

## Call for research proposals: Curiosity-driven research for a sustainable energy system

The Swedish Energy Agency is issuing a call totalling 125 million SEK to support projects within social sciences, humanities, and natural and engineering sciences. The projects must be of high scientific quality and have very good potential for contributing new knowledge, increased understanding or solutions to meet crucial challenges relating to future energy systems. The deadline for applications is 26 February 2020.

<b>Deadline for applications:</b>	26 February 2020
<b>Funds for the call:</b>	125 million SEK
<b>Project decision:</b>	No earlier than December 2020.
<b>Project start:</b>	1 January 2021 – 1 April 2021

The call relates to project grants, where you as a researcher have the freedom to formulate the research idea, research questions, method and implementation, with the aim of solving a specific research task within a limited period. The call supports projects within humanities and social sciences (HS), or natural and engineering sciences (NT). Multidisciplinary projects with features from both HS and NT are welcome.

The call is divided up into two categories, and is aimed at projects within the areas HS and NT respectively, as follows:

- **Category A – Humanities and social sciences (HS)**

The call supports research projects with the potential to contribute with new knowledge and increased understanding of problems, opportunities and challenges linked to the energy area. The projects shall be based on social sciences and humanities perspectives, questions and methods.

- **Category B – Natural and engineering sciences (NT)**

The call supports energy-related basic research projects within natural and engineering sciences.

Project applications within the HS area will be assessed by experts within disciplines for social sciences and humanities. Project applications within the NT area will be assessed by experts within disciplines for natural and engineering sciences.

In addition to being of high scientific quality, research projects within the call must have long-term potential for contributing to the transition to a sustainable energy system, by producing knowledge for increased understanding of and/or solutions for meeting crucial challenges in the development of:

- an entirely renewable energy system
- a resource-efficient society
- a flexible and robust energy system
- interaction in the energy system

The call is issued by the Swedish Energy Agency in collaboration with the Swedish Research Council. The Swedish Energy Agency is responsible for the call as a whole, and makes the decision to award grants under the call. The Swedish Research Council assists in the assessment process.

Projects within the call may receive support of a maximum of 1.2 million SEK per year, however the maximum per project is 6 million SEK in total. The overall budget for the call is approximately 25 million SEK per year, of which approximately 18 million SEK is for projects focusing on natural and engineering sciences, and approximately 7 million SEK is for projects focusing on humanities and social sciences. In total, the call covers 125 million SEK across the years 2021 to 2025.

Projects aimed at direct commercial application or use are not supported within the call.

**The call has a budget of 125 million SEK and offers the following opportunities for funding:**

- **Type of grant:** Research project funding
- **Subject area:** Humanities and social sciences, and natural and engineering sciences. Multidisciplinary projects are welcome.
- **Focus:** Curiosity-driven research for a sustainable energy system
- **Applicant:** Individual researchers
- **Participating researchers:** A maximum of six researchers may be invited to join the application
- **Grant period:** 1-5 years
- **Grant amount:** Minimum 400 000 SEK/year, maximum 1 200 000 SEK/year, overall maximum 6 000 000 SEK/project

## Criteria for applicants

### *Applicant*

The applicant for a project grant must be an individual researcher. You will be the project leader and have scientific responsibility for the project, and your level of activity in the project must be no less than 20 per cent of a full-time equivalent. You must hold a Swedish doctoral degree or a corresponding foreign degree, awarded no later than the deadline for this call. The degree award date we use is the date you fulfilled all the criteria for a doctoral degree, such as mandatory courses, oral defence and an approved doctoral thesis.

Only applicants belonging to an organisation that fulfils the Swedish Research Council's criteria (has an approved organisation account in the Swedish Research Council's application management system Prisma) can apply under the call. If it does not already have one, please contact your organisation and ask it to [apply for an organisation account](#) with the Swedish Research Council.

### *What grants may I apply for simultaneously?*

You may only submit one application for a grant under this call.

You may apply for this research project grant even if you are submitting applications under other calls, both to the Swedish Research Council or direct to the Swedish Energy Agency, but you must state this in your application and research plan.

### *Grant period*

You may apply for a grant to cover a minimum of 1 and a maximum of 5 years, starting from January 2021. The first payment will be made during February 2021 at the earliest.

