

Research Project Grant Energy-Oriented Basic Research

The aim of this grant is to support basic research projects in natural and engineering sciences of the highest scientific quality and with very strong potential to contribute to an entirely renewable energy system, a resource-efficient society and/or a more flexible and robust energy system. The call concerns research project grants, which allow researchers the freedom to identify the research concept, methods and implementation steps, and to solve a specific research task within a limited period of time.

Projects can be supported with a maximum of 1.3 million SEK per year. The overall budget for the call is 25 million SEK per year.

This call by the Swedish Energy Agency is made in collaboration with the Swedish Research Council. The Swedish Energy Agency is responsible for the call as a whole, and makes award decisions within the call.

Summary

Type of grant	Research Project funding
Area	Natural and Engineering sciences
Focus	Energy-oriented basic research
Applicant	Individual researcher
Participating researchers	A maximum of six researchers may be invited to join the application.
Grant period	1-4 years
Grant amount	Minimum 400 000 SEK per year, maximum 1 300 000 SEK per year
Call deadline	21 March 2017 (14.00/2 p.m.)
Publication of grant award decisions	The decision is planned for November 2017
Grant period start date	January 2018

[Read more about previously awarded grants by the Swedish Energy Agency](#) 

Eligibility criteria for grant applications

You must fulfil the requirements set out below to be eligible to apply for the grant. We will carry out checks in order to ensure that ineligible applications are rejected from further processing.

The Swedish Energy Agency makes the funding decision and administers grants awarded. Further information about the terms and conditions that apply to grants awarded may be obtained from the Swedish Energy Agency contact persons (see "Contact" below).

Focus

In addition to being of high scientific quality, research projects covered by this call must show very strong potential to contribute to the transition to a long-term sustainable energy system, by facilitating the development of:

- An entirely renewable energy system
- A resource-efficient society
- A flexible and robust energy system.

This means that through the choice of project goal and approach, the projects shall have very good potential to solve a problem or develop new knowledge relating to crucial challenges to this development.

Collaboration with business parties, for example in a reference group, and other prerequisites that may contribute to ensuring the relevance of the project results and realising the project potential to contribute to the transition to a long-term sustainable energy system is considered a strength in the assessment.

The call supports basic research, i.e. experimental or theoretical work that in the first instance aims to acquire new knowledge about the fundamental causes of phenomena and observable facts, and that is not aimed at any direct commercial application or use.

Applicant

The research project grant is open to individual researchers. You will be the project leader and scientific supervisor of the project and your active participation in the project must equal at least 20 per cent of a full-time equivalent. You must hold a Swedish doctoral degree or an equivalent foreign degree awarded no later than the deadline of this call. The date of issue will be considered to be the point in time when all the requirements of the degree were fulfilled, such as mandatory courses, the oral public defence of the doctoral thesis and the approved doctoral thesis.

The grant will be administered by a Swedish Higher Education Institution (HEI), or another public organisation in Sweden that fulfils the Swedish Research Council's [requirements for administrating organisations](#). Please note that you will not be able to apply unless your organisation is an approved administrating organisation.

Number of applications and previous grants

The eligibility criteria under this section only apply to the applicant and project leader, not to participating researcher.

What grants may I apply for simultaneously?

You may only submit one application for this grant under this call for applications in energy-oriented basic research. You may apply for this project grant in parallel with applications under other calls by the Swedish Research Council or the Swedish Energy Agency, but please state this in your research plan.

What eligibility criteria apply to ongoing research grants?

You may apply for a grant with this focus at the same time as being the project leader of an ongoing grant awarded by the Swedish Research Council, the Swedish Energy Agency or another funding agency. By ongoing grant, we refer to a previously awarded grant with a grant period that overlaps wholly or in part with the grant period of the current application.

Note: It is a requirement of the Swedish Energy Agency that progress reports, financial progress reports, final reports and final financial reports must be submitted within the time specified for all grants funded by the Agency. The Agency will verify that all your or your institution's reports have been submitted to the Energy Agency. In the case of a missing report, a funding decision cannot be taken until the report has been submitted. Please contact your administrating organisation if you are unsure whether all your final financial reports have been submitted.

