WELCOME to our information meeting regarding two of the Swedish Energy Agency's open calls!

The meeting will begin soon!

Carolina Ahlqvist
Christopher Frisk
Fariba Mohammedian
Peter Bennewitz
(Pierre-Jean Rigole)

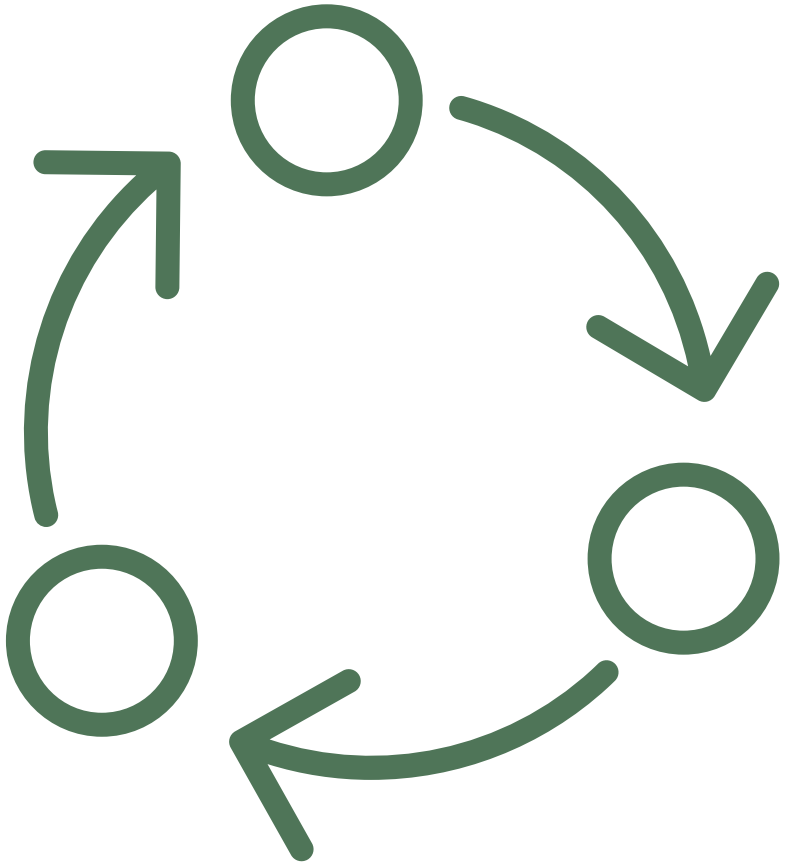
Agenda

Welcome and meeting method	12:00-12:05
Research and innovation programme: Framtidens elsystem	12:05-12:10
Contribute to the development of the electricity markets of the future	12:10-12:20
Contribute to knowledge and competence for the future power system	12:20-12:30
Questions?	12:30-13:00

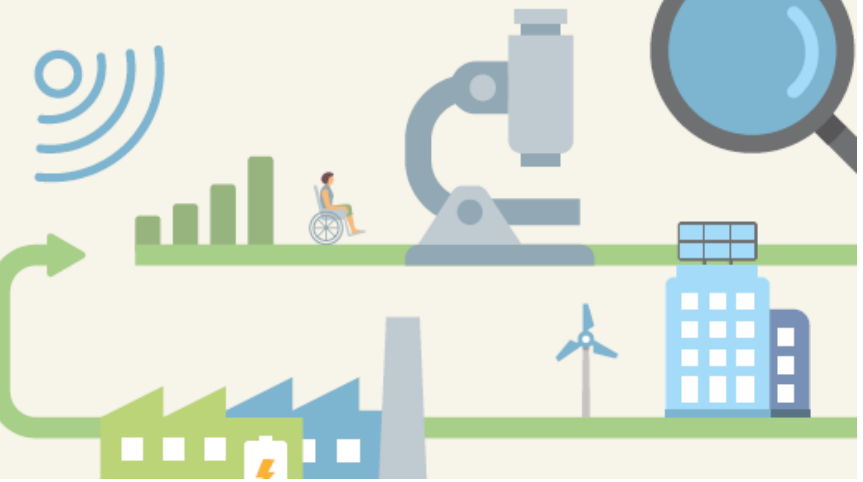
Swedish Energy Agency

Meeting method

- Turn off you microphone and camera when you are not speaking
- Questions
  - Write your questions in the chat during our presentation. Our moderator will ask these during (questions for clarification) and after (other questions) the presentation
  - After the presentation you can ask your questions by raising your hand in Teams, or write them in the chat
  - You are welcome to introduce yourself and turn on the camera when speaking



Swedish Energy Agency



Reserach and Innovation programme

Framtidens elsystem

Swedish Energy Agency

About the programme

The programme will support the transition to a sustainable energy system by facilitating the electrification of other sectors and at the same time work for an electricity system characterized by security of supply, competitiveness and ecological and social sustainability

