

EUROPEAN CLUSTER Collaboration platform

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C2Lab: Build the business case for your innovative idea!

An initiative of the European Union



Input paper



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Introduction

The primary purpose of this Input Paper is to provide a set of relevant information supporting the innovative projects of the participants to the Cluster Collaboration Lab (C2Lab) that takes place in Lund (Sweden) on 21-22 March 2023. The second edition of the C2Lab "Build the business case for your innovative idea" is an interactive workshop that serves as an excellent platform to find collaboration partners, mature project concepts, and develop business cases with other attendees, potentially from cluster organisations, companies, research organisations, and other interested entities, which will be further implemented after the event itself. It is also a co-creation space that facilitates an exchange of ideas within thematic working groups of similar areas of interests or that could tackle similar challenges.

The ideas for projects presented at the C2Lab shall strengthen the EU twin transition and boost the resilience of the European industry. Firstly, the key focus is on creating advanced and innovative solutions in green technology, energy efficiency and fossil-free industry, that contribute to energy transition. Secondly, the particular emphasis is placed on circular economy where economically and environmentally sustainable and circular business solutions need to be developed. Furthermore, any ideas for the green and digital innovations are welcomed.

In view of the above, the central objective of this paper is to offer suitable assistance and practical guidance for development and implementation of the innovative projects fostering greener, more digital, and resilient economies, by focusing mainly on current funding schemes for innovation. As the C2Lab is organised within the Sweden Innovation Days and the Sweden's Innovation Ecosystem Summit, **Chapter 1** sheds light on the economy of Sweden and Baltic Sea Region, as well as Swedish innovation ecosystem, its relevant cluster actors, and strategic innovation priorities, with the aim to gain a better understanding of the economic context. **Chapters 2 and 3** present a slightly different focus by showing how to put the innovative project ideas into practice. **Chapter 2** guides the readers through several public - EU, intergovernmental and national - funding programmes, outlined together with a list of concrete calls for proposals, types of topics funded, partner search platforms, advisory services, and diverse support tools. With a special emphasis on the area of cleantech **Chapter 3** investigates numerous sources of private funds such as venture capital, corporate venture capital, business angels, banks, and impact investors that aim to help develop research outputs into market products.



01

Context: Economic profile of Sweden and Swedish innovation ecosystem





Context: Economic profile of Sweden and Swedish innovation ecosystem

Sweden and its macroeconomic picture

Sweden is part of the Nordic region and shares borders with other Scandinavian countries, namely Norway, Finland, and Denmark. The country's long coastline along the Baltic Sea to the east and south also allows for access to other countries within the Baltic Sea region. Sweden has a population of around 10.4 million¹, as of 2021, and a large active workforce of roughly 5.6 million in the labour force.² For 2021, the employment rate of all residents ranged between 20 years and 64 years is 80.7%, thus ranked second among EU 27 Member States after the Netherlands.³

Albeit having a relatively small population, Sweden has a strong economy in Europe, with a GDP of 537.1 billion EUR, making it the seventh largest economy in the EU 27.⁴ Sweden's economy has shown steady growth since the 1990s due to economic restructuring and reforms aimed at enhancing global competitiveness. As shown in Figure 1, the country has faced occasional dips in growth, such as the global economic slowdown after the financial crisis in the late 2000s, resulting in an 11.3% annual growth downturn in 2009. However, the country recovered relatively quickly, with GDP surpassing precrisis levels in 2010 with an annual growth of 19.1% the following year. In recent years, Sweden's GDP has continued to grow, reaching EUR 537.1 billion in 2021. Despite the challenges posed by the effects following the COVID-19 pandemic, the country's economy has remained relatively resilient and was able to emerge after the global supply chain eased, given the government's implemented policies. Overall, Sweden's sustained economic growth over the years is a testament to its resilience and adaptability in the face of global challenges.

https://ec.europa.eu/eurostat/databrowser/view/tps00001/default/table?lang=en (last access 16.02.2023). ² SCB (2021): Arbetsmarknadssituationen för befolkningen 15-74 år. Available under

https://www.scb.se/contentassets/e2ceb79669ef4194b5d52a77f5ee5ef3/am0401_2021a01_br_am12sm2201. pdf (last access 21.02.2023).

⁴ Eurostat (2023): GDP and main components (output, expenditure and income): Sweden. Available under <u>https://ec.europa.eu/eurostat/databrowser/view/nama_10_gdp/default/table?lang=en</u> (last access 16.02.2023).



¹ Eurostat (2023): Population on 1 January: Sweden. Available under

³ Eurostat (2023): LFS, Employment and activity by sex and age: Sweden. Available under <u>https://ec.europa.eu/eurostat/databrowser/view/LFSI_EMP_A_custom_4943304/default/table?lang=en</u> (last access 16.02.2023).



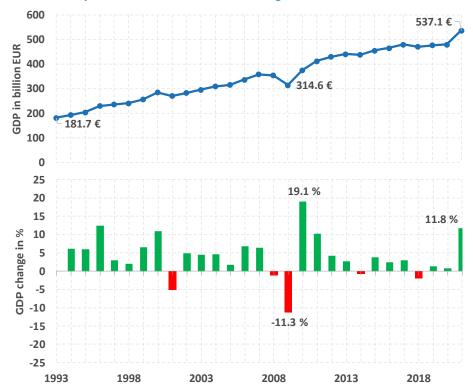


Figure 1: GDP at market prices in billion \$ and GDP change in % over time

Source: Eurostat (2023), GDP and main components (output, expenditure, and income). Available under: <u>https://ec.europa.eu/eurostat/databrowser/view/nama 10 gdp/default/table?lang=en</u> (last access: 17.02.2023).

To gain a more comprehensive understanding of Sweden's economic profile, it is helpful to assess its positioning in the **14 industrial ecosystems** defined by the European Commission ⁵ in terms of both employment and gross value added (GVA). Among the **14** industrial ecosystems, the "Health" ecosystem takes the lead in terms of employment and represents a larger share of the Swedish economy than the EU 27, implying a specialization in health-related sectors. Similarly, the "Proximity, Social Economy and Civil Security", "Cultural and Creative Industries", and "Digital" ecosystems have a higher share of employment compared to the EU 27 levels. On the contrary, ecosystems such as "Retail"⁶, "Tourism", "Agri-Food" and "Textile" play a comparatively smaller role in the Swedish economy. A similar picture can be drawn when looking at the largest ecosystems in terms of GVA. Here the specialization of industrial ecosystems like "Proximity, Social Economy and Civil Security" and "Digital" become more discernible, with both exceeding EU 27 levels significantly, thus indicating their importance for the Swedish economy. Overall, these statistics highlight Sweden as a service-driven economy, with a notable specialization in Health and Digital-related sectors, while the industrial and agricultural sectors are relatively less significant. This specialization in more research-intensive sectors

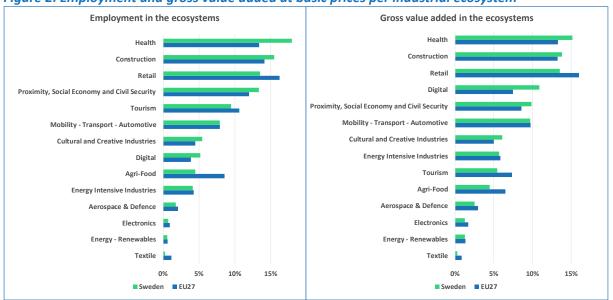
⁶ Note that despite its importance for the Swedish economy based on employment and gross value added, retail remains the only industrial ecosystem, for which there are no Swedish clusters registered on the ECCP. 9



⁵ EU Commission (2021): Annual Single Market Report 2021: Available under

https://op.europa.eu/en/publication-detail/-/publication/6355326c-ae95-11eb-9767-01aa75ed71a1/languageen (last accessed 21.02.2022).

is also a result of Sweden's high expenditure in R&D activities. In 2021, R&D expenditures amounted to EUR 18.0 billion, of which 12.9 billion are spent on the business enterprise sector, making up 3.35% of Sweden's GDP. This makes Sweden the country with the highest expenditure on R&D relative to its GDP within the EU 27 Member States.⁷





Source: ECCP (2023), own elaboration based on Eurostat.

All in all, Sweden's strategic location has played a significant role in its economy, as it has been an important centre for trade and commerce in the region, which is still of importance. Today, Sweden's location continues to be a key advantage for its export-oriented economy, which is heavily reliant on foreign trade. This is reflected in its trade capacity in 2021, with imports of goods and services amounting to EUR 261.8 billion and exports of goods and services amounting to EUR 289.2 billion, resulting in a positive trade balance.

<u>https://ec.europa.eu/eurostat/databrowser/view/rd_e_gerdtot/default/table?lang=en</u> (last accessed: 17.02.2023).



⁷ Eurostat (2023). GERD by sector of performance. Available under



Macroeconomic look on the Baltic Sea Region

Given Sweden's strategic location within the Baltic Sea region as well as its global competitiveness, it is an important country to consider when examining interregional cooperation in this region.

The Baltic Sea region, which constitutes approximately a quarter (24.7%) of the EU 27 population⁸, can be regarded as an **important economic hub in Northern and Eastern Europe**. The region's combined GDP is significant, reaching over EUR 5.4 trillion in 2021.⁹ The strategic location of the region provides easy access to global markets, making it a hub for trade, as reflected by its trade capacity, with imports amounting to EUR 3.1 trillion¹⁰ and exports to EUR 3.15 trillion¹¹ from the EU 27. Latter makes up more than third (36.4%) of the EU 27 export capacity.

The Baltic Sea region has experienced strong economic growth over the past decades. Nevertheless, the region also faces challenges, including an ageing population, increasing global competition as well as the emergence of disruptive technologies.¹² This latter, however, also presents an opportunity for the region to leverage its strengths, such as its proximity to renewable energy sources and the potential of new industrialisation. Sweden, Finland, Latvia, and Estonia are among the top 4 of the EU 27 Members States with the highest share of renewable energy, with Sweden generating 62% of its energy from renewable sources.¹³ The region's abundance of natural resources and established energy sector make it strategically positioned to take advantage of the green transition taking place in the EU, particularly given its potential in offshore wind energy.¹⁴

To fully showcase the region's potential, a territorial foresight scenario has been outlined for the year 2050, envisioning the Baltic Sea Region as a leader in green technology, with a focus on innovation and private investment. This transformation would position the region as a hub for green innovation,

EU&name_desc=false (last access 16.02.2023).

https://ec.europa.eu/eurostat/databrowser/view/nrg_ind_ren/default/table?lang=en (last access 21.02.2023) ¹⁴ ENTSO-E (2023): Regional investment Plan 2022 - Baltic Sea. Available under:

documents/TYNDP2022/public/RegIP-2022-BS.pdf (last access 21.02.2023).