Participating researchers

You may include up to six participating researchers in your application, i.e. researchers with a doctoral degree whose scientific merits and competence will be crucial for the implementation of the proposed research activities. The participating researchers do not have to be employed by a Swedish Higher Education Institution (HEI).

Participating researchers will themselves have to enter the required information into Prisma, and link it to the application. Any other collaboration partners and their roles shall be described in the research plan (see instructions under Research plan below).

Costs and grant funding

You may apply for and be awarded a maximum of 1 300 000 SEK per year, including indirect costs. You may apply for a minimum of 400 000 SEK per year, including indirect costs.

The grant may be used to cover all kinds of project-related costs, such as salaries (including your own salary, which must correspond to no more than your dedicated time in the project), premises costs, operating costs (such as consumables, travel costs including visits to research centres, publishing costs and minor equipment) and depreciation. The grant may however not be used for the following: costs covering activities at foreign HEIs, costs related to undergraduate education such as supervision of master theses or for scholarships. If a doctoral student takes part in the project, the grant may not be used to pay for his/her teaching hours.

Indirect costs for Swedish HEIs are covered according to the full-cost accounting principle. Indirect costs should be calculated according to the HEI's individual accounting model or according to the SUHF accounting model.

Grant period

You may apply for a grant period of a minimum of one and a maximum of four years, starting from January 2018. The first payment will be made in January 2018 at the earliest.

How do I apply?

You apply electronically through [Prisma](#), which is the application system used by the Swedish Research Council. You create an application in the Prisma system by filling out the text fields, retrieving information from your personal account, and attaching the required appendices.

In order for you to be able to apply, your organisation must have become an [approved administrating organisation](#) and created an organisation account in Prisma.

Most of the required steps in Prisma are described in the [User Manual](#) and the [FAQ answers](#). Please refer to these documents when writing your application.

Please avoid stating your or anybody else's full personal identity number in the application except where specifically requested.

Creating a personal account in Prisma

Before applying, you must create a personal account in [Prisma](#), where you will store your personal data and your CV. The information only has to be entered once, and may subsequently be supplemented or amended whenever necessary. Since foreign peer reviewers are involved in most of the Swedish Research Council calls, we ask you to enter text in English in your CV data. The account will also enable you to register your publications for future use. Please note that publications stored in your account cannot be transferred to the application form. The reason for this is that the publications function is still under development and

has not yet been implemented in the Swedish Research Council's calls. The publications list must therefore be presented in the form of an attached PDF file (see instructions under Publications below).

Please remember to create your personal account well in advance. The applications that you register in Prisma will be linked to your personal account.

Any other participants involved in the preparation of the application must also create an individual Prisma account, and agree to their participation. Once that has been done, they will be able to link their account data to the application.

Text

Some text fields are formattable, which means that in those fields you can change the font and size and insert certain tables, formulas and symbols. If you have written the text in advance using Microsoft Word, you will also be able to copy-paste the text and keep the initial formatting. Pictures can however not be inserted into the text fields.

All text fields have limitations as to the number of characters and this will be illustrated by means of a character counter. If you use too many characters you will not be able to register the application.

Attached documents and appendices

An appendix designed according to the instructions provided shall be attached to some fields. The appendix may only consist of one file, and you can only attach documents in PDF format. All appendices are limited in terms of file size and number of pages. You will not be able to attach a file that exceeds the stated maximum file size.

Signing

Both you, as applicant, and the official representative of the administrating organisation, must sign the application electronically in Prisma. More information can be found under Registering the application below.

What must the application contain?

Please familiarise yourself with the application form in Prisma at the same time as you read through the instructions below.

Language

The scientific assessment of the applications is partly done by foreign peer reviewers. To guarantee a well-functioning procedure and a level playing field in the review process, we therefore ask you to submit your application in English unless where otherwise is called for.

Application subsections

The application form contains the following tabs:

- Descriptive data
- Research description
- Budget and research resources
- Publications
- Administrating organisation
- Participants
- CV

Below you will find an outline of the information required under each tab. Mandatory information is marked with an asterisk (*) in Prisma.

Descriptive data

Under this tab, please list the project title in Swedish and English, the project period (number of years), and select SCB classification codes and keywords. Please also provide an abstract and a popular science description (see instructions below).