## How to apply

The application shall be written according to the instructions for applicants below, and be submitted via the Swedish Energy Agency's electronic application tool [E-kanalen](#). Remember to apply for user rights for E-kanalen in good time, as this may take a couple of days.

The information filled in under the tabs in E-kanalen may be written in Swedish, but you must also attach appendices written in English containing information about the application. See Appendix 2, Appendix 3, Appendix 4, and Appendix 5 for instructions. The whole application may also be written in English. A text in English must be accompanied by a Swedish summary.

## Category A – HS

Remember to include the following in your application:

### *Justification*

Describe the project's potential for contributing in the long term to the transition to a sustainable energy system, by producing knowledge for increased understanding of and/or proposed solutions that may contribute to challenges linked to the development of:

- an entirely renewable energy system
- a resource-efficient society
- a flexible and robust energy system
- interaction in the energy system

Describe:

- **What development will the project contribute to?**  
In what way will the project contribute long-term to the development or understanding of an entirely renewable energy system, interaction in the energy system, a resource-efficient society and/or a flexible and robust energy system? If the project is intended to contribute to increased knowledge and understanding, within what, and in what way will such knowledge and understanding contribute to the development of a future energy system? What impact can the project have on the opportunity to meet the challenges of the energy system, for example in respect of societal expectation and demands, policy issues, changes to infrastructure, attitudes and behaviour, environment and health?
- **Crucial challenges**  
Describe the project's starting points and existing knowledge gaps that the project intends to contribute to filling, and how this relates to the project's purpose, questions and methods.
- **The contribution of the project goals to meeting these challenges**  
Describe how the project's aims and goal have the potential to contribute new knowledge and increased understanding of the challenges that the project addresses.

### *Background*

Here you can include any further information that you think may be needed for the assessment of the project's scientific potential and its potential for contributing knowledge for increased understanding of opportunities for meeting challenges in the development of an entirely renewable energy system, a resource-efficient society and/or a flexible and robust energy system or interaction in the energy system.

The Swedish Energy Agency has been mandated to promote research that involves sex and/or gender aspects when applicable.

### *Goals*

The goals shall be adapted to the purpose of the project, and be worded in such a way that they can be achieved during the project period. The same goals shall also be included in Appendix 2 “Research plan”.

### *Implementation*

Describe the project’s implementation briefly.

Please include information on any research collaboration and exchange of experiences with other societal actors (such as other research teams, companies, civic society, etc.) considered relevant for the implementation of the project.

The Swedish Energy Agency works to promote diversity and gender equality, and therefore encourages applicants to take these issues into consideration in the composition of the project group, the choice of project leader and the implementation of the project, as well as in its effects.

**The completed application including appendices must be submitted no later than 26 February 2020.**

### **Category B – NT**

Remember to include the following in your application:

#### *Justification*

Describe the project’s potential for contributing to the transition to a sustainable energy system, by contributing knowledge for increased understanding of and/or solutions for meeting crucial challenges in the development of:

- an entirely renewable energy system
- a resource-efficient society
- a flexible and robust energy system
- interaction in the energy system

Describe:

- **What development will the project contribute to?**  
In what way will the project in the long term enable the development of an entirely renewable energy system, interaction in the energy system, a resource-efficient society and/or a flexible and robust energy system? If the project is intended to create better prerequisites for some specific type/s of technology/application, what is/are this? If the project is intended to contribute to increased knowledge and understanding, within what, and why? How could the results be used for further implementation, and what impact may it have on the chances of meeting the challenges of the energy system, for example in respect of strengths and weaknesses in relation to alternative development paths or solutions?

- **Crucial challenges**  
Describe the project's starting points and crucial challenges that can currently constitute problems, and that limit the development the project aims to contribute to. Projects aimed at developing a specific technology should describe the challenges that are currently limiting the ability of the technology to contribute to the challenges in the call. Projects aimed at supporting knowledge development should describe potentially crucial challenges that are closely related to the purpose of and questions raised by the project.
- **The contribution of the project goals to meeting these challenges**  
Describe how the project goals contribute to the challenge(s) described under the heading above, and how they complement previous research within the area.

### *Background*

Here you can include any further information that you think may be needed for the evaluation of the project's potential for contributing to the transition to a sustainable energy system, by contributing knowledge for increased understanding of and/or solutions for meeting crucial challenges in the development of an entirely renewable energy system, a resource-efficient society and/or a flexible and robust energy system, as well as the interaction in the energy system.

