

Department for Research, Innovation and Business Development

The Sustainable Battery Value Chain of the Future

The Swedish Energy Agency welcomes project proposals from researchers focusing on the sustainable battery value chain for increased energy and resource efficiency and circular processes.

This translation is for information purposes only and has no legal force. In the event of discrepancies, the Swedish-language version takes precedence. **The full version of the call including appendices is only available in Swedish.** If there are any uncertainties, please refer to the Swedish text.



1 About the call

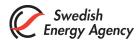
This call is carried out within the Swedish Energy Agency's research program Sustainable Battery Value Chain. The call is open for applications across the entire thematic breadth of the program (see section 9 for more information). All project proposals with the potential to contribute to the program's goals are welcome. In this call, we particularly seek *projects within one or more of the following areas:*

- New and developed battery chemistries that can contribute to increasing the resilience of, and reducing the pressure on, critical value chains of strategic importance for Sweden and the EU.
- New knowledge and skills that strengthen the ability to produce components, cells, or raw materials for batteries.
- Development of equipment and/or technology necessary for various types of manufacturing or recycling processes for the battery value chain.
- Projects on cell and battery system modelling or development of modelling tools for battery systems, enabling increased level of detail for the optimisation of the performance and lifespan for various vehicle and electrical system applications, including property and industrial applications.
- The call is also open to project proposals conducted in international research collaboration across the thematic breadth of the program, with the opportunity to position the Swedish and European battery value chain in an international context. We particularly seek collaborations where one or more parties are geographically based in one of the following countries: Japan, South Korea, the Nordic countries (*Norway, Finland, Denmark, and Iceland*), Germany, Spain, France, and Canada. The Swedish Energy Agency will in the first instance only provide funding to project partners with operations in Sweden. In exceptional cases funding may be provided to project partners without operations in Sweden (see appendix 1 in the Swedish version of the call for more information).

Collaboration is important, and research projects that are connected to industry, academia, and society are sought to facilitate the dissemination and further use of research results. For example, this can be done through:

- Collaborative projects between actors in different parts of the battery value chain and/or in different industries in Sweden and internationally.
- Projects where individuals work within academia instead of industry for a period, or vice versa.
- Collaborative activities such as seminars where the project's results are
 presented in a broader context or where companies are given the
 opportunity to assess the developed battery concept and thereby
 contribute to capability building.
- Activities through which analyses of policy developments and recommendations is disseminated to policymakers in relevant fora.
- Reference groups.

The project should contribute to the achievement of one or more of the following goals:



- New and enhanced cost- and resource-efficient battery concepts for energy storage and use in electrical system and vehicle applications have been developed.
- World-leading knowledge and skills have developed among both Swedish researchers and companies in the fields of:
 - Mature and emerging battery technology for electrical system and vehicle applications.
 - Energy and resource-efficient processes for battery components, battery cells, or raw materials for battery cells.
 - Sustainable and cost-effective recycling processes and recycling methods
- A close collaboration and an active network between academia and industry has been developed, and battery research activity within Swedish industry and academia has been expanded.
- Research collaboration around the battery value chain has been established with the countries specified in the call.
- Knowledge relevant for the formation of policy has been produced.

Projects concerning battery development should adhere to the publication guidelines provided in "Reporting methodologies – Batteries Europe". The Swedish Energy Agency views this method positively for creating uniformity, but it is not part of the assessment.

The call concerns the provision of funding in the form of grants. In this call, a total of approximately 120 million SEK is available for the project parties that are granted support.

Project proposals falling within the breadth of the program but involve experimental research to a greater extent, are larger pilot and demonstration projects, or focus on research questions on application challenges with less focus on the battery, are referred to calls within other relevant programs, such as <u>Pilotoch demo</u>, <u>Framtidens elsystem</u> or <u>FFI</u>.

2 Important dates

Application deadline	Earliest project start date	Latest project end date
August 21, 2025	November 1, 2025	December 31, 2030

Timetable for submission:

• Application period: May 12, 2025 – August 21, 2025

• Decisions are planned in October 2025

• Earliest project start date: November 1, 2025

• Latest project end date: December 31, 2030

The call is titled "Framtidens hållbara batterivärdekedja" in Mina Sidor – the Swedish Energy Agency's application portal



3 Who can apply?

This call is open to:

- Companies (legal entities)
- Other legal entities
- Public sector entities
- Universities and colleges
- Research institutes
- Non-governmental entities

Collaborative projects between different types of actors (e.g. industry, academia, research institutes) are viewed positively.

In project consortia with both Swedish and non-Swedish actors, the Swedish Energy Agency will in the first instance only fund project partners with operations in Sweden. In exceptional cases funding may be provided to project partners without operations in Sweden (see appendix 1 in the Swedish version of the call for more information).

