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Introduction

The primary purpose of this Input Paper is to provide relevant information that supports the innovative efforts of the participants in the Cluster Collaboration Lab (C2Lab) taking place in Esbjerg, Denmark, on 6-7 May 2025.

The C2Labs offer a valuable opportunity for participants from cluster organisations, companies, research organisations, civil society, and other interested parties to discover potential partners for collaboration, advance project concepts and create business cases for innovative solutions and the development of joint applications for European funding calls. **The ideas for projects presented at this C2Lab aim to strengthen the EU Twin Transition and enhance the resilience and competitiveness of the European industry.**

At the event in Esbjerg, joint project creation will focus on **energy transition to address key challenges in the green transition**. Participants will collaborate and discuss project ideas on fostering the clean energy transition, clean technologies and recycling, as well as the linkages in areas such as digital solutions, smart energy, and cybersecurity. By fostering synergies among clusters, businesses, and research institutions, the C2Lab aims to accelerate the creation of clean energy solutions that support Europe's green and twin transition objectives.

Given the above, the **central objective of this paper is to offer suitable assistance and practical guidance for the development and implementation of innovative projects that foster greener, more digital, and resilient economies**. Specifically, it provides insights into relevant funding opportunities, strategic priorities, and collaboration mechanisms that can help participants refine their project ideas and bring them closer to implementation.

- **Chapter 1** examines Denmark's position in the green transition, highlighting six key challenges, namely: Clean Energy Transition, Clean Technologies, Recycling and Circularity, Smart Energy, Digitalisation, and Cybersecurity**.** Furthermore, the role of clusters in the green transition is highlighted.
- **Chapter 2** provides a brief economic profile of Denmark, offering insights into its key economic indicators, green economy, innovation ecosystems, and industrial clusters. This contextual overview helps to frame the discussion on clean energy innovations and collaboration within Denmark's broader economic landscape.
- **Chapter 3** outlines the key steps involved in developing a successful project proposal. Building on this, Chapters 4 and 5 explore how to turn clean energy project ideas into actionable initiatives.
- **Chapter 4** outlines public funding opportunities at European, national, and intergovernmental levels, including relevant programmes, calls for proposals, and support mechanisms.
- **Chapter 5** covers private funding options such as venture capital, business angels, banks, and impact investors to help bring clean energy innovations from research to commercialisation.

01

State of the Green Transition in Denmark and the EU and the role of clusters

1. State of the Green Transition and the role of clusters

The **green transition** is a cornerstone of the strategy of the European Union to tackle climate change, strengthen energy security, and safeguard Europe's industrial competitiveness. Through the **European Green Deal**, the EU has set out its ambition to reach climate neutrality by 2050 and cut greenhouse gas emissions by at least 55% by 2030[1]. Achieving these targets requires sustained investment in clean energy technologies, circular business models, and digital innovations that drive decarbonisation across sectors. To support this transformation, the **Net-Zero Industry Act** was adopted in 2024 to accelerate the development and deployment of strategic net-zero technologies and scale up domestic manufacturing capacity.[2] Furthermore, the **Critical Raw Materials Act** addresses Europe's dependency on third-country suppliers by promoting recycling, diversification, and secure access to key materials necessary for the green and digital transitions.[3] Together, they lay the groundwork for a resilient, future-oriented industrial base in Europe. Funding instruments offer support to bring green innovations to market. At the same time, clusters and regional ecosystems are essential in translating these efforts into action, fostering cooperation and uptake on the ground. Beyond its environmental objectives, the green transition is a major opportunity to boost innovation, create quality jobs, and drive sustainable growth in all regions. In this context, the C2Lab in Esbjerg, Denmark, provides a focused space to explore how European priorities can be turned into collaborative, high-impact projects.

Denmark has emerged as one of the **frontrunners in implementing the green transition and advancing policies as well as technologies** that support deep defossilisation across all sectors. The nation's commitment to climate neutrality by 2045 is underpinned by robust governance, public-private collaboration, and technological innovation. This chapter summarises six key aspects of Denmark's green transition: Clean Energy Transition, Clean Technologies, Recycling and Circularity, Smart Energy, Digitalisation, and Cybersecurity.

Denmark's energy transition is supported by one of the world's most ambitious climate frameworks: a legally binding target to reduce greenhouse gas emissions by 70% by 2030 (relative to 1990) and achieve full climate neutrality by 2045.[4] By 2023, over 80% of Denmark's electricity was generated from renewable sources, with wind contributing 54%.[5] This is significantly higher than the EU average, where renewables reached around 50% of electricity generation in 2023.[6] Offshore wind is at the core

[1] For more information, see The European Green Deal - European Commission (last access 17.04.2025).

[2] European Union (2024): Regulation (EU) 2024/1252 of the European Parliament and of the Council of 11 April 2024 on establishing a framework of measures for strengthening Europe's net-zero technology manufacturing ecosystem and amending Regulation (EU) 2021/1058 (Net-Zero Industry Act). Official Journal of the European Union, OJ L, 2024/1735, 28.06.2024, p. 1–58. Available online: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202401735 (last access 17.04.2025).

[3] European Union (2024): Regulation (EU) 2024/1252 of the European Parliament and of the Council of 11 April 2024 establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1724 and (EU) 2019/1020, OJ L 2024/1252, 03.05.2024, p. 1–62. Available online: https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=OJ:L_202401735 (last access 17.04.2025).

[4] IEA (2023): Denmark 2023 Energy Policy Review. Available online: https://iea.blob.core.windows.net/assets/9af8f6a2-31e7-4136-94a6-fe3aa518ec7d/Denmark_2023.pdf (last access 17.04.2025).

[5] The Progress Playbook (2024): How Denmark and Estonia became the world's climate action leaders. Available online: (last access 17.04.2025).

[6] EMBER (2024): European Electricity Review. Available online: https://ember-energy.org/app/uploads/2024/10/European-Electricity-Review-2024.pdf (last access 17.04.2025).

of Denmark's clean electricity expansion. The country plans to increase offshore wind capacity from 2.3 gigawatt (GW) in 2022 to 35 GW by 2050.[7] Denmark co-founded the North Sea Energy Cooperation and plays a leading role in regional offshore energy planning. In addition to electricity, district heating—serving two-thirds of Danish households—is increasingly decarbonised using sustainable biomass, heat pumps, and waste heat recovery.[8] The "**Climate Partnerships**" model has involved 13 industrial sectors in collaborative policy development, contributing to sector-specific decarbonisation roadmaps.[9] This governance approach is supported by annual policy cycles ("climate year wheel"), integrated climate budgeting, and widespread political consensus.[10]

Denmark's clean technology sector is both domestically impactful and globally influential. In 2022, environmental technologies accounted for 12% of Denmark's exports—the highest share in the EU.[11] Flagship companies like Ørsted and Vestas drive innovation and export in wind turbine manufacturing and project development. The country's approach is not limited to hardware; it includes business models, digital services, and regulatory leadership. A central component of Denmark's future industrial strategy is Power-to-X (PtX), which converts renewable electricity into green hydrogen and synthetic fuels for use in transport, shipping, and industry. Denmark aims to install 4–6 GW of electrolysis capacity by 2030.[12] Several large-scale projects, including those in Esbjerg and Holstebro, are under development to enable green fuel exports to northern Europe.[13] Carbon capture and storage (CCS) is also scaling. The Danish Greensand project received the EU's first offshore CO_2 storage permit in 2023, with the potential to store up to 8 million tonnes of CO_2 annually in depleted oil and gas fields in the North Sea.[14] These developments align with EU goals under the Net-Zero Industry Act to boost domestic clean tech manufacturing and decarbonise hard-to-abate sectors.[15]

Circular economy strategies are gaining prominence as the clean energy transition accelerates material demand. The EU's Critical Raw Materials Act mandates that 25% of strategic raw materials must come from recycling by 2030.[16] Denmark's national strategy reflects this imperative through reforms targeting improved separation, reuse, and recovery of materials. As of 2020, Denmark

[7] IEA (2023): Denmark 2023 Energy Policy Review. Available online: https://iea.blob.core.windows.net/assets/9af8f6a2-31e7-4136-94a6-fe3aa518ec7d/Denmark_2023.pdf (last access 17.04.2025).