### *Goals*

The goals shall be adapted to the purpose of the project, and be worded in such a way that they can be achieved during the project period. If appropriate, they shall be measurable. The same goals shall also be included in Appendix 2 "Research plan".

### *Implementation*

Describe the project's implementation briefly.

Please include information on any research collaboration and exchange of experiences with other societal actors of relevance (such as other research teams, companies, civic society, etc.) by the research team, and who may contribute to ensuring the relevance of the project results and to realise the potential of the project to contribute to the transition to a sustainable energy system.

The Swedish Energy Agency works to promote diversity and gender equality, and therefore encourages applicants to take these issues into consideration in the composition of the project group, the choice of project leader and the implementation and content of the project, as well as in its goals and effects.

**The completed application including appendices must be submitted no later than 26 February 2020.**

### **How large a percentage of the project costs can be funded?**

The Swedish Energy Agency is permitted to award government support covering up to 100 per cent of the recipient's costs to projects carried out by universities, higher education institutions (HEI) or other actors carrying out non-profit activities ([Länk till regleringsbrev, avsnitt 1.4](#)).

The maximum amount you may apply for and be awarded is 1 200 000 SEK per year, including indirect costs. The maximum award per project is 6 000 000 SEK, however. The minimum amount you may apply for is 400 000 SEK per year, including indirect costs.

The grant may cover all types of project-related costs, such as salaries (including your own salary, however no more than corresponding to your activity level in the project), premises, running costs (such as consumables, travel including stays at research facilities, publication costs and minor equipment linked to the project), plus depreciation costs. The following costs are, however, excluded: Financing activities at foreign HEIs, costs related to first cycle higher education, such as supervising degree projects, and scholarships. If a doctoral student participates, project funds may not be paid out as salary for the period when the doctoral student is teaching.

Indirect costs to the HEI are compensated for at full cost. The indirect costs shall be calculated according to the HEI's own model, or according to the model of the Association of Swedish Higher Education.

### **Terms and conditions for projects awarded**

The Swedish Energy Agency's decision to award grants is based on an agreed project and cost plan. In order for grants to be paid to projects awarded, the recipient must confirm that he/she has read the Swedish Energy Agency's decision, and that he/she accepts the terms and conditions for the grant. A more detailed description of the terms and conditions is available in Appendix 1 below.

### **What happens next?**

If your application is short-listed for assessment of scientific quality, you will receive an email no later than 30 April 2020 with information on how to register your application in the Swedish Research Council's application management system Prisma. The time period for registering your application in Prisma will be approximately 10 calendar days. It is important that you have the opportunity to do so during this time period.

### **Assessment**

The following assessment criteria will be used to assess applications under the call.

1. Potential to contribute to one or more identified challenges within the energy area.

- To what extent does the project have the potential to contribute to an entirely renewable energy system?
- To what extent does the project have the potential to contribute to a flexible and robust energy system?
- To what extent does the project have the potential to contribute to a resource-efficient society?
- To what extent does the project have the potential to contribute to increased interaction in the energy system?

2. Scientific quality

- To what extent does the project contribute to the Swedish Research Council's assessment criteria for the subject areas humanities and social sciences (HS) and natural and engineering sciences (NT) respectively?

Assessment of applications received is done in three stages. As a first step, the applications will be evaluated by the Swedish Energy Agency's basic research committee. The committee consists of members with competency within humanities and social sciences (HS) and natural and engineering sciences (NT). Applications within the HS area are assessed by reviewers with a background in research disciplines within social sciences and humanities. Applications within the NT area are assessed by reviewers with a background in research disciplines within natural and engineering sciences. The committee assesses the project goals' transition potential for the energy system according to the criterion above. This assessment will be done solely based on the information input under the tabs in E-kanalen (the appendices are not evaluated in this step). Based on the committee's statements, the Swedish Energy Agency will decide which applications will be put forward for assessment of their scientific quality by the Swedish Research Council's review panels within HS and NT.