Gender equality and diversity should be considered when assembling the project team and selecting the project leader, in project content and during project implementation, as well as in relation to the intended project outcomes and impacts.

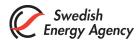
4 How will the application be evaluated?

The Swedish Energy Agency will evaluate the project proposals using the following criteria:

Programme Relevance

The degree to which the project contributes to:

- New collaborations between companies in the battery field.
- New collaborations between researchers that are the less well-established within the battery value chain field, thereby procuring the transfer of knowledge and skills from relevant research fields.
- Increasing the number of PhD students and postdoctoral researchers in the battery ecosystem.
- Increasing the total number of active researchers in the industry.
- The career development and academic qualifications of junior academic researchers.
- Increased research exchange, both national and international, focusing on junior academic researchers.
- Promoting collaboration, both Nordic, European and global, to meet knowledge, skills and competitiveness needs.
- Increased gender equality in leading positions within academia and industry.
- One or more of the areas particularly sought after in the call:



- New and enhanced battery chemistries that can contribute to the reduction of pressure on critical value chains of strategic importance for Sweden and the EU.
- New knowledge and skills that strengthen the ability to produce components, cells, or raw materials for batteries.
- Development of equipment and/or technology needed for various types of manufacturing or recycling processes in the battery value chain.
- Projects on cell and battery system modelling, or development of modelling tools for battery systems, enabling increased level of detail for the optimisation of performance and lifespan.
- Establishing new research collaborations around the battery value chain with international actors in the countries listed in the call.

Scientific Excellence and Innovation Potential

The degree to which the project contributes to:

- New and enhanced cost- and resource-efficient battery concepts for the storage and use of renewable energy in vehicle and electrical system applications.
- World-leading knowledge, potentially advancing the state-of-the-art and skill
 development in current and future battery systems for the storage and use of
 renewable energy in vehicle and electrical system applications within both
 the academia and the industry.
- World leading knowledge, potentially advancing the state-of-the-art and skill
 development in energy and resource-efficient processes for the production of
 components, cells or raw materials for battery cells.
- World leading knowledge, potentially advancing the state-of-the-art and skill
 development in sustainable, cost-efficient processes and methods for reuse
 and recycling within in both the academia and the industry.

Feasibility

The degree to which the project has:

- A suitable project plan with choices for duration, methodology and budget that are deemed reasonable for addressing the identified problems through the specified activities, work packages, milestones, division of responsibilities, specific project objectives and goal fulfilment plans.
- A project team with the right set of skills and resources for carrying out the project and achieving the specified purpose and objectives.
- Incorporated diversity and gender equality aspects of relevance to the specified areas of enquiry, the proposed solutions, and the expected impacts in its implementation plan.
- Considered gender equality when selecting the project team in terms of both the gender balance as well as the distribution of power and influence between women and men.

Utilization and Dissemination

The degree to which the project contributes to:



- The transmission and utilisation of the knowledge within the battery ecosystem.
- The development of close collaborations and active networks between academic and industrial actors, as well as the expansion of battery research activity within the Swedish industry.

Projects addressing topics within the specifically requested research areas in this call will be prioritised in instances where proposals are otherwise ranked equally.

5 What your application should include

Be thorough when writing your application and attach relevant documents. Read more on what the application should include in the **Manual for applying and managing support for research and innovation via Mina sidor** (In Swedish only) (https://www.energimyndigheten.se/491cfb/globalassets/sharepoint-dokument/process-dokument/publicerade-dokument/manual-for-forskningsansokningar-via-mina-sidor.pdf).

Attach the CV of the project manager and other key personnel - maximum one A4 page per person.

Attach any figures and images that are referred to in the application form. Note that the project description must be included in the application form and should not be submitted as a separate attachment. Appendices submitted as attachments should complement, and not duplicate, the information provided in application form.

For efficient and faster processing, you are encouraged to attach:

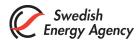
• The certificate Redogörelse för tidigare mottaget stöd för innovationsrådgivningstjänster och innovationsstödjande tjänster (only in Swedish). This certificate converts whether support can be granted for innovation-supporting services, such as IP-strategy (Intellectual Property) and patents.

More information is available on how the Swedish Energy Agency processes personal data (in Swedish).

6 How to apply

Follow these steps to speed up the processing of your application:

- Use the e-service "Finansiering av forskning och innovation" in Mina Sidor to write your application. (https://minasidor.energimyndigheten.se)
- Start by applying for authorization to represent the coordinator, that is, the organization that will coordinate the project, collect the grant payments from the Swedish Energy Agency, and distribute the payments to the other



beneficiaries involved in the project. **Apply for authorization well in advance**, as it may take a few days before it is granted. You will receive an email once your authorization request has been approved.

