

# Economic and financial drivers for climate action

**Opening Date:** 14 November 2019

**Application Deadline:** 30 January 2020

**Date of Decision:** 17 June 2020



## WHAT CAN YOU APPLY FOR?

Research projects on the importance and ability of economic and financial systems in helping to find solutions to our climate challenges.



## WHO CAN APPLY?

Principal applicants must have completed their doctorate degree and be affiliated with a Swedish university, college, research institute or government agency that has a research assignment.



## HOW MUCH CAN YOU APPLY FOR?

A maximum of SEK 10 million for a project duration of up to four years.



## Revision history

Any changes to the call text are listed below.

Date	Change
December 12, 2019	New text on page 7: “An individual is not allowed to be the principal applicant for more than one application in this call. However, there are no restrictions on how many applications an individual can be a co-applicant for.”

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## Description of the call

### Introduction

Society is facing a major transition in its attempt to drastically reduce greenhouse gas emissions within a short time frame while preparing our communities for the consequences of a changing climate. An important piece of the puzzle in these efforts is increased knowledge of the role of economic and financial systems in addressing climate challenges. This call is aimed at active researchers with doctoral degrees who are associated with universities, colleges, research institutes or government agency that has a research assignment. The call consists of two focus areas: (1) The role of the economy in the climate transition and (2) The financial sector and the climate. You can apply for a maximum of SEK 10 million for one project. The call has a total budget of SEK 80 million. The call is being implemented within the National Research Programme for Climate.

### Background

Climate change is becoming ever more urgent. The world needs to drastically reduce greenhouse gas emissions within a short time frame while preparing our societies for the consequences of a changing climate. By signing the Paris Agreement, Sweden pledged to help limit global warming to “well below 2 degrees”. The Swedish Parliament has also adopted a national target through the Climate Act, which stipulates that Sweden must reach net-zero greenhouse gas emissions to the atmosphere by 2045 and subsequently achieve negative emissions. According to the Swedish Environmental Protection Agency’s in-depth evaluation from 2019 of Sweden’s environmental objectives, we are far from achieving it. According to the 2018 IPCC report, “Global Warming of 1.5°C”, global greenhouse gas emissions must be reduced by about half up to 2030 for there to be a reasonable chance of achieving the Paris Agreement goals. This will require the comprehensive transition of all major sectors in society away from the use of fossil fuel-based raw materials.

In order for environmental issues to be taken into account in economic decisions at different levels of society, the environmental damage caused by planned investments and measures must be made visible in any decision-support material. If the climate transition is delayed, more and more costs will be passed on to society at large in the form of an increasingly unstable climate. This problem was negligible during most of the development of industrialised society, since the size of the population and the extent of the formal economy were limited. Today, the situation is quite different. Climate change is an example of one of the planetary boundaries that humanity risks crossing, with serious consequences for life on earth.

Research can provide more knowledge about how investments and activities within our economies are linked to climate change as well as ways forward to achieve a sustainable economic and financial system. For example, this type of research can involve how to use markets to demonstrate the profitability of climate efforts, or how to adjust economic instruments in order to mitigate climate change. It can also involve economic risks in a changing climate, how economic goals are being weighed against other goals in efforts to achieve the UN’s sustainable development goals,

and how economic sustainability relates to social and ecological sustainability. What possible goal conflicts can arise? How can they be managed?

All sectors should participate in the transition to a fossil-free society, one that is also resilient to the effects of climate change. Significant investments in a sustainable direction are needed for these purposes, and investments in activities that bring major impacts on the climate or involve major climate risks must be avoided. The financial sector and capital markets must interact with the rest of society's climate efforts, and the game rules of financial markets should be investigated in light of the climate challenge. The public sector can provide capital to kick start the transition, but the biggest capital flows are needed from the private sector. Research is needed that provides knowledge and recommendations on how these and other necessary investments are to be achieved.

## Purpose and focus

This call is part of the [National Research Programme for Climate](#). In the programme's [strategic agenda](#), "Economic System for a Fossil-Free Society" has been identified as one of six key themes of the programme. The call aims to promote research that is relevant for this theme.

The call aims to increase knowledge about the importance of economic and financial systems and their ability to contribute solutions to climate challenges. The call has two guiding focus areas:

1. The role of the economy in the climate transition
2. The financial sector and the climate

These two areas are described below. The examples of research we provide serve as guidance only.

