Federal Ministry
Innovation, Mobility
and Infrastructure
Republic of Austria

klima+ energie fonds

Energy Research

Leveraging Potential & Shaping the Future

2025 Call for Proposals

An RTI initiative of the Austrian Federal Ministry for Innovation, Mobility and Infrastructure and the Climate and Energy Fund

Programme management

FFG
Promoting Innovation.

Vienna, April 2025

Table of contents

1.0 KEY FACTS

The Austrian Federal Ministry for Innovation, Mobility and Infrastructure (BMIMI) and the Climate and Energy Fund have set themselves the objective of jointly supporting the development of a wide range of solutions for the green transformation: energy innovations from Austria that serve both the Austrian market and the export market and make a contribution to climate protection.

The contents of the RTI initiative **Energy Research – Leveraging Potential & Shaping the Future** are based on the implementation plan for the RTI priority area on energy transition: impact pathways, key topics and innovation targets.

The following priority areas have been announced:

1. **Energy generation and storage technologies**
2. **Hydrogen, renewable gases and carbon capture, utilisation and storage (CCUS)**
3. **System design and operation of flexible, integrated and climate-friendly energy systems**
4. **Digital transformation for the energy transition**
5. **Efficient energy conversion**
6. **Societal transformation (acceptance and participation)**
7. **System analyses – R&D services**

Funding is provided by the BMIMI and the Climate and Energy Fund. The minimum funding volume amounts to **EUR 16.9 million.** An increase in the funding volume is planned through additional finances from the 2025 annual programme of the Climate and Energy Fund, which is still pending approval.

As part of the **Energy Research 2025** call for proposals, there will be **two submission deadlines** (see Table 2). This guideline is valid for both submission deadlines.

- **First submission deadline**[1]: Wednesday, **25 June 2025, 12:00 noon** – for priority areas 1 to 5 and 7
- **Second submission deadline**[2]: Wednesday, **12 November 2025, 12:00 noon** – for priority areas 1 to 6, as well as flagship projects[3].

Important notice

If an application submission was planned for the first deadline (25 June 2025), but the application was not completed and submitted on time, a new submission can be made before the second deadline (12 November 2025). However, a new application must be created in eCall. This is only possible if the relevant priority area is also included for the second submission deadline.

1 Applications can be created and submitted via eCall from 1 April 2025 to 25 June 2025, 12:00 noon.
2 Applications can be created and submitted via eCall from 26 June 2025 to 12 November 2025, 12:00 noon.
3 Applications for flagship projects and priority area 6 can be created and submitted via eCall from 1 April 2025 to 12 November 2025, 12:00 noon.

Table 1: Overview of available instruments

Funding/ financing instrument	Brief description	Maximum funding / financing in EUR	Funding rate	Term in months	Cooperation requirement
Exploratory study	Exploratory study *Preliminary study for R&D project*	Max. 250,000	Max. 80%	Max. 12	No
Collaborative R&D project	Collaborative R&D project *Industrial research and experimental development*	Between 100,000 and 2 million	Max. 85%	Max. 36	Yes
Flagship projects	Flagship project *Industrial research and/or experimental development*	Min. 2 million	Max. 85%	Max. 48	Yes
Qualification network	Qualification projects to increase research, technology, development, innovation and digital competence	Max. 200,000	Max. 100%	Max. 24	Yes
R&D services	Meeting the requirements of a specified call for proposals	See priority area 7	Financing up to 100%	See priority area 7	No
Dissertations	Dissertation with an appropriate research question	Max. 110,000	Max. 50%	Max. 36	No

Table 2: Overview of the priority areas in the call for proposals

Funding/ financing instrument and submission deadlines for priority areas	PA 1: Energy generation and storage technologies	PA 2: Hydrogen, renewable gases and CCUS	PA 3: System design and operation of energy systems	PA 4: Digital transformation for the energy transition	PA 5: Efficient energy use including conversion	PA 6: Societal transformation	PA 7: System analyses	Funding opportunities for people in RTI
Submission deadline 1: 25 June 2025	YES	YES	YES	YES	YES	NO	YES	Ongoing
Submission deadline 2: 12 November 2025	YES	YES	YES	YES	YES	YES	NO	Ongoing
Exploratory study	✔	✔	✔	✔	✔			
Collaborative R&D project	✔	✔	✔	✔	✔	✔		
Flagship project (submission deadline 2 only)	✔	✔	✔	✔	✔			
Qualification network (submission deadline 2 only)						✔		
R&D service (submission deadline 1 only)							✔	
Dissertations (ongoing)								✔

Note: Exploratory study

Exploratory studies form part of the preparatory phase for research, development and innovation projects (R&D&I). They are intended to facilitate the development of ideas for **disruptive** or **radical innovations**, support the creation of concepts in the case of increased complexity and explore the feasibility of potential future R&D&I projects.

An exploratory study is therefore NOT a study, data collection, or analysis of a situation for its own purpose.

An exploratory study MUST clearly assess and determine the feasibility of a specific project. Regarding the feasibility of the project, factors must exist at the time of the exploratory study that are still unknown or unclear, as well as risks that cannot be calculated at the time. The project for which feasibility is to be assessed must therefore extend beyond the current state of knowledge or technology. For exploratory studies, these conditions must be clearly presented in the funding application.

As part of an exploratory study, the evaluation and analysis of the potential of a project can be carried out with the objective of facilitating decision-making by providing an objective and rational presentation of its strengths and weaknesses, as well as the opportunities and risks associated with the project. The evaluation also seeks to determine what resources would be required for its implementation and what the prospects for success would be (for definition see General Block Exemption Regulation [GBER]: Regulation (EU) No 651/2014, OJ L 187/48, extended by Regulation (EU) 2023/1315 of 23 June 2023, Art. 2(87).

