1. About the call "Transition to a Sustainable, Biobased Society"

Do you want to provide new capabilities or solutions that have the potential to accelerate and boost the transition to a sustainable and bio-based society?

The Swedish bioeconomy has been growing over many decades and offers a diversified range of bio-based materials, products, and fuels with essential functionalities for society and Swedish competitiveness. A resilient and competitive bioeconomy requires significant amounts of biomass resources and a more efficient (re)use of side streams that can contribute to increased security of supply. A basic principle is that the biomass should be used efficiently and be based on sustainable value chains – economically, ecologically, and socially.

In this call, the Swedish Energy Agency offers support for research and innovation projects that:

- Increase the understanding of the role(s) of biomass in a broader industrial and energy system perspective.
- Develop capabilities on how policy instruments, regulations, and behaviours may impact the bioeconomy, the interaction with the energy system, and related industries or sectors.
- Boost the energy and climate transition through industrial renewal¹, new solutions, or value chains related to bioeconomy.

The call refers to support in the form of grants. This call covers approximately SEK 70 million for project partners that are granted support. The maximum funding per project is SEK 8 million and SEK 1 million per feasibility study² (footnote).

The call is the 11th within the Bio+ program (see section 9 for more information) and welcomes projects in the areas of:

- Biomass and bio-based solutions (including projects based on aquatic biomass).
- Sustainability, societal perspectives, and system analysis (projects addressing system wide issues and solutions).
- Market and commercialisation (company-driven projects within industrial research, experimental development, and feasibility studies).
- International cooperation.

2. Important Dates

The schedule for submitting an application is listed in the table below:

- Application Deadline: September 10, 2024
- Earliest Project Start: January 1, 2025
- Latest Project End: December 31, 2027
- **Decision from the Energy Agency:** No earlier than December 2024

On "Mina sidor" (My Pages), the call is named "Bioplus 2024 FoI."

 ¹ Industrial renewal is defined here as new cross-industry connections and new constellations with great potential for scaling up.
² Feasibility study - Evaluation and analysis of the potential of a project aimed at supporting the decision-

² Feasibility study - Evaluation and analysis of the potential of a project aimed at supporting the decision-making by rationally revealing the project's strengths and weaknesses, opportunities and risks as well as to identify the resources required to implement it, and finally the prospects for the project to become a success.

3. Who Can Apply?

The call is directed to all actors who can contribute to the transition, and the following projects are prioritized:

- Company-driven Innovation Projects: Companies that develop biobased solutions with significant export and commercialisation potential, providing relevant contributions to the energy and climate transition.
- Projects Led by Junior Researchers³ (footnote)
- **Interdisciplinary Projects:** Projects where social sciences and humanities (SSH) are also included.
- Cross-sectoral Projects: Projects between actors and sectors characterized by clear and appropriate cooperation, for example between academia, research institutes, public sector, and industry.
- Projects Studying the Interaction with other (parts of the) Energy Systems, for instance, the electricity system, heating system, and transport sector.

Gender equality and diversity should be considered in the composition of the project group, selection of project leaders, implementation, project content, and its goals and effects.

Specifically for Technical Projects: Relevant recipients of results as well as actors along the value chain should participate actively in the project. The project application is strengthened by financial engagement from a broad stakeholder base where different types of actors (industries, academia, research institutes, and decision-makers in the public/private sectors) collaborate across sectors. Larger pilot and demonstration projects with more than SEK 7 million in eligible costs should refer to the Pilot & Demonstration call.

Specifically for System- or SSH-Oriented Projects: Relevant receivers of results should actively participate in the project. The application is strengthened by engagement from a wider network of stakeholders where various types of actors collaborate across sectors (e.g., the research community, decision-makers from business, public sector, and/or civil society organizations).

Specifically for Feasibility Studies:

- Up to SEK 1 million support for a maximum of one year (see support levels in Appendix 1).
- Activities must classify as a feasibility study, as defined in the footnote above
- Note that a feasibility study should evaluate the conditions for a subsequent research and innovation project.

³ A junior researcher is defined: a researcher who has completed a dissertation in the last five years and who still do not have stable employment within the academic career ladder – may for example be employed as postdoctoral fellow, researcher, assistant lecturer or hold another type of employment with mainly research teelor.

4. How Do We Assess Your Application?

The Swedish Energy Agency evaluates project proposals according to the criteria listed below (without any specific order or weighting):

• Potential to Contribute to the Purpose of the Call:

To what extent does the project contribute to fulfilling the call's purpose?

• Feasibility:

- Does the project have a relevant group of participants (see Section 3 above) with the right capabilities and resources for making an impact (market potential and societal impact)?
- Are the goals measurable, concrete, well-defined, and reasonably ambitious?
- Is the proposed work plan concrete and realistic in terms of timeline?
- Is the budget reasonable in relation to the intended efforts and goals?
- Is there awareness regarding gender equality in the project's team composition, division of work, and work conditions?
- If gender perspectives are relevant for the project, how well are these integrated in the project?