[8] IEA (2023): Denmark 2023 Energy Policy Review. Available online: https://iea.blob.core.windows.net/assets/9af8f6a2-31e7-4136-94a6-fe3aa518ec7d/Denmark_2023.pdf (last access 17.04.2025); IFRI (2021): Denmark A Case Study for a Climate-Neutral Europe. Available online: https://www.ifri.org/sites/default/files/migrated_files/documents/atoms/files/menu_denmark_climate_neutral_europe_2021.pdf (17.04.2025).

[9] Danish Government's Climate Partnerships (n.d.): The Danish Climate Act (last access 17.04.2025).

[10] IEA (2023): Denmark 2023 Energy Policy Review. Available online: https://iea.blob.core.windows.net/assets/9af8f6a2-31e7-4136-94a6-fe3aa518ec7d/Denmark_2023.pdf (last access 17.04.2025).

[11] Consultancy.eu (2022): Netherlands, Denmark and Estonia lead Europe's energy transition. Available online: https://www.consultancy.eu/news/7841/netherlands-denmark-and-estonia-lead-europes-energy-transition (last access 17.04.2025).

[12] IEA (2023): Denmark 2023 Energy Policy Review. Available online: https://iea.blob.core.windows.net/assets/9af8f6a2-31e7-4136-94a6-fe3aa518ec7d/Denmark_2023.pdf (last access 17.04.2025).

[13] Danish Ministry of Climate, Energy and Utilities (2021): The Government's strategy for POWER-TO-X. Available online: https://www.en.kefm.dk/Media/637788859015138974/PtX%20strategi_ENG3.pdf (last access 17.04.2025).

[14] Greensand (n.d.): Building a European CCS Value Chain. Available online: https://greensandfuture.com (last access 17.04.2025).

[15] European Commission (2023): Net Zero Industry Act. Available online: https://single-market-economy.ec.europa.eu/publications/net-zero-industry-act_en (last access 17.04.2025).

[16] European Commission (2024): European Critical Raw Materials Act. Available online: https://single-market-economy.ec.europa.eu/publications/european-critical-raw-materials-act_en (last access 17.04.2025).

achieved a 54% recycling rate for municipal waste, above the EU average, but still heavily reliant on incineration for district heating.[17] Recent policies are aimed at reducing incineration and expanding recycling of plastic, organics, and electronic waste. Denmark's circularity efforts are particularly notable in the wind energy sector. A facility under development in Esbjerg will become the world's first industrial-scale site for recycling wind turbine blades into construction materials.[18] Denmark is also considered a leader in lifecycle planning for clean technologies. Pilot programs are testing the collection and second-life use of batteries from electric vehicles and stationary storage systems. These efforts align with EU regulations on battery recycling and digital product passports.[19]

Denmark's energy system is among the most flexible and digitally integrated in the world. **Smart energy** strategies are essential for balancing high shares of variable renewable electricity. Denmark achieved 100% smart meter deployment by 2020, enabling time-of-use pricing, remote control, and consumer-side flexibility.[20] The EcoGrid pilot project on Bornholm Island demonstrated that households equipped with automated controls and pricing signals could shift demand and contribute to grid stability in real time.[21] These findings have since informed national rollouts of smart grid functions. Denmark's heat and electricity systems are increasingly integrated. Electric boilers and large-scale heat pumps in district heating allow load shifting and reduce fossil backup. This sector coupling improves system efficiency and reliability. At the EU level, smart meter penetration stood at 47% in 2023, with projections to reach 78% by 2028.[22]

Digitalisation is a key enabler of Denmark's clean energy transition. It supports forecasting, operational optimisation, and decentralised control. Energinet, the Danish transmission system operator, uses AI-enhanced wind and solar forecasts to manage system balancing with over 50% renewable penetration.[23] Denmark promotes open data through national portals, enabling third-party services and transparency in energy markets. IoT-enabled home energy systems allow consumers to optimise usage, while blockchain pilots are testing granular renewable energy certificates at the hourly level.[24] Digital tools are also improving asset maintenance. Predictive analytics help wind farm operators anticipate turbine faults, reducing downtime and costs. The EU's Digitalising the Energy System Action Plan (2022) emphasises similar themes: interoperability, data sharing, AI integration, and digital skills [17].[25]

As energy systems become more digital, **cybersecurity** becomes a critical pillar of resilience. The EU's NIS2 Directive (2022/2555) mandates cyber risk management, reporting obligations, and technical

[17] Eurostat (2025): Recycling rate of municipal waste (last access 17.04.2025).
[18] State of Green (2023): Decommissioned wind turbine blades spun into recyclable buildings (last access 17.04.2025).
[19] European Commission (2023): Net Zero Industry Act. Available online: https://single-market-economy.ec.europa.eu/publications/net-zero-industry-act_en (last access 17.04.2025).
[20] IEA (2023): Denmark 2023 Energy Policy Review. Available online: https://iea.blob.core.windows.net/assets/9af8f6a2-31e7-4136-94a6-fe3aa518ec7d/Denmark_2023.pdf (last access 17.04.2025).
[21] EcoGrid (2019). EcoGrid 2.0 Final report. Available online: https://energiforskning.dk/files/media/document/EcoGrid_final_EUDP_rapport_til_EUDP_3.0_1.0_1_24022020_1350.pdf (last access 17.04.2025).
[22] FFE (2023): The Smart Meter Rollout in Germany and Europe (last access 17.04.2025) .
[23] IEA (2023): Denmark 2023 Energy Policy Review. Available online: https://iea.blob.core.windows.net/assets/9af8f6a2-31e7-4136-94a6-fe3aa518ec7d/Denmark_2023.pdf (last access 17.04.2025); ENERGINET (n.d.): The energy system right now (last access 17.04.2025).
[24] ENERGINET (2020): Energinet investigates possibilities of new digital platform (last access 17.04.2025).
[25] European Commission (2022): EU action plan on digitalising the energy system (last access 17.04.2025).

standards for energy sector operators across Member States.[26] Denmark treats cybersecurity as a national security priority. The Danish Defence Intelligence Service's 2023 threat assessment identified critical energy infrastructure as a top vulnerability.[27] Energinet and major utilities operate 24/7 security operation centres (SOCs), conduct regular penetration testing, and invest in quantum-safe encryption pilots. A recent audit of Danish electricity providers found that many small and municipal companies lacked real-time monitoring of SCADA systems, though progress has since been made to close these gaps.[28]

Denmark's comprehensive **clean energy strategy**—encompassing renewables, clean technologies, digitalisation, cyber security, and circularity—not only aligns with but in many areas also drives forward broader European innovation efforts. The country's proactive approach serves as a benchmark for how national strategies can effectively contribute to the EU's wider green and digital transitions. However, Denmark is not alone in its ambition. Across Europe, an increasing number of innovation actors are developing breakthrough solutions in these fields. Many of these efforts are captured in the ECCP Trend Universe, which monitors technological progress across the EU's industrial ecosystems. Selected examples from the Energy-Renewables ecosystem are presented below (see Box 1).

Denmark's comprehensive clean energy strategy—encompassing renewables, clean technologies, digitalisation, cyber security, and circularity—aligns with and often leads broader European innovation efforts. Additional emerging trends and technological advancements in renewable energy are highlighted in the ECCP Trend Universe (see Box 1).

