Welcome to the information meeting about the call

Digialisation, circularity and climate neutrality within Swedish Metals & Minerals

impact innovation

Contact persons

Energimyndigheten

- Jenny Köhler
- Michael Novotny

Swedish Metals & Minerals
impact innovation

- Lawrence Hooey

Agenda

11.00 – 11.40

About Swedish Metals & Minerals and scope of the call

Apply for funding and Evaluation

Tips!

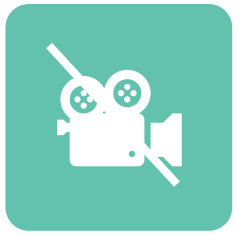
11:40 – 12:00

Time for Questions

Rules of order

Mute the microphone

Please write your questions in the chat



The meeting will not be recorded

This presentation will be available at the calls webbsite

Research and Innovationprojects

You can apply for Industrial research and experimental development (EU COMMISSION REGULATION No 651/2014 Article 25 GBER)

A project may include both industrial research (TRL 2-4) and experimental development (TRL 5-8)

	Level	Description
Industrial research	TRL 2	The solution is formulated. Concept and application described.
	TRL 3	Experimental evidence for the solution and its functionality exists. Initial tests in a laboratory environment have been carried out.
	TRL 4	The solution confirmed in a laboratory environment with evidence that it can be applied in the intended system. Small-scale prototype developed.

	Level	Description
Experi-mental develop-ment	TRL 5	The solution validated in a relevant environment. Tested under realistic conditions with evidence supporting that the solution works.
	TRL 6	The solution demonstrated on a smaller scale in a relevant environment, with intended functionality and performance.
	TRL 7	The solution integrated into a prototype of the intended system and demonstrated in an operational environment. All expected functional requirements are met.
	TRL 8	The solution fully developed and fully functional in the intended system. Operational functionality has been verified by end users. Not commercially introduced.

IPR– Innovation support for SME

- Small and medium-sized enterprises (SMEs) may apply for innovation support to cover costs related to the acquisition, validation, and protection of patents and other intellectual property assets across all fields.
- budgeted IPR-costs as a separate work package
- The support level for SMEs must not exceed 50%
  with a maximum support amount of SEK 250,000.
  The overall aid intensity for the entire project is not affected.

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MISSION

Enabling a sustainable and resilient metals and minerals supply for the societal transition

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1. The program and its mission
2. Scope and action areas
    2.1 Technological action areas
    2.2 Social and policy-related action areas

About the call

Topics in this call

- **1. Resource-efficient and circular production processes**
- **2. Fossil-free and climate-neutral processes**
- **3B. Pilot and demonstration of advanced digitalization and AI**

- **3A. Creating conditions for digitalization and AI**

Potential solutions or improvements may cover several technical action areas!

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Topic 1. Resourceefficient and circular production processes

- Maximize value of extracted metals and minerals from primary or secondary sources, enhanced performance and lifetime of materials, and decrease waste generated in its extraction
- TRL 2-8

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Topic 1. Resource-efficient and circular production processes

Includes but not limited to:

- Smart material design for improved performance that increases functionality, durability or recyclability, thereby
- reducing resource requirements.
- Facilitate recycling and improved resilience through substitution of critical raw materials in metal and mineral products.
- Demonstration of circular flows (system demonstrators)
- Development of new business models that enable circular production processes
- Processes that significantly reduce the need for energy or water.
- Development of technologies, strategies and processes to reduce waste generated during mining and downstream processes, e.g. through innovations in mineral resource characterization, geometallurgical methods, mining and process techniques.
- Development of processes to increase the extraction of minerals and metals in mining and in the mineral and metalworking process chain.
- Development of recycling processes for internally generated waste from mining and metal sectors such as waste rock, slag, and scrap, as well as end-of-life products containing metals and minerals.

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Topic 2. Fossil-free and climate-neutral processes

The goal of projects in this topic is to develop solutions that have the potential to **significantly reduce emissions of fossil carbon dioxide** from the production of minerals, metals and related products such as the production of burnt lime.