⁸ Eurostat (2023). Population on 1 January. Available under

https://ec.europa.eu/eurostat/databrowser/view/tps00001/default/table?lang=en (last access 16.02.2023). ⁹ Eurostat (2023): GDP and main components (output, expenditure and income): Sweden. Available under https://ec.europa.eu/eurostat/databrowser/view/nama 10 gdp/default/table?lang=en (last access 16.02.2023).

¹⁰ The World Bank (2023). Imports of goods, services and primary income (BoP, current US\$) - Denmark, Estonia, Finland, Germany, Poland, Lithuania, Latvia, Sweden, European Union. Available under <u>https://data.worldbank.org/indicator/BM.GSR.TOTL.CD?locations=DK-EE-FI-DE-PL-LT-LV-SE-</u>

¹¹ The World Bank (2023). Exports of goods, services and primary income (BoP, current US\$) - Denmark, Estonia, Finland, Germany, Poland, Lithuania, Latvia, Sweden, European Union. Available under https://data.worldbank.org/indicator/BX.GSR.TOTL.CD?locations=DK-EE-FI-DE-PL-LT-LV-SE-EU (last access 16.02.2023).

¹² Baltic Development Forum (2018). The Baltic Sea Region economies: Progress and Priorities. Available under <u>http://www.bdforum.org/wp-content/uploads/2018/04/TBSREReport2018_210x297_webfinal.pdf</u> (last access 16.02.2023).

¹³ Eurostat (2023): Share of energy from renewable sources. Available under:

https://eepublicdownloads.blob.core.windows.net/public-cdn-container/tyndp-



leading to a reduction in the region's ecological footprint.¹⁵ Therefore, the region is poised to play a crucial role in the implementation of the Green Deal Industrial Plan for the Net-Zero Age, introduced by the European Commission in February 2023.¹⁶ The European Green Deal is a comprehensive plan designed to boost the competitiveness of Europe's net-zero industry and accomplish net-zero carbon emissions by 2050. The plan's emphasis on driving the transition to clean energy sources, creating new markets and the development of new technologies aligns well with the Baltic Sea Region's potential for sustainable industry, as highlighted by the region's already established renewable energy sector and abundance of natural resources.¹⁷ To realize this potential, it is essential to promote investment as well as collaboration between companies and countries in the region, enabling the region to become a global leader in green technology and to achieve the net-zero target by 2050.

The following sections will complement the previous analyses by providing a brief overview of the Swedish innovation ecosystem. In a first step, the Swedish innovation performance is examined. This is followed by an outline of the Swedish innovation landscape in which relevant actors, cluster organisations in particular, for innovation in energy transition and circular economy are presented. In a last step, Swedish Smart Specialisation Strategies (S3) and the strategic innovation priorities identified therein are illustrated.

 ¹⁷ 3 Seas Europe (2023): Why the Baltic Sea Is the Key to Green Transformation. Available under: https://3seaseurope.com/baltic-sea-green-transformation/ (last access 03.03.2023).
 12



¹⁵ Interreg Baltic Sea Region (2019): 2030 and 2050 Baltic Sea Energy Scenarios. Available under: <u>https://vasab.org/wp-content/uploads/2019/05/Baltic-LINes-2030-and-2050-Baltic-Sea-Energy-Scenarios.pdf</u> (last access 21.02.2023).

¹⁶ European Commission (2023): Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: A Green Deal Industrial Plan for the Net-Zero Age. Available under: https://commission.europa.eu/system/files/2023-

^{02/}COM 2023 62 2 EN ACT A%20Green%20Deal%20Industrial%20Plan%20for%20the%20Net-Zero%20Age.pdf (last access 03.03.2023).



Sweden as an Innovation Leader

With regards to the Swedish innovation performance, it can be highlighted that Sweden continues to be an 'Innovation Leader' and the **best performing EU Member State** (see also Figure 3) in the European Innovation Scoreboard (2022). On the national level this above average performance can be linked to the strengths of Sweden especially in the fields of "Public-private co-publications", "Lifelong learning", "International scientific co-publications", "Employed ICT specialists" and "Foreign doctorate students".¹⁸ These strengths are primarily linked to the strengths of the Swedish education system and to the knowledge transfer between public and private actors in the innovation ecosystem. Over the last years the Swedish innovation ecosystem has seen increases also in the areas of "Public-private co-publications" and "International scientific co-publications" but also in the areas of "Business process innovators", "Government support for business R&D" as well as "Venture capital expenditures". The 2022 European Semester country report for Sweden explains that public support for business enterprise expenditure on R&D is relatively low but that the availability of venture capital in Sweden is above the EU average.¹⁹

The good innovative performance of Sweden is also reflected on the regional level (see Figure 3, right side). Here, the Regional Innovation Scoreboard (2021) shows that out of the eight Swedish regions **four regions are classified as 'Innovation Leader' and four as 'Strong Innovator'**. As indicated in Figure 3, the four 'Innovation Leader' are located in the south of Sweden and include the capital region of Stockholm, Östra Mellansverige (East Middle Sweden), Sydsverige (South Sweden) and Västsverige (West Sweden).²⁰ It can be observed that the strengths of the Swedish innovation ecosystem that were previously described are also reflected in the strengths of the majority of the Swedish regions. Nonetheless, some regional characteristics can be emphasized. For instance, the regional innovation ecosystem of the capital region Stockholm stands out in the dimensions "Tertiary education", "Trademark applications" and "Employment in knowledge-intensive activities". In Östra Mellansverige (East Middle Sweden) on the other hand the "Design applications" and in Västsverige (South Sweden) on the other hand the "Design applications" and in Västsverige (West Sweden) the "R&D expenditures of the business sector" can be highlighted.

²⁰ European Commission (2021): Regional Innovation Scoreboard – Regional Profile Sweden. Available online: <u>https://ec.europa.eu/docsroom/documents/45965/attachments/1/translations/en/renditions/native</u> (last access 10.02.2023).



 ¹⁸ European Commission (2022): European Innovations Scoreboard – Country profile Sweden. Available under https://ec.europa.eu/assets/rtd/eis/2022/ec rtd ec rtd https://ec.europa.eu/assets/rtd/eis/2022/ec rtd <a href="https://ec.europa.eu/assets/rtd/eis

https://commission.europa.eu/system/files/2022-05/2022-european-semester-country-report-sweden en.pdf (last access 16.02.2023).

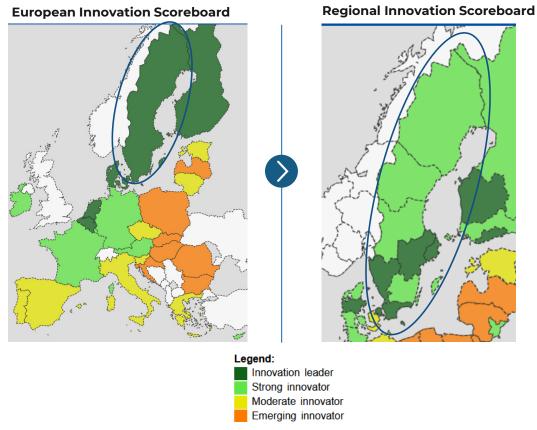


Figure 3: Sweden in the European (left) and Regional (right) Innovation Scoreboard

Source: European Innovation Scoreboard 2022 and Regional Innovation Scoreboard 2021. Available online: <u>https://ec.europa.eu/research-and-innovation/en/statistics/performance-indicators/european-innovation-scoreboard/eis</u> (last access 09.02.2023).

Next to the EIS and RIS, it can be pointed out that Sweden is not only an 'Innovation Leader' on a general level but also in terms of **eco-innovation**. Here, in the Eco-innovation Scoreboard²¹ by the European Commission Sweden is ranked among the Top 5 countries and is classified as an 'Eco-Innovation Leader'. In this scoreboard, the Swedish performance is above average in dimensions related to sustainable resource management and business operations.²²

²² European Commission (2022): Eco-Innovation Country Profile 2022: Sweden. Available online: <u>https://circabc.europa.eu/rest/download/a28d6b32-bc8e-4dc9-9280-d26b368ad824?ticket=</u> (last access 10.02.2023).



²¹ <u>https://green-business.ec.europa.eu/eco-innovation_en</u> (last access 10.02.2023).



Swedish innovation landscape & cluster actors in energy transition and circular economy

This section provides a brief outline of actors in the Swedish innovation landscape and also cluster actors related to the topics of energy transition and circular economy.

Cluster organisations as intermediaries play a central role in innovation ecosystems. To start, the number of registered cluster organisations and other innovation actors in Sweden on the European Cluster Collaboration Platform (ECCP) gives a first impression on the cluster landscape in Sweden. Out of the current total of 1,094 registered EU-27 cluster organisations on the ECCP, there are **39 cluster organisations from Sweden**.

Figure 4 displays the geographical distributions of the Swedish cluster organisations as well as their correspondence to the EU Industrial Ecosystems²³. It can be highlighted that all Swedish regions have registered cluster organisations on the ECCP. South Sweden (11 cluster organisation) and North Central Sweden (8 Cluster organisations) are the regions with the most cluster organisations with profiles on the ECCP.

²³ see also <u>https://clustercollaboration.eu/in-focus/industrial-ecosystems</u> (last access 13.02.2023).



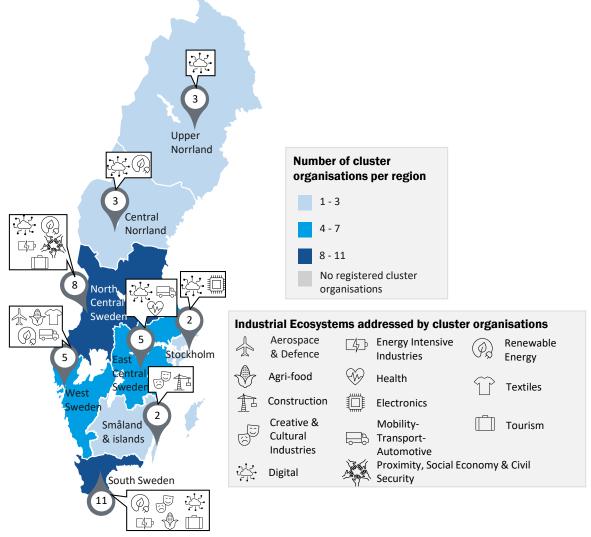


Figure 4: Overview of Swedish cluster organisations registered on the ECCP, by their regional and sectoral distribution

Source: ECCP (2023), own elaboration based on https://reporting.clustercollaboration.eu/all (last access 10.02.2023). A full overview of the Swedish clusters is provided in Table 1 in the Annex.