Box 1: Clean energy trends identified in the ECCP Trend Universe

The **ECCP Trend Universe**[29] provides a unique **technology monitoring** platform that is open to all registered ECCP users. In the Trend Radar, clusters can assess their strengths and weaknesses in each of the 14 industrial ecosystems, including the Energy-Renewables ecosystem. Furthermore, the content area shows regularly updated innovation articles showcasing recent technological developments in the ecosystem.

Recent examples are included in the following:

- *GKN Hydrogen* is a German company that has presented metal hydride storage as the first and safest storage solution for hydrogen in industrial applications. The principle is that green wind, solar or water energy is converted into hydrogen molecules, which then flow into a solid and are absorbed in the metal lattice. When energy is needed, the molecules are released from the storage and converted into electricity. This implies an easier access to clean energy and a step forward in energy storage[30].

[26] Ensia (2024): Cyber Europe tests the EU Cyber Preparedness in the Energy Sector (last access 17.04.2025).

[27] Centre for Cyber Security (2023): Cyber security in supplier relationships. Available online: https://www.cfcs.dk/globalassets/cfcs/dokumenter/vejledninger/en/-cyber-security-in-supplier-relationships.pdf (last access 17.04.2025).

[28] ibid.

[29] Rewatch the ECCP Cluster Talk on the Trend Universe here: https://www.youtube.com/watch?v=mpUp_xYG52c (last access 28.02.2025).

[30] Storing hydrogen in metal hydrides (2024): https://in-future.com/client/QiggcQt-a1/innovation-compass/search/articles/13765?source=search (last access 11.04.2025).

- *Normandie Hydroliennes* is a French company that uses the power of ocean currents for energy generation. The company has proposed placing turbines underwater and expect to generate enough energy to supply 15,000 households[31].
- The *HyBit model project* gathers different entities around the city of Bremen in Germany with the purpose to test the production and storage of hydrogen and the associated conversion processes on an industrial scale. While the electrolyses plant produces hydrogen, the participating public authorities look at the needed infrastructure changes for a successful implementation. The purpose of this project is to implement the advancements in steel production infrastructure at the ArcelorMittal steel plant[32].
- *MAN Energy Solutions* is a company that has installed a seawater heat pump, providing climate-friendly heating to the districts of Esbjerg. The heat pump draws water from the sea and extracts heat from it, generating three megawatt-hours (MWh) of usable thermal energy while using only one MWh of electricity. The electricity is supplied by local wind farms, making the system climate-neutral. An additional heat pump is currently under construction, and together, both installations are expected to reach a combined capacity of 70 MWh, thus replacing the city´s coal-fired power plant.

Visit and explore the ECCP Trend Universe **here**.

As shown by the **ECCP Cluster Panorama Report 2024**, **cluster organisations play a pivotal role in Europe's green transition** by acting as intermediaries in innovation ecosystems and providing essential support services to industry. There is a significant positive link between cluster presence and regional readiness for both the green and digital transitions. Regions with a strong cluster presence tend to demonstrate higher levels of green patents, digital maturity, and employment in technology-intensive sectors. Clusters contribute to the green transition in several ways. They support local value chain development, foster collaboration across industries, and facilitate the adoption of clean technologies. Their services range from organising access to resources, infrastructure, and financing to delivering training, upskilling and knowledge-sharing activities. Common green services provided by EU cluster organisations include awareness-raising campaigns, thematic events, and the dissemination of best practices and green technologies. Furthermore, over 40% of EU27 cluster organisations report dedicated expertise in areas such as energy efficiency, materials and waste, and climate mitigation. These organisations often help companies navigate environmental regulation, improve resource efficiency, and integrate circular economy strategies. Cluster programmes also promote the construction of circular industrial ecosystems and support SMEs in building green innovation capabilities. Cluster policy plays a key enabling role by positioning cluster organisations as institutional infrastructure for coordinated transition efforts. Cluster organisations not only act as platforms for industrial modernisation but also link their ecosystems to broader EU strategies and programmes

[31] Clean energy stable and predictable in advance with new tidal technology (2025) https://in-future.com/client/QiggcQt-a1/innovation-compass/search/articles/17989?source=search (last access 11.04.2025).
[32] Model project for the development of a green hydrogen economy and decarbonisation of steel production (2024): https://in-future.com/client/QiggcQt-a1/innovation-compass/search/articles/16132?source=search (last access 11.04.2025).

aimed at delivering the twin transition.[33] Specific examples of how clusters are putting these roles into action are highlighted in case studies from the Green Transition Support – a service of the ECCP – in Box 2.

Box 2: Cluster role in the green transition identified in the ECCP Green Transition Support

Examples on how clusters can play a role in the Green Transition can be found in the **Green Transition Support,** which is a service offered on the ECCP that aims to inspire, inform, and share good practices for clusters on how to promote the green transition and support local businesses in this endeavour.

1. **Innovation Challenge:** Flux50 supports the energy transition of its members by connecting large companies with innovative solution providers through innovation challenges. In the 2024 "Low Voltage Flexibility Challenge," Flux50 facilitated collaboration between an electricity supply company and over 50 innovators, demonstrating how clusters can bridge innovation gaps and accelerate the adoption of clean energy solutions. Read more here: https://www.clustercollaboration.eu/sustainability-action-impactful-initiatives-clusters/innovation-challenge
2. **Talent Pool Platform:** The Basque Energy Cluster supports the energy transition by bridging the gap between industry and talent, helping its members access skilled professionals needed for clean energy innovation. Through targeted outreach to STEM students and graduates, the cluster strengthens the workforce pipeline essential for driving the sector forward. Read more here: https://www.clustercollaboration.eu/sustainability-action-impactful-initiatives-clusters/talent-pool-platform

[33] ECCP (2024): European Cluster Panorama Report 2024. Available online: https://www.clustercollaboration.eu/sites/default/files/document-store/Cluster_Panorama2024.pdf (last access 17.04.2025).

02

Economic profile of Denmark and its innovation ecosystem

2. Economic profile of Denmark and its innovation ecosystem

Since this C2Lab is taking place in Esbjerg and C2Lab events have a supra-regional focus, this chapter will provide an overview of Denmark's economic profile and its innovative ecosystem. As of 2024, Denmark has a population of approximately 6 million and is administratively divided into five regions.[34] Although Denmark is a relatively small European country, it is of great importance for the European economy as a frontrunner in the fields of innovation and the green transition.

The following section will provide a concise economic overview of Denmark, encompassing key aspects, such as the macroeconomic profile, its green economy, employment composition and innovation performance.