### 1. The role of the economy in the climate transition

In this focus area, Formas welcomes applications that address the relationship of climate change to the economy in a broad sense. This can involve all or part of an economic system and its consequences for the climate. How can economic decision-making be changed to positively contribute to a future where established climate goals can be achieved? How can different stakeholders use economic drivers for climate neutrality or climate-positive solutions, and what role can policy play in facilitating this? For example, research in this area could address: how climate impact can be integrated into economic decision-making at different levels in society; how non-linear systems, such as possible threshold effects in relation to the climate, can be applied in economic models; how climate-related risks, rights or obligations are distributed among different stakeholders; the importance of applying different methods for assessing investment profitability and their impact on decisions on measures to reduce climate impact; or questions about climate-related taxation. In addition, we welcome applications for research that illustrates past lessons learned from economic incentives and decisions regarding desirable future developments within climate change.

## 2. The financial sector and the climate

In this focus area, Formas seeks research that focuses on or is relevant to how the financial sector and capital markets can contribute to climate change mitigation or adaptation. For example, such research can generate knowledge about what needs to change in the financial market in order to shift capital flows in a more sustainable direction. Research questions can address how society can counteract investments that negatively affect the chances of achieving climate policy goals, how investments from both the public and private sectors can strengthen society's climate efforts, or how instruments and other incentives can be designed for a more sustainable financial market. Researchers can also investigate the obstacles currently hampering the transfer of capital in more sustainable directions and how to create incentives for large-scale climate investments. Other possible questions can revolve around how to share risks between the public and the private sector, the risk of assets declining in value, the legal means of enforcing accountability for investments with a high environmental load, or the climate benefit of different actions and measures. Any conflict of goals and potential synergies with other global and national sustainability objectives should be investigated and described.

The proposed research should demonstrate a clear link to climate change and should address emission reductions, climate adaptation or both. In projects where it is considered relevant, we also welcome perspectives that concern one of the four central cross-thematic perspectives identified in the programme's [strategic agenda](#): globalisation, digitalisation, sustainable development and gender equality.

### Who can apply under this call

The main target group for the call is researchers from any scientific discipline who can apply relevant perspectives on how economic and financial systems can contribute to limiting global warming and adapting society to climate change. Formas encourages new collaborative research partnerships and collaboration with other stakeholders outside academia, but it is not a requirement.

Formas strives for an equitable, gender-balanced and inclusive development of society. Applicants should design the project so that its results can benefit a diverse group of people and should consider the gender distribution and different backgrounds of project members.

## Before you apply

### Applicant and organisation requirements

The principal applicant and other participating researchers must hold a doctoral degree. Others working in the project, such as PhD students or communicators, do not need to have a doctoral degree. The principal applicant and participating researchers must have completed their doctorate no later than 1 February 2020.

The principal applicant must be (or, through the project, must become) associated with an administrating organisation that has been generally approved by Formas. Generally approved administrating organisations are usually Swedish universities, colleges, research institutes or government agencies with research assignments. Read more about [administrating organisations](#).

The project can include participating researchers or other project participants who are employed by an organisation outside of Sweden. Any choice to include experts outside of Sweden should be justified in the project application. The administrating organisation is responsible for transferring funds to foreign organisations in accordance with the administrating organisation's rules and guidelines.

In this call, Formas does not grant funding to organisations engaged in economic activity. However, all types of organisations are welcome to contribute co-funding to the project. Co-funding can consist of time, money or other resources and should be reported in the budget specification.

You can seek funding in this call even if you have an ongoing project that is being funded by Formas. However, total funding may not exceed 100% of your salary.

An individual is not allowed to be the principal applicant for more than one application in this call. However, there are no restrictions on how many applications an individual can be a co-applicant for.

### **Costs that qualify for funding**

When you apply for project funding, you can apply for a grant to cover both direct and indirect costs. Direct costs include costs for salaries, equipment and travel. Indirect costs are costs that are shared with others in your organisation, such as for administration, IT and renting of premises. Indirect costs are sometimes called overhead.

Read carefully about [which costs qualify for funding](#).

### **Grant amount and project duration**

The grant amount for a project must be at least SEK 3 million and a maximum of SEK 10 million. The project must run for a minimum of 3 years (36 months) and a maximum of four years (48 months). Applications with a requested amount or project duration that is not within the above specified range will be rejected by Formas in the early stages and will not proceed to review.

Projects can start on 1 August 2020 at the earliest, but no later than 1 December 2020. Funding can be requested for the years 2020–2024. The application's budget must indicate how the funds will be used in the project. For administrative reasons, Formas can apply a payout plan that differs from the application's allocation of the budget over time.

## Language

We recommend that you write your application in English, since the review panel that will assess your application is international. If you write your application in Swedish, we will submit the section relating to the research programme for translation into English before the panel assesses your application. You will **not** be able to read the translation or change it before it is assessed.