Moreover, these Swedish cluster organisations can be linked to 13 out of the 14 EU Industrial Ecosystems. No Swedish cluster organisation on the ECCP is operating in the Industrial Ecosystem "Retail". The majority of these cluster organisations relate to the Industrial Ecosystem "Digital" followed by "Renewable Energy", which represent two key areas of the Swedish economy. The six cluster organisations that are linked to the Industrial Ecosystem "**Renewable Energy**" are:

- <u>Cleantech Scandinavia</u>
- RISE Processum
- <u>Sustainable Business Hub</u>
- <u>NetPort Energy Cluster</u>
- Dalarna Science Park





OffshoreVäst

Besides these individual cluster organisations, **Clusters of Sweden**²⁴ as a national cluster association plays an increasing role in supporting clusters and networks as well as the Swedish innovation ecosystem. In their capacity, Clusters of Sweden offers training and services to cluster managers, advocate for cluster matters or conduct projects for cluster internationalisation. As an example of a cluster internationalisation project, Clusters of Sweden contributes to the EU-funded project "CAFEIN" which aims at accelerating the green and digital transition through comparisons of funding schemes across the EU and by connecting different European cluster associations.²⁵

From a national policy perspective, the innovation agency **Vinnova**²⁶ plays a crucial role in Sweden and follows the aim of linking economic-technological competitiveness and societal problem solving. Moreover, Vinnova has a focus on developing intensive cooperations in the Swedish innovation system. To pursuit these aims Vinnova offers a variety of services which include the development, coordination, and implementation of innovation policies as well as the bundling expertise. Other fields of work include the steering of innovation processes and mediation between different sectors and levels of action. In its role as an innovation agency, Vinnova also provides and supports in finding suitable funding sources for projects.²⁷ The majority of Vinnova's funding is spend for projects of SMEs and thereby especially supporting their cooperation with scientific actors.

²⁷ <u>https://www.vinnova.se/en/apply-for-funding/find-the-right-funding/</u> (last access 16.02.2023).



²⁴ <u>https://clustersofsweden.com/</u> (last access 16.02.2023).

²⁵ <u>https://cafein-project.eu/</u> (last access 16.02.2023).

²⁶ <u>https://www.vinnova.se/en/about-us/</u> (last access 09.02.2023).



Strategic innovation priorities in Sweden

Smart Specialisation like cluster policy is a place-based approach that aims at utilising advantages of proximity and promoting economic growth and competitiveness²⁸, thereby concentrating resources into defined strategic priorities.²⁹ Due to the similarity of the two concepts, Cluster organisations (can) play an important role in the design and implementation of Smart Specialisation Strategies.

In the following, a brief overview of Smart Specialisation Sweden will be provided, and emphasis put on strategic priorities related to energy transition and circular economy. A key starting point for this is the data collected in the Study on prioritisation in Smart Specialisation Strategies in the EU.³⁰ This data bases on the Smart Specialisation Strategies of the 2014-2020 funding period. In Sweden the Smart Specialisation Strategies of the 2014-2020 period were designed on a granular regional level (NUTS 3) whereas in the majority of EU Member States those strategies were designed on the NUTS 2 level. Overall, 64 priority areas of 12 Swedish NUTS 3 regions have been identified, covering fields from "Smart sustainable cities and societies to Sustainable energy and cleantech. Out of those 64 priority areas, nine have a direct link to the topics of energy transition and circular economy. These regions and priority areas are presented below and shown in Figure 4:

- Dalarnas län: Energy efficient society
- **Gävleborgs län**: Smart sustainable cities and societies (including efficient transport, energy efficiency & waste management)
- Norrbottens län: Energy technology
- Östergötlands län: Business models and arenas for sustainable system solutions (including biobased circular economy & energy)
- Värmlands län: Advanced Manufacturing and Complex Systems (including renewable energy & energy efficiency) and System Solutions with Photovoltaics
- Västerbottens län: Sustainable energy and cleantech
- Västmanlands län: Energy
- Västra Götalands län: Renewable energy

²⁹ Prognos /CSIL (2021): Study on prioritisation in Smart Specialisation Strategies in the EU. Study on behalf of the European Commission. Available under:

https://ec.europa.eu/regional_policy/en/information/publications/studies/2021/study-on-prioritisation-in-smart-specialisation-strategies-in-the-eu (last access on 13.02.2023).



²⁸ European Commission (2013): The role of clusters in smart specialisation strategies. Available under: <u>https://op.europa.eu/o/opportal-service/download-handler?identifier=2fe44194-e5a8-42b7-ac14-</u> <u>9c9b8e157de3&format=pdf&language=en&productionSystem=cellar&part=</u> (last access 20.02.2023).

https://ec.europa.eu/regional_policy/en/information/publications/studies/2021/study-on-prioritisation-in-smart-specialisation-strategies-in-the-eu (last access on 13.02.2023).

³⁰ Prognos /CSIL (2021): Study on prioritisation in Smart Specialisation Strategies in the EU. Study on behalf of the European Commission. Available under:

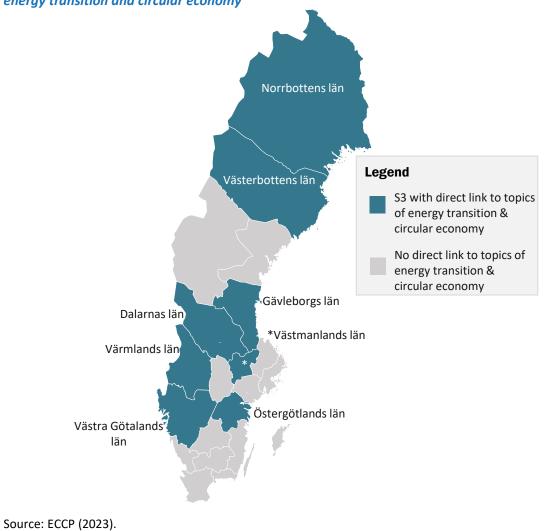


Figure 5: Overview of Swedish regions with priority areas that are directly linked to the topics of energy transition and circular economy





Turn your project idea into practice: public funding instruments for innovation



EUROPEAN CLUSTER Collaboration platform

Strengthening the European economy through collaboration



Turn your project idea into practice: public funding instruments for innovation

Public funding schemes play a pivotal role in strengthening innovation in Europe, also across European regions. In order to raise awareness of cluster community and seed ideas for future proposals, this chapter outlines diverse funding opportunities for projects that aim to support the green and digital transition, primarily in the areas of energy transition and circular economy. It lists budgets of the selected programmes, concrete calls for proposals, topics funded, partner search and networking opportunities as well as advisory services and supporting tools, relevant for cluster organisations. Figure 6 gives an overview of relevant funding schemes that are presented in the chapter.

Key EU innovation sup	Other funding opportunitie	
Horizon Europe EU's main funding programme for research and innovation • European Innovation Ecosystems (EIE)	Innovation Fund EU's main funding programme for supporting the development of the Single Market and SMEs	Innovation Procurement
 European Innovation Council (EIC) New European Bauhaus Cluster 5: Climate, Energy & Mobility Cluster 6: Food, Bioeconomy, etc. 	LIFE Programme EU's funding instrument for the environment and climate action • <i>Close-to-market projects</i>	Vanguard Initiative: Pilot projects
Single Market Programme EU's main funding programme for	European Regional Development Fund EU's main funding programme for research and innovation • Interregional Innovation Investments (I3) Instrument	Eureka cluster and project network calls
 supporting the development of the Single Market and SMEs Joint Cluster Initiatives (Euroclusters) for Europe's recovery 		SI Baltic Sea Neighbourhood Programme
INTERREG EU funding instrument to support c	ooperation across borders	Vinnova grants

Figure 6: Overview of relevant public funding instruments for innovation

Source: ECCP (2023).





Key EU innovation supporting programmes

Interregional Innovation Investments (I3) Instrument

Total programme budget within the work programme 2023 - 24

EUR ~159 million

Participating countries



Thematic priorities

Green transition Digital transition



More information on the I3 Instrument:

- I3 website
- Upcoming calls for proposals will be published on the <u>Funding &</u> <u>Tenders portal</u>.

General description

In the 2021-2027 funding period, the Interregional Innovation Investments (I3) **Instrument** is a new funding instrument under the European Regional and Development Fund (ERDF) with a yearly budget of EUR 75.8 million to EUR 80.4 million. The calls for proposals are divided into two different call strands aiming both to invest in interregional project consortia with innovation projects. The focus of project strands is on the commercialisation and scale-up of investment projects with a specific focus on the smart specialisation priorities areas of the involved regions and interregional cooperation. Moreover, project consortia should involve major stakeholders of the quadruple innovation helix like public and private sector stakeholders as well as research organisations and SMEs.

Types of topics funded

The Interregional Innovation Investments (I3) Instrument is offering two different for support strands interested organisations. Both strands only fund projects which belong to one of the thematic areas: green transition, digital transition, and smart manufacturing. While strand 1 aims at supporting more mature partnerships to commercialise and scale-up innovation investments, strand 2 calls set the focus on less developed regions and their capacity building and integration in global value chains.





- **Strand 1:** Financial and advisory support for investments in interregional innovation projects
- Strand 2a: Financial and advisory support to the development of value chains in less developed regions
- Strand 2b: Financial and advisory support to test new approaches in order to increase the capacity of regional innovation ecosystems in less developed regions

Call for proposals

Under the Interregional Innovation Investments Instrument (I3), a call for proposals for the call "Capacity Building Strand 2b" is open with the deadline on 16 March 2023, 17:00 CET. The Work Programme 2023-2024 of the I3 Instrument has been published in February 2023 and it has been announced on the website that new calls for proposals are expected to be published in Q2 2023. To implement the I3 Instrument, a total EU contribution of EUR ~159 million is foreseen in 2023 and 2024. The EU contribution is foreseen to be split up into two years:

- EU contribution in 2023: ~ EUR 78.8 million
- EU contribution in 2024: ~ EUR 80.4 million

In 2021, interested organisations had around 2-3 months between call opening and submission deadline in order to draft their project proposal. The evaluation process of project proposals consists of two steps. Results of the first evaluation step are expected to be announced two months after project submission deadline. The results of the second step of the proposal expected to be announced three months after the first evaluation process step (or five months after project deadline submission).