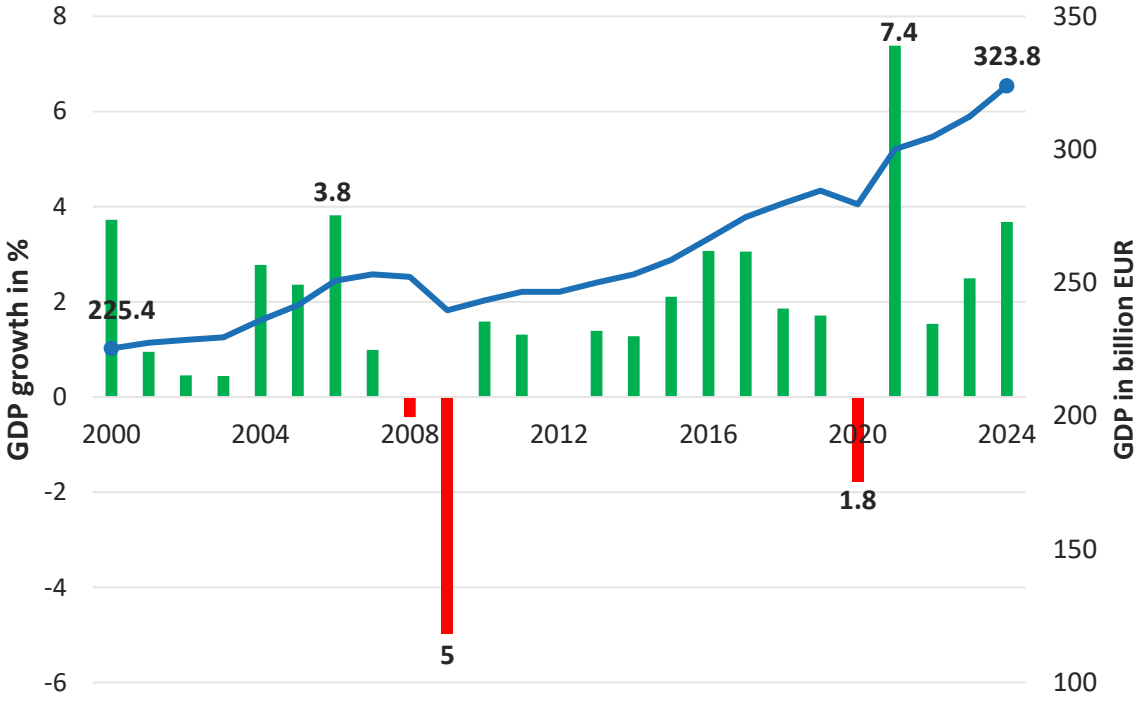
Denmark and its macroeconomic picture

Denmark has shown strong economic performance in recent years, with a real GDP of €376.4 billion in 2023 (see Figure 1).[35] Between 2000 and 2024, Denmark's average annual GDP growth rate was 1.5%, roughly in line with the EU average of 1.4%. During this period, the Danish economy experienced two recessions. The first followed the 2008 financial crisis, from which Denmark struggled to recover compared to other European economies. The country surpassed its pre-crisis level in 2014. The second recession occurred in 2020, triggered by the COVID-19 pandemic, causing the GDP to contract by 1.8%. However, the Danish economy rebounded strongly, exceeding pre-pandemic GDP levels by 2021. In 2023 and 2024, Denmark's GDP growth rates reached 2.5% and 3.7%, significantly outpacing the EU average of 0.4% and 1%.

The capital region of Hovedstaden accounts for 42.8% of the total GDP, showcasing the economic importance of the region for the Danish economy. Midtjylland and Syddanmark follow with 19.5% and 18.5%, respectively. In 2023, Denmark's GDP per capita in purchasing power standards (PPS) reached €47,800, significantly exceeding the EU27 average of €38,100.[36] The capital region of Hovedstaden had the highest GDP per capita (PPS) in Denmark, reaching €64,000, well above both the national and EU averages. This is followed by Syddanmark (€42,400), Midtjyland (€40,700), Nordjylland (€37,500) and Sjælland (€33,400). The GDP per capita in PPS highlights a clear economic disparity between the capital region of Hovedstaden and the rest of the country.[37]

[34] Eurostat (2025): Population on 1 January. Available online: https://ec.europa.eu/eurostat/databrowser/view/tps00001/default/table?lang=en&category=t_demo.t_demo_pop (Data retrieved on 02.04.2025).
[35] Eurostat (2025): GDP and main components (output, expenditure, and income. Available online: https://ec.europa.eu/eurostat/databrowser/view/nama_10_gdp__custom_12801476/default/table?lang=en (Data retrieved on 02.04.2025).
[36] Eurostat (2025): Gross domestic product (GDP) at current market prices by NUTS 2 region. Available online: https://ec.europa.eu/eurostat/databrowser/view/nama_10r_2gdp/default/table?lang=en (Data retrieved on 02.04.2025).
[37] ibid.

Figure 1: Real GDP (2010 chain-linked) and GDP change over time in Denmark

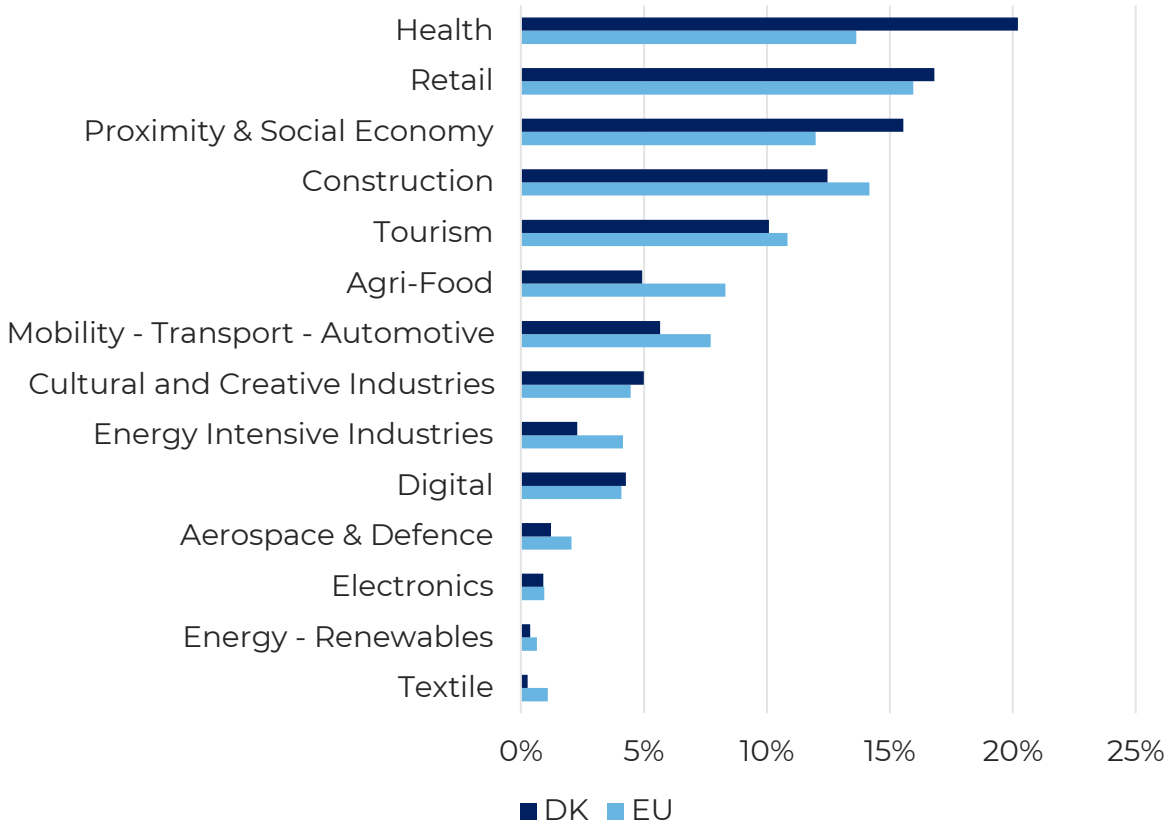


Source: ECCP (2025), own elaboration based on Eurostat.

To gain a better understanding of the Danish economic profile and its employment composition, it is useful to assess its positioning across the EU's **14 industrial ecosystems in terms of employment** (see Figure 2). These industrial ecosystems have been identified by the European Commission as part of its Industrial Strategy and encompass all players operating in a value chain.[38] The Health ecosystem exhibits the highest employment share, accounting for 20.2% of total employment across all ecosystems, exceeding the EU27 average of 13.6% by nearly 7 percentage points. It is followed by the Retail ecosystem, which represents 16.8% of total employment, above the EU average of 15.9%. The Proximity & Social Economy ranks as the third-largest ecosystem by employment, contributing 15.5%, significantly above the EU average (12%). Additionally, the Cultural and Creative Industries and the Digital ecosystem also report employment shares above the EU average.