- TRL 5-8
- Processes that enable the replacement of fossil energy sources to sources with low carbon dioxide emissions, such as electricity, hydrogen, biofuels and biochar.
- Integration of carbon capture and use (CCS/CCU) in metal and mineral production to reduce fossil carbon dioxide emissions from processes where the use of fossil coal or other fossil carbon dioxide sources is difficult to avoid.

Refer to the Swedish text!

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Topic 3B. Pilot and demonstration of advanced digitalization and AI

The objective of this area of research and innovation projects is to develop and test advanced digital and AI tools to address specific industrial challenges. It is expected that project proposals in this area have already taken into account and addressed the issues described in Topic 3A.

Project proposals that primarily aim to develop new, stand-alone digital solutions or algorithms are **not** in scope. Instead, initiatives that emphasize application, integration, adaptation and responsible use of AI in relevant context.

- TRL 5-8

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Topic 3B. Pilot and demonstration of advanced digitalization and AI

Research and innovation projects whose scope includes one or more of the following aspects:

- Development of industrial applications of digitalization or AI solutions for autonomous systems, digital twins or simulations.
- Design of prototypes, demonstration, pilots, testing and validation of processes incorporating advanced digitalisation and/or AI
- Development of interaction between humans and AI.
- Evaluation of the potential of production systems or supply chains.
- Development of personal privacy and data security strategies.
- Development of operational preparedness and change management

Note that you have to consider how use of the AI/advanced digitalization solutions support the Mission!

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3A. Establishing conditions for advanced digitalization and AI

The aim of the topic is to investigate how industrial application of advanced digitalization and AI technologies can be used in one or more of the program's technical focus areas**, including but not limited to: automation, process control for operational efficiency, productivity, safety, security, environmental improvement, material or process design, new ways of working, organizational development, or other relevant aspects** that can support the program's mission.

The focus is on identifying and developing strategies to overcome obstacles, knowledge gaps, and other challenges required for industrial implementation of existing AI/digital solutions.

TRL levels 2 to 4: refers to the maturity of the issues or knowledge gaps to be addressed in the project, not necessarily the TRL of the technical solution.

Project proposals that primarily aim to develop new, stand-alone digital AI solutions or algorithms are not covered. Instead, the area supports initiatives that emphasis creating the conditions for the application, integration, adaptation and responsible use of AI in relevant contexts.

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• 3A. Creating conditions for advanced digitalization and AI

The scope includes, but is not limited to, projects that address the following for a specific process or processes where the digital/AI solution is to be applied:

• Identification and management of knowledge gaps, bottlenecks and others barriers to implementation.
• Identification and management of data needs and availability.
• Identification and management of intellectual property issues such as data ownership.
• Identification and management of regulatory and policy-related aspects.
• Testing of relevant concepts up to laboratory level or in simulated environment.
• What digitalization, AI, new ways of working and organizational development means partly within organisational units (production, etc.) and partly between organisations (product development, value chains, suppliers, customers, obstacles, opportunities, lock-in effects, consequences of the AI solution

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Summary of the call

	1 Resource-efficient and circular production processes	2. Fossil-free and climate-neutral processes	3B. Pilot and demonstration of avancerad digitalization and AI	3A. Create conditions for digitalization and AI
Maturity level, TRL	TRL 2-8	TRL 5-8	TRL 5-8	TRL 2-4
Scope of the call, Maximum funding per project, MSEK	Approx 80 MSEK			Approx 10 MSEK
Project duration	Maximum 4 years for PhD projects, other projects maximum 3 years			Max 2 years
Max funding per project	No maximum level, but an expectation to be able to fund 10–25 projects			Max 2 MSEK
Maximum support per project	Max 60%			Max 70%
Actor constellation	Minimum: 2 Swedish companies and 1 research organization (university, college, research institute)			

Who can apply?

At least three project partners in the application

At least two partners must be a
- company operating in Sweden.