Table 3: Budget – deadlines – contact details

Additional information	Details

Total budget	**At least EUR 16.9 million, an increase in the funding volume is planned through additional funds from the 2025 annual programme of the Climate and Energy Fund, which is still pending approval.**
	Of which provisional budgets:
	• Submission deadline 1: EUR 10.3 million
	• Submission deadline 2: EUR 6.6 million
	  • of which EUR 600,000 for priority area 6
	  • flagship project: approx. EUR 6 million

Submission deadlines	Wednesday, 25 June 2025, 12:00 noon for priority areas 1 to 5 and 7 Wednesday, 12 November 2025, 12:00 noon for priority areas 1 to 6 Wednesday, 12 November 2025, 12:00 noon for flagship projects
Submission deadlines for dissertations	Ongoing submission (subject to budget availability)
Questions about R&D services	Supplementary questions by no later than Wednesday, 27 May 2025, in writing by email to helfried.maehrenbach@ffg.at
Compulsory preliminary meeting for flagship project	Registration by no later than Friday, 10 October 2025 Last preliminary meeting on Wednesday, 15 October 2025
Proposal language	German: Exploratory study, collaborative R&D project, R&D services, qualification network English: Flagship project
Contacts	Helfried Mährenbach, T (0) 57755-5058 E helfried.maehrenbach@ffg.at See website for other contacts Qualification network contacts: Teresa Pflügl, T (0) 57755-2303 E teresa.pfluegl@ffg.at Sonja Gossar, T (0) 57755-2312 E sonja.gossar@ffg.at Renata Egger, T (0) 57755-2315 E renata.egger@ffg.at
Information available online	www.ffg.at/2025-Ausschreibung-Energieforschung
To the submission portal	ecall.ffg.at

2.0 OBJECTIVES OF THE CALL FOR PROPOSALS

Objectives of the research, technology and innovation (RTI) initiative

The RTI initiative "Energy Research – Leveraging Potential & Shaping the Future", which is part of the RTI priority area "Energy transition", has set itself the objective of making a vital contribution to climate neutrality. This is to be achieved by promoting research and development of new, climate-friendly energy technologies and components that are "Made in Austria", as well as their system integration. The initiative aims to strengthen Austria's innovative capacity, expand technological expertise, and solidify the country's position as a hub for next-generation energy technologies. Furthermore, export opportunities are to be improved, and the objectives of the European Green Deal as well as the Fit for 55 package are to be supported.

A funding application will only be viewed positively if it goes a long way towards achieving the strategic target dimensions of the RTI priority area[4].

Objective 1: Successful energy transition in Austria

The objective is to accelerate the energy transition in Austria through the interdisciplinary and inter-sectoral transformation of the energy and economic systems. To achieve this, the availability of technologies and solutions must be ensured, a sustainable knowledge base established, and innovative stimuli for development encouraged. Solution users and solution developers should work together to enhance the level of system maturity of the solutions. This leads to tangible, scalable solutions in Austria for energy-efficient and climate-neutral energy infrastructures, integrated regional energy systems, and a climate-neutral energy supply for small-scale manufacturing and industry.

Objective 2: Austrian stakeholders in global value chains

The objective is to strengthen the innovative capacity of Austrian RTI stakeholders and promote their participation in global value chains. Promoting research and development, along with trials of technologies, will support positioning in international markets. Collaboration with researchers and RTI institutions strengthens the technological expertise of companies. This in turn should strengthen competitiveness in global target markets.

Objective 3: Future competence in the RTI system

The objective is to promote strategic skills for future energy innovations through high quality research. Global trends are identified to support decision makers in industry, government and politics in developing long-term technology strategies and advancing Europe's technological sovereignty. Collaboration between RTI institutions and the promotion of entrepreneurial initiatives are essential for boosting value creation and ensuring the security of our energy supply. A uniform vision and plausible transformation paths are necessary for the broad acceptance of climate neutrality and energy transition. This requires the mobilisation of all stakeholders involved in energy research.

4 See impact pathways in the implementation plan for the RTI priority area on energy transition

Important dimensions of innovation

To make technologies and infrastructures available in a timely manner and to shape the institutional framework for a successful transformation, projects must deliver insights and innovations in the following areas:

- **Technologies, infrastructures and technical system solutions**: development, provision and coupling of technologies for energy conversion, storage and transport, with a particular focus on integration across sectors.
- **Structuring energy systems**: coordination of stakeholders and system elements for the flexible use of renewable energy sources, as well as the development of innovative business models.
- **Transitioning between energy systems**: integration of new solutions into the everyday lives of citizens, businesses and infrastructure operators, taking into account social acceptance and evolving values.

Key topics, innovation objectives and interdisciplinary requirements

This call for proposals contributes to the further development of the five key topics listed in the Implementation Plan for the RTI priority area on energy transition with a total of 16 innovation topics. The following interdisciplinary requirements are integral components:

- **Sustainable value chains and strengthening of Austria as a production location**: strengthening regional supply chains and production sites improves economic performance while simultaneously reducing environmental impact.
- **Circular economy and security of energy supply**: the efficient use of resources minimises environmental impact while ensuring security of supply, in particular, through the promotion of recycling and reuse.
- **Societal transformation**: innovations and technologies that align with the needs and values of society gain widespread acceptance and participation in the energy transition.

Applied research projects with technology readiness levels (TRL) 3 – 7 are supported. In justified exceptional cases, funding is possible up to technology readiness level 8: commercially usable prototypes and pilot projects. This applies when production for trial and validation purposes alone would be too expensive and the undertaking involves the final commercial product.

In the spirit of excellence, only projects that achieve a total of at least 80 points in the evaluation criteria will be funded.

3.0 PRIORITY AREAS

The submitted project proposal must relate primarily to one of the priority areas described below or to its underlying research topics, but may also address several of these priority areas at once. The projects must demonstrate scientifically verifiable and measurable advancements beyond the current state of the art in at least one of the priority areas, make significant contributions to climate protection, and have broad applicability.