Budget: 552 million SEK

Duration: April 2022 to December 2027

Swedish Energy Agency

Research areas Smart grids, electricity markets, energy storage, resource-efficient energy use and fossil-free energy production

The research and innovation programme Framtidens Elsystem is one of the Swedish Energy Agency's main funding in research and development related to the electricity system and supports research and innovation projects that focuses on challenges linked to future power production, use and distribution

Outcome of funding of research and innovation for the Swedish power system

- Market and flexibility
- Interaction in the energy system
- Power production, infrastructure and security of supply
- Social sustainability and inclusion
- Ecological sustainability and climate
- Competitiveness and innovation

Energimyndigheten

Outcome of funding of research and innovation for the Swedish power system

Market and flexibility

The electricity market is efficient, well-functioning, takes advantage of the possibilities of digitalization and enables flexibility among the players. The Swedish market is attractive for investments from other countries.

Interaction in the energy system

The power system interacts with other sectors such as the transport, industrial and agricultural sectors and contributes to sustainable communities, cities and rural areas.

Power production, infrastructure and security of supply

The Swedish power system is part of a well-integrated European system that enables 100% renewable electricity. The power system has high security of supply and contributes to increased security of supply.

Swedish Energy Agency

Outcome of funding of research and innovation for the Swedish power system

Market and flexibility

- Market design and market models
- Developed regulations and instruments
- New business models
- Digital transformation, IT security and integrity
- Developed forecasts
- Capacity in the power system

Interaction in the energy system

- Rapid expansion that meets society's need for electricity
- Smart and sustainable cities
- Permitting processes
- Demand flexibility and interaction with industry, combined heat and power, buildings and the transport system
- Scenario analysis

Electricity production, infrastructure and security of supply

- Sustainable and resource-efficient expansion of power grids
- Development and use of storage and other energy carriers
- Secure energy supply and robust power electronics
- Renewable electricity production, microgrids and aggregated systems that contribute to grid stability
- Charging infrastructure and electric roads

Outcome of funding of research and innovation for the Swedish power system

Social sustainability and inclusion

The power system meets the needs of different parts of society. All people are included and can influence the transition of the power system.

Ecological sustainability and climate

The power system is climate-neutral, resource-efficient and ecologically sustainable with a large part of circular flows. The power system plays a key role in reducing greenhouse gas emissions in other parts of the energy system.

Competitiveness and innovation

Sweden is a world leader in several areas in the power sector and exports sustainable innovations, products, services and knowledge that contribute to economic sustainability and sustainable energy systems globally.

Outcome of funding of research and innovation for the Swedish power system

Social sustainability and inclusion

- The people and the power system
- Collaboration between “need owners” and project executors
- Inclusive transition
- Socio-economic analyzes
- Driving forces and behavior
- Ethics and justice

Ecological sustainability and climate

- Environmental impact and environmental benefit
- Sustainability throughout life cycle
- Circular flows, virgin materials and waste management
- Hazardeous substances and materials

Competitiveness and innovation

- Increased export and strengthened Swedish businesses
- New demand-driven services and other innovations
- Building competence
- Test environments for business models and techniques

Swedish Energy Agency

Contribute to the development of the electricity markets of the future

.

If you want to contribute to the development of the electricity markets of the future, for tomorrows electric power system, and if you have a research project you are welcome to apply for funding.

In short

Available funding	Approximately 30 million SEK
Who can apply?	Universities, research institutes, companies, public sector, other stakeholders in connection to the research area within the call.
How to apply?	Through ”Mina Sidor” (Utveckla framtidens elmarknader)
Closing date?	8th of June 2022
When are decisions expected?	The Swedish Energy Agency planes to make decisions in January 2023
Last end date for the project?	1st of May 2026
How much funding can be granted?	Each project within the call can be granted a maximum of 5 000 000 SEK from the Swedish Energy Agency*

**The amount of aid each project participant can receive depends, among other things, on*

- *the extent of the eligible costs the participant has*
- *if the participant is engaged in non-economic activity or is a company*
- *which research activities the project is considered to correspond to*

Swedish Energy Agency

Aim of the call

The projects should address one or several of the programme goals that relate to electricity markets within the research programme ”Framtidens Elsystem”:

- The knowledge about the electricity market of today and of the future increases.
- New solutions for electricity markets that make use of possibilities enabled by digitalisation.
- Knowledge that contributes to the development of regulations that support the sustainable electric power systems of the future has increased.

We view cooperation and dialogue between academy, business and other stakeholders positively.

Swedish Energy Agency

Assessment criteria

Possibility to contribute to the aim of the call

Create dialogue and spread knowledge and competence

Scientific excellence and innovation level

Feasibility

Swedish Energy Agency

Assessment criteria

Possibility to contribute to the aim of the call

- To what degree does the project contribute to the development of the future electricity markets?
- How big is the potential of the project to find solutions to the market challenges that can arise in the short and long term in the electric power system?
- To what degree does the project contribute to fulfil the program goals?