At least one part must be a research actor
- University
- College
- Research institutes

These organisations can be a part of the consortia
- Companies (legal entities)
- Public sector organizations
- Universities and college
- Research institutes
- Non-governmental organizations

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Project partner

- **Project partner** refers to the organization(s) participating in the project.
- **Coordinator** is the project partner responsible for coordinating the project, receiving the funding from the Swedish Energy Agency, and distributing the funds to the other beneficiaries involved in the project.
- Costs and funding for each project partner, including the coordinator, must be specified in the application.
  A project partner must finance the portion of the costs not covered by the Swedish Energy Agency's funding with its own resources or with funds from another **financier.**

At least three project partners in the application

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How much funding can each project partner receive?

- If the project partner is a company or an organization that conducts non-economic operations (such as universities and colleges)
- If the project partner is a small or medium-sized enterprise (SME)
- Depending on the research category that the activities in the project are considered to fall under

Overview of maximum funding

Type of category	Small enterprises	Medium-sized enterprises	Large enterprises	Non-economic operations
Industrial research	70%	60%	50%	100%
Experimental development	45%	35%	25%	100%

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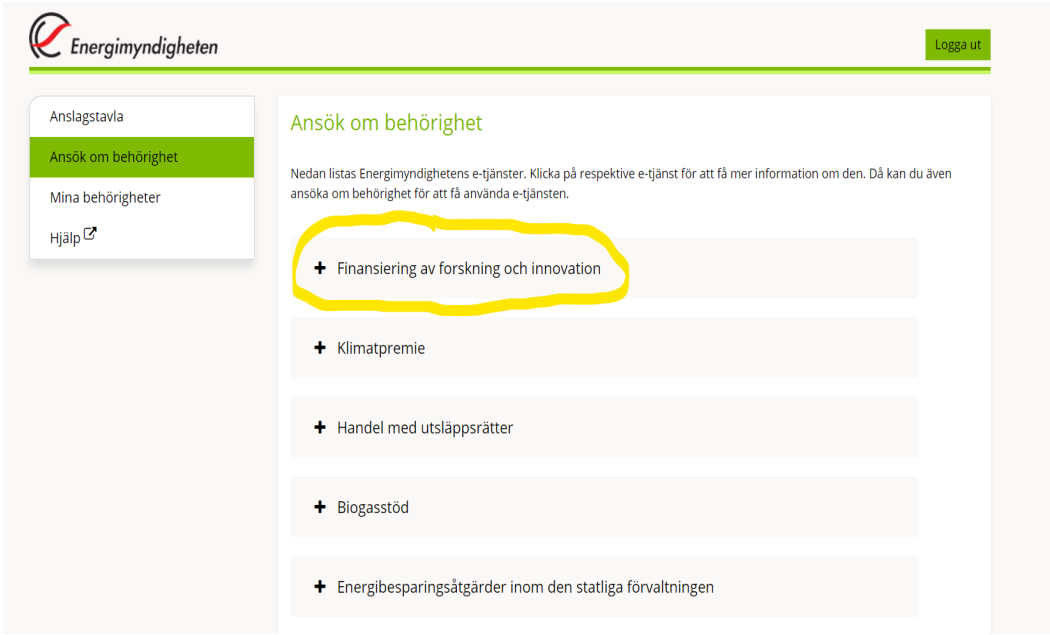
Apply for acessto ”Mina sidor”

- http://minasidor.energimyndigheten.se/
- Apply for access to ”Mina Sidor” **well in advcance**
- Apply for access to "My Pages" and the form "Funding of Research and Innovation"
  In the form ”**Finansiering av forskning och innovation**"
- In the form ”Finansiering av forskning och innovation" choose ” **Impact Innovation - Swedish Metals & Minerals: Hållbar omställning inom metall- och mineralindustrin digitalisering, cirkularitet och klimatneutralitet** "



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Apply for funding

- Use ”Mina sidor”
- See the manual for how to use ”Mina sidor” in the ”Manual för forskningsansökningar via Mina sidor”
- Write your application in English or Swedish. Applications written in Swedish may be translated into English as the evaluation will be conducted by international reviewers. Applicants will not have the opportunity to contribute to or review the translation.
- A summary of the application shall be written in both English and Swedish

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Apply for funding

- Write everything for the application in the form exept for appendicies
- Attach appendices
  - CV´s for the project leader and other key persons
  - Letters of Intent
- Project summary to program office