Your budget specification will not be translated. So, please write the budget specification in English, even if you write the other sections in Swedish and submit your application in the Swedish version of our application system Prisma.

## Who can read the application?

Applications submitted to Formas become publicly available documents after a decision is announced. However, Formas does not disclose information about an individual's private circumstances, individual business or operating conditions, inventions or research results if it can be assumed that any individual would be harmed by the disclosure of this information. If applications are requested, Formas conducts a confidentiality assessment.

## How to apply

### You apply in Prisma

You apply for a grant in our application system, Prisma. In Prisma, you must create a personal account where you will add the information you need for your application. The organisation that will be the administrating organisation must also have an organisation account in Prisma. Read more about [how to apply in Prisma](#).

## Information your application must include

Your application must include a clear description of the project under the following sections:

### Basic information

- **Number of months applied for:** The number of months must not be less than 36 months or exceed 48 months.
- **Start month:** The earliest start date is 1 August 2020 and the latest start date is 1 December 2020.
- **Estimated project duration:** The project duration is calculated automatically in Prisma, based on the start date stated and the number of months stated.
- **Project title (in Swedish and English):** A maximum of 200 characters per project title, including spaces.



- **Popular science description (Swedish):** A maximum of 4,500 characters, including spaces. The popular science description should be able to be used in Formas' project database, which allows the general public and the media to see which projects Formas has funded.
- **Abstract (in Swedish and English):** A maximum of 1,500 characters per abstract, including spaces.
- **Focus:** Indicate the focus of the application (either “The role of the economy in the climate transition” or “The financial sector and the climate”). Only one focus area should be specified.

### Research programme

- **Goals and objectives of the project, and a background description containing an overview of the research area.** 7,000 characters, including spaces.
- **Project description, including structure, theory, methodology and implementation as well as a plan for publication in a scientific journal:** 15,000 characters, including spaces.
- **Description of the possible societal benefit of the project and planned communication with stakeholders/users:** 8,000 characters, including spaces.
- **References:** 5,000 characters, including spaces.

### Budget

- **Salaries, including social security contributions:** Salaries should be specified for each project participant. Funding for salaries can be sought for project managers, participating researchers and other project participants who are not active in an organisation that engages in economic activity. Salary funding can be sought for specific people or for roles in the project. Social security contributions should be included. Formas does not grant funding for annual salary increases. You can therefore apply for funding for salaries that apply at the time of the application, but not for funding to cover salary increases. For any current job positions, you must state the salary in effect at the time of the application submission. This will then apply to all subsequent years in the project. For new job positions you must state the starting salary at the administrating organisation. The amount you can seek for the salary of an individual person must never exceed 100 percent of full-time employment. This also means that someone who is already receiving full salary funding from any funder cannot receive additional funding for salary. Researchers who are full-time pensioners cannot receive funding for their own salary.
- **Activity level in the project:** Activity level refers to the percentage of full-time service a project participant contributes.
- **Operating costs:** Operating costs can include the cost of consumables, travel, conferences and publication fees for open-access journals and databases. A limited part of the grant can be used for a subcontractor or the purchase of services from organisations engaged in

economic activity. Equipment costs and depreciation costs for equipment used in the project are also considered operating costs. The total maximum amount you can be granted for equipment and equipment depreciation costs is 500,000 kronor.

- **Premises:** You can apply for funding for the cost of premises if this is not already included as overhead in the project's budget.
- **Indirect costs:** When you specify overhead costs in the application, you should do so according to the practice of the organisation that will manage the grant. Formas does not grant funding for overhead costs that you write off for equipment or premises.

In the "Total budget" table, the above costs are automatically added together and become the total amount applied for. You can also specify whether the project will receive funding from another source in the "Other funds" field. This indicates whether the project receives funding from a source other than Formas that is relevant for completing the project.

**Budget specification:** In your own words, explain how the budget will be used (maximum 7,000 characters including spaces). State how the grant amount you are applying for will be distributed each year, as well as the total amount per organisation if several organisations are applying. Please note that a budget specification provided in Swedish will not be translated but will be a part of the international review panel's assessment.

## Ethical considerations

You must describe the relevant ethical issues and how they should be managed. Examples include research that uses personal data, or experiments on humans or animals. Even if you do not expect your research to involve ethical concerns, you should state that this is the case in your application and explain why. The reporting of animal experiments and human trials should be described in separate fields using a maximum of 4,000 characters, including spaces, in each field. [Read more about ethics.](#)

## Classifications

Formas uses project classifications in analyses and supporting documentation on an overall level. The classifications are made by the applicant, who states the subject area, SCB codes and at least one SDG the project can contribute to.