Abstract

The research plan abstract should contain a brief description of:

- The research activities to be undertaken.
- The project implementation: the project organisation, the time table and the scientific methods to be used.
- The significance of the planned research, including its potential to contribute to an entirely renewable energy system, a resource-efficient society and/or a flexible and robust energy system.

The abstract should include a brief outline of the aim and the implementation of the research activities. Please use wording that can also be understood by somebody with a different scientific background.

The outline may contain a maximum of 1 500 characters, including blank spaces (approximately half an A4 page in Times New Roman, size 12, single spacing).

Popular scientific description

Describe the project in a way that makes it possible to understand for a person not familiar with the subject. Describe why and how the research will be conducted, and explain in what way the new knowledge might be important.

The popular scientific description is an important tool for us when we provide information about the research funded. If the Swedish Energy Agency approves your application, we therefore reserve the right to use the description for information purposes.

Note: Unlike the rest of the application, the popular scientific description must be written in Swedish.

The description may contain a maximum of 4 500 characters, including blank spaces (approximately one A4 page in Times New Roman, size 12, single spacing).

Research summary

Under this tab, please attach you research plan, describe ethical considerations and relevance to the focus area.

The contribution of the project to the transition to a long-term sustainable energy system

Describe the way in which your project can contribute to the transition to a long-term sustainable energy system by facilitating the development of an entirely renewable energy system, a resource-efficient society and/or a flexible and robust energy system. The description may contain a maximum of 16 000 characters, including blank spaces (approximately four A4 pages in Times New Roman, size 12, single spacing) and **shall be written in Swedish**.

Please note that applications under the call in the first instance will be assessed on the basis of the relevance of the project aims to the solution of a problem or development of new knowledge relating to crucial challenges with good potential for contributing to an entirely renewable energy system, a resource-efficient society and/or a flexible and robust energy system. The information provided under this heading in the application is important for this assessment. Only projects that receive a grading of at least 6 out of 7 in this initial assessment will be taken forward to the assessment of scientific quality.

The following headings shall be included:

- **Main challenges to realising the potential of the application/applications to contribute to an entirely renewable energy system, a resource-efficient society and/or a flexible and robust energy system.** What techniques/applications may the project contribute to developing? What are the main challenges to the techniques/applications in question contributing to an entirely renewable energy system, a resource-efficient society and/or a flexible and robust energy system?
- **Project goals.** Examples of goals may include the questions to be answered or the results to be achieved, and should preferably be listed as bullet points. **Please note that the goals shall be identical to those stated in the research plan, but stated in Swedish here!**
- **The relevance of the project goals to an entirely renewable energy system, a resource-efficient society and/or a flexible and robust energy system.** How do the project goals contribute to meeting main challenges to the techniques/applications in question contributing to an entirely renewable energy system, a resource-efficient society and/or a flexible and robust energy system?
- **Prerequisites for the project results being implemented in the energy system in the long term.** What are the prerequisites for the results being put into practical use in the development of a sustainable energy system? What type of collaboration, recipient capacity within industry, etc. may facilitate this?

Collaboration with business partners, for example in a reference group, and other prerequisites that may contribute to ensuring the relevance of the project results for the development of the application(s) and realising the project's potential to contribute to the transition to a long-term sustainable energy system are considered a strength in the assessment of the project.

Please note however that the call only supports basic research projects, i.e. experimental or theoretical work that in the first instance aims to acquire new knowledge about the fundamental causes of phenomena and observable facts, and is not aimed at any direct commercial application or use.

Ethical considerations

Present the ethical issues raised by the research, and explain how they will be addressed in the research activities. Please also indicate whether the research includes animal experiments, experiments involving human subjects, or the handling of personal data. If the research does not raise any ethical issues, this should also be stated.

Research plan

Please attach your research plan in a PDF format. Please note that the appendix may only contain one file, with a maximum size of 10 MB.