LIMITATION:
R&D projects that primarily deal with the following issues are not eligible for funding:

- **Circular economy, circular design and production** as well as **recycling, materials for the energy transition process, efficient use of resources and raw materials, production technologies and Industry 4.0**
  Submission option: circular economy and production technologies (BMIMI)
- Technological **basic questions in computer science, electronics, software or hardware development**
  Submission option: key topic of information and communication technologies (BMIMI)
- **Mobility, batteries and fuel cells for mobile applications**
  Submission option: key topic of mobility and transportation (BMIMI)
- **Building materials** and **buildings**
  Submission option: technologies and innovations for the climate-neutral city (BMIMI)
- Development of **new technological solutions for the manufacturing industry** that **replace greenhouse gas-emitting technologies and systems**
  Submission option: RTI initiative for transforming industry (Climate and Energy Fund)
- Development and trials of practical, forward-looking, and replicable (overall) solutions for a **climate-neutral heating and cooling supply for buildings and districts**
  Submission option: flagship projects on heating transition (Climate and Energy Fund)

In case of doubt, it is recommended to consult with the Österreichische Forschungsförderungsgesellschaft (FFG).

Information on submission options for research funding can be found in section 6.5.

With regard to proposed R&D services, the required performance level is specified in section 3.7.

3.1 Priority area 1 – Energy generation and storage technologies

The aim is to increase the efficiency of energy generation and storage technologies, improve scalability, reduce manufacturing costs, optimise the entire life cycle and achieve effective system integration.

At present, Europe is heavily reliant on the import of clean energy technologies to achieve its climate goals. Improving energy and resource efficiency, using innovative materials derived from more abundant raw materials and enhancing the circularity of innovative technologies and components can help reduce dependencies, lower costs, and strengthen Europe's competitiveness as a producer in the global market. The strategic selection of technologies with lower supply chain dependencies can also play a key role here.

The focus is on the (further) development and optimisation of components and complete systems, the development and use of technologies (hardware components such as power electronics and sensors, as well as digital methods and tools) for yield control and security, damage detection or predictive maintenance and sector integration of innovative charging and storage technologies, efficient manufacturing processes and technological solutions (e.g., grid forming inverters, secure communication infrastructures, etc.) for hybrid renewable systems and power plants.

Technologies: Photovoltaics (PV), solar thermal energy, concentrating solar power (CSP), wind power (use on land and at sea)[5], heat pumps, geothermal energy, electricity storage, small-scale hydropower, bioenergy

Please note: Efficient manufacturing methods and production processes are addressed in the national RTI call for proposals under resource management.

Instruments for which proposals are invited (see **Table 1**):

- Exploratory study
- Collaborative R&D projects in industrial research or experimental development
- Flagship project

5 Micro and small wind turbines for use on buildings do not fall within the call for proposals.

3.2 Priority area 2 – Hydrogen, renewable gases and carbon capture, utilisation and storage (CCUS)

The aim is to develop and scale up energy-efficient processes, technologies and components that contribute to the cost-effective production, transport, (seasonal) storage and use of hydrogen and renewable gases from biowaste and renewable raw materials, as well as their integration into infrastructures. In addition, this area aims to develop cost-effective approaches for the capture and purification, transport, use and intermediate or long-term storage (at least 35 years)[6] of carbon.

With the decarbonisation of the Austrian energy system, the demand for non-fossil molecular energy carriers, such as hydrogen from renewable sources, is increasing. Enhancing efficiency is crucial for maintaining competitiveness and ensuring supply security. Comprehensive management of the carbon budget is becoming increasingly important in the reduction of climate-damaging emissions and in unlocking and utilising sink potential.

Research and development of **hydrogen** includes the production, transport, storage and use of hydrogen from renewable energy sources (electricity) or other climate-neutral production methods as a key element of the subsequent value chains: Electrolysis, methane pyrolysis, photochemical processes, fuel cells and H2-ready power plants, long-term storage of hydrogen, reconversion to electricity (power-to-gas-to-power, P2G2P), industrial material applications, methanation, e-fuels (power-to-liquid, P2L) and other refinements as part of power-to-X (P2X) processes.

At the core of **CCUS** are measures that focus on the capture and long-term storage of (carbon capture and storage, CCS) fossil emissions at point sources (e.g., the raw materials industry). Research into technical sinks is also being funded, in which case CO_2 is extracted directly from the atmosphere (direct air carbon capture and storage, DACCS), biogenic carbon is utilised (bioenergy carbon capture and storage, BECCS) or CCS is used at thermal waste treatment plants (waste with CCS, WACSS), thereby achieving negative emissions.

The RTI priority area energy transition deals with technological innovations as well as the special requirements of hydrogen, green gases and CCUS with regard to energy balance, the circular economy, value chains and societal acceptance issues. Consideration of legal and techno-economic aspects as well as life-cycle analyses of the full processes and process chains in the technological developments is welcomed.

IMPORTANT: Reducing greenhouse gas emissions is the overriding objective of the energy research programme. Improved efficiency should prevent or reduce emissions and replace greenhouse gas-intensive processes or products with low-greenhouse gas or greenhouse gas-neutral alternatives. Only unavoidable residual emissions reduced to a technical minimum are to be offset by technical sinks in order to achieve climate neutrality.

In addition to the prospects for implementing CCUS technologies within Austria, international demand for innovative system solutions in the area of R&D is also growing.

Technologies: Electrolysers and fuel cells, methane pyrolysis, photochemical, thermochemical and plasma-based processes for the production of hydrogen, hydrogen storage and transport, efficient synthesis processes for hydrogen derivatives, catalysts and process optimisation, carbon capture and usage (CCU), carbon capture and storage (CCS), bioenergy with CCS (BECCS), direct air capture (DAC), CO_2 **mineralisation.**

Instruments for which proposals are invited (see **Table 1**):

- Exploratory study
- Collaborative R&D projects in industrial research or experimental development
- Flagship project

6 Total storage volume of less than 100,000 tonnes in accordance with Section 2 (2) of the Federal Act on the Prohibition of Geological Storage of Carbon Dioxide, Federal Law Gazette I no. 144/2011 as amended on 3 November 2024.

3.3 Priority area 3 – System design and operation of flexible, integrated and climate-friendly energy systems

The aim is the new and further development of technologies for the secure and flexible operation of energy networks and systems (including sector coupling) with rapidly growing quantities of weather-dependent renewable energy sources that can only be controlled to a limited extent. This includes solutions for climate change adaptation in energy infrastructure (construction, operation, maintenance) that help manage the already noticeable impacts of climate change as effectively as possible and that proactively minimise future damage or take advantage of emerging opportunities.