The financing rate for each I3 project is 70%. Project budgets can vary, depending on the strand type, from EUR 2 – 10 million.

Partner search & networking

Partner search is offered through the call website on the Funding and Tenders portal for each individual call. For instance, partners for the open call on "<u>Capacity</u> <u>Building Strand 2b</u>" can be found here.

Advice services and support tools

Interested organisation can find information on the <u>I3 website</u> of the <u>European Innovation</u> <u>Council and SMEs Executive Agency</u>.

- <u>Guidelines</u> for applicants incl. an <u>FAQ</u> <u>section</u>.
- <u>Presentation and recording</u> of the I3 Instrument Infoday.





The Innovation Fund

Total programme budget 2020-2030

EUR ~38 billion

Participating countries



Thematic priorities

Renewable energy

Carbon capture and utilisation

Carbon capture and storage



Call for proposals (small-scale)

The third call is expected to be open in the second quarter of 2023. Overview of the previous projects can be found here.

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Call for proposals (large-scale)

The third call is open until 16 March 2023. More information about the call: <u>here</u>. The EC opens new calls in the second half of every year - please check Funding & Tenders portal.

General description

The Innovation Fund is one of the largest funding programmes for the commercial demonstration of innovative low-carbon technologies, aiming to bring to the market industrial solutions to decarbonise Europe and support its transition to climate neutrality. The primary objective is to help businesses invest in clean energy and industry to foster economic growth through calls for large and small-scale projects. The Innovation Fund mainly focuses on highly innovative technologies and big flagship projects that are sufficiently mature in terms of planning, business model as well as financial and legal structure.

Types of grants

Under the Innovation Fund two kind of projects could be financed: **large-scale projects** with a capital expenditure above 7.5 MEUR and **small-scale projects** with total capital costs below €7.5 million.

The third call for large-scale projects with a total budget of 3 billion EUR covers four topics:

- General decarbonisation (1 billion EUR): renewable energy, energy-intensive industries, energy storage or carbon capture, use, and storage, as well as products substituting carbon-intensive ones (notably low-carbon transport fuels).
- Innovative electrification in industry and hydrogen (1 billion EUR): electrification methods to replace fossil fuel use in industry as well as renewable hydrogen production or hydrogen uptake in industry.
- Clean tech manufacturing (0.7 billion EUR): manufacturing of components as well as final equipment for electrolysers





Support tools

- <u>Self-Check Questionnaire</u> for small-scale projects designed to provide early high-level orientation on potential fit and readiness of project ideas for the Innovation Fund.
- Innovation Fund Project Portfolio Dashboard: an interactive reporting platform, allowing the viewer to discover the portfolio of Innovation Fund signed projects.
- List of the Innovation Fund projects

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Advisory services

In order to obtain more information on the Fund, in particular its interactions with national funding instruments and other EU programmes, please check <u>the</u> <u>list of National Contact Points.</u> and fuel cells, renewable energy, energy storage and heat pumps.

 Mid-sized pilots (0.3 billion EUR): disruptive or breakthrough technologies in deep decarbonisation in all eligible sectors of the Fund. Projects should prove the innovation in an operational environment but would not be expected to reach largescale demonstration or commercial production.

The proposals that are not sufficiently mature for a grant may benefit from project development assistance by the European Investment Bank.

Overview of the second call for large-scale project proposals can be accessed via <u>link</u>.





LIFE Programme: close-to-market projects

Total programme budget 2021-2027



EUR 5.4 billion

Participating countries



Two relevant LIFE subprogrammes

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Climate Change Mitigation and Adaptation

Circular Economy and Quality of Life

Call for proposals

The LIFE Call for proposals 2023 will be published on the Funding & tender opportunities portal as of Mid-April.

The calls for **Clean** energy transition are expected to be published as of Mid-May 2023.



LIFE - Support for applicants



Get in touch with your national contact point national contact point for the LIFE programme.

General description

The LIFE Programme is the EU's funding instrument for the environment and climate action. Its closeto-market part supports private and public entities bring their green products, technologies, services, and processes to the market. LIFE close-to-market projects launch innovative, demonstrative solutions e.g., in waste management, the circular economy, resource efficiency, water, air or climate change mitigation. They also need to present a high level of technical and business readiness which means that solutions could be implemented in close-to-market conditions (at industrial or commercial scale) during the course of the project or shortly after its completion.

Types of topics funded (non-exhaustive list)

Climate Change Mitigation and Adaptation

- farming, land use •
- peatland management •
- renewable energies •
- energy efficiency •
- resilience of infrastructure
- sustainable management of water in drought-prone areas

Circular Economy and Quality of Life

circular economy (recovery of resources • from waste, water, air, noise, soil, and chemical management)

On 25-28 April 2023, CINEA will organise virtual EU information sessions to guide potential applicants. A dedicated virtual information session on the specificities of the calls for Clean energy transition will take place at the beginning of June 2023.





Horizon Europe (HE)

Total programme budget 2021-2027

EUR 95.5 billion

Participating countries



+ third countries associated to HE + other third countries

II pillar of HE

Relevant clusters:

- Climate, Energy and Mobility (cluster 5)
- Food, Bioeconomy, Natural Resources, Agriculture & Environment (cluster 6)
- New European Bauhaus (intercluster initiative)

Relevant Partnerships:

B Processes4Planet

- Made in Europe
- Built4People



Support tools

Partner Search Services helps to find a partner organisation for your proposal.

Online manual guide on the procedures from proposal submission to managing your grant.



Find your National Contact Point here.

General description

Horizon Europe is the EU's key funding programme for research and innovation that aims to tackle climate change, boosts the EU's growth, and promotes industrial competitiveness and optimises investment impact within a strengthened European Research Area. Apart from the EU members, the third countries associated to HE and participants with low- or middle-income third countries are eligible for funding (the full list can be accessed here).

Types of projects funded

Projects funded under HE can be divided into three main types: 1) RESEARCH, AND INNOVATION **ACTIONS (RIA)** aim at establishing new knowledge or exploring a new or improved technology, product, process, service or solution (the EU funding covers up to 100% of the project costs); 2) **INNOVATION ACTIONS (IA)** aim at producing plans or designing for new or improved products, processes or services including prototyping, testing, demonstrating, piloting, large-scale product validation and market replication (the EU funding covers up to 70% of the project costs); 3) COORDINATION AND SUPPORT ACTIONS (CSA) that aim at improving cooperation among EU and associated countries to strengthen the European Research Area including standardisation, dissemination, awareness-raising, communication, and networking activities (up to 100% of the project costs).

Topics of calls for proposals

As part of the 2023 – 24 work programme, different calls for proposals will be launched, also in the areas of circular economy, energy transition, manufacturing, and construction.





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Call for proposals (non-exhaustive list)

Calls under Cluster 5. Climate, Energy and Mobility

 <u>HORIZON-CL5-2024-D3-01-08</u>: Demonstration of sustainable wave energy farms (IA)

Deadline: 16 January 2024

 <u>HORIZON-CL5-2024-D3-01-12</u>: Energy Management Systems for flexibility services (IA)

Deadline: 16 January 2024

 <u>HORIZON-CL5-2024-D3-02-10</u>: Market Uptake Measures of renewable energy systems (CSA)

Deadline: 5 September 2024

 <u>HORIZON-CL5-2024-D4-01-02:</u> Smart grid-ready buildings (IA)

Deadline: 18 April 2024

Calls under Cluster 6. Food, Bioeconomy, Natural Resources, Agriculture & Environment

 <u>HORIZON-CL6-2024-CircBio-02-5-</u> <u>two-stage</u>: Circular design of biobased processes and products (RIA)

Deadlines: first stage - 22 February 2024, second stage - 17 September 2024

 <u>HORIZON-CL6-2024-CircBio-01-3</u>: Innovative circular solutions for furniture (IA)

Deadline: 22 February 2024

• <u>HORIZON-CL6-2024-CircBio-01-7</u>: Demonstrating the fair and just transition

from GHG-intensive economies facing challenges towards circular bioeconomy model regions (IA)

Deadline: 22 February 2024

 <u>HORIZON-CL6-2024-CircBio-01-9</u>: Circular bioeconomy start-up villages (CSA)

Deadline: 22 February 2024

Calls related to the New European Bauhaus

 <u>HORIZON-CL6-2024-BIODIV-02-2-two-</u> <u>stage</u>: Demonstrating the potential of Nature-based Solutions and the New European Bauhaus to contribute to sustainable, inclusive, and resilient living spaces and communities (IA)

Deadlines: first stage - 22 February 2024, second stage - 17 September 2024

 HORIZON-CL6-2024-CLIMATE-01-5: Climate-smart use of wood in the construction sector to support the New European Bauhaus (RIA)

Deadline: 22 February 2024

Calls under Processes4Planet Partnership

 <u>HORIZON-CL4-2024-TWIN-TRANSITION-</u> <u>01:</u>Turning CO2 emissions from the process industry to feedstock (IA)

Deadline: 7 February 2024





 <u>HORIZON-CL4-2024-TWIN-</u> <u>TRANSITION-01</u>: Breakthroughs to improve process industry resource efficiency (RIA)

Deadline: 7 February 2024

Calls under Made in Europe Partnership

 <u>HORIZON-CL4-2024-TWIN-</u> <u>TRANSITION-01-TWO-STAGE</u>: Biointelligent manufacturing industries (RIA)

Deadlines: first stage - 7 February 2024, second stage - 24 September2024

 <u>HORIZON-CL4-2024-TWIN-</u> <u>TRANSITION-01:</u> Technologies/solutions to support circularity for manufacturing (RIA)

Deadline: 7 February 2024

Calls under Built4People Partnership

• <u>HORIZON-CL5-2024-D4-02:</u> Digital solutions to foster participative

design, planning and management of buildings, neighbourhoods, and urban districts (IA)

Deadline: 5 September 2024

 <u>HORIZON-CL5-2024-D4-02</u>: Design for adaptability, re-use and deconstruction of buildings, in line with the principles of circular economy (RIA)

Deadline: 5 September 2024

 <u>HORIZON-CL5-2024-D4-02-01</u>: Industrialisation of sustainable and circular deep renovation workflows (IA)

Deadline: 5 September 2024





European Innovation Ecosystems (EIE) as part of Horizon Europe

Budget within the work programme 2023 – 24

🔵 EUR ~173 million

Participating countries



Thematic priorities

SCALEUP

Call for proposals

- HORIZON-EIE-2023-CONNECT-02-01: Deadline on 21 September 2023 17:00h (CET)
- HORIZON-EIE-2024-CONNECT-01-01: Deadline on 24 April 2024 at 17:00h (CET)
- HORIZON-EIE-2024-CONNECT-01-03: Startup Europe: Deadline on 24 April 2024 at 17:00h (CET)

More information

European Innovation Ecosystems website

General description

As part of the Horizon Europe programme, the **European Innovation Ecosystems (EIE)** aim at building interconnected, inclusive innovation ecosystems across Europe, encompassing national, regional and local ecosystems, to undertake and achieve collective ambitions towards the benefit of society, including the green, digital, and social transitions. Objectives are based on the New European Innovation Agenda.