The Swedish Research Council's review panels assess the scientific quality of the applications based on the Swedish Research Council's assessment criteria for the subject areas HS and NT respectively. Applications graded minimum 5 out of 7 by the Swedish Research Council's review panels within NES, and/or minimum 4 out of 7 by the Swedish Research Council's review panels within HSS, will go forward for final assessment by the Swedish Energy Agency.

The Swedish Energy Agency's final selection of applications is made on the basis of the project's potential to contribute to the development of:

- an entirely renewable energy system
- a resource-efficient society

- a flexible and robust energy system
- interaction in the energy system

The final assessment will be done in the first instance based on the information input under the tabs in E-kanalen. The Swedish Energy Agency works to promote diversity and gender equality, and therefore likes to see these issues taken into consideration in the composition of the project group, the choice of project leader, the implementation and content of the project, and in the goals striven for.

### **Grant decision**

The Swedish Energy Agency is planning to make its grant decision no earlier than December 2020. The decision to reject applications that do not achieve a sufficiently high grade in the basic research committee's assessment in the first step may be made earlier.

### **Background to the call**

The Swedish Energy Agency's support for Swedish basic research in the energy area is an important complement to the applied research that the Agency supports. Basic research fills an important function, through building up a knowledge basis for a future transition to a sustainable energy system. The academic quality of applications received under the call shall be high.

### **Contact**

The personnel at the Swedish Energy Agency are happy to answer any questions about the call. However, we may not comment on project ideas or give recommendations, only answer questions relating to the call itself. Questions related to Appendices 2–4 are answered by the Swedish Research Council.

Remember that many persons may be telephoning on the last day the call is open, and that it might be more difficult to get help then. The Swedish Energy Agency is only available for asking questions until 16.00/4 p.m.; after this, you cannot expect to receive any assistance or support.

- Natural and engineering sciences: Fredrik Brändström, email: [fredrik.brandstrom@energimyndigheten.se](mailto:fredrik.brandstrom@energimyndigheten.se), telephone: 016-544 23 66
- Humanities and social sciences: Michael Novotny, email: [michael.novotny@energimyndigheten.se](mailto:michael.novotny@energimyndigheten.se), telephone: 016-542 06 25
- Appendices *Instructions for research plan*, *Instructions for CV* and *Instructions for publication list*: Elisabeth Söderström Tehler, email: [elisabeth.tehler@vr.se](mailto:elisabeth.tehler@vr.se), telephone: 08-546 44 229
- Technical questions relating to E-kanalen: [ekanalen@energimyndigheten.se](mailto:ekanalen@energimyndigheten.se) or Helpdesk, telephone 016-544 22 11

## **Appendix 1 – Terms and conditions for projects awarded**

### **Terms and conditions for projects awarded**

The terms and conditions applicable to projects awarded will be shown in the Swedish Energy Agency's decision to award grants. A description of the terms and conditions follows below.

#### **General**

The Swedish Energy Agency's decision to award grants is based on an agreed project and cost plan. The part of the costs that is not covered by the grant from the Swedish Energy Agency shall be covered by own funds, or by funds from another funding body. The grant recipient is responsible for financing any cost increases that arise during the project period. The Swedish Energy Agency's grant decision that does not relate to the grant funds for the current budget year is valid only on condition that the Swedish Energy Agency receives/has available the required funds.

Shifts in costs between cost centres of up to 10 per cent for each cost centre are acceptable, on condition that the overall cost framework does not change. Any larger changes require approval from the Swedish Energy Agency.

### **§ 1 Costs eligible for funding**

#### ***General terms and conditions***

Costs eligible for funding means the costs incurred by the grant recipient for implementing their part of the project. What costs are eligible for funding in a project, and how large a percentage of these costs that the grant recipient can receive cover for is dependent on which funding grounds the Swedish Energy Agency has used in its grant decision. The funding grounds are shown in the Swedish Energy Agency's grant decision.

In order to be eligible for funding, the cost must:

- be reasonable and have arisen for the implementation of the project
- be concrete and auditable, which means that it must be recorded in the grant recipient's accounts Grant recipients cannot, for example, receive funding for work done without pay. Nor may the cost be estimated,
- be carried by the grant recipient, which means that grant recipients may only include their own costs accounted for
- be accounted for according to good accounting practice, and
- have arisen in the project and during the project period stated in the grant decision. Costs that have arisen before or after the project period stated in the grant decision are not eligible for funding.