- **Subject area:** Select the project's subject area (Level 1) and add a sub-heading (Level 2). Select a minimum of one and a maximum of three subject areas.
- **SCB codes:** Next, select at least one SCB code with two sub-levels that together form the entire code. Up to three SCB codes can be specified.
- **The sustainable development goals:** Specify at least one and up to a maximum of three of the sustainable development goals (SDGs) that best suit the project. Put the SDGs in priority order. If more SDGs than three are relevant, please specify the most relevant ones.
- **Keywords:** Select at least one and a maximum of five keywords describing the project. Choose what best represents your project, even if it does not entirely match the field you work in.

## Administrating organisation – the organisation receiving the grant

An administrating organisation is the organisation that receives the grant money from Formas when a grant is awarded. Applicants under this call must be administrating organisations that are approved by Formas. Applying for an organisation account in Prisma means that you are applying to become an administrating organisation under this specific call. If your organisation is already an administrating organisation, you do not need to submit this application. If you do not know if your organisation is already a qualifying administrating organisation, please contact Formas (see the contact details on page 16). A registered application is automatically sent to the administrating organisation after the call is closed. The administrating organisation then has seven business days to digitally sign the application.

The administrating organisation is responsible for transferring part of the grant to any co-applicant project partners. This grant money must be transferred, not invoiced.

## CVs

You must include the project manager's CV in the application. CVs from up to 10 participating researchers who have received their PhD can also be added to the application, but CVs from other people working in the project should not be included. However, the skills of additional participating researchers can be described in an appropriate section in other parts of the project application.

The project manager and up to 10 participating PhD researchers retrieve the data for their CVs through their personal accounts in Prisma. Add the following information to the application:

- **Education:** Postgraduate, undergraduate and graduate level.
- **Professional experience:** Current employment and major relevant prior positions, postdoctoral stays, postgraduate exchanges that are relevant for the research, and any significant gaps in the research (such as parental leave, illness, military service or political duties).
- **Qualifications and merits:**
  - Lectureships
  - Number of advisor engagements: Doctoral students, postdocs, graduate theses; specify the total number for each category and name the most relevant ones (10 maximum)
  - Grants received in competition: Specify the most relevant ones (10 maximum)
  - Awards and distinctions: Specify the most relevant ones (10 maximum)
  - Other merits: Here, the main applicant and participating researchers can give a brief summary of all their publications (maximum of 800 characters including spaces), as well as other merits relevant to the application, such as experience of documented collaboration and research communication (10 maximum)
  - Intellectual property: For example, patents and open source software that you have developed (10 maximum)

## List of publications

The principal applicant and participating researchers should list their most relevant publications. Up to ten publications can be specified per person. The publications should be linked from the applicants' personal profiles in Prisma.

## Appendices

The following appendices can be uploaded if relevant for the application:

- Appendix J. Illustrations. If you need figures, tables or images to describe the project, you can upload them as attachments here. A maximum of one PDF attachment of 4 MB can be uploaded.

## After submitting your application

First, Formas verifies that your application complies with requirements. If your application passes these checks, it continues on to a review panel for assessment. If it does not, it is rejected.

Any applications containing errors in basic requirements will be rejected. The following errors in basic requirements will result in a rejection of your application:

- The administrating organisation has not signed the application.
- The total grant amount sought is too low or too high.
- The specified project duration is too short or too long.
- The date of the doctoral degree of the principal applicant or participating researcher is later than 1 February 2020.
- The application is incomplete. Required information is missing on the application form or in the appendices.
- The application does not meet the requirements set out in the call text.
- The project does not fall within one of Formas' areas of responsibility (environment, agricultural sciences and spatial planning).

In addition, Formas asks applicants who have received funding earlier but have not submitted their scientific or financial reports on time to submit their reports. Otherwise, the project manager risks not being granted new funding.

## How does the assessment process work?

Applications will be assessed by an international review panel that is qualified to cover the current theme in the call. Applications are assessed based on their contents. It is therefore important to write the application as clearly as possible and include all important and relevant information. Each application is read and assessed by several members of the panel. The review panel is composed of

active researchers as well as individuals outside academia with the expertise necessary to evaluate the relevance of the research. The review panel is appointed by Formas.

For this call, Formas has created a panel of reviewers who will assess the applications for both focus areas of the call. The applications are then ranked by the panel in a common ranking list. Formas will ensure that the number of projects granted within each focus area does not deviate significantly from the applicant pool in the focus areas. If two applications are very similar and both are highly ranked by the review panel, Formas reserves the right to grant funding only to the project that was ranked highest by the review panel.