For effective system integration, energy grids and systems should be strengthened through innovative technologies and solutions for better control and flexibility, including sector coupling. The focus is on maximising the absorption capacity for energy from renewable sources and the efficient use of high proportions of energy from renewable sources.

Funding is provided for the development and validation of application-oriented system innovations that combine technologies and components into complete system solutions through appropriate operating and business processes. Furthermore, innovations should enable new solutions for the design, planning and operation of subsystems that integrate an exponentially growing number of components and stakeholders. Interoperability, security and resilience should be considered as integral design requirements.

The research topics of climate change adaptation range from hazard analysis and the development of components and equipment to the simulation, planning and safe operation of energy infrastructure.

Technologies (examples include): power electronics, sensors, grid components and equipment, methods, algorithms, simulation and planning tools for the safe operation of energy systems with up to 100% energy from renewable sources, R&D roadmaps – climate change adaptation infrastructures, etc.

Instruments for which proposals are invited (see **Table 1**):

- Exploratory study
- Collaborative R&D projects in industrial research or experimental development
- Flagship project

3.4 Priority area 4 – Digital transformation for the energy transition

The aim is to (further) develop hardware, methods, processes and algorithms to enable efficient data generation, provision and analysis for the digitalisation of the energy system and to strengthen the cyber resilience of energy technologies.

The digital transformation of the energy system requires fundamental changes. The availability of extensive real-time data enables more efficient resource utilisation and the emergence of new business models. The interoperability of connected information and communication technology (ICT) systems plays a central role in this. ICT applications are used for the automation and control of grids, as well as for the generation, consumption and storage of energy in order to open up trading opportunities and improve communication with consumers in the future energy system.

The use of satellite data[7] (Copernicus, earth observation, Galileo, navigation, etc.) is also of great importance for the energy transition as this enables the identification, monitoring and optimisation of renewable energy potential. Satellite data provide important information about locations, resource potential and environmental impact and can contribute to more efficient planning, implementation and maintenance.

Technologies (examples include): hardware (e.g., actuators, sensors, etc.), software (e.g., machine learning, artificial intelligence, data spaces, Internet of Things, data analytics, etc.), digital twins (e.g. of energy transmission and distribution systems such as electricity and district heating networks), virtual worlds, etc.

Instruments for which proposals are invited (see **Table 1**):

- Exploratory study
- Collaborative R&D projects in industrial research or experimental development
- Flagship project

7 Support is provided by the Geospace Hub Vienna space data innovation laboratory at Urban Innovation Vienna. Project results can be visualised and demonstrated in the Green Transition Information Factory (GTIF). The first trials of the energy transition are already online and can be further improved.

3.5 Priority area 5 – Efficient energy conversion

The aim is to increase the energy efficiency and functionality of end-user technologies (household appliances, heating and air conditioning systems, lighting, office equipment, etc.) and (industrial) production technologies.

Efficiency remains a central pillar of the energy transformation. It forms a part of ecological, economic, and social objectives, as well as societal requirements such as affordability and security of supply. Innovations in the intelligent interplay of various applications and transformation processes are required to strengthen overall system efficiency. The focus is on energy-optimised technologies, components, complete systems and processes with higher efficiencies, lower material usage or lower costs while maintaining or improving product quality. There is a need for research into the energy-efficient design of appliances and production processes, new metering, control and regulation technologies, as well as intelligent basic technologies and electrical and electronic energy converters.

In terms of the circular economy, requirements for resource conservation, durability and recyclability must be taken into account as well as aspects of energy-saving user-friendliness in the case of end-user technologies.

Technologies (examples include): energy-efficient and intelligent basic technologies (e.g., power electronics, sensor technology, edge AI, machine learning), tools and methods (planning and analysis tools, decision support tools, management tools), energy-efficient process technology for industry, stationary motors and actuators, etc.

Instruments for which proposals are invited (see **Table 1**):

- Exploratory study
- Collaborative R&D projects in industrial research or experimental development
- Flagship project

3.6 Priority area 6 – Societal transformation (acceptance and participation)

3.6.1 Collaborative R&D projects

The aim is to utilise all societal potential for the energy transition in the interests of an intensified socio-technical transformation. Personalised technologies, products and services will be developed in line with demand by focusing on the benefits for all persons, regardless of gender, age or other aspects of diversity.

Diversity in the energy transition is at the heart of this application-oriented priority area. This means that people or groups of people are the subject of the research or are impacted by the results of the research in everyday life and work or that the technology or product development takes into account the specific requirements of different users.

The topics can include the following (examples): Diversity of energy use and energy demand patterns, creation of participation opportunities, consideration of acceptance, fairness and inclusion in new business models of energy communities and the use of flexibility (e.g. variable grid tariffs, etc.), digital and energy-efficient devices, technologies and applications that are designed to be inclusive; social aspects of the energy transition.

For gender-relevant topics, gender competence must be clearly evident and gender expertise must be integrated throughout the entire course of the project.

Research projects must be transdisciplinary and therefore also involve societal actors.

Provisional budget: EUR 400,000

Submission deadline (see **Table 3**): 12 November 2025

Instruments for which proposals are invited (see **Table 1**):
- Collaborative R&D projects in industrial research or experimental development

3.6.2 Geothermal energy qualification network

Qualification networks are application- and implementation-oriented qualification measures that lead to an increase in research, development, innovation and digital competencies in the economy. In **cooperative projects**, knowledge transfer takes place between scientific institutions, companies, and other not-for-profit organisations. This aims to provide Small and Medium-sized Enterprises (SMEs), as well as municipalities, with access to scientific knowledge and networks.

Qualification networks are submitted as consortium projects: research institutions and/or universities and/or Universities of Applied Sciences – possibly supported by other intermediaries – jointly design tailored, time-limited advanced training offerings with companies and/or other not-for-profit organisations. The training measures are available exclusively to the employees of the organisations participating in the consortium, either from businesses or other not-for-profit organisations, for the duration of the project.