The research plan should consist of a brief but complete description of the research task. The research plan should be given a forward-looking focus and comprise a maximum of ten page-numbered A4 pages in Times New Roman, font size 12, single spacing, including references and any images. **Please note that any content in excess of the stated maximum number of pages will not be taken into account when assessing your application.**

The following information must be included under separate headings in the research plan, listed in the given order:

- **Purpose:** Present the overall purpose of the research project.
- **Project aims:** The aims may for instance include the research questions to be answered or the specific research objectives to be achieved. The aims should preferably be stated as bullet points.
- **Survey of the field:** Outline previous research, conducted by either yourself or by others, as well as earlier research results in the field. Please provide key references.
- **Project description:** Summarise the project by describing the theories, methods, time table and implementation. You should also describe the project organisation and clarify your own and any

participating researchers' roles in the project. In this section, you may also include other researchers, who are not listed as participants in the application form.

- **Significance for the research field:** Describe the project's significance to the research area.
- **Preliminary results:** Describe your own experiments and pilot studies in the research area. If there are no preliminary results, this should also be stated.
- **Other applications or grants:** Describe similarities with and differences from associated projects within the research group. Such projects may be in progress or completed, or in the application phase (submitted as well as planned applications).

Provide information on the following points under a separate heading if relevant to your application:

- **Equipment:** Describe the basic equipment that you and the team will have at your disposal for the project.
- **Need for infrastructure:** Specify the need for international and national infrastructure within the project. Also specify the need for local infrastructure if such equipment depreciation costs are included in the application. [Read more about research infrastructure supported by the Swedish Research Council](#).
- **International and national collaboration:** Describe your and your team's collaboration with Swedish/foreign researchers and research groups. Indicate whether you participate in, or refer to, international collaboration in your research. You may use project grant funds to co-finance EU projects with a similar aim and direction. Indicate whether such coordination is being envisaged in the research plan.
- **Independent line of research:** If you are currently - or will be - working in a large group, please show how your project relates to the other projects of the group. If you are continuing work on a project that was fully or partly initiated during your doctoral or postdoctoral studies, you must also describe how your project relates to the research conducted by your former research advisor.

Budget and research resources

Under this tab, please show personnel costs, other costs and any other project funding sources. The grant may be used to cover all kinds of project-related costs, such as salaries, premises costs, operating costs and depreciation. Exceptions are costs covering activities at foreign HEIs, supervision of master theses, and scholarships, which may not be funded.

Projects under the call may be awarded a maximum of 1 300 000 SEK per year.

Project personnel

Specify the dedicated time in the project (as a percentage of a full-time equivalent) for all project personnel, including yourself, any other researchers and other personnel. Your dedicated time as project leader must equal at least 20 per cent of a full-time equivalent.

You must also include salaries for which you request funding, for yourself and/or other project personnel. Quote the amounts both in proportion to the full-time monthly salary and as actual annual earnings (including social security contributions). Quote the rounded amounts in SEK.

Other costs

Describe other project-related costs (such as premises costs, operating costs and depreciation costs). Please quote rounded annual amounts.

You may only include the proportion of the depreciation costs that corresponds to the use of the equipment in the project for which you request funding. You may not include depreciation costs relating to equipment that is fully financed by means of other grants. If you have questions about what qualifies as local research infrastructure, acquisition values, or how to calculate the depreciation cost, please contact your administrating organisation.

Total project cost

The application system will automatically add up the budget items that you enter in a table. The total amount requested shall also include indirect costs. You will have to add the indirect costs yourself to the table according to the SUHF accounting model. In this section, please add any other additional project costs (for which you do not request funding in this application).

For questions as to what qualifies as a direct or indirect cost, please contact your administrating organisation.

Explanation of the proposed budget

Write a brief justification statement for each item in the proposed budget. The statement may contain a maximum of 4 000 characters including blank spaces (equivalent to approximately one A4 page in Times New Roman, font size 12, single line spacing).

Other funding

List any other funding (whole or part) of the project received/applied for by you or any other researcher besides the funding requested in this application. Quote the rounded amounts in SEK.

Publications

Under this tab, please attach your and the participating researchers' publications lists in a PDF format. Please note that the appendix may only contain one file, with a maximum size of 10 MB. If the attachment contains several files, you will therefore have to join them into a single file.