- The call for proposal will soon be available in English

Time schedule

Call closes	February 3 2026, 23:59 (support until 4 PM)
Decisions planned	May/June 2026
Project start	Earliest June 15

Evaluation process

Evaluation process

- Applications are assessed **in competition** with other submitted applications.
- Area 3A will be evaluated separately and the other areas will be evaluated together
- The Swedish Energy Agency uses an external evaluation panel that acts in an advisory capacity to the agency.
- The evaluation panel may include international (non-Swedish speaking) experts. If so, applications in Swedish may be machine translated to English. You will not be able to review the translation.
- Each application will be reviewed by three independent experts. The evaluation results in **a recommendation to the Swedish Energy Agency**, which forms the basis for the agency's funding decision.
- The Swedish Energy Agency makes the final decisions.
- The agency's decision to approve or reject an application can´t be appealed

4,7	4,0	3,7	3,0
2,7	2,3	1,7	2,7
4,7	4,3	3,7	3,7
3,3	3,7	3,7	4,0
3,7	3,3	4,0	4,3
3,3	3,0	2,3	3,0
2,3	2,0	2,7	2,7
2,7	3,3	3,0	3,3
4,7	4,3	4,0	3,7
3,8	2,8	3,5	2,8
3,0	3,0	4,5	3,5
3,3	2,3	1,7	2,3
3,3	3,3	3,0	2,7
3,3	4,0	4,0	3,7
3,3	2,7	3,3	2,0

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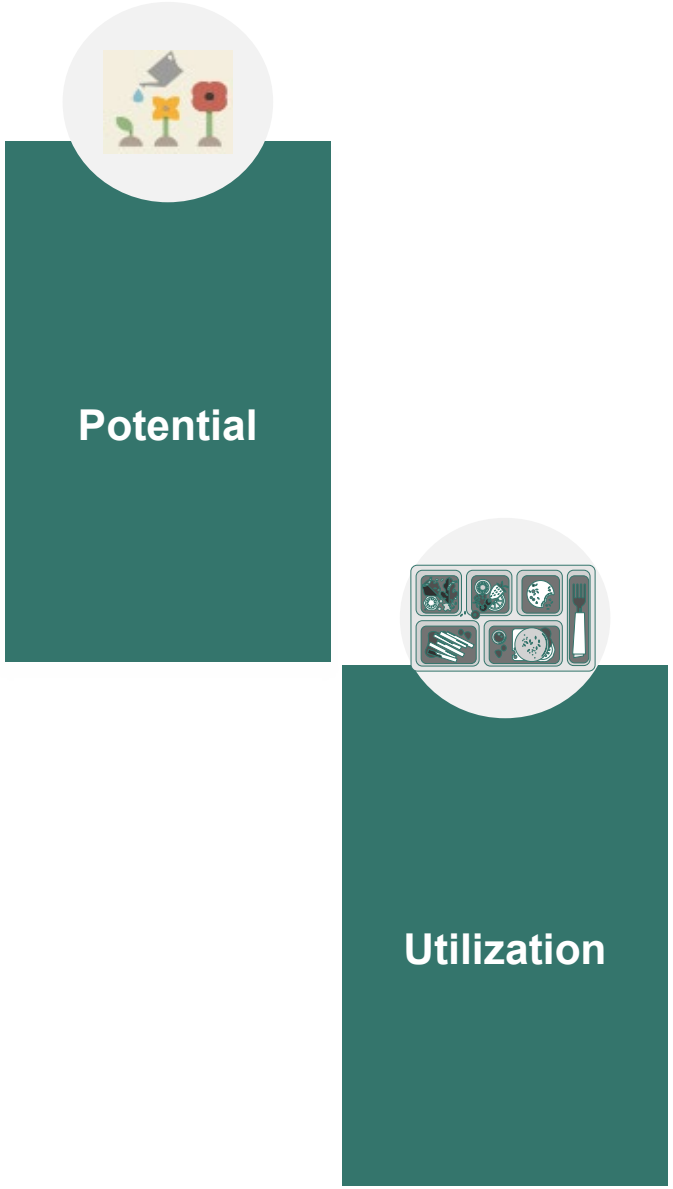
Potential and Utilization

Potential

- What potential does the project proposal have to contribute to the goal within its area?
- How well are the scientific and practical backgrounds of the chosen approach described?
- How clearly are the expected improvements/benefits, including techno-economic aspects, described and quantified?