In the accounts, the project costs shall be accounted for in such a way that they can be separated from the organisation's other transactions.

## *Salary costs*

### *Direct costs*

Direct costs for personnel (salary and payroll overheads) shall be reported as salary costs to the extent these persons work on the project. Payroll overhead refers to statutory social security contributions, mandatory pension provision, mandatory insurance and fees, and holiday pay. As the salary costs shall be auditable, the grant recipient must account for time worked on the project.

Salary costs shall be differentiated by personnel category. The following maximum amounts apply, however, unless otherwise is shown in the Swedish Energy Agency's grant decision:

Category 1 – Senior officers and senior researchers: maximum 825 SEK per hour

Category 2 – Technical personnel: maximum 550 SEK per hour

Category 3 – Routine tasks: maximum 300 SEK per hour

Please note that the salary costs shall relate to actual work. It must not be estimated or a standard amount. This means that if the salary costs are lower than the maximum amount for the applicable category, the lower amount (that is, the actual salary costs) shall apply.

### *Indirect costs*

Indirect costs (overhead costs) are general costs that do not arise as an immediate result of the project during the project period. These relate to salaries and fees to personnel who are not working specifically with the project, such as personnel working with finance or administration that is not project-specific, and also remuneration to management functions, such as MD and board members.

Higher education institutions (HEIs) can receive funding for indirect costs according to the full cost principle they apply.

Grant recipients that are not run on a commercial basis (such as municipalities and non-profit institutes) can receive funding for indirect costs of maximum 30% of their direct costs for personnel (salaries and payroll overheads) eligible for funding. This also applies if the grant recipient carries out both commercial and non-commercial activities, provided the project is conducted within the non-commercial section.

Grant recipients that are companies (grant recipients who carry out commercial activities) cannot receive funding for indirect costs. This also applies if a grant recipient carries out both commercial and non-commercial activities, if the project is conducted within the commercial section.

## **§ 2 Payment of the grant**

Unless the decision states otherwise, grants will be paid at the middle of the project period for each budget year, without any preceding requisition. The grant will cover value added tax only when this arises as a net cost to the grant recipient (only applies to HEIs). Verifications for the reported cost items shall be submitted to the Swedish Energy Agency on request. Funds that have not been used shall be repaid. Advance payment of maximum 30 per cent of the overall grant amount may be made (only applies to HEIs). 15 per cent, or another percentage as stated in the decision, of the funds awarded may be retained until the final report according to § 5 has been received and approved by the Swedish Energy Agency.

## **§ 3 Employment relationship**

The Swedish Energy Agency is not the employer or principal of the grant recipient or anyone else employed in the project by the grant recipient. The Swedish Energy Agency therefore does not make any deduction for taxes, social insurance contributions, etc.

## **§ 4 Obligation to notify any funding**

The grant recipient is obliged to notify the Swedish Energy Agency immediately in writing if funds for the project in the decision have been sought or awarded from a funding body other than the Swedish Energy Agency.

## **§ 5 Obligation to report**

Reports and surveys as listed below shall be submitted according to the Swedish Energy Agency's instructions. If separate reports are required in addition, this will be stated in the decision.

### ***Annual report***

Higher education institutions are obliged, at the request of the Swedish Energy Agency, to submit an annual report for each budget year showing the institution's and/or research team's overall activities.

### ***Status report***

A status report relating to the project activities shall be submitted at the request of the Swedish Energy Agency. This shall include a description of the activities and results to date in the project, and also a financial report. The Swedish Energy Agency may also demand that the report shall include a technical status report. The status report shall be submitted to the Swedish Energy Agency no later than the date stated in the decision.

### ***Financial report – only applies to companies***

A financial report shall be submitted once or twice annually, on a separate form as supplied by the Swedish Energy Agency or downloaded from the Agency's website ([www.energimyndigheten.se](http://www.energimyndigheten.se)). The report shall be submitted no later than the date stated in the decision.

**Final report**

The final report shall show the project results and include a description of the implementation and goal fulfilment of the project. The report shall also include a summary of the project results in English, covering no more than 200 words. The report shall be submitted to the Swedish Energy Agency no later than the date stated in the decision.

A final financial report shall be submitted no later than the date stated in the decision, on a separate form as supplied by the Swedish Energy Agency, or downloaded from the Agency's website ([www.energimyndigheten.se](http://www.energimyndigheten.se)).