Include publications made in the last eight years and mark the five publications on each list that are the most relevant to the project with an asterisk (*). In each list, the researcher's name shall be indicated in bold and also be shown in the page heading of the list. Sort the publications under the following numbered headings in the given order:

1. **Peer-reviewed original articles**
2. **Peer-reviewed conference contributions** (the findings presented may not have been reported in other publications).
3. **Monographs**
4. **Research review articles**
5. **Books and book chapters**
6. **Popular science publications including books/presentations**

Note: You may only include articles (or equivalent) that have been published or accepted for publication at the time of applying. The application cannot be supplemented with publications after the call has closed.

Citation data, including the number of citations per publication, must be provided after each publication reference. The number of citations (n) must be preceded by the phrase "Number of citations: n". Each list shall also state the five most cited publications, irrespective of the publication year, with citation data presented in the same way.

Citation data must be shown for:

- Peer-reviewed original articles
- Peer-reviewed conference contributions
- Research review articles, books and book chapters

List the database used at the top of the publications list. You may choose from the following databases:

- Web of Science
- Google Scholar

- Scopus (Elsevier)
- SPIRES
- ADS (The SAO/NASA Astrophysics Data System)
- MathSciNet

Note: The Swedish Research Council has a restrictive view on bibliometric comparisons between individuals. The citation data given will only be used as one part of an overall evaluation performed by experts in each subject field.

Administrating organisation

Under this tab, please list the administrating organisation and the project site. The administrating organisation is the organisation that administers and accounts for the funds of the project awarded under the terms and conditions laid down. The project site is the organisational unit where the project will be based. The administrating organisation and the project site generally correspond to the HEI and the department where the project leader will be employed.

An application can only be linked to an administrating organisation with an approved Prisma account. Unless your administrating organisation already has such an account, you will have to ask it to [apply for an organisation account](#) with the Swedish Research Council.

Please contact your administrating organisation if your project site does not appear on the list. You have to provide the project site information to be able to finalise the registration of the application.

Participants

In this section, you may invite participating researchers and administrators to join the application. A participating researcher refers to a person with a doctoral degree who is involved in the project, and whose scientific merits and competence will be crucial for the implementation of the proposed research activities. A participating administrator is a person who does not take part in the project itself but can help you register and edit information in the application.

You may invite participants, who do not yet hold a Prisma account. Each one of them must however open a personal Prisma account to be able to contribute to your application.

All participants must accept the invitation and participating researchers must enter their CV data in the application before you can finalise the application registration. Please make sure that you use the correct email addresses when you send invitations to participants, and that each address is linked to invited person's Prisma account.

CV

Under this tab, please retrieve and enter relevant CV data stored in your personal Prisma account. Any participating researchers will have to enter their respective CV data in the application. The following information (where available) must always be provided in each CV and limited to the number specified:

- **Education:** Graduate studies, specialist degree, as well as basic and advanced education.
- **Professional history:** Current employment (including whether it is a permanent position or not) and longer relevant positions you have held, postdoctoral visits (should also be included as a position/employment if applicable), research exchanges that are relevant for the research described and any longer interruption in the research that has affected your ability to qualify as a researcher.
- **Merits and awards:** Fellowship, supervised persons (postdocs and postgraduate students; indicate the total number for each category and indicate up to 10 persons that are most relevant), up to 10 of your most relevant awarded competitive grants, up to 10 of your most relevant awards and distinctions, as well as up to 20 potential other merits of relevance to the application.

- **Intellectual property:** For example patents and freely available computer programs that you have developed; please indicate up to 10 of your most relevant.

Registering the application

When you open the Registering the application tab, the system will perform a check to verify if any mandatory information is missing and inform you of any need for supplements. The application will not be registered unless you click the Register button.

Please use the preview function in order to double-check your application before submitting it!

Note: Please note that all invited participants must accept your invitation before you can proceed to register the application. Invitations that have not been accepted have to be removed.

The registered application can then be viewed in your personal Prisma account, under Applications in the Applications and grants tab. If necessary, a registered application may be de-registered, edited and re-registered up to the call deadline.

You are responsible for ensuring that the application is complete, that is to say that the application form is filled out correctly, the required appendices are submitted, and the requested information is provided in accordance with the instructions. Please only submit specifically requested information. After the closing date, additions to the application will only be accepted in cases where we have asked for this.