Types of topics funded

Calls for proposals are divided into different focus areas. On the one hand, the CONNECT calls aim at elaborating interconnected European innovation Ecosystems through the existing capacities of national, regional, and local ecosystems. A special characteristic is that capacities and skills should be shared with less-represented actors and territories. On the other hand, SCALEUP calls aim at setting a dedicated focus on the reinforcement of connections within networks and across different innovation ecosystems. The overall objective of the call type is on accelerating business growth and development. In addition, the European Partnership on Innovative SMEs/EUROSTARS strand aims at supporting innovative SMEs to fund international collaboration projects.







Partner search & networking

Partner search is offered through the call website on the Funding and Tenders portal for each call.



Advice services and support tools

Interested organisation can find information on the <u>European</u> <u>Innovation Ecosystems website</u> of the <u>European Innovation Council and</u> <u>SMEs Executive Agency</u>.

> • <u>Presentation</u> from the EIE Infoday

Topics of calls for proposals

As part of the 2023 – 24 work programme, different calls for proposals will open. While not all calls target cluster organisations, two calls for proposals include cluster organisations as eligible beneficiaries.

HORIZON-EIE-2023-CONNECT-02-01: Stimulating Experimentation Practices

The call for proposals aims at supporting innovation actors such as research organisations, EIT, SMEs, NGOs and more to develop action plans to outline **experimentation frameworks / spaces and to set-up these frameworks / spaces** which should be well-fitting for examination of innovative solutions. By doing so, project consortia will help policy makers to see which experimentation frameworks / space (e.g. living labs, etc.) could be implemented in the future to test disruptive innovations. Applicants are encouraged to link proposals to smart specialisation strategies. Out of the EUR 4 million of the total call budget, around EUR 1 million are foreseen for each project.

HORIZON-EIE-2024-CONNECT-01-01:

Implementing co-funded action plans for connected regional innovation valleys

The call for proposals aims at **creating connected**, **regional innovation communities**, especially involving innovation-weak regions, to strengthen regional innovation performance. Project funding supports the creation and **implementation of strategic long-term action plans (3-5 years)** for the development and introduction of innovations. Regarding the consortium structure, it is important to involve all **actors of the quadruple innovation helix**. Out of the EUR 55 million of the total call budget, around EUR 8 – 12 million are foreseen for each project. The funding rate is 50% and support for third parties is possible.

HORIZON-EIE-2024-CONNECT-01-03: Startup Europe

The call focuses on interlinking local digital start-up ecosystems through cross-border





collaborative projects with a special focus on strategic digital technologies and deeptech innovations. Eligible beneficiaries are business angel organisations, venture capital companies, accelerators, incubators, startup associations, and cluster organisations. Out of the EUR 12 million of the total call budget, around EUR 2 million is foreseen for each project. The funding rate is 50%.





Single Market Programme (SMP)

Total programme budget between 2021-2027

EUR ~4.2 billion

Participating countries



Thematic priorities

Food safety
 Consumer protection
 Effective Single Market
 Development of standards
 European Statistics



Call for proposals

All the calls can be found on the <u>Funding & Tenders platform</u>



Partner search & networking

Partner search is offered through the call website on the Funding and Tenders portal for each call.

General description

As the successor programme of the COSME programme and five other support programmes of the 2014-2020 funding period, (e.g. consumer protection or financial support), the <u>Single Market</u> <u>Programme (SMP)</u> aims at supporting the EU single market to reach its full potential and to boost growth, competitiveness and employment. The overall objective of the SMP is to create jobs, support the long-term recovery due to the COVID-19 pandemic and ensure food safety.

Besides the EU27 Member States, Iceland, Norway and Liechtenstein, there are ongoing negotiations with <u>additional 12 countries</u> interested in joining the SMP Programme.

Types of topics funded

Activities supported under the SMP are divers. They consist of data gathering, analyses, studies and evaluations in support of effective enforcement and modernisation of the EU legal framework, capacity-building activities and facilitation of joint actions between EU countries, their competent authorities, the European Commission and decentralised EU agencies.

Target audience

The SMP targets different types of stakeholders such as SMEs, cluster organisations and more. Especially the pillar on "Effective Single Market" has some interesting calls for cluster organisations coming up soon.

Additional information

More information can be found on the <u>dedicated</u> <u>Single Market Programme website.</u>







Call for proposals (non-exhaustive list)

• <u>SMP-COSME-2023-SMEUA-01</u>: Support to Ukrainian companies to integrate into the Single Market. Besides Ukrainian clusters and SMEs, also EU companies that lost market opportunities in Russia and Belarus because of the Russian aggression against Ukraine can apply for the call.

Deadline: 27. April 2023

• European Agrifood Sustainability Cluster Partnership

Deadline: coming soon.

• Joint Cluster Initiatives (Euroclusters) Deadline: Expected in 2024.





Joint Cluster Initiatives (Euroclusters) for Europe's recovery as part of the SMP

Total programme budget between 2021-2027

🗇 EUR ~42 million

Participating countries



Thematic priorities



General description

As part of the European Single Market Strategy, the Eurocluster call aims at strengthening the resilience of cluster networks within the EU industrial ecosystem through the establishment of value chain interlinkages through European cluster networks. Moreover, the Eurocluster calls foresee to enable cluster organisations to speed up twin transition processes and to improve up- and reskilling of the skilled workers as well as the increase internationalisation. In September 2022, the first <u>30 Euroclusters</u> have started their activities.

Types of topics funded

The focus of the Euroclusters projects should be at least on one of the 14 <u>EU Industrial Ecosystems</u>. As part of the open strand, project proposals can include several elements of different EU Industrial Ecosystems (Cross-Innovation).

Call for proposals

No new call is foreseen in the recently adopted WP 2023. Other calls are however expected in the to be launched in 2024. Upcoming calls for proposals will be published on the <u>Funding & Tenders portal</u>.

Target audience

Eurocluster projects focus on supporting cluster organisations and cluster networks. The current 30 Euroclusters offer regularly third party support for SMEs. Open call opportunities for SMEs can be found <u>here</u>.

Additional information

More information can be found on the <u>dedicated</u> <u>Eurocluster website on the ECCP</u>.





INTERREG Europe

Total programme budget 2021-2027

EUR 379 million

Participating countries



Topics

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Smarter Europe Greener Europe

More connected Europe

More social Europe

Europe closer to citizens

Better regional governance



Call for proposals

The second call for projects proposals will be open from 15 March to 9 June 2023 with a budget of 130 MEUR. The average total budget per 4-year project is 1-2 MEUR.

Here is also the link to the upcoming calls.



Support tools

- Online library of project ideas
- The self-assessment tool to verify whether the suggested project idea is relevant to the programme
- A tailored guidance for project development

General description

Interreg **Europe** is the interregional cooperation programme that aims to reduce disparities in the levels of development, growth, and quality of life in and across Europe's regions. This instrument mainly targets local, regional, and national public authorities, institutions governed by public law (e.g., regional development agencies, business support organisations, universities), private non-profit bodies.

Types of topics funded under Smarter and **Greener Europe themes**

Smarter Europe:

- research & innovation capacities
- digitization
- SME competitiveness
- S3, industry and entrepreneurship
- digital connectivity

Greener Europe:

- energy efficiency ٠
- renewable energy
- smart energy systems •
- circular economy
- climate change

The list of 72 projects approved in the first call can be found here.



Advice services

Please see a list of national contact points





INTERREG specific programmes

INTERREG has three types of programmes: cross-border, transnational and interregional. From the perspective of cluster organisations, primarily two first ones need to be highlighted. <u>Interreg cross-border cooperation</u>, known as Interreg A, supports cooperation between NUTS III regions from at least two different Member States lying directly on the borders or adjacent to them, whereas <u>Interreg transnational cooperation</u>, formerly known as Interreg B, involves regions from numerous countries of the EU in order to promote better cooperation and regional development within the Union by a joint approach to tackle common issues. Both sources of funding could be considered by clusters wherever they are located. In order to find the right programme that covers geographical area of your interest, please visit a <u>dedicated portal with all Interreg programmes</u>.

Due to the fact that C2Lab takes place in Sweden, three Interreg subprogrammes – Baltic Sea Region, South Baltic, and Aurora - are briefly presented below.





Interreg Baltic Sea Region Programme

Total programme budget 2021-2027

EUR ~250 million

Participating countries



Thematic priorities

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Innovative societies

Water-smart societies

Climate-neutral societies

Cooperation governance

Call for proposals

Next calls for core and small projects are planned in 2024. More information <u>here.</u>



Support tools

- <u>Gateway for applicants</u> with programme manual, webinars, tutorials, and video guides
- <u>Project library</u> to learn more about the previously funded ideas.

General description

The Interreg Baltic Sea Region Programme supports financially diverse projects driving the transition to a green and resilient Baltic region. The Programme is fully aligned with the EUSBSR (European Union Strategy for the Baltic Sea Region) and it targets public authorities at local, regional and national levels, business support organisations, specialised agencies, and infrastructure and service providers as the main forces responsible for the structural transition into a more resilient and innovative region. Wherever appropriate, e.g., for the purposes of practical testing of the solution, the Programme supports enterprises. directly involving Regarding geographical composition of the project partnership, an organisation from an EU Member State or Norway outside the Programme area can become a project partner only under certain circumstances (please see Programme Manual).