Innovation Level:

- How well is the existing knowledge base and environmental analysis described?
- To what degree is the project innovative and original, and/or how well does it contribute to advancing the knowledge frontier?

Benefit:

- Are there clear recipients and/or end users of the project's results, and are their needs considered?
- How and to what extent can the project's results be utilized, for example, through dissemination, capacity building, publications, coordinated policy measures and regulations, new products/services/processes, or commercialization?

To achieve the program's goals, the Swedish Energy Agency may consider the composition of the project portfolio.

5. What Should Be Included in the Application

Be thorough when writing your application and attach relevant materials. Read more about the application requirements in the "Manual for Applying for and Managing Support for Research and Innovation via My Pages."

• Motivate Why the Project Needs to Be Implemented:

The application should clearly state how the project contributes to the energy and climate transition and to the development of a sustainable energy system.

• Results Dissemination:

Results dissemination is essential to ensure the project's outcomes are utilized. A well-developed communication plan is necessary to make sure the project is known and rooted in relevant societal sectors and that the knowledge developed is used effectively.

• **Include communication activities** in your project budget, as these are eligible for support.

• Attach Key CVs:

Attach the CVs of the project leader and other key individuals, each no longer than one page.

• Attach Figures and Images:

Attach any figures and images referenced in the text. Note that the project description must be provided in the application form and not as an attachment.

• Obligatory Attachment:

Attach the required attachment form to your application. The template is available on the call page.

6. How to Apply

Follow these steps to expedite your application process:

- 1. Use the "Financing of Research and Innovation" e-service on My Pages to complete your application.
- 2. First, apply for authorization to represent the coordinator the organization coordinating the project, receiving support from the Swedish Energy Agency, and forwarding funds to other project participants. Apply for authorization in good time, as it may take a couple of days to be granted. You will receive an email when your authorization application is approved.
- 3. Once authorized for the e-service, you will have access to the form "Application for Research and Innovation Funding," which you can complete and submit.

7. Support Available

The level of support each project partner can receive depends on:

- The size of eligible costs the partner has,
- Whether the partner is a company or engages in non-economic activities,
- Whether the partner is a small or medium-sized company (SME), and
- The type of research category the project activities correspond to.

All project costs must be actual and auditable, meaning they should be separately accounted for.

Refer to **Appendix 1** and **Appendix 2** for detailed information on support levels, eligible costs, and types of activities.

8. What Happens After You Submit Your Application?

The version of your application submitted before the call's deadline will be the basis for the Swedish Energy Agency's evaluation.

The Swedish Energy Agency may request additional information if needed.

A credit check may be conducted on applying companies, project partners, owners, and board members.

Communication regarding your application will primarily occur through "Mina sidor" (My Pages).

Disbursement of the support will occur according to the disbursement plan specified in the decision. For more information about disbursement, see **Appendix 2: General Conditions for Support**.

9. The Call is Part of the Bio+ Program

Bio+ is a research and innovation program focusing on the contributions of biomass, bioenergy, and the bioeconomy to energy and climate policy, research policy, and economic policy goals, as well as the three pillars of energy policy: security of supply, competitiveness, and ecological sustainability. The program aims to develop bio-based solutions and value chains relevant to the energy system and increase knowledge and competence on how these should interact with each other and the broader energy system. The solutions and value chains developed should be competitive, improve the ecological status of land and water if possible, contribute to security and equality, and collectively contribute to the flexibility and robustness of the energy system.

The program runs from 2021 to 2027 with a budget of SEK 511 million. By 2030–2045, the program aims to contribute to the following outcomes:

• Resource-Efficient Solutions:

Resource and cost-effective technologies, products, and system solutions are available, improving security of supply, competitiveness, and carbon yield. These solutions are exported to international markets.

• Sustainable Value Chains:

Sustainable value chains are available, including supplying sustainable bio-based raw materials and converting them into products and solutions in demand by the market. Value chains also include utilizing by-products and waste streams in collaboration with other industries and sectors.

• New Actor Constellations:

New and/or expanded actor constellations are formed, where collaboration and continuous knowledge exchange occur nationally and internationally. Resource-efficient bio-based system solutions are developed and built within or as a result of these constellations.

• High Competence Levels:

Companies and organizations in Sweden can easily recruit sought-after competence in the bio field to accelerate the transition. National competence in the area is strong and adapted to meet societal needs.

• Effective Policy Measures and Policy:

The bio industry's actors face incentives aligned with society's goals, where market mechanisms work well and interact with the energy system. Regulations are designed based on current sustainability research, societal studies, and system and economic analyses.

More information about the program can be found on the BioPlus portal and the Swedish Energy Agency's website.

10. If You Have Questions

Email bioplus@energimyndigheten.se with "Bioplus 2024 FoI" in the subject line.