**Survey**

At the end of each year, all grant recipients shall complete a survey and submit it to the Swedish Energy Agency. The Government has instructed us to collect information from all grant recipients in order to report a number of results in indicator format in our annual report.

**§ 6 Changes**

Significant changes to the project and cost plan approved by the Swedish Energy Agency shall be notified in advance to the Agency for evaluation and approval. If any circumstance of significant importance should arise, resulting in the project being terminated, delayed, etc., the grant recipient shall immediately notify the Swedish Energy Agency. The grant recipient is obliged to notify any name or address changes immediately.

**§ 7 Publication**

The project results shall be published. Publication shall be according to good international practice for publication of research results.

The grant recipient is entitled to protect the results with a patent or other protection of intellectual property rights, and in conjunction with this delay publication until any application for such legal protection has been submitted to the patent authority in question. If a grant recipient intends to protect the results, this shall be notified to the Swedish Energy Agency. An application to a patent authority shall be submitted without delay. If a grant recipient wishes to delay publication for a reason other than that mentioned above, or to refrain from publishing certain results, the Swedish Energy Agency written approval shall be obtained from case to case.

All presentations of the project shall state that the work has been conducted with support from the Swedish Energy Agency.

**§ 8 Rights to results**

The grant recipient or the rights holder to the results has commercial right of use to the project results, and is entitled to grant or transfer the rights to another.

If the rights to project results is transferred to a company carrying on for-profit activities, compensation corresponding to the market price of the rights shall be paid (only applies to HEIs).

#### **§ 9 Right to scrutinise**

The Swedish Energy Agency or a person or persons appointed by the Agency (such as an authorised public accountant) is entitled to follow the work and partake of documents that may provide information on the technical and financial development of the project. To facilitate scrutiny, the Swedish Energy Agency is entitled to issue specific instructions for reporting.

The Swedish Energy Agency is also entitled to follow up concluded projects by requesting a follow-up report, which shall be designed and submitted according to the Agency's instructions. Such a report may be requested on three occasions within a ten-year period from the date of the final report.

#### **§ 10 Changes to decision**

At the grant recipient's request with justification, the Swedish Energy Agency may allow a change in the period of availability and/or allow a delay in reporting.

#### **§ 11 Cancellation of decision**

The Swedish Energy Agency may decide that unused grants shall be retained, or alternatively that funds paid out but not yet used shall be returned, if:

- a) the prerequisites for the project's funding have changed
- b) the project is not conducted according to the agreed project plan
- c) there are no prospects of achieving satisfactory results in the project within a reasonable time (for example due to significantly changed prerequisites or competitive conditions), or if the project's continuation as planned cannot be considered safeguarded (for example due to insolvency if the grant recipient is a company)
- d) the grant recipient fails to sign and return a copy of the Terms and Conditions Appendix to the Swedish Energy Agency.

#### **§ 12 Repayment demand for amounts paid out**

The amount paid out plus interest of 8 (eight) per cent above the applicable reference interest rate may be demanded with immediate effect, if:

- a) the grant recipient does not submit the prescribed reports according to § 5
- b) the grant recipient uses the funds for a purpose other than that stated in the agreed project plan
- c) the project is not conducted according to the agreed project plan
- d) the grant recipient in other respects does not fulfil the obligations according to the Terms and Conditions Appendix, or the specific conditions in the decision.

### **§ 13 Retention of funds**

The Swedish Energy Agency is entitled to stop any further payment of funds until a decision has been made to refuse payment or to demand the return of funds awarded according to Paragraphs 11 and 12. Such a stop of further payment of funds may also include payments to other projects administered by the same institution, company or corresponding administrative unit, if the Swedish Energy Agency so decides.

### **§ 14 The EU's government support rules**

One condition for support is that the support measures may be cancelled or changed and the support recovered if the European Commission, via a decision that has come into legal force, or the European Court of Justice finds that the support is in breach of Article 107 of the Treaty on the Functioning of the European Union. A decision to cancel or change the support measures shall be made by the Government. Hereby, the terms and conditions for repaying the support shall be determined in each individual case.