Utilization

- How relevant and appropriate are the project's deliverables for enabling implementation of the solution in the next development stage?
- To what extent are the actors expected to use the project results (the end-users) i.e., those who can "take the next step," involved in the project?



Novelty and extent of innovation

- To what extent is the project proposal and its approach new compared to previous attempts to solve the same challenge(s)?
- To what extent does a successful project have the potential to outperform available technologies, methods, or knowledge?
- To what extent do the project results contribute to new knowledge in the addressed area?

Feasibility

- To what extent does the project proposal have clear goals and deliverables that are achievable within the project's execution?
- To what extent is the project's timeline and activity plan appropriate in relation to its goals and ambitions?
- Are the available resources (budget, expertise, equipment, etc.) reasonable in relation to what is to be carried out?
- Are activities described that meet the definitions of industrial research or experimental development?
- How well are risks related to implementation identified, and is there a plan for appropriate risk management?

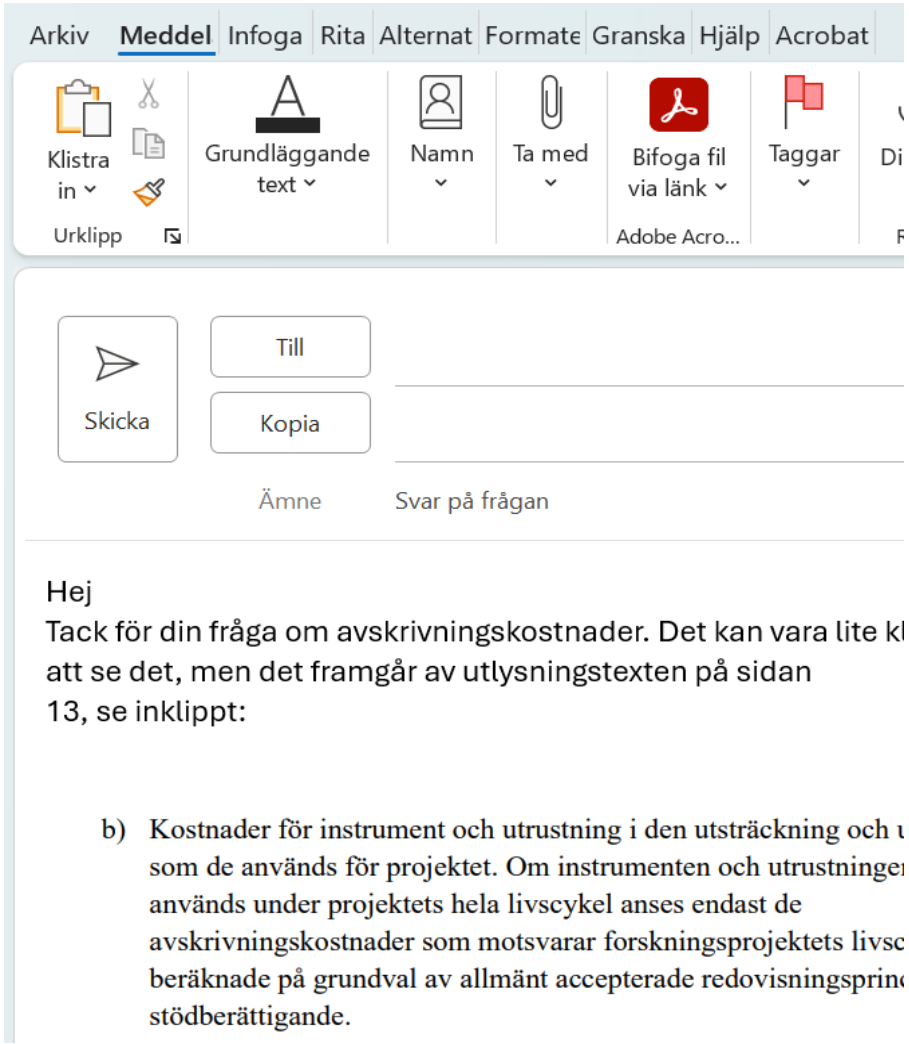
Actor Constellation

- To what extent does the application show that the participating organizations and key individuals have the necessary competence to successfully carry out the project (including subcontractors or other actors connected to the project but not project partners, e.g., in reference groups)?
- To what extent are gender and equality considered in the composition of the project team, in the selection of the project manager, and in the project's implementation, content, goals, and impacts?

Tips!

Tips!

- **Start early!**
  Don’t be one of those who miss the deadline by just a few minutes.
  No additions will be accepted after February 3 at 23:59.
- Apply for access to “**Finansiering av forskning och innovation**” via “**Mina sidor**”
  It may take a couple of days to receive access.
- **Read the call text carefully!**
  You are welcome to email the functional mailbox or call, but most answers can be found in the call text or the manual for “Mina sidor”.



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Contact

For questions about the selection process as well as legal requirements and formal conditions, contact:

Call Manager at Energimyndigheten

Jenny Köhler

Michael Novotny

impactinnovation@energimyndigheten.se

For questions regarding the background of the call and the desired impacts, contact:

Call responsible at the programme office Swedish Metals & Minerals:

Lawrence.hooey@swedishmetalsandminerals.se

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Questions?

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Welcome to contact us!

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Additional slides

What type of costs can we fund?

Our funding may only be used for certain types of costs. These are called eligible costs.

- **Personnel costs**: Salaries, social security contributions, and other personnel-related fees