Types of topics funded under priority 3. Climateneutral societies

3.1 Circular economy

- Develop tools for creating industrial symbiosis
- Apply cross-sectoral cooperation for better integrated planning processes
- Use digitalisation to support sharing economy initiatives
- Change behaviours of society and entrepreneurs
- Test green public procurement models

3.2 Energy transition

- New approaches & policies towards climate neutrality
- Support greener energy production





B-**B** Partner search & networking

If you seek partners to support your project idea, please check a dedicated <u>matchmaking platform</u> that gathers more than 850 members.



Advisory services

Should you need any further assistance, please see <u>national contact points</u> in the Interreg Baltic Sea Region countries.

- "Planning" energy
- Local integration & storage of energy
- New patterns to practically use renewables
- Strengthen use of local energy
- Support energy efficiency & connected schemes
- Implementation of district heating

3.3 Smart green mobility

- Coordinate planning infrastructure and technologies for renewable fuels
- Integrate shared solutions for freight mobility
- Space efficient or low-emission mobility of all modes
- Create and test digital tools (transnationally!) for integrated and optimised services
- Develop common standards for compatibility of green solutions

Types of grants

Under this funding scheme **core** and **small projects** can be financed, involving at least 3 organisations from 3 Programme area countries. **Core projects** (up to 36 months and budget proportionate to activities) are the primary tool to deliver the change Interreg Baltic Sea Region aims at. All core projects are requested to **prepare**, **pilot and transfer practical and durable solutions to the challenges** they choose to tackle. **Small projects** (max. 24 months and budget up to EUR 500,000) aim at facilitating easier access to the Programme, in particular for those partners that have not previously participated in the Programme.





Interreg South Baltic Programme

Total programme budget 2021-2027

EUR 79.9 million

Participating countries



Thematic priorities



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Call for proposals

For the First Call for Proposals (regular projects), open until **15 February 2023**, <u>36 applications have been received.</u>

As **the result of 4th Seed Money call**, 23 have been selected for funding (more information <u>here</u>).

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Advisory services

Should you need further information, please check <u>contact points</u> in the Interreg South Baltic countries.

General description

The Interreg South Baltic Programme 2021-2027 supports cross-border cooperation between **the coastal regions** of 5 countries. Actions aimed at improving the blue and green growth of the area, and cooperation of different actors are supported by the Programme. Organisations located outside the Programme Area but having important cooperation potentials can also join the partnership as project partners (please see **Programme Manual**).

Types of topics funded under priority 2. Sustainable South Baltic

2.1 Supporting transition towards energy

- Energy policies, enhance usage of renewable energy and green fuels
- Solutions in production and utilisation of energy from renewable sources
- Common standards in renewable energy, joint green policy strategies

2.2. Promoting sustainable use of water

- Green technology solutions in water management and nature-based flood water management
- Solutions for reducing pollution and innovations in sustainable water management
- Common standards in waste and water management

2.3 Supporting a circular and more resource efficient development

- Joint business models, product design, technologies, solutions in waste / water management and resource efficiency
- Innovative solutions and waste management standards





Interreg AURORA

Total programme budget 2021-2027

EUR ~165 million

Participating countries



Thematic priorities

Smart and sustainable growth Green and sustainable transition Education, culture, and sustainable tourism

Better and more sustainable crossborder cooperation

Call for proposals

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Second call for regular projects: open until **28 March 2023.**

The third call for regular project proposals will be open **from 5 September until 10 October 2023**.

Small-scale projects: continuous application system



Support tools

- Programme Manual
- <u>Projects Archive</u> to get inspired

General description

<u>The Interreg Aurora Programme</u> offers diverse funding opportunities and enables cross-border cooperation in the northernmost parts of Europe and Sápmi. Partners from outside Sweden, Finland or Norway are welcome to participate as associated partners that are not part of the formal project partnership but nevertheless directly engaged in the project's implementation but with other financial support than Interreg Aurora.

Types of topics funded under priority 3. Green and sustainable transition

- Energy efficiency
- Renewable energy
- Developing smart energy systems, grids, and storage outside the Trans-European Energy Network (TEN-E)
- Promoting access to water and sustainable water management
- Circular economy
- Biodiversity and green infrastructure
- Urban mobility

Types of grants

There are two kinds of projects to be funded: <u>small-scale projects</u> (up to 12 months) and <u>regular projects</u> (max. 36 months). Small-scale project applications can be submitted at any time, for all priorities, and will be prioritised continuously by the Steering Committees. Calls for regular project applications will be launched regularly, approximately twice a year.





Other EU funds and supporting materials

European Innovation Council

The European Innovation Council is one of the flagship programmes of the HE programme to support breakthrough innovations of SMEs and start-ups. The total budget in the current funding period is EUR 10.1 billion. The EIC consists of three different support strands:

EIC Pathfinder Open / EIC Pathfinder challenges offer support for scientific, technological, or technology-oriented research and development in the earliest stages of development for SMEs and research consortia (TRL 1-3).

Out of total budget of EUR 179.5 million, each project can receive up to EUR 3 million with a 100% funding rate. The next call deadline for the EIC Pathfinder Open is the 7 March 2023, 17:00 CET. The next call deadline for the EIC Pathfinder Challenge is the 18 October 2023, 17:00 CET.

EIC Transition Open / EIC Transition challenges funds innovation activities of SMEs, start-ups and spin-offs that go beyond experimental proof of the principle in the laboratory (validation) with TRL 5/6. Out of total budget of EUR 128.26 million, each project can receive up to EUR 0.5 – 2.5 million with a 100% funding rate. The next call deadline is the 12 April 2023, 17:00 CET. EIC Accelerator Open / EIC Accelerator supports innovations in later stages (TRL 6 and higher) of development based on scientific and technological breakthroughs. Out of total budget of EUR 1.12 billion, each project can receive a grant of up to EUR 2.5 million and additional max. EUR 15 million of equity with a 100% funding rate. The next call deadline of the open and challenge strands is the 22 March 2023, 17:00 CET.

Innovation procurement

To improve public procurement practices, promote the demand of innovative goods, services and works in Europe and foster the uptake of innovation in the EU, the EC supports public buyers looking to develop or purchase innovative solutions.

For instance, it provides <u>Guidance on</u> <u>Innovation Procurement</u> in order to help start and develop procurement of innovation projects. The European Union also funds:

- <u>Big buyers Initiative</u> that promotes collaboration between big buyers in Europe in strategic public procurement to help boost the market for innovative goods and services
- Innobroker on the creation of an Innovation Procurement Broker that will gather together public buyers, suppliers of innovation (with a special focus on SMEs and start-ups), investors, and researchers to facilitate the procurement of innovative goods and services





More information about the EC actions on innovation procurement can be found <u>here</u>.

Toolbox on Interregional Investment

The Toolbox on Interregional Investment is a practical, operational guidance on the core elements of investment project development, and the key components of a project business plan. The five tools provide tips, methods, best practices, and common limitations to be avoided when working on investment projects, drawing from the experience of TAF (*Technical Assistance Facility for Industrial Modernisation and Investment*) experts. The toolbox provides guidance on following aspects:

- inter-regional governance and partnerships
- the size, the trends, the competitors, the risks, and opportunities of your market
- business model validation
- financial planning, including sources of revenues, distribution channels, and cost structure
- sources of public-private financing for project implementation and market placement

In addition to tools, case studies about the supported projects are presented to showcase in practice the relevance of the presented topics and their usefulness to S3P-Industry project promoters.





Other "intergovernmental and national" funding for innovation

Vanguard Initiative Pilot Projects

The Vanguard Initiative, launched in 2014, is a network of 39 European regions (including Swedish Dalarna, Skåne, Gävleborg, Örebro County, and Värmland), which is dedicated to advancing industrial innovation in Europe. By bringing innovation ecosystems together and sharing knowledge and facilities across its member regions, the Vanguard Initiative facilitates interregional collaboration, fosters interregional innovation investments, strengthens open innovation, and accelerate the introduction and marketuptake of new products and innovations in Europe.

The Vanguard Initiative is currently focused on thematic interregional <u>Pilot Projects</u> which have been developed through the active participation of clusters, science parks, research institutes and universities in the member regions. The Pilot Projects aim to speed up the market uptake of innovations in following eight domains:

- advanced manufacturing for energy related applications in harsh environments
- bioeconomy
- efficient and sustainable manufacturing
- high performance production through 3D-printing
- new nano-enabled products
- artificial intelligence
- hydrogen (H2)
- smart health/ personalised medicine

All Pilot Projects are close to the market (> TRL5) and therefore have a high potential for full market deployment in a time span of 3 to 5 years. In order to develop concrete results by the Pilot Projects, a 4-step methodological approach is applied: **learn, connect, demonstrate, commercialise.**

Overview of the Pilot Projects supported by the Vanguard Initiative can be found <u>here.</u>

EUREKA cluster calls

EUREKA, established in 1985, is a transnational network consisting of 47 member countries and the European Commission. EUREKA offers support programmes in the context of international R&D activities of companies. In this context, EUREKA also provides funds to mixed large consortia with large companies as part of the <u>EUREKA cluster programme</u> and the <u>EUREKA network projects</u>.

As part of the **EUREKA clusters**, the network offers support for collaboration projects of SMEs, knowledge institutes and end-user organisations for projects in fields such as lowcarbon energy and advanced manufacturing. The focus of EUREKA clusters should be on close-to-market community activities. The average project budget is around EUR 6.75 million and calls follow the bottom-up approach. Upcoming calls will be published on the <u>EUREKA website</u> or national partner websites.





Besides the EUREKA cluster calls, the <u>EUREKA Network projects</u> offer funding for R&D projects in international cooperation consortia. The average costs per project are in average around EUR 1.34 million. The final deadline for the EUREKA Network projects is the 31 December 2025 at 20:00h CET.

SI Baltic Sea Neighbourhood Programme

The SI Baltic Sea Neighbourhood Programme, offered by the Swedish Institute, provides funding to projects that contribute to an economically, environmentally, and socially sustainable development in the EU countries around the Baltic Sea and in the EU's eastern neighbourhood. The following countries are eligible to be part of a partnership: Armenia, Azerbaijan, Denmark, Estonia, Finland, Georgia, Germany, Latvia, Lithuania, Moldova, Poland, Sweden, and Ukraine. A partnership in the Programme must include actors in at least three countries (including Swedish main applicant), representing e.g., regional authorities, government agencies, higher education institutions and research institutes, business companies and business and trade organisations.