### **Consent to information being made available**

The Swedish Energy Agency makes information on projects funded by the agency available on the agency's website ([www.energimyndigheten.se](http://www.energimyndigheten.se)). On this website, the general public may seek information on ongoing and concluded research projects based on various search words, such as the research subject, research organisation, project title and project leader. The grant recipient is responsible for ensuring any copyright holders have consented to the information being made available, and shall ensure that the copyright holder has the right to give consent in each individual case. A form for consent to information being made available accompanies the Swedish Energy Agency's decision to award funding. By signing the form, the authorise representative of the grant recipient consents/does not consent to information that is not subject to confidentiality according to the Public Access to Information and Secrecy Act (SFS 2009:400) and is included in the project may be made available to the general public.

### **Consent to personal data processing**

The Swedish Energy Agency makes information on projects funded by the agency available on the agency's website ([www.energimyndigheten.se](http://www.energimyndigheten.se)). A form for consent to personal data processing accompanies the Swedish Energy Agency's decision to award funding. By signing this form, the project leader consents/does not consent to their personal data being processed by the Swedish Energy Agency in order to be made available to the general public on the agency's website. More information on how the Swedish Energy Agency processes personal data is available on the agency's website ([www.energimyndigheten.se](http://www.energimyndigheten.se)).

### **Public document and confidentiality**

In principle, all post and emails to the Swedish Energy Agency become public documents. This means, among other things, that the general public and mass media are entitled to demand to partake of the contents. Documents and decisions

sent by the Swedish Energy Agency are also public documents. The right to partake of public documents that are not confidential is part of the right of access to public documents principle.

The Swedish Energy Agency may not disclose information covered by confidentiality according to the Public Access to Information and Secrecy Act (SFS 2009:400). This means that a document or certain data in a document may be covered by confidentiality. A confidentiality assessment is therefore carried out in each individual case before a document is disclosed.

Confidentiality applies to information such as an individual's business or operational circumstances, inventions or research results, if it can be assumed that the individual would suffer damage if the information was disclosed.

## Appendix 2 – Instructions for research plan (in English)

Please use wording to ensure persons with another subject specialisation can understand the information. Foreign experts are involved in the scientific assessment of the applications. To ensure fair and equitable assessment and efficient processing, please therefore complete your application in English.

**Please note that any content exceeding the stated maximum number of pages will not be taken into account when reviewing your application.**

### Research plan

The research plan shall be forward-looking and consist of a brief but complete description of the research task. It shall cover a maximum of 10 page-numbered A4 pages in Arial, font size 11, single line spacing and 2.5 cm margins, including references and any images.

The research plan must include the following headings and information, listed in the following order:

- **Purpose and aims:** State the overall purpose and specific goals of the research project.
- **State-of-the-art:** Summarise briefly the current research frontier within the field or area covered by the project. State key references.
- **Significance and scientific novelty:** Describe briefly how the project relates to previous research within the area, and the impact the project may have in the short and long term. Describe also how the project moves forward or innovates the current research frontier.
- **Preliminary and previous results:** Describe briefly your own previous research and pilot studies within the research area that make it probable that the project will be feasible. If no preliminary results exist, please state this too.
- **Project description:** Describe the project design under the following headings:
  - Theory and method: Describe the underlying theory and the methods to be applied in order to reach the project goal.
  - Time plan and implementation: Describe summarily the time plan for the project during the grant period, and how the project will be implemented.
  - Project organisation: Clarify how you and any participating researchers will contribute to the implementation of the project. Explain in particular how the time allocated by you (that is, your activity level) as project leader is suitable for the task, including the relationship with your other research undertakings. Describe and explain the competences and roles of the participating researchers in the project, and also any other researchers or equivalent who are important for the implementation of the project.

Provide the following information also. If a heading is not relevant to your application, please state this.

- **Equipment:** Describe the basic equipment you and your team have at your disposal for the project.
- **Need for research infrastructure:** Specify the project's need for international and national research infrastructure. In the first instance, you should use the [research infrastructures supported by the Swedish Research Council](#), which are open to all. If you choose to use other research infrastructures instead, please justify this need (also applies for local research infrastructure).
- **International and national collaboration:** Describe your own and the team's collaboration with foreign and Swedish researchers and research teams. State whether you contribute to or refer to international collaboration in your research.
- **Independent line of research:** If you are working or will be working in a larger group, please clarify how your project relates to the other projects in the group. If you are continuing a project that was wholly or partly started during your doctoral or postdoc studies, you must also describe the relationship between your project and the research of your former supervisor.