The objective of the qualification network is **to build and disseminate knowledge in the field of near-surface and/or deep geothermal energy within Austrian organisations**. This aims to accelerate the adoption of geothermal energy applications and enhance the utilisation of this renewable energy source.

As part of the qualification network, the following exemplary **topics** may be addressed:

- technical and geological fundamentals of near-surface and/or deep geothermal energy
- modern drilling and extraction techniques
- storage system and distribution technologies
- combination of geothermal energy with other renewable energy generation systems
- integration of geothermal energy systems into existing heat and cooling networks
- legal aspects (water law, mining and raw materials, small-scale manufacturing, etc.), excluding training measures for compliance with binding training standards of EU member states
- economic viability of geothermal energy projects

Target audiences for businesses and other not-for-profit organisations (i.e., training participants) include:

- technical planning offices
- drilling technology companies
- equipment manufacturers
- civil engineering companies
- companies that focus on integrating renewable energy generation technologies into existing heating networks, storage technologies and integrated energy systems
- companies that operate in the field of metering, control and feedback control systems
- investment and participation service providers for infrastructure projects
- municipalities

Target audiences for scientific partners include:

- universities
- universities of applied sciences
- research institutions[8]

Funding conditions:

- As per the instrument guide, projects can be funded for a maximum duration of 24 months, with shorter durations (minimum 6 months) also being eligible. All funded projects are required to include at least 40 hours of training in a collaborative learning environment. The training measures must take place in Austria or online.
- The maximum funding amount is EUR 200,000. Cost planning should take place accordingly, depending on the scope of the training and the project duration.
- The consortium must include, at a minimum:
  - 3 independent organisations that send employees for training,
  - 1 research and knowledge dissemination institution (research institution – see GBER 2014), university, or university of applied sciences with a branch in Austria, serving as the consortium leader in the context of its scientific activities

Further requirements can be found in the Instrument Guide (v1.1).

It is recommended to complete a consultation prior to submission (see **Table 3** for contact persons).

Provisional budget: EUR 200,000

Submission deadline (see **Table 3**): 12 November 2025

Instruments for which proposals are invited (see **Table 1**):

- Qualification network

8 see GBER: Regulation (EU) No 651/2014, OJ L 187/48, extended by Regulation (EU) 2023/1315 of 23 June 2023, Art. 2(83)

3.7 Priority area 7 – System analyses – R&D services

3.7.1 R&D service 1: Research infrastructures in the field of hydrogen

The R&D service should analyse the potential and cost/benefit of expanding research infrastructure in the hydrogen sector and provide a well-founded basis for decision-making. The basis is the relevant Recommendation 2024 published by the advisory board of the Austrian Hydrogen Partnership (HyPa).

Starting point

In its Recommendation 2024, the advisory board of the Austrian Hydrogen Partnership (HyPa) emphasised the crucial importance of developing research expertise and infrastructure at a critical scale. By strengthening cooperation among Austria's leading research institutions and expanding the existing research infrastructure in alignment with established areas of expertise, synergies and complementarities could be maximised, leading to the creation of sufficient critical mass. The aim is to create a research environment that makes a significant contribution to Austria's international positioning as an innovative research and business hub.

In this context, it is essential to thoroughly analyse the starting point, specific requirements, and potential impacts of investments in R&D infrastructure in the hydrogen sector.

Objective

A clear analysis of needs, utilisation, and costs should therefore be carried out to make informed decisions on the further expansion of the R&D infrastructure for hydrogen technologies in Austria. The study aims to assess the potential impacts of such an investment.

The specific requirements include:

- a clear definition of the objectives to be achieved through the investment in R&D infrastructure,
- an estimation of total investments, along with a detailed cost breakdown and an analysis of financing models and funding opportunities.
- justification of the costs: a well-supported justification for the necessity of each cost item, to include an explanation of how it aligns with the specific requirements of the research infrastructure.
- economic benefits: analysis of the economic benefits resulting from the investment, such as the analysis of cost reductions with regard to the implementation of pilot projects and demonstration plants, as well as the creation of competitive advantages for the Austrian hydrogen economy.
- strategic benefits: assessment of the strategic benefits resulting from the investment, such as Austria's positioning as an innovative research and business location and the promotion of start-ups and SMEs.
- market introduction and scaling: an assessment of how the investment can accelerate the market introduction and scaling of hydrogen technologies. Demonstration of industry and company demand, for example, through Letters of Intent (LOIs).
- sustainability and the circular economy: an analysis of how the investment contributes to the development of sustainable material concepts and recyclability.
- comparison with international/European institutions and the state of the art: a comparison of the proposed research infrastructure with best practices in Europe.
- benchmarking with other countries: an analysis of how other countries are making similar investments in hydrogen research and the successes they have achieved (also considering State aid requirements).
- identification of risks: identification of potential risks associated with the investment, such as technological or economic risks.

Requirements

The application must present the method in a clear, comprehensible and justified manner on the basis of work packages. These include objectives, description, methodology, milestones and results.

A kick-off workshop and a final workshop must be held with the client.

Synergies with ongoing and completed research and technology development projects are explicitly desired. In-depth knowledge of the Austrian and European research landscape, as well as the relevant technological and economic framework conditions, is required.

The results of the study are to be prepared in the form of a publishable final report and a presentation.

The creation of a website is not part of the R&D service.

Submission deadline (see **Table 3**): 25 June 2025

Instrument for which proposals are invited (see **Table 1**):
- R&D services
- project duration: max. 6 months
- project cost: max. EUR 100,000 (excl. VAT)

A maximum of one R&D service on "Research infrastructures in the field of hydrogen" will be funded.

3.7.2 R&D service 2: RTI roadmap for technologies for CO_2 capture, transport and utilisation, as well as storage systems and negative emission technologies from Austria

The objective is the systematic identification, assessment, and prioritisation of promising technology pathways[9] for CO_2 capture, transport, utilisation and storage, as well as CO_2 removal from the atmosphere based on technical sinks (NET – Negative Emission Technologies) for Austria, with high export potential. The priority areas (processes, technologies, components), timeline (short-, medium-, and long-term), RTI instruments, and the advancement of technological and systemic maturity (defining the starting point and objective) should be addressed.