[38] See here for more information https://clustercollaboration.eu/in-focus/industrial-ecosystems (last access 16.08.2024).

Figure 2: Employment across the industrial ecosystem in Denmark (DK) and the EU27, in 2022



Source: ECCP (2025), own calculations and elaboration based on data from Eurostat.

Denmark's Green Economy

As shown in Chapter 1, Denmark is a recognised leader in the transition towards a green economy, which is also reflected in its economic structure. As the EU's leading exporter of environmental goods and services, Denmark reported that such products accounted for 12% of its total exports in 2022.[39] In total, the country exported €13.7 billion worth of environmental goods and services, which reflects a 41.2% increase compared to 2014.[40] In terms of its gross value added, the environmental economy accounted for 3.2% in 2022, above the European average of 2.5% (2021).[41] Approximately 50% of the turnover from environmental goods and services originates from the manufacturing sector.[42] For example, Denmark accounts for more than one-third of global wind turbine sales.[43] Beyond

[39] Eurostat (2025): Environmental economy – statistics by Member State (last access 09.04.2025).
[40] Eurostat (2025): Production, value added and exports in the environmental goods and services sector (last access 09.04.2025).
[41] Eurostat (2025): Production, value added and exports in the environmental goods and services sector (last access 09.04.2025).
[42] Statistics Denmark (2025): Green economy (last access 09.04.2025).
[43] OECD (2024): OECD Economic Surveys: Denmark 2024. Available online: https://www.oecd.org/en/publications/oecd-economic-surveys-denmark-2024_d5c6f307-en.html (last access 09.04.2025).

manufacturing, the sectors of electricity, gas, steam and air conditioning supply (15.4%), and water supply, sewerage and waste management (12.9%) also account for significant shares of turnover.[44] Regarding renewable energy, Denmark is a global frontrunner in integrating wind power into its electricity grid. It also plays a key role in the large-scale district heating sector, including solar-based systems, and demonstrates strong performance in eco-innovation and the share of green patents. Denmark has set an ambitious target to quadruple its electricity generation from solar and onshore wind by 2030, compared to 2021 levels.[45] As a result, Denmark now generates 87.6% of its electricity from renewable sources,[46] the majority of which comes from wind energy.[47]

Innovation performance of Denmark

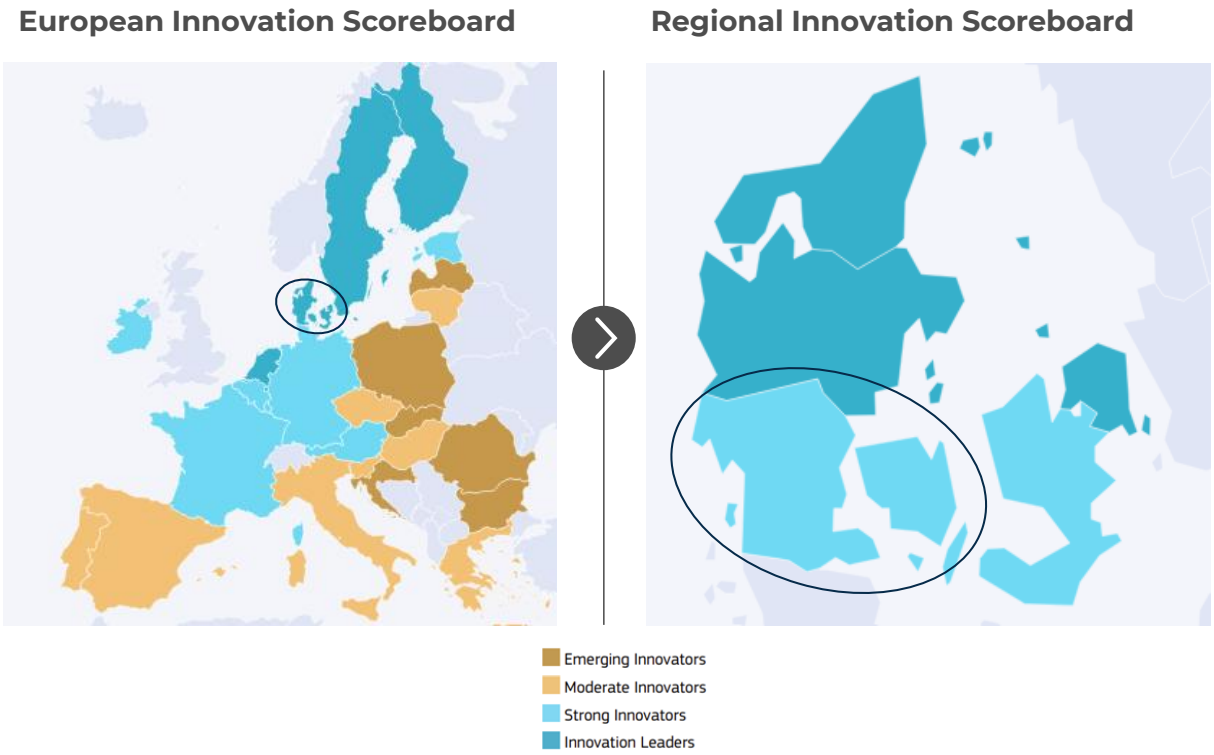
Based on the most recent data from the European Innovation Scoreboard (EIS) 2024, Denmark continues to be an "Innovation Leader" (see Figure 3), with a summary score of 135.7 (EU27 = 100). This makes Denmark the highest-ranked EU27 country and the most innovative Member State, ahead of Sweden. Since 2017, Denmark's innovation performance has displayed a strong improvement, with an increase of 14.2 percentage points, making the country outpace the EU average of 10%-points.[48] Denmark is leading the European Innovation Scoreboard because it excels across different innovation indicators. The country exhibits exceptional strength in the dimension of human resources (124.3), particularly in the population involved in lifelong learning (227.8). The high performance in the attractive research system (183.9) is driven by the substantial international scientific co-publications (288.6). In digital domain, both broadband penetration (144.4) and individuals with above basic overall digital skills (151.7) outperform the EU average. In the field of linkages (214.2), the country excels in public-private co-publications (489), indicating an excellent network and cooperation between businesses, academia, and public research institutions, which are crucial for knowledge exchange and innovation. In the realm of intellectual property, Denmark performs strongly in the field of PCT patent & design application (140.5 & 155.7). Within the environmental sustainability dimension (122.7), Denmark performs strongly in environment-related technologies (179.1), marking this as another key strength, showcasing high development in the field of clean tech.

However, the EIS also highlights specific weaknesses, underscoring the need for improvements to enhance Denmark's overall innovation performance. The indicator for direct and indirect government support of business R&D (75.3) falls below the EU average. Employment in innovative enterprises (97) remains slightly below the EU average, with a notable decline between 2023 and 2024. In the field of sales impact, the indicators Exports of medium and high technology products (73.5) and Knowledge-intensive services exports (96.3) both show room for improvement, with the latter being in decline

[44] Statistics Denmark (2025): Green economy (last access 09.04.2025).
[45] European Commission (2023): 2023 Country Report Denmark. Available online: https://economy-finance.ec.europa.eu/system/files/2023-06/ip228_en.pdf (last access 09.04.2025).
[46] European Commission (2024): 2024 Country Report Denmark. Available online: https://economy-finance.ec.europa.eu/document/download/a5c263cb-169f-4f7f-96b7-bce40e5bacf8_en?filename=SWD_2024_604_1_EN_Denmark.pdf (last access 09.04.2025).
[47] International Energy Agency (2025): Denmark (last access 09.04.2025).
[48] European Commission (2025). Country Profile Denmark (last access 09.04.2025).

compared to 2023. Finally, even though Denmark scores well in environmental sustainability (122.7), mainly due to its strong development of clean tech as discussed above, the indicator resource productivity (72.1) performs below the EU average.