### **Appendix 3 – Instructions for research resources (in English)**

The description shall cover a maximum of 2 page-numbered A4 pages in Arial, font size 11, single line spacing and 2.5 cm margins.

#### **Project personnel**

State the activity level (per cent of a full-time equivalent) of all personnel active within the project, that is to say yourself, any other researchers and other personnel.

#### **Justification of the budget applied for**

Justify briefly each cost applied for in the budget stated.

## Appendix 4 – Instructions for CV (in English)

Attach your own and any participating researchers' CVs (in English) in PDF format as an appendix to your application. Each CV shall cover a maximum of 2 A4 pages in Arial, font size 11, single line spacing and 2.5 cm margins. The following headings shall be included, in this order: If a heading is not relevant to your application, please state this.

1. **Higher education qualification(s):** Year, subject and HEI.
2. **Doctoral degree:** Year, discipline/subject, HEI, title of the thesis and supervisor.
3. **Postdoctoral positions:** Year and location.
4. **Qualification required for appointments as a docent:** Year.
5. **Current position:** Appointment period, percentage of research in the employment.
6. **Previous positions and periods of appointment:** Type of employment and appointment periods.
7. **Interruption in research:** Here you can account for any longer interruptions in your active research time after your doctoral degree that has impacted on your ability to earn merits. Please state the scope of each interruption.
8. **Supervision:** Doctors and postdocs for whom you have been the main supervisor; names and years.
9. **Grants awarded in competition:** Please state relevant grants; funding body, year, type of grant.
10. **Other information of relevance to the application:**

## Appendix 5 – Instructions for publication list (in English)

Attach your own and any participating researchers' publication lists (in English) in PDF format as an appendix to your application. Please note that the attachment may consist of one file only. If the attachment consists of several documents, you must therefore merge them into a single file. Please use Arial font, font size 11, single line spacing and 2.5 cm margins.

### *Applicant's publication list*

Please attach your publication list drawn up according to the headings and information below. The list shall cover a maximum of 5 page-numbered A4 pages.

Sort the publications under each heading in reverse chronological order, so that the latest publication is at the top of the list. Please only include articles or equivalent that are published or accepted for publication at the time of applying. The author name order shall be identical to that of the published work. The application cannot be supplemented with publications after the deadline for the call.

The publication list shall begin with **bibliometric information**. Note: This only applies for researchers within natural and engineering sciences.

#### 1. **Bibliometric information:**

- Total number of peer-reviewed original articles
- Total number of citations of the peer-reviewed original articles
- i10 index (overall, not limited to the last 8 years)
- The database used for the above citation data

**Note:** The Swedish Research Council has a restrictive attitude towards evaluation of individuals based on bibliometrics. The citation data stated will only be used as part of an overall assessment carried out by subject specialists.

- #### 2. **Selection of publications:** List the publications (maximum 10) of greatest importance to your application. Describe how you contributed to each

publication, and its relevance to the research project described (maximum 4 lines per publication). Highlight your name in bold in the author list.

**3. Relevant publications from the last 8 years (2012–2020):** Sort the publications, with your name highlighted in bold in the author list, under each heading (publication type) in the following order.

- **Peer-reviewed original articles**
- **Peer-reviewed conference contributions**, the results of which are not included in other publications
- **Peer-reviewed edited volumes**
- **Research review articles**
- **Peer-reviewed books and book chapters**
- **Patents:** Please state date of registration
- **Open access computer programs or databases you have developed**
- **Other publications including popular science books/presentations**

#### ***Participating researchers' publication lists***

Attach all participating researchers' publication lists. The list for each researcher shall include the publications (maximum 10) that are the most relevant to the research described, and shall cover a maximum of 1 A4 page. The name of the researcher in question shall be highlighted in bold and also be included in the page header of each list.

Please only include articles or equivalent that are published or accepted for publication at the time of applying. The author name order shall be identical to that of the published work. The application cannot be supplemented with publications after the deadline for the call.

The publications shall be of the types: **Peer-reviewed original articles, conference contributions, edited volumes, research review articles, books and book chapters, and other publications including popular science books/presentations.**