- **Instruments, equipment,** for the period used for the project. Where such instruments and equipment are not used for their full life for the project, only the depreciation costs corresponding to the life of the project, as calculated on the basis of generally accepted accounting principles are considered as eligible.
- **Equipment, land, and buildings**: rent for premises other than the regular place of business
- **Consultancy and license costs**: Consultancy services, knowledge, and patents that have been purchased or licensed from an external party
- **Other direct costs**: For example, materials, supplies, and travel necessary for carrying out the project
- **Indirect costs (overhead)**: Costs that are not incurred as a direct result of the project but can be related to it
  - Academic work 100% overhead
  - Research institutes that perform the research in their non-economic activities maximum 45%
  - Economic activities (for example enterprises) maximum 30%

Support for international project partners

The Swedish Energy Agency is restrictive when it comes to providing research funding to actors that do not have operations in Sweden. Exceptions may be made if all of the following criteria are met:

1. It can be demonstrated that the actors without operations in Sweden possess **unique expertise** that is not available among actors in Sweden.
2. The project partner is essential for achieving the objectives of the program.
3. There is a **clear potential for knowledge transfer** to actors in Sweden.

The Swedish Energy Agency may deny funding to actors without operations in Sweden even if all of the above criteria are considered to be fulfilled.

Economic or Non-economic activities?

- In general, most limited companies (AB) engage in economic activity.
- It is not the legal form (e.g., limited company, partnership, association, foundation, etc.) that determines the classification, but rather
- the **only relevant criterion** for assessing whether an actor is considered to be engaged in economic activity (and thus regarded as an undertaking) is **whether the actor offers goods or services on a market.**
- For example, the intention to make a profit is not a decisive factor in this assessment—**non-profit actors can also offer goods or services on a market** and therefore be considered undertakings.
- Applicants must therefore assess for themselves whether their activities involve offering goods or services on a market.
- The burden of proof lies with the applicant

Co-financing

- A project partner must finance the portion of the costs not covered by funding from the Swedish Energy Agency with their own resources or with funds from another financier.
- The total public funding for the same eligible costs may not exceed the maximum permitted aid intensity levels.
- Public funds refer to funding from national, regional, or municipal sources.
- Mark the support as public funding in the application form if a beneficiary has received other public support, such as other national, regional, or municipal funding, or if you have received centrally managed EU funding for the same costs for which you are applying for support from the Swedish Energy Agency.