Figure 3: Denmark in the EU (left) and Regional (right) Innovation Scoreboard



Source: European Commission (2025). European Innovation Scoreboard.

Denmark's regional innovation performance varies significantly across its five regions, as shown in the figure above. The Regional Innovation Scoreboard (RIS) classifies Denmark's five regions into two categories: "Innovation Leader" and "Strong Innovators". Hovedstaden (156.3), Midtjylland (140.7), and Nordjylland (129.6) are classified as "Innovator Leaders", reflecting their outstanding innovation capacity, with the capital region Hovedstaden being ranked the most innovative region in Europe. The remaining two regions—Syddanmark and Sjælland—are categorised as "Strong Innovators".
Denmark's position as a frontrunner in the EU is accompanied by R&D spending significantly above the European average. Total R&D expenditure in Denmark accounts for 3.1% of GDP with (1.9% and 1.2% public sector)[49] compared to the European average of 2.2%.[50]

Denmark's innovation ecosystem is further strengthened by a dense network of innovation centres and hubs, which translate scientific excellence into practical applications and foster collaboration across sectors. Notable examples include:

[49] Statistics Denmark (2025): Research and Development (last access 15.04.2025).
[50] Eurostat (2025): R&D expenditure (last access 15.04.2025)

- **Innovation District Copenhagen** is a collaboration among major educational, healthcare, and business institutions, including the University of Copenhagen, University Hospital of Copenhagen, and Novo Nordisk, and focuses on medicine, health, and the natural sciences. The district aims to become a leading knowledge and innovation hub by attracting talent and investment, and by fostering entrepreneurship and spin-offs in the life sciences.
- **TechCircle**, based in Central Denmark, is a collaboration of 10 partners supporting SMEs in innovation, focusing on sustainable solutions and reducing environmental impact through Circular Economy principles and advanced data technologies. The hub leverages regional strengths in agriculture, food, manufacturing, and digital tech to boost economic impact, enhance efficiency, and promote smart city development and sustainability initiatives.
- **Innovation Centre Copenhagen (ICDK)** strengthens Danish innovation globally through several international hubs, offering customised advisory, network access, and partnerships with leading global actors by uniting government bodies, academia and business through the triple helix model. The centre supports startups, SMEs, researchers, and institutions with tailored guidance and connections to key innovation ecosystems in cities like Munich, Tel Aviv, and Silicon Valley.
- The **Digital Energy Hub** aims to establish collaboration with Danish companies to drive the green transition by creating Denmark's first innovation ecosystem focused on big data, AI, and IoT for the energy sector.

Danish cluster landscape

In the following, the Danish cluster organisations will be examined, as clusters play a crucial role as intermediaries in innovation ecosystems. In regard to the green transition, clusters facilitate the transition by supporting eco-innovation, promoting sustainable production models, and mobilising relevant actors across value chains. The European Cluster Collaboration Platform (ECCP) serves as a one-stop shop for cluster organisations at the European level, making its database a valuable resource for assessing Denmark's cluster landscape. The number and sectoral orientation of ECCP-registered cluster organisations in Denmark provide a comprehensive overview of the country's cluster landscape. Of the 1,242 registered cluster organisations from the EU27 registered on the ECCP, 22[51] are based in Denmark.

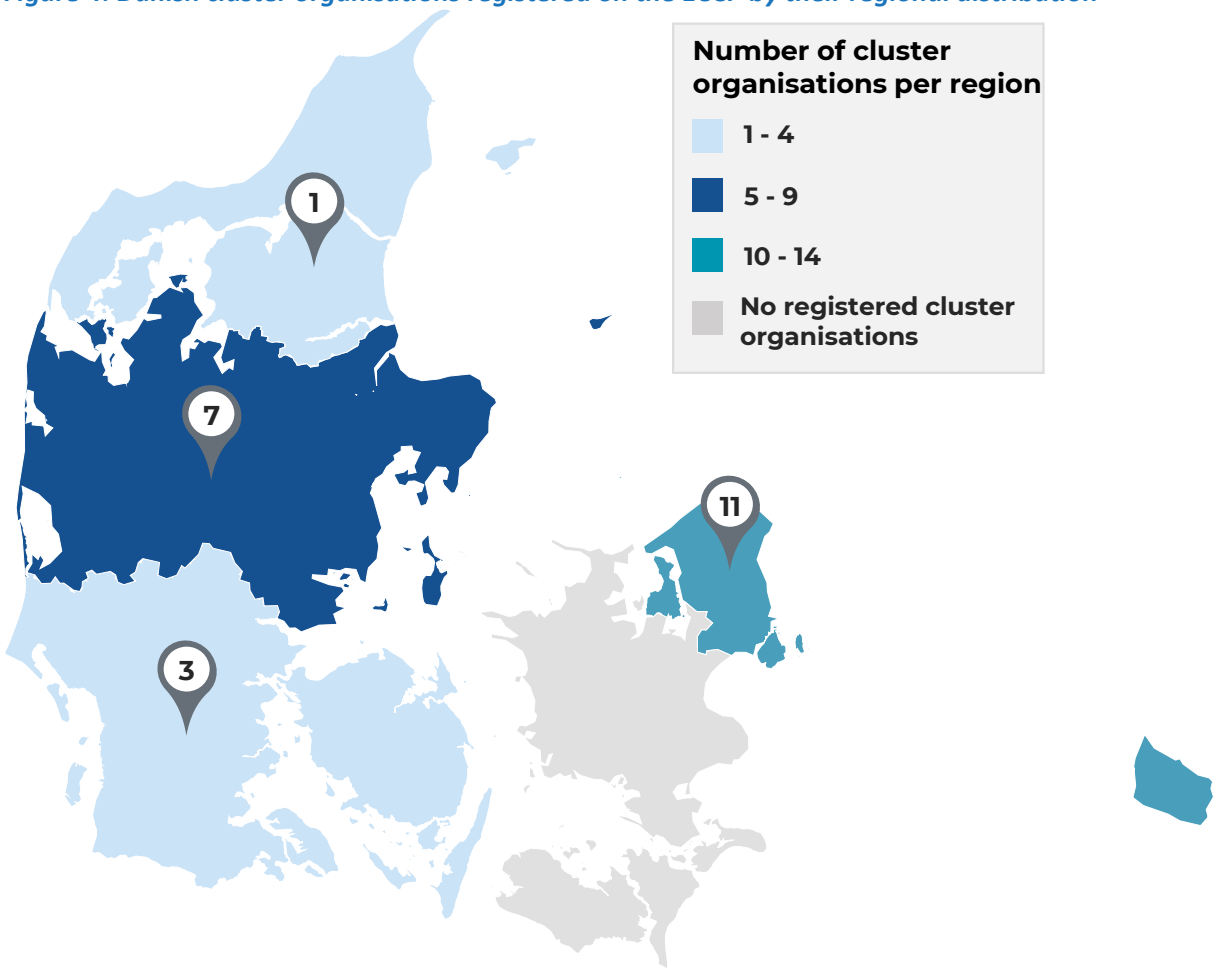
Figure 4 shows the geographical distribution of the ECCP-registered cluster organisations from Denmark.[52] The capital region of Hovedstaden hosts the highest number, with 11 cluster organisations, followed by Midtjylland (7), Syddanmark (3), and Nordjylland (1), while the region of Sjælland does not host any ECCP-registered cluster organisations. A complete list of Danish cluster organisations is found in Table 1 in the Annex.