Starting point
According to the UN Climate Panel (IPCC - Intergovernmental Panel on Climate Change), carbon emissions must not only be reduced but also reach net-negative levels by 2050 to achieve climate targets and mitigate global warming. Negative emissions essentially require long-term CO_2 storage – either in geological subsurface reservoirs through mineralisation or in the biosphere (e.g., forests, oceans). **CCS** is needed to capture and geologically store or permanently bind hard-to-avoid residual emissions from point sources (e.g., industrial facilities). Negative emission technologies include the capture of CO_2 from renewable biogenic and atmospheric sources, followed by storage, accelerated weathering or biochar production.

Furthermore, the use of captured CO_2 (Carbon Capture and Utilisation, **CCU**) can play a key role in emission reduction. The potential applications of CO_2 utilisation for product manufacturing can be broadly categorised into permanent CO_2 binding (e.g., for building materials) and non-permanent CO_2 binding (e.g., for plastics or energy use such as synthetic fuels). Integrating CO_2 into industrial processes allows for the replacement of fossil carbon, helping to reduce the CO_2 footprint of products. While non-permanent CCU applications alone do not result in negative emissions, they can still promote the advancement of the circular economy.

Building on the national Energy and Climate Plan (NECP), which aims for 500,000 tonnes of CO_2 storage from CCS projects by 2030, and the Austrian Carbon Management Strategy, there is an urgent need to implement targeted measures that support research and innovation in the fields of CCUS and NET. This is crucial for advancing technological solutions for the reduction and removal of greenhouse gas emissions in Austria, while also developing viable business models for Austria's export economy.

9 thermochemical, biological, thermal, electrochemical or chemical CCUS processes, as well as through mineralisation

Objective

The primary objective of this RTI roadmap is to establish a foundation for CCUS and NET to make a significant contribution to Austria's climate neutrality efforts by identifying, evaluating, and prioritising promising technology pathways for the country. Additionally, the roadmap aims to identify opportunities for developing an economically viable business model based on Austria's industry, infrastructure and research expertise.

A diverse CCUS and NET community, comprising research institutions, technology providers, and major emitters, will collaborate in the development of the roadmap. The combined efforts are crucial to aligning Austria's research and innovation strategy with the reduction of greenhouse gas emissions and the scalability of CCUS and negative emission technologies.

The roadmap will:

- analyse technological, economic and ecological aspects of relevant CCUS and negative emission technologies,
- identify challenges and opportunities related to scalability, infrastructure, economic effects and costs,
- derive concrete recommendations for future research and implementation strategies.

A particular focus will be placed on the life-cycle analyses and environmental impact assessment of various CO_2 utilisation pathways, the development and scaling of CCUS and NET, as well as the definition of realistic application scenarios in Austria, including export scenarios. The selection of relevant technology pathways will be guided by a structured set of criteria to ensure that future CCUS and NET applications in Austria are technologically feasible, economically viable and environmentally sound.

Service components

The following areas are to be analysed and evaluated as part of this R&D service:

1. **Analysis of global and national trends**
   Examination of medium- and long-term developments, including general political frameworks, future economic markets, as well as technological and societal changes relevant to CCUS (including transport) and NET.

2. **Identification of national strengths and development potential**
   Assessment of Austria's technological and scientific competencies in the areas of CCUS (including transport) and NET. This includes analysing national technology providers and research institutions with the objective of identifying strategic competitive advantages.

3. **Development of a strategic RTI agenda**
   Definition of a long-term research strategy for individual technology fields, with clearly defined priority areas, a timeline (short-, medium-, and long-term) and appropriate RTI instruments. This includes basic research, industrial research and experimental trials, as well as pilot and flagship projects. In addition, accompanying measures must be defined, for example in the areas of training and continuing education, standardisation, regulatory frameworks and funding instruments.

4. **Definition of the required research infrastructure (according to GBER Art. 2(91)**
   Identification and description of the necessary research infrastructure for the implementation of the strategic RTI agenda.

5. **RTI policy recommendations**
   Development of targeted measures to promote research, development, and innovation in the field of CCUS and negative emission technologies in Austria. The objective is to accelerate market deployment and sustainably enhance the international competitiveness of domestic technology providers across the value chain.

Requirements

The application must present the method in a clear, comprehensible and justified manner on the basis of work packages. These include objectives, description, methodology, milestones and results.

A project advisory board must be established in consultation with the client. A kick-off workshop and a final workshop must be held with the client and the advisory board.

Close cooperation with selected stakeholders is required. This willingness to cooperate must be documented in a suitable manner (e.g. written expression of interest) and increases the relevance of the offers.

Interim results are to be discussed in a workshop with representatives from industry, trade associations and ministries. For this purpose, a background paper must be prepared. The results must be summarised in a short report and submitted to the FFG via eCall within one month of the respective event.

Collaboration with current, relevant, ongoing and completed research and technology development projects is explicitly encouraged: CaCTUS, WasteCCUS, as well as those featured in Energieforschung 2024, the second call for proposals for R&D services "CCS Hubs and CCS Clusters in Austria – the Identification of Suitable Starting Points for the Development of an Austrian CCS Infrastructure" and "Decentralised CO_2 Sinks – Solutions for Emission-Intensive Heavy Industry Operations away from CO_2 Transport Networks in Austria". It is strongly encouraged to take into account work that has been funded under the Raw Materials Call for Proposals by the Federal Ministry of Finance (BMF), as well as the content of the feasibility study on a CO_2 collection and transport network in Austria, which was financed by the BMIMI.

The BMIMI and the Climate and Energy Fund (KLIEN), as the commissioning parties (clients) for the R&D services on CCS hubs and CCS clusters in Austria, as well as decentralised CO_2 sinks (both clients: BMIMI) and WasteCCUS (client: KLIEN), hold non-exclusive, unrestricted usage rights to all work results that are created or will be created within the scope of these services. These results will be made available to the contractors – insofar as necessary for the execution of the respective R&D services.

The exploitation rights for CaCTUS lie with the consortium. The research results, along with all source materials, including data, models (open-source software) and other analyses that contributed to the results – provided they were developed with support from funding under the ACRP (Austrian Climate Research Programme) – must be made accessible upon request for a period of at least seven years.