There are two different types of grants: seed funding to create project ideas and large cooperation projects. The main objective of seed funding (max. 15 months and up to SEK 400,000 for a project) is to lay the foundation for cooperation. For example, projects can use seed funding to prepare applications for new funding (mainly EU), develop concepts and identify partners for future cooperation. **Funding for cooperation projects** (max. 24 months and up to SEK 1,000,000 for a project) aims to deepen and further develop cooperation, for instance, to: 1) establish networks and platforms, 2) develop and test models and methods, 3) provide input to policy and strategy, or 4) build/spread knowledge and competence. List of to the projects founded previously by the Swedish Institute in the Baltic Sea region can be accessed <u>here.</u>

Last call for applications was open until 2 March 2023.

Vinnova grants

Financial support is also provided by Sweden's Innovation Agency - <u>Vinnova</u>. There is a broad range of calls for proposals in such areas as circularity, transport and mobility services, sustainable industry, bioinnovation, food.

Two open calls that may be of interest of the C2Lab participants are presented below:

Promote Swedish participation in Horisont Europa: planning project in Sustainable industry 2023

Deadline: 31 May 2023

This call for proposals aims to fund planning projects that can be turned into competitive applications in the Horizon Europe programme in the area of sustainable industry. This means that project results are expected to support: 1) climate-neutral and circular production; 2) resource-efficient and resilient value chains; 3) competitiveness, global and; 4) social sustainable industry. The funding will be used to develop the project idea, establish a strong consortium, and plan the resources required for the project to be a success. The consortium must consist of at least two Swedish partners, at least one of which is a Swedish company.





Each planning project can apply for up to SEK 500,000 (for a coordinating role) or SEK 300,000 (for a participating role).

Preparation project for international proposal in health and food 2023

Deadline: 2 June 2023

This call funds activities aiming at preparing a project for an international financing application. This encompasses enhancement of the project content or the composition of the team. It targets Swedish academy, research institutes, public sector and care providers, idea-driven organisations, or SMEs. In this call for proposals the average budget 200,000 - 300,000 SEK for a project up to 12 months.

A full list of calls is available in <u>Find the right</u> <u>funding</u> section. More topics already funded by Vinnova can be found in its <u>project</u> <u>database</u>.





Turn your project idea into practice: private funds for innovative business



EUROPEAN CLUSTER Collaboration Platform

Strengthening the European economy through collaboration



Turn your project idea into practice: private funds for innovative business

Background: The European Valley of Death

There is a yawning gap between Europe's world-class research and its sluggish commercialisation of innovation. Start-ups who aim to develop research output into market products often end up in the figurative 'Valley of Death'. It describes the lack of early-stage funding that inhibits the translation of European knowledge into marketable goods and services. The result is an estimated 95% of European patents lying idle while the remaining 5% contribute more than 40% to the European GDP in IPR-intensive industries.³¹

The valley of death occurs in the stage after initial funding (e.g., from public funds or business angels) ends but before institutional investors like banks and venture capital are ready to support the market expansion of proven and market-ready products (see Figure 7).

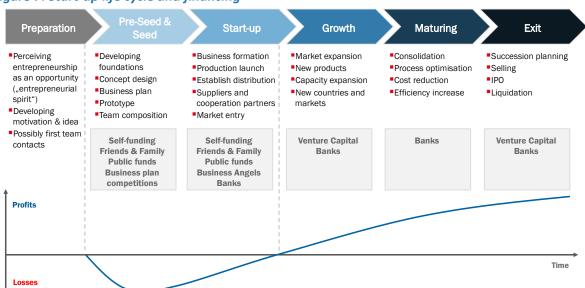


Figure 7: Start-up life cycle and financing

Source: Own elaboration by Prognos (2023).

To overcome the valley of death and propel their business into the growth phase, entrepreneurs need to convince potential investors of their product while it is still in the incipient stage. While still existent, the problem has risen to the attention of investors and policymakers alike. New lines of public, private or hybrid funding are emerging to bridge the deadly gap.

 ³¹ European Patent Office & European Union Intellectual Property Office 2019 and Siota et al. 2020, p. 16.
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This chapter provides an overview of potential types of investors and their specific characteristics, starting points and examples for relevant market intelligence as well as a practical guide to construct a convincing business model canvas.

Overview: Private funding for start-ups and scale-ups in cleantech

Clean tech funding is booming. According to Net Zero Insights, 2022 saw the highest ever funding of clean tech across Europe and North America with an increase by +19% over 2021.³² Swedish companies are highly successful in raising capital in the focus areas of energy and circular economy. In 2022, for the energy sector, Swedish business ranked highest in Europe, securing \$6.4 billion in funding. In the circular economy, it came in second only marginally behind Germany (\$1.2 vs. \$1.4 billion) in Europe.³³

Sectoral information and market intelligence can be consulted at the following sources:

- **Cleantech for Europe**, the European cleantech business association, releases both quarterly and annual <u>briefings</u> on current developments.
- Cleantech Scandinavia, its Nordic version, offers its own set of <u>programmes</u> like the <u>Nordic</u> <u>Cleantech Open competition</u> and hosts regular <u>events</u> to connect cleantech entrepreneurs to relevant investors and industries.
- **InvestEurope**, the European private equity association, provides <u>data and reports</u> on fundraising, investment and divestment from over 1,800 private equity and venture capital firms in Europe.
- Net Zero Insights, a market intelligence provider with a focus on 'climate tech', <u>monitors</u> all new investments into green startups across Europe and North America. Based on its data collection, it releases <u>monthly</u> and <u>annual</u> reports.
- **Dealroom**, a market intelligence provider with a focus on European venture capital, <u>monitors</u> startup and venture capital developments and provides reports, briefings and other materials. A recent <u>report</u> from February 2023 covers the state of VC funding in the Nordics.
- Further recent insights into the European investment landscape can be found in the <u>State of</u> <u>European Tech</u> report for 2022.
- FreeingEnergy provides a <u>list</u> of cleantech and climate tech investors searchable by stage/type and focus.

With a particular emphasis on the focus area of cleantech, including energy transition and circular economy, we will examine the following sources of funding that are particularly relevant to bridge the 'valley of death':

- Venture capital
- Corporate venture capital
- Business angels



³² Net Zero Insights 2022, p. 3.

³³ Net Zero Insights 2022, pp. 148 & 170.



- Banks
- Impact investors

Venture capital

Venture capital (VC) is generally expected to play a crucial role in the commercialization of green technologies. VC firms provide early-stage funding to startup companies in exchange for equity in the company, with the goal of generating a return on investment through an eventual exit, such as an initial public offering (IPO) or acquisition by a larger company. VC firms which are focused on specific sectors or innovation ecosystems can also provide valuable support beyond funding, including business strategy guidance, mentorship, and network connections.

Although VC certainly plays its role in financing cleantech innovation, it also comes with some limitations that are worth keeping in mind.³⁴ Those limitations derive from the typical business model of VC firms which aim for fast growth and high returns. The type of company that suits these expectations best is usually in software or services that are rapidly scalable and come with the promise of market domination and monopoly profits. Cleantech startups might not fit the VC model due to their higher technological and regulatory risks and a longer time horizon.

Though VC funds are usually not bound to any particular country or region in their operations, there remains a certain home bias of investors. It can therefore make sense to look out for domestic and regional VC funding in particular.³⁵ Sweden has been leading the development of VC markets in the EU. A policy shift to redirect pension funds towards venture capital investment in the 1980s and 90s paved the way to become one of the largest VC markets of Europe during the 2000s and 2010s.³⁶ As of 2018, Sweden showed the <u>highest amount of VC investments per capita</u> across all European countries including the UK.

Box 1 offers an exemplary selection of venture capital firms chosen for their relevance for energy and circular economy companies, Sweden and the Nordics and/or post-early-stage funding. Further relevant VC firms can be found via the market intelligence resources provided at the beginning of the chapter.

Box 1: Exemplary selection of venture capital (VC) firms

Antler Web: <u>https://www.antler.co/</u> Stage: From pre-seed to scale-up and exit (full life cycle) Sectors: Climate and clean tech; energy; etc. Region: Global; including the Nordics as well as other European countries



³⁴ For a more general evaluation of VC's role in financing innovation, see Lerner & Nanda 2020.

³⁵ Gaar et al. 2020.

³⁶ Ornston 2013.

⁵⁰



Location: Stockholm, Oslo, Copenhagen (Nordics), Germany (Berlin), Paris (France), Amsterdam (Netherlands), Madrid (Spain), Lisbon (Portugal), London (UK), and several non-European locations Investment tickets (example of Antler Nordics programme):

- Pre-Launch for individual founders and teams (Start date: February 2023)
- Pre-Seed for startups (Start date: Rolling intake)
- Both: €125,000 pre-seed funding and further support for fundraising, hiring and PR
- For programme calls in other Antler locations, check the website.

Junction

Web: <u>https://junctiongrowthinvestors.com/</u> Stage: between early-stage VC and buyout capital. In the case of scale-ups Series B, with SMEs as early as the first capital round Sector: Energy transition Region: Western Europe Location: Antwerp Investment tickets: standard from €5 to €10 million, broadly from €2 to €15 million

Corporate Venture Capital

Another variety of private funding available to startups is provided by established, large companies in the form of corporate venture capital (CVC). CVC therefore is a type of venture capital investment made by established corporations in emerging startups that are seen as strategically relevant to the corporation's core business or long-term growth objectives.

CVC can provide cleantech startups with access to not just funding, but also industry expertise, market insights, and potential business partnerships. It can also be a valuable source of funding for cleantech startups as they look to scale up their operations and bring new sustainable technologies to market. By partnering with established corporations, cleantech startups may be able to accelerate their growth and achieve economies of scale more quickly than they would be able to on their own.

Corporate venturing – understood broadly in the sense of any "collaboration between established corporations and innovative start-ups" – encompasses a broad range of activities from challenge prices and hackathons over scouting teams and strategic partnerships to corporate incubators and accelerators and, of course, CVC. ³⁷

Corporate venturing has grown substantially during the last decade with large corporations founding dedicated venturing arms such as Airbus Ventures and BMW Startup Garage. Between 2013 and 2019, the number of annual corporate investments in start-ups has more than tripled, from 980 to 3,232, while the total size of this investment has risen by a multiple of seven, from \$19 billion to \$134 billion.³⁸

 ³⁷ See JRC study by Siota et al. (2020) for a comprehensive analysis of corporate venturing. Available under: https://publications.jrc.ec.europa.eu/repository/handle/JRC119084 (last access 17.02.2023).
 ³⁸ Siota et al. 2020, p. 1.