 Once you have been authorized for the e-service, you will gain access to the form "Ansökan om finansiering av forskning och innovation," which you must complete and submit.

Submit your application no later than 11:59 PM on August 21, 2025. Support will be available until 4:00 PM on the same day.

7 How much support a project partner can receive

The share of each project partner's costs that can be funded depends, among other things, on:

- the amount of eligible costs each project partner has
- whether or not the project partner is a company or carries out non-economic activities
- whether or not the project partner is a small or medium-sized enterprise (SME)
- which research category the project activities are considered to fall under.

All project costs must be actual and auditable, which means they must be recorded separately in the accounting.

This call provides the following types of grants:

Grants for research and development projects

In the categories of basic research, industrial research, experimental development, and feasibility studies, funding can be granted to:

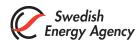
- actors carrying out non-economic activities, such as universities, colleges, municipalities and research institutes
- companies.

Grants for innovation-supporting activities

These activities must be included in a separate work package in the application. Examples of innovation-supporting activities that may be included in such a work package are:

- work on intellectual property strategy (IP strategy)
- preparation of patent applications, trademark applications, or design protection (does not apply to annual fees to the Swedish Intellectual Property Office (PRV))
- other innovation advisory services, such as guidance related to applicable standards, agreements, and regulations.

For more detailed information on funding levels, eligible costs, and types of activities, see Appendix 1 and Appendix 2 in the Swedish version of the call.



8 What happens after you submit the application?

Your application will be evaluated by an evaluation group acting in an advisory capacity to the Swedish Energy Agency. The version of the application that is submitted by the deadline is the one that forms the basis for the Swedish Energy Agency's evaluation.

The Swedish Energy Agency may, if necessary, ask you to submit complementary information.

The Energy Agency may also run a credit check on applying companies, project partners, owners, and board members.

Communication during the processing of your application will primarily be carried out through Mina Sidor.

The decision to grant or to reject your application will be taken by the Swedish Energy Agency taking into account the outcome of the evaluation conducted using the criteria outlined above. You will receive a notification from us shortly afterwards, noting the decision, accompanied by a motivation.

You can follow the status of your case in Mina Sidor.

Grants will be paid out as per the payment plan in the decision. For more information on payments, see the General Terms and Conditions for Funding attached to the decision.

9 This call is part of the programme The Sustainable Battery Value Chain

The vision of the program is to, through research-related initiatives in the battery sector, "enable Sweden's contribution to a sustainable European battery value chain."

The long-term objective of the program is to contribute to competitiveness, security of supply, and ecological and social sustainability through battery-related research and the development of academic expertise. A key premise of the program is to contribute to strengthened and sustained competitiveness for Swedish actors, sustainable electrification of transport, and a resilient energy system through resource- and energy-efficient, system-efficient, and circular processes throughout the battery value chain.

The program funds research projects in areas such as the development of new battery materials and chemistries, recycling, reuse, safety issues, development of methods and tools for battery system modeling, as well as



other related areas such as further development of existing battery materials and chemistries, diagnostics/measurement, control/use, and other battery-related fields relevant to the program's impact objectives. The program also supports system analyses of different battery tracks, knowledge syntheses, feasibility studies, and policy analyses.

The focus of the program is on strengthening knowledge and expertise in batteries, with an emphasis on academic research and qualifications, increased collaboration in applied research that addresses the need for scaling up technologies and processes in areas where there are industry actors in Sweden, as well as improved knowledge bases for policy and regulatory development.

Read more in the program description <u>Forskningsprogrammet: Hållbar batterivärdekedja</u> (only in Swedish).

10 If you have questions

The Swedish Energy Agency are happy to answer any questions on the call. However, we cannot comment on project ideas or provide recommendations, we can only answer questions related to the call itself.

Please note that it may be more difficult to get assistance on the last open day of the call as many tend to call in then. The Swedish Energy Agency is only available for questions until 4:00 PM on the last open day. After that time, you should not expect to receive help or support.

Please note that applications to this call must be submitted through Mina Sidor. Instructions on how to proceed can be found in the Manual for Research Applications via Mina Sidor (only in Swedish).

For questions on the contents of the call, contact one of the following program managers:

- Gabriel Granström, gabriel.granstrom@energimyndigheten.se,
 +46 (0)16-544 24 30
- Yawer Jafri, yawer.jafri@energimyndigheten.se, +46 (0)16-544 24 32
- Anna Lock, anna.lock@energimyndigheten.se +46 (0)16-544 23 21

For technical support or questions about authorization, contact:

registrator@energimyndigheten.se

Telephone: +46 (0)16-544 20 00