The results of the study are to be prepared in the form of a publishable final report and a presentation.

The creation of a website is not part of the R&D service.

Submission deadline (see **Table 3**): 25 June 2025

Instrument for which proposals are invited (see **Table 1**):
- R&D services
- Project duration: max. 12 months
- Project cost: max. EUR 150,000 (excl. VAT)

A maximum of one R&D service "RTI roadmap for CO_2 capture, transport, utilisation and storage system technologies, as well as negative emission technologies from Austria" will be funded.

Table 5: Further requirements and specifications for submissions for R&D service(s)

Further requirement(s)	Specification(s)
Documents required to prove authorisation and technical/economic capability > to be uploaded as an attachment to the eCall project data	– Extract from the trade register or certified copy of the professional register or the company register (commercial register) of the bidder's country of origin or the certification provided there or – if no verification is available in the country of origin – an affidavit by the applicant, in each case not older than twelve months. – Bidders who are domiciled in the territory of another contracting party to the EEA Agreement or in Switzerland and who must obtain an official decision regarding their professional qualification in order to exercise an activity in Austria must initiate a procedure aimed at this as soon as possible and in all cases prior to the bid deadline. The same applies to subcontractors to whom bidders wish to assign services. Bidders must provide proof of their authorisation by submitting the corresponding business licence in their bid. The client reserves the right to check the authorisation of any subcontractors separately. – Current extract from the company register (max. six months old) – Bidders must also submit proof of total turnover and development of turnover for the last three years or for the period since the company was founded in the case of newcomers (meaning companies founded less than three years ago).
Supplementary information	– Requests for supplementary information on the content of the requested R&D services must be sent in writing by email to the FFG (helfried.maehrenbach@ffg.at) by no later than **27 May 2025**, with indication of the sender's address (email). In coordination with the BMIMI and the Climate and Energy Fund, the FFG will respond to the requests as quickly as possible, at the latest by **5 June 2025**. – The questions and answers will be published on the FFG website. After this date, it is no longer possible to ask questions. The FFG, the BMIMI and the Climate and Energy Fund will not provide any comments on the evaluation of the submissions in advance.

4.0 PROPOSAL DOCUMENTS

Projects can only be submitted electronically via eCall.

A proposal shall comprise the following **online** elements, which are to be entered under the following menu items in eCall:

- **Content description** comprises an outline of the project's content.
- **Work plan** comprises an outline of the work packages and other project management elements such as the time management plan (Gantt chart), tasks, milestones and results.
- **Consortium** describes the expertise of the individual consortium members.
- **Costs and financing** describes all cost categories for each consortium member. The sum totals for each work package will be displayed automatically in the online work plan.

Any attachments to the electronic proposal.

All documents relevant to the call for proposals can be found on the website – Energieforschung Ausschreibung 2025 (Energy Research Call for Proposals 2025):

Table 6: Proposal documents – funding

Funding instrument or other information		Available proposal documents
Collaborative R&D projects	.PDF	Guidelines for cooperative R&D projects
	.PDF	Declaration of SME-Status (if required)
Flagship project	.PDF	Guidelines for flagship projects
	.PDF	Declaration of SME-Status (if required)
Exploratory study	.PDF	Guidelines for exploratory studies
	.PDF	Declaration of SME-Status (if required)
Qualification network	.PDF	Guidelines for qualification networks
	.PDF	Declaration of SME-Status (if required)
General rules on costs	.PDF	Cost guidelines 3.1 (recognition of costs in FFG projects)

Please note: Associations, individual companies and foreign companies will need to submit the declaration in lieu of an oath regarding SME status. Using the template provided, they must categorise – as far as possible – their last three years of business in accordance with the definition of an SME.

Table 7: Proposal documents – R&D services

Financing instrument		Available proposal documents
R&D services	.PDF	Guidelines for R&D services
	eCall	Bidder's declaration
	.DOC	Sample contract for R&D services

5.0 LEGAL AND ADMINISTRATIVE ASPECTS

5.1 Funding/financing decision and legal basis

The management of the FFG will make the funding or financing decision for the BMIMI-financed priority areas in the call for proposals on the basis of the funding or financing recommendation of the evaluation committee.

The Executive Board of the Climate and Energy Fund will make the funding or financing decision for the priority areas in the call for proposals that will be financed by the Climate and Energy Fund on the basis of the funding or financing recommendation of the evaluation committee.

The call for proposals is based on the Guidelines for Österreichische Forschungsförderungsgesellschaft mbH on the promotion of research, technology, development and innovation to tackle societal challenges (the FFG Challenge Guidelines 2024–2026).

The relevant definition of an SME under EU competition law applies with regard to company size. An aid to classification can be found on FFG's SME page.

The relevant versions of all EU rules and regulations are to be applied.

The legal basis for "research and development services" is the exception in Section 9 (12) of the Federal Procurement Act 2018.

5.2 Privacy, data protection and confidentiality

The FFG is obliged by law not to disclose information on companies or projects – in accordance with Section 9(4) of the Act Establishing Österreichische Forschungsförderungsgesellschaft mbH (Österreichische Forschungsförderungsgesellschaft mbH-Errichtungsgesetz), Federal Law Gazette I no. 73/2004.
This confidentiality obligation also covers external experts who evaluate the projects.

Personal data is processed in accordance with Art. 6 ff. of the EU General Data Protection Regulation (Regulation (EU) 2016/679 – GDPR)

- to comply with legal obligations applicable to FFG, BMIMI and the Climate and Energy Fund (Art. 6(1)c GDPR);
- where there is no legal obligation, in order to safeguard legitimate interests of the FFG, the BMIMI and the Climate and Energy Fund (Art. 6(1)f GDPR), specifically the conclusion and processing of the funding contract and for monitoring purposes.

This use may require data to be transmitted or disclosed in particular to executive bodies and authorised representatives of the Court of Audit Austria, to the Federal Ministry of Finance or to the EU. There is also the possibility of submitting a request to the transparency portal in accordance with Section 32(5) of the Transparency Database Act 2012 (TDBG 2012).