As mentioned in Chapter 1, Denmark is leveraging competitive advantages in the green transition. This focus is also reflected in the region's cluster landscape. To name an example, the **Energy Cluster**

[51] Of the 22 ECCP-registered cluster organisations in Denmark, two no longer appear to be active, namely InnoBYG and the Maritime Cluster Copenhagen North.

Denmark brings together companies, researchers, and public organisations across the energy sector to drive innovation and develop green energy solutions. They act as a neutral, member-driven platform that supports collaboration on new technologies and ideas, aiming to make Denmark a global leader in sustainable energy. Another example is the **CLEAN Cluster,** the water and environmental cluster aims to promote the improvement of the competitiveness of its partners through open innovation and has been active since 2006.

Figure 4: Danish cluster organisations registered on the ECCP by their regional distribution



Source: ECCP (2025), own elaboration based on the ECCP Mapping Tool. Data retrieved on 3 April 2025.

At the national level, Denmark's cluster policy revolves around the Danish Cluster Programme (Klyngeprogrammet).[53] The main objective of this policy is to establish an effective, nationally coordinated cluster framework based on consolidated and professional cluster organisations working nationwide and bringing together the ecosystem in their respective business and technology areas. A key aim is to support the shift towards greener and more climate-friendly production. The cluster programme aims to strengthen the productivity and competitiveness of enterprises - and in particular

[53] Danish Board of Business Development (2025). Cluster programme 2025-2028. Available online: https://erhvervsfremmebestyrelsen.dk/sites/default/files/2024-12/Klyngeprogram%202025-2028_0.pdf (last access 10.04.2025).

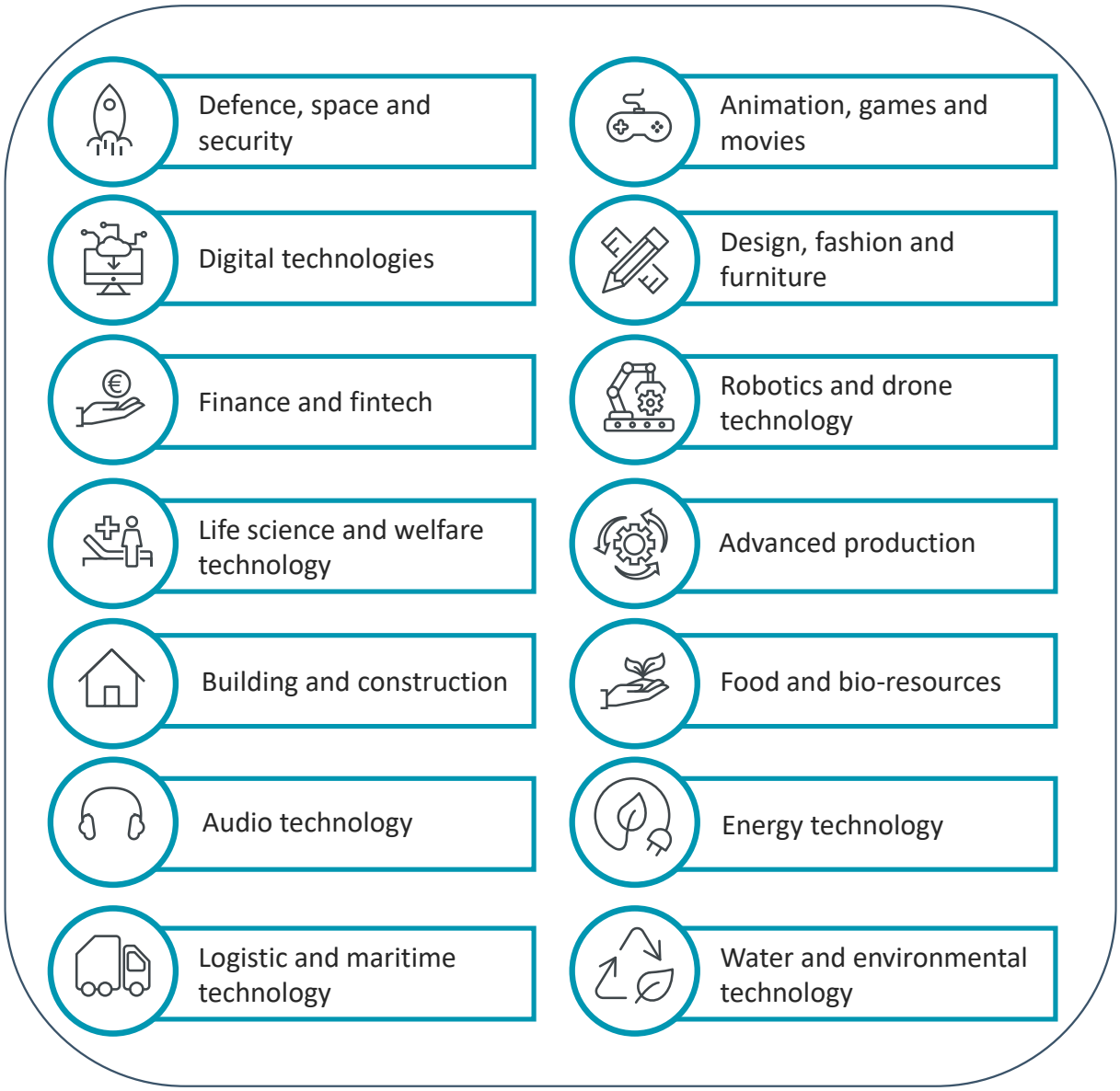
SMEs - through cooperation on innovation and knowledge transfer between enterprises and knowledge institutions, including government-approved research and technology organisations and other actors in the relevant business and technology areas.

Strategic innovation priorities of Denmark

Smart Specialisation, like cluster policy, is a place-based approach that aims to leverage the advantages of proximity and promote economic growth and competitiveness[54], thereby concentrating resources into defined strategic priorities.[55] Due to the similarity of the two concepts, cluster organisations can play an important role in designing and implementing Smart Specialisation Strategies. In Denmark, the cluster programme is directly integrated into the Smart Specialisation Strategy (S3) priorities. Figure 5 illustrates Denmark's S3 priorities as outlined in the *Business Development Throughout Denmark 2024–2027* programme.[56] This programme covers 14 key sectors of significant economic importance, each with strong innovation potential and clear links to Denmark's robust knowledge, research and technology environments. Both the S3 strategy and the cluster policy operate at the national level. Each priority area is eligible for funding through one designated cluster initiative. Therefore, a total of 14 cluster organisations are eligible for funding. This integrated approach ensures a more coordinated and targeted use of resources, fostering synergies between innovation, research, and business development. As such, Denmark's model serves as a valuable example of how cluster policy can be aligned with Smart Specialisation to drive regional and national economic transformation. Several of these priorities align closely with the focus of the C2Lab event in Esbjerg, particularly in the areas of energy technologies, water and environmental technologies, and digital technologies.

[54] European Commission (2013): The role of clusters in smart specialisation strategies. Available online: https://op.europa.eu/o/opportal-service/download-handler?identifier=2fe44194-e5a8-42b7-ac14-9c9b8e157de3&format=pdf&language=en&productionSystem=cellar&part= (last access 10.04.2025).
[55] Prognos /CSIL (2021): Study on prioritisation in Smart Specialisation Strategies in the EU. Study on behalf of the European Commission. Available online: https://ec.europa.eu/regional_policy/en/information/publications/studies/2021/study-on-prioritisation-in-smart-specialisation-strategies-in-the-eu (last access 10.04.2025).
[56] Danish Board of Business Development (2024): BUSINESS DEVELOPMENT THROUGHOUT DENMARK 2024-2027. Available online: https://erhvervsfremmebestyrelsen.dk/sites/default/files/2024-05/Strategien%20H%C3%B8jformat_til_hjemmesiden_pages-opt-a_0.pdf (last access 10.04.2025).