Create dialogue and spread knowledge and competence

- Does the project have an appropriate definition and description of its target groups?
- Does the project have a well-composed reference group and a plan for the group's work?
- Does the project express appropriateness in dialogue creation and communication of the project's implementation and results in relation to the project's research questions and knowledge requirements?
- Does the project create crosstalk between different research groups within the academy and / or between business and academia and between researchers who are active in different subject areas?

Scientific excellence and innovation level

- To what degree does the project contribute to push the research frontier forward and to what degree is the project innovative and original?
- How appropriate are the project's scientific methods for answering selected research questions?
- To what extent does the project include a new idea or innovation?
- To what extent is a need met in relation to existing solutions in the intended target market?
- How far has the project's solution come in its development or application in the target group / company / industry / customer / market / society, in terms of knowledge, process, product, system, technology or service?
- To what extent does the applicant clearly state whether a gender and gender perspective is relevant to include or not include in the project? If relevant, how well is it incorporated into the application?

Feasibility

- To what extent are the goals of the project measurable, concrete, well defined and reasonably ambitious?
- To what extent is the proposed work plan concrete and time-realistic in relation to set goals?
- Do the players have the right skills and the right resources to implement the investment?
- To what extent is the project's scope, schedule and budget realistic in relation to the set goals?
- If gender and gender perspectives are relevant to the project, how well is this incorporated into the project implementation?

Swedish Energy Agency

Contribute to knowledge and competence for the future power system

Those with an idea and a desire to contribute to knowledge and competence for the future electricity grid are welcome to apply for funding

In short

Available funding	90 million SEK
Who can apply?	**Main applicant** must be a University, University colleges or research institut Following organisations may also participate: companies, public sector, other organizations, who are shareholder within the topics of this call.
How to apply?	Through ”Mina sidor” (Kompetensförsörjning)
Closing date?	8th of June 2022
When are decisions expected?	The Energy Agency plans to make decisions in January 2023
Latest end date for the project?	31st of December 2027
How much funding can be granted?	Each project within the call can be granted a maximum of **SEK 6,000,000** in funding from the Swedish Energy Agency* **The amount of aid each project participant can receive depends, among other things, on* *• the extent of the eligible costs the participant has* *• if the participant is engaged in non-economic activity or is a company* *• which research activities the project is considered to correspond to*

Swedish Energy Agency

Aim of the call

- Projects should address one or several of the outcomes of the programme
- Project should be within the following research areas:
  - Smart grid,
  - Electricity market
  - Energy storage
  - Resources effective electricity use
  - Fossil free electricity production
- Social science, humanities, technical and scientific disciplines are included
- We see positively projects that involves PhD student and industrial PhD student, as well as include collaboration with stakeholders, such as companies, public sector, or other needs owners.

Energimyndigheten

Assessment criteria

Possibility to contribute to the aim of the call

Dissemination

Scientific excellence and innovation level

Feasibility

Swedish Energy Agency

Assessment criteria

Possibility to contribute to the aim of the call

- To what extent does the project contribute to increase knowledge and strength competence within the electricity system to fulfil the programs six goals?

Dissemination

- To what extent can the project benefit, for example through knowledge building, publications, new solutions?
- How well identified is the need for project results, e.g. a knowledge gap?
- How well prepared is the plan for how identified need owners will be given the opportunity to take part in and influence the project, for example through participation in a reference group?
- How well prepared is the plan for creating dialogue with other research groups and relevant need owners during the project?

Scientific excellence and innovation level

- To what extent does the project contribute to push the research frontier forward?
- How appropriate are the project's scientific methods to address the research questions?
- To what extent can the results of the project contribute to scientific development and be disseminated scientifically?
- How does the application relate to new and existing (scientific) theories and methods in the chosen field?
- I vilken grad kan projektets resultat bidra till den vetenskapliga utvecklingen och spridas vetenskapligt?
- To what extent does the project include a new idea or innovation?

Feasibility

- To what extent are the goals of the project measurable, specific, well defined and reasonably ambitious?
- To what extent is the proposed work plan well defined and time-realistic in relation to set goals?
- Do the actors have the required skills and resources to implement the project?
- To what extent is the project's scope, timeline and budget realistic to reach the set goals?
- If gender and gender perspectives are relevant to the project, how well are these incorporated into the project plan?
- How well do applicants take gender equality into account in the project group's composition, division of labor and working conditions?

Questions?

Take part of the knowledge and competence call through the Swedish Energy Agency's website

Contact
Pierre-Jean Rigole, 016-544 21 91
Carolina Ahlqvist, 016-542 06 04

Take part of the electricity market call on the website of the Swedish Energy Agency

Contact
Peter Bennewitz, 016-544 24 39
Carolina Ahlqvist, 016-542 06 04
Fariba Mohammedian, 016-544 22 07

Energimyndigheten