All project proposals submitted will only be presented for review to the individuals tasked with processing this research programme and to the programme owner. All individuals involved are obliged to maintain confidentiality.

5.3 Publication of the funding decision

Should they decide to award funding, the BMIMI and the Climate and Energy Fund reserve the right to publish the name of the applicant for the funding, the fact that funding has been awarded, the funding rate, the amount of funding, the title of the project and a short description of it in order to take account of the legitimate interest in ensuring transparency in funding matters (Art. 6(1)f GDPR).

6.0 ADDITIONAL INFORMATION

This part contains details of other funding opportunities and services that may be useful in conjunction with funding applications and/or funded projects.

6.1 The FFG Project Database service

FFG provides a service that involves publishing brief information pieces about funded projects and an overview of the parties involved in projects in a publicly accessible FFG Project Database, allowing you to showcase your project and its partners more effectively to your audience. The database can also be used to find partners to collaborate with.

Once a decision has been made to award funding, applicants will be told via the eCall system about the possibility of publishing brief, defined information pieces on their project in the FFG Project Database. Nothing will be published without an applicant actively giving their consent in the eCall system.

More details are available on FFG's page on its Project Database.

6.2 The BMIMI Open4Innovation service

In addition, the BMIMI open4innovation platform provides a knowledge base for companies, researchers, etc. (community support, more detailed information, success stories, etc.).

6.3 Open access publications

The research results obtained with public funding must be put to the best possible use for science, industry and society. With this in mind, open access should be sought as far as possible for peer-reviewed publications produced with the support of funding awarded by the FFG. As with European funding, the applicable principle here is "as open as possible, as closed as necessary".

Publication costs count as eligible project costs.

6.4 Handling project data – data management plan

A data management plan (DMP) is a management tool that helps users handle the information generated in their projects in an efficient and systematic way.

A DMP can be created using the free tool DMP Online, for example. The European Commission also offers support via its "Guidelines on FAIR Data Management".

A DMP describes:
- what data are to be collected, compiled or generated in the project,
- how these data are to be handled,
- what methods and standards are to be applied in this process,
- how the data are to be secured, backed up and managed over the long term,
- whether there are plans to make data records accessible to and usable by third parties ("open access to research data").

It makes sense for research data to be openly available if they form the basis for peer-reviewed publications and must be published in the interests of the reproducibility and verifiability of the published results.

If data is to be published, it is expected to be "findable, accessible, interoperable and reusable". It is a good idea to store data in established, internationally recognised repositories (see also the re3data website) in order to make the data as easy as possible to find.

The option of connecting to existing data spaces (e.g. the DIO Data Spaces) and activities for creating a new use case should be described.

If a Data Management Plan (DMP) is required, it is recommended to submit it alongside the funding application and designate a Project Data Steward who will be responsible for developing and regularly updating the DMP throughout the project.

6.5 Other FFG funding opportunities

Are you interested in other FFG funding opportunities?

The **Funding Service** is your first port of call for any queries about funding and advice available from FFG. Contact us, we will be happy to advise you!

Contact:
FFG Funding Service, T: +43 (0) 57755-0, E: foerderservice@ffg.at

Web: www.ffg.at/foerderservice

Further FFG funding opportunities can be found here.

Funding opportunities for people in research, technology and innovation (RTI)

During the term of the current call for proposals, the following specific calls for proposals are open, which focus on funding people in research, technology and innovation in the priority area "Energy transition":

- Industry-focused dissertations 2025 (for students at non-university research institutions) with ongoing submission options throughout the application period: 6 November 2024 to 30 September 2025
  FFG contact:
  Denise Schöfbeck
  T: +43 (0) 57755-2308
  E: denise.schoefbeck@ffg.at
- DIVERSITEC 2024 (submission open until 30 June 2025, 12:00 noon)
  DIVERSITEC promotes organisational development measures for diversity, equity and inclusion in scientific and technical companies.

7.0 APPENDIX: CHECKLIST FOR THE SUBMISSION OF APPLICATIONS

During the formal review, the funding or financing application is checked for formal correctness and completeness. Please note:

If the formal requirements are not met and the deficiencies cannot be rectified, the funding or financing application will be excluded from the further procedure without exception and formally rejected during the formal review due to the required equal treatment of all funding or financing applications.

Table 8: Formal checklist for funding applications

Criterion	Review content	Defect rectifiable?	Consequence
The project description is sufficiently filled out, and the correct language has been used.	The online project description must be completed in full. Language: German Flagship project language: English	No	Rejection for formal reasons
Uploads to the master data in eCall (upload as .pdf document)	Annual financial statements (balance sheet, income statement) for the last two financial years are available. Start-ups must have a business plan	Yes	Correction via eCall after submission
The funding applicant is entitled to submit an application.	See instrument and call for proposals guides	No	Rejection for formal reasons
For consortia: The project participants are eligible to participate.	See instrument and call for proposals guides	No	Rejection for formal reasons
Minimum requirements for the consortium	See instrument guide	No	Rejection for formal reasons
For flagship projects – compulsory preliminary meeting was held on time	See Table 3	No	Rejection for formal reasons

Table 9: Formal checklist for financing applications (R&D services)

Criterion	Review content	Defect rectifiable?	Consequence
The financing application is sufficiently filled out, and the correct language has been used.	The online project description must be completed in full. Language: German	No	Rejection for formal reasons

Federal Ministry
Innovation, Mobility
and Infrastructure
Republic of Austria

klima+ energie fonds

Imprint

Owner, publisher and media owner:
Austrian Federal Ministry for Innovation, Mobility, and Infrastructure (BMIMI)
Radetzkystraße 2, 1030 Vienna
Climate and Energy Fund, Leopold-Ungar-Platz 2 / 1 / Top 142, 1190 Vienna

Programme management:
Österreichische Forschungsförderungsgesellschaft mbh (FFG), Sensengasse 1, 1090 Vienna

Graphic design:
Waldhör KG, www.projektfabrik.at

Photos:
stock.adobe.com

Place of production:
Vienna, April 2025

Programme management
FFG
Promoting Innovation.

www.klimafonds.gv.at