Signing the application

When you register the application, it will automatically be signed by you in your capacity as project leader. The application must also be signed by the official representative of the administrating organisation in order for it to be considered complete and be processed further in the review process. This representative is normally the head of the department where the research will be conducted, but that will depend on the organisational structure of your administrating organisation.

The signature *of the applicant* confirms that:

- The information contained in the application is correct and in line with the instructions from the Swedish Research Council.
- Any side-line occupation and/or commercial ties have been reported to the administrating organisation, and that no conflict with the principles of good research practice has been established.
- The necessary permits and approvals are in place at the start of the project, e.g. concerning the ethical review.

The signature *of the administrating organisation* confirms that:

- The organisation will accommodate the research and the equipment, and employ the applicant during the time period and to the extent presented in the application.
- The organisation approves the cost estimate presented in the application.
- The project will be conducted in accordance with Swedish law.

The parties must have discussed the above-mentioned points before the representative of the administrating organisation approves and signs the application.

Note: The official representative of the administrating organisation must have signed the application in Prisma no later than one week (seven calendar days) after the application deadline for it to be considered further in the review process.

What happens next?

When the call closes (14.00/2 p.m. on the final day for submission of applications), the registered application will automatically become final and given a registration number.

Your registered application will automatically be forwarded to the official representative of the administrating organisation, who must sign the application no later than one week (seven calendar days) after the application deadline. You will receive an auto-generated email when the application has been signed.

You will find information about the status of the application, the registration number and the application signature under the tab Applications and grants in your account.

Scientific evaluation

The scientific assessment of the application will be made by the Swedish Energy Agency's Basic Research Committee. The Committee evaluates the projects on the basis of the information provided under the application heading "The contribution of the project to the transition to a long-term sustainable energy system" based on the relevance of the project goals to solving a problem or developing new knowledge about crucial challenges with good potential to contribute to an entirely renewable energy system, a resource-efficient society and/or a flexible and robust energy system.

Applications that receive a grading of at least 6 out of 7 by the Swedish Energy Agency's Basic Research Committee will be forwarded to the [Swedish Research Council's review panels within natural and engineering sciences](#), which will assess the scientific quality on the basis of the [assessment criteria](#) established by the Swedish Research Council for the area.

The Swedish Energy Agency's final selection of applications is made based on their potential to contribute to energy transition by facilitating the development of:

- An entirely renewable energy system
- A resource-efficient society
- A flexible and robust energy system

The Swedish Energy Agency wishes to promote diversity and gender equality, and therefore likes to see these issues addressed in the composition of the project group and in the choice of project leader, as well as in the implementation of the project, its contents and in the effects it strives to achieve.

If an application does not comply with the instructions, this will be taken into account in the assessment.

[The Swedish Research Council's conflict of interest policy](#)

[The Swedish Research Council's gender equality strategy](#)

Decisions

The Swedish Energy Agency will make the decision on the applications no later than November 2017. The decision to reject applications that do not achieve a sufficiently high grade in the Basic Research Committee's first stage assessment will be made earlier. Following the decisions, notice of the decisions as well as any statements and/or other documents will be published in your personal account in Prisma. Projects granted funds will also receive an award letter from the Swedish Energy Agency, which will then administrate all further grants awarded.

Contact

Questions relating to the application content:

For questions relating to the application content, please contact any of the contact persons listed below:

Sara Malmgren, email: sara.malmgren@energimyndigheten.se, telephone: +46 (0)16-544 20 29

Elisabeth Tehler, e-mail: Elisabeth.Tehler@vr.se, telephone: +46 (0)8-546 44 229

Emma Olsson, e-mail: Emma.Olsson@vr.se, telephone: +46 (0)8-546 44 204

Technical questions

In the first instance, please consult the help menu in Prisma, where you will find instructions and [FAQs](#) as well as a detailed [user manual](#), which describe most of the required steps in Prisma.

If you cannot find the answer to your technical question in the above-mentioned information material, please contact [our technical support team](#). Please note that depending on the workload, it may take up to 1-2 working days before you get a reply.