⁵¹



Box 2: Exemplary selection of corporate venture capital (CVC) providers

Future energy ventures Web: <u>https://fev.vc/</u> Corporation: E.ON (German energy company) Sectors: Energy infrastructure, battery technology, smart cities, AI Location: Essen (Germany)

Statkraft Ventures

Web: <u>https://www.statkraftventures.com/</u> Corporation: Statkraft (Norwegian public energy company) Sectors: Renewable energy, sustainable mobility, AI Location: Oslo (Norway), Düsseldorf (Germany)

Business Angels

Business angels are typically high net worth individuals who invest their own capital in startups in exchange for equity or convertible debt and can be an important source of financing in the early stages of a company's development. Beyond financial support, business angels can offer strategic guidance, mentorship and access to their networks which can be critical to overcome the 'valley of death' and navigate the challenges of developing and commercialising innovative sustainable technologies.

The following **resources** can serve as starting points when looking for angel investors. Box 3 below showcases two examples.

- The **Angel Investment Network** Scandinavia provides a <u>platform</u> for entrepreneurs and business angels to match. Local networks exist for many <u>countries</u> in Europe and worldwide.
- **Connect Sverige** is another matchmaking <u>platform</u> for entrepreneurs and investors in Sweden.
- Nordic Angels is a business angels <u>platform</u> for the Nordic countries.
- The European Business Angel Network (EBAN) is a pan-European representative for the earlystage investor community cofounded with the European Commission. It is offering a range of resources and opportunities including the EBAN <u>Scaleup of the Month</u> initiative and the excelerator initiative
- **Business Angels Europe (BAE)** <u>represents</u> business angels' federations and trade associations of several European countries, excluding the Nordics however.

Box 3: Exemplary selection of business angel investors

Sustainable Energy Angels Web: <u>https://seangels.se/</u> Stage: Early stage Sector: Sustainable energy Region: Sweden, Nordics Location: Västerås (Sweden)

DHS Venture Partners

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Web: <u>https://www.dhsventurepartners.com/</u> Stage: Early stage





Sectors: Circular economy, food-tech, etc. Region: Sweden Location: Stockholm

Banks

Banks can be an important source of financing for cleantech startups, but they are typically not the primary source of funding for early-stage ventures. This is because banks generally require collateral or a proven track record of profitability, which many startups do not have.

However, as startups mature and establish a track record of revenue and profitability, they may become eligible for various forms of bank financing, including loans, lines of credit, and other debt instruments. In particular, banks may be interested in financing cleantech projects that have a steady stream of cash flows, such as renewable energy projects, energy efficiency retrofits, and other sustainable infrastructure projects.

In addition, some banks have established green banking initiatives to support the transition to a lowcarbon economy. These initiatives may provide funding, technical assistance, or other support to cleantech startups and other sustainable businesses. Some banks also offer financing programs specifically designed for cleantech startups and other businesses working in the sustainability sector. Box 4 showcases examples for green financing offered by banks.

Box 4: Exemplary selection of banks offering green financing for startups

Swedbank					
Web: <u>https://www.swedbank.com/</u>					
Location: Sundbyberg (Sweden)					
Financing options:					
 Broad <u>range</u> of sustainable finance instruments including equity, loans, bonds and commercial papers 					
SEB					
Web: https://sebgroup.com/					
Location: Stockholm					
Financing options:					
<u>Sustainability financing</u> including green bonds and loans					
Impact investments					
<u>SEB Greentech Venture Capital</u>					
SEK					
Web: <u>https://www.sek.se/en/</u>					
Type: Public export credit agency					



Financing options: Green loans and bonds

Location: Stockholm



Impact investors

Impact investors are individuals or institutions that invest with the intention of generating positive social and environmental impact, as well as financial returns. They can provide a range of financing options for cleantech startups, including equity, debt, and mezzanine financing. They may also offer additional support beyond funding, such as mentorship, network connections, and technical assistance. In addition, many impact investors have a longer-term investment horizon than traditional investors, which can be particularly important for cleantech startups that may require significant time and resources to develop and commercialize new technologies.

Impact investors are not a strictly separate type of investors. By contrast, a range of financial market actors can engage in impact investing. According to a 2022 <u>study</u> commissioned by EVPA, the European impact investors association, venture capital and private equity funds represent over one third of impact investors (36%), followed by financial institutions including traditional and ethical banking (20%) and foundations (10%).

Useful starting points for **market intelligence** in impact investment can be found at:

- Impact Database provides a searchable (and mapped) <u>database</u> to look for impact investors across Europe.
- Norrsken offers a <u>dataset</u> on Nordic VC engaged in impact investment.
- Impactyield's database covers impact funds worldwide, <u>here</u> filtered for Europe.
- Vestbee assembled a top 50 list of <u>VC firms engaged in impact investing</u>.
- The **Global Impact Investment Network (GIIN)** offers <u>research</u> reports (e.g., about the <u>size</u> of the impact investment market) and <u>case studies</u> on specific impact investment funds.
- The **Swedish National Advisory Board for Impact Investing** represents the sectoral business <u>association</u> of impact investors in Sweden.

Box 5 offers an exemplary selection of impact investors and a stylised overview on their relevant financing operations.

Box 5: Exemplary selection of impact investors

Ananda Impact Ventures Web: https://ananda.vc/ Type: Venture capital firm Stages: Early stage: (Pre)seed, Pre-Series A, Series A Sectors: Sustainability transformation, healthcare, education, etc. Region: Europe with focus on DACH, UK, Benelux and the Nordics Location: Munich, London Investment tickets:

- Target investment size: €3 million €8 million
- Initial investment size: €0.5 million €3 million

Nefco

Web: <u>https://www.nefco.int/</u> Type: International public bank (by Denmark, Finland, Iceland, Norway, Sweden) Stage: Mainly Growth/Scale-up

Sectors: Renewable energy, cleantech





Region: Nordics, global Location: Helsinki Financing options:

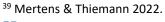
- <u>Scale-up financing</u> (loans or equity): up to €5 million
- <u>Fast-track loan</u>: €100,000-300,000
- <u>Financing for feasibility studies</u> (via Nopef)
- See also: Environment and sustainability guidelines
- See also: <u>Nefco in Sweden</u>

The role of EU support for private funding

The **European Union** provides a range of important instruments (see also Ch. 3) to finance innovation. Next to direct grants, loans or – most recently – <u>direct equity investment</u>, a large part of EU funding is earmarked to back up and facilitate private investment.

The <u>European Investment Bank (EIB)</u> is one of the world's main financers of the climate and environment-targeted projects and has aptly been called the "EU's Climate Bank"³⁹. The EIB supports businesses through direct loans (large companies, big projects), loans or other assistance to local banks (that in turn give finance to small enterprises for small projects), advisory services with a broad range of assistance to urban and regional development, and, for climate projects, through grants and technical assistance to help projects succeed.

The European Investment Fund (EIF) is the EU's provider of risk finance to small and medium-sized enterprises (SMEs). Its main shareholder is the EIB, accompanied by the European Commission, as well as a broad range of public and private banks and financial institutions. The EIF is invested in private venture capital funds such as the above mentioned <u>Ananda Impact Ventures</u> and <u>Junction Growth</u> <u>Investors</u>. In February 2023 five EU member states and the EIB Group have launched the European Tech Champions Initiative (ETCI) that will be operated as a fund of funds by the EIF as the backbone of the <u>pan-European Scale-up Initiative</u> with the goal to back European high-tech companies in their late-stage growth phase.







Developing a Business Model Canvas

The Business Model Canvas (BMC) is a **strategic visualisation tool** for developing and displaying a business model. It helps to get a clear view of a company's operations and identify key business components. A BMC does not replace a formal business plan but provides a bird's-eye perspective on the business model that allows for further strategic development as well as easy understanding and communication.

It can provide the structure for the **collaboration** of different stakeholders and facilitate discussions and brainstorming sessions, allowing everyone to contribute their ideas and insights. At the same time, it is **flexible** enough to allow for an **iterative** process when rapidly developing and testing different business models. In its focus to create and deliver **value** to customers, it is useful to both new ventures and existing businesses and can be applied to a wide range of business scenarios.

A typical BMC comprises the following sections as shown in Figure 8 below.

Figure 8: Structure of a Business Model Canvas

Key Partners	Key Activities	Value Propositions	Customer	Customer
			Relationships	Segments
	Key Resources		Channels	
Cost Structure		Revenue	Revenue Streams	

Source: Own elaboration by Prognos (2023).

Detailed **guides for constructing a BMC** can be obtained from the following sources:

- Strategyzer explains the structure and <u>building blocs</u> of the BMC.
- Indeed has a detailed <u>walkthrough</u> of what a BMC should contain and how it can be elaborated.
- **Templates** for a BMC can be found, for example, at <u>miro</u> or <u>canvanizer</u>.

Further helpful **resources** on **scaling up**:

- **Tech Nation**'s <u>guide</u> to scaling provides useful an abundance of checklists, tips, and explainers for businesses at the early, mid, and late stage.
- **'An Entrepreneur's Guide to Surviving the "Death Valley Curve"** by Thomas Ritter and Carsten Lund Pedersen in the <u>Harvard Business Review</u>.





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Annex

Table 1: Overview of Swedish cluster organisations registered on the ECCP and theiraddressed EU industrial ecosystem, by region

1 Cleantech Scandinavia Renewable Energy 2 CoDest Tourism 3 Game Habitat Southern Sweden AB Creative & Cultural Industries 5 Media Evolution Southern Sweden Creative & Cultural Industries 6 Mobile Heights Digital 7 NetPort Energy Cluster Renewable Energy 8 Packbridge AB Energy Intensive Industries 9 Skane Food Innovation Network Agri-food 10 Sustainable Business Hub Renewable Energy 11 Techtank Advanced Engineering Energy Intensive Industries 12 Compare - Digital Innovation Hub Digital 13 Dalarna Science Park Renewable Energy 14 Future Positon X Digital 15 Hudiksvalls Hydraulikkluster Digital 16 Paper Province Ekonomisk förening Energy Intensive Industries 19 Visit Dalarna Tourism 20 OffshoreVäst Renewable Energy 21 Agroväst Lissmedel AB Agri-food 22 OffshoreVäst Renewable Energy 23	N°	Cluster organisation	Industrial Ecosystem	Region
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Source: ECCP (2023) and own adaptations.