Discrimination is prohibited in the assessment of applications. The scientific quality and relevance of the proposed research take precedence over aspects of gender equality in the awarding of funding. But in cases where applications have the same assessment scores, the underrepresented sex is given preference.

Read more about [Formas' assessment process](#).

### Criteria

The following table gives an overview of the criteria used to assess applications. The first three criteria relate to scientific excellence and the other two related to relevance to society. Note that the sub-criteria are different from the criteria described on the Formas website.

The application must address all the criteria, and we advise applicants to clearly relate their application to these criteria. Each criterion will be scored by the review panel on a scale of 1–7, where 1 is the lowest and 7 is the highest. All criteria are equally important

Criteria	Sub-criteria
Research topic	<ul style="list-style-type: none"> <li>• The purpose has great scientific significance.</li> <li>• The purpose, theories or hypotheses are original or innovative.</li> <li>• The topic addresses significant scientific challenges.</li> <li>• The purpose is aligned with the call.</li> </ul>
Methods and implementation	<ul style="list-style-type: none"> <li>• The scientific method is clearly described, appropriate to the topic and feasible to implement.</li> <li>• Any multidisciplinary or interdisciplinary approach is clearly described and fit for purpose.</li> <li>• Ethical considerations are described well, and the applicant's plan for managing them is appropriate.</li> <li>• The project addresses gender equality and diversity perspectives in a relevant way.</li> </ul>

	<ul style="list-style-type: none"> <li>• The coordination of the project and research group is clearly described and fit for purpose.</li> <li>• The timetable and budget are reasonable in relation to the project's implementation and expected results.</li> <li>• The work plan and timetable are well-defined and realistic.</li> <li>• Risks are analysed and reasonable alternatives described.</li> <li>• The plan for scientific publication and communication is well-defined and realistic.</li> </ul>
<p>Scientific excellence</p>	<ul style="list-style-type: none"> <li>• The research group has the resources, skills and experience required to complete the project.</li> <li>• The stated scientific publications are of high scientific quality.</li> <li>• The principal applicant has the ability to lead and implement major collaborations.</li> <li>• The research group has experience in supervising students, doctoral students or post docs.</li> <li>• The research group has other merits that are relevant to the application, such as proven experience of collaboration and research communication.</li> </ul>
<p>Potential societal benefit of the research topic</p>	<ul style="list-style-type: none"> <li>• The project addresses important societal issues or sectoral issues within the call's focus, nationally or internationally.</li> <li>• The expected results have the potential to contribute to sustainable development in the short or long term, nationally or internationally.</li> <li>• In the project's design, relevant consideration is given to the needs of stakeholders or users.</li> </ul>
<p>Communication with stakeholders or users</p>	<ul style="list-style-type: none"> <li>• Stakeholders or users who will be involved are relevant to the project's objectives.</li> <li>• Plans for the involvement of stakeholders or users are realistic.</li> <li>• The project team has the skills required to carry out the activities planned for communication or interaction with stakeholders or users.</li> </ul>

## How does the assessment process work?

Applications will be assessed by an international review panel that is qualified to cover the current theme in the call. Each application is read and evaluated by several members of the panel. The review panel is composed of active researchers as well as individuals outside academia with the expertise necessary to evaluate the relevance of the research. The review panel is appointed by Formas. Read more about [the assessment process](#).

## Grant award decisions

Formas' Scientific Council is expected to reach a decision on 17 June 2020 concerning which projects are granted funding. Decisions will be announced the following day at the latest on Formas' website and later sent via email from Prisma. Grant award decisions cannot be appealed. Read the general information about our [grant award decisions](#).

## Reporting for granted projects

Each project that is awarded funding must submit a report to Formas containing a financial and a popular scientific summary in accordance with the decision.

Results from research funded by Formas must be published with open access. Read more about our requirements for [open access to research results and data](#).

The projects that are granted funding must develop a data management plan for the data produced in the project. By signing our grant terms and conditions, you certify that a data management plan will be available before the research begins and that it will be maintained.

Formas may impose requirements on how projects must be reported in terms of content and results to enable distribution and application. In such cases, the award decision will contain more information about this. Formas may also require you to participate in conferences and similar events in order to create synergies and platforms for learning and knowledge sharing.

Read more about [reporting](#).

## Support and shortcuts

- [Prisma](#)
- [Prisma's user support](#)
- [Ethics policy](#)

## Contact information

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