Figure 5: Overview of Danish S3 priorities



Source: ECCP (2025), own elaboration based on the S3 CoP Observatory (last access 09.04.2025).

After introducing the thematic priorities and providing context on Denmark's economic, innovation, and cluster landscape as the host country for the event, the following two chapters offer further insights into how project proposals can be structured and what funding opportunities are available to assist participants in their collaborative activities.

03

Developing a project proposal

EUROPEAN CLUSTER COLLABORATION PLATFORM

Strengthening the European economy through collaboration

3. Developing a project proposal

This chapter begins by outlining practical guidelines for SMEs to improve their chances of securing funding and successfully implementing their projects. It then introduces the Business Model Canvas as a tool for structuring and promoting project ideas.

A well-prepared **project proposal** should clearly demonstrate the value and impact of the project while meeting any specific requirements of the funding source. A prerequisite for this process is the development of a clear project idea for a product or process. For developing project ideas, inspiration can come from global challenges society faces, from customers and stakeholders as well as from the technical/scientific literature or by monitoring specific calls aimed at SMEs and intermediaries (such as Clusters) for example from Horizon Europe (including those from European Innovation Council), I3 and/or SMP and other relevant funding sources.

Along with the project idea, it is important to have an initial identification of relevant actors that need to be engaged (collaborators, suppliers, etc.), required material resources (e.g. hardware, software, access to specialised infrastructure) and human resources (skilled personnel), key performance indicators for the product or process that is under consideration compared to existing solutions or the current state-of-the-art and broad knowledge of required funds for the various stages of development. In this respect classification of the product or process along the Technology Readiness Level (TRL), Manufacturing Readiness Level (MRL) and Investment Readiness Level (IRL) scales is essential. While the TRL focuses on the readiness of the technology itself, MRL focuses on the capability to manufacture the technology at scale and IRL provides a structured approach to evaluating the maturity of a product/process made by an enterprise, from the perspective of potential investors.

Some useful material on proposal preparation can also be consulted here:

- Practical pointers for developing a proposal for Horizon Europe project funding
- INFO Session Erasmus+ Alliances for Innovation 2023: Tips on how to write a good project proposal. Do's and Don'ts
- How to write a winning proposal for Horizon Europe
- Develop your Interreg project proposal
- Interreg NEXT MED – Guide for project preparation

A concise summary is provided below, tailored for applicants with little experience in proposal writing (for example SMEs, clusters, etc.), helping them better navigate the process with confidence.

Guidelines for Proposal Development

1. Start Early and Understand the Requirements

- **Begin the Process Early**:

- Start the proposal writing process well in advance of the submission deadline. This allows time for refining ideas, gathering necessary information, and collaborating with partners.
- Early preparation helps avoid last-minute issues and ensures that all aspects of the proposal are thoroughly considered.

- **Familiarise Yourself with the Call for Proposals**:
  - Carefully read the call for proposals to understand the objectives, eligibility criteria, and evaluation criteria. This will guide the development of your project and ensure it aligns with the funder's expectations.
  - Review relevant documents such as programme guides, funding guidelines, and evaluation criteria to ensure compliance.

2. Define Your Project Clearly

- **Clarify Objectives and Needs**:
  - Clearly define the objectives of your project. Ensure they are Specific, Measurable, Achievable, Relevant, and Time-bound (SMART).
  - Conduct a thorough needs analysis to justify the project. Clearly articulate the problem your project addresses and provide evidence to support its significance.
- **Align with Strategic Goals**:
  - Make sure your project aligns with broader strategic goals, such as those outlined in EU policy frameworks and other relevant documents, such as the Call documents. This alignment can strengthen your proposal by demonstrating its relevance to the funder's priorities.

3. Build a Strong Consortium

- **Select the Right Partners**:
  - Choose partners with complementary skills and expertise that cover all aspects of the project. This includes technical knowledge, market access, and implementation capabilities.
  - Involve partners early in the proposal development process to build trust and ensure alignment on project goals.
- **Diversity and Collaboration**:
  - A diverse consortium with a mix of SMEs, large enterprises, research institutions, and other stakeholders can enhance the proposal's appeal. Ensure that all partners contribute meaningfully to the project.

4. Develop a Detailed Work Plan

- **Structure the Proposal with Clear Work Packages**:
  - Divide the project into clear work packages, each with specific tasks, responsibilities, and deliverables. Use tools like Gantt charts or PERT diagrams to visualise the timeline and dependencies.
  - Ensure that the work plan is logical, realistic, and directly aligned with the project's objectives.

- **Write a Compelling Work Plan**:
    - The work plan should be detailed, clear, and convincing. Avoid overly complex language and focus on presenting a coherent narrative.
    - Include key milestones, performance indicators, and a risk management plan to demonstrate the project's feasibility.

5. Create a Realistic Budget

- **Develop a Detailed and Justified Budget**:
    - Prepare a budget that includes all necessary costs such as personnel, travel, materials, and equipment. Ensure that the budget aligns with the project's scope and timeline.
    - Justify each budget item, explaining why it is necessary for the project's success. Be transparent about how funds will be used.

6. Focus on Impact and Sustainability

- **Demonstrate the Project's Impact**:
    - Clearly articulate the impact your project will have, both during and after its implementation. Highlight how the project will contribute to societal, economic, or environmental goals.
    - Include measurable outcomes and Key Performance Indicators (KPIs) to track the project's success.
- **Plan for Long-term Sustainability**:
    - Include a sustainability plan that outlines how the project's outcomes will be maintained beyond the funding period. This could involve follow-up funding, partnerships, or commercialisation strategies.

7. Write and Refine Your Proposal

- **Draft a Clear and Concise Proposal**:
    - Write the proposal in clear, simple language. Avoid jargon and ensure that the narrative is easy to follow, even for those not familiar with the topic.
    - Address all sections required by the funder, ensuring that each part of the proposal is consistent and coherent.
- **Review and Seek Feedback**:
    - Review the proposal multiple times, checking for clarity, consistency, and alignment with the call's objectives.
    - Seek feedback from colleagues or experts to identify areas for improvement. Consider having a native speaker proofread the proposal if it is not in your first language.
- **Ensure Timely Submission**:
    - Submit your proposal well before the deadline to avoid any last-minute technical issues or omissions.
    - Double-check that all required documents are included and correctly formatted.

Developing your Business Model with a Canvas

This part gives a brief introduction on how to use a business model canvas to promote a project idea. The Business Model Canvas (BMC) is a **strategic visual 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 high-level overview on the business model that supports strategic refinement as well as easy understanding and communication.

It can provide a structure to support collaboration among 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. With its focus on creating and delivering **value** to customers, it is useful to both new ventures and existing businesses and applies to a broad range of business scenarios.

A typical BMC comprises the following sections as shown in Figure 6 below.

Figure 6: Structure of a Business Model Canvas

<table>
<tr><td rowspan="2">Key Partners</td><td>Key Activities</td><td rowspan="2">Value Propositions</td><td>Customer Relationships</td><td rowspan="2">Customer Segments</td></tr>
<tr><td>Key Resources</td><td>Channels</td></tr>
<tr><td colspan="3">Cost Structure</td><td colspan="2">Revenue Streams</td></tr>
</table>

Source: Own elaboration by Prognos (2025).

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

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

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

- **Tech Nation**'s guide to scaling offers an abundance of useful checklists, tips, and explainers for businesses at the early, mid, and late stage.

'**An Entrepreneur's Guide to Surviving the "Death Valley Curve"**' (see also the Annex for an elaboration on the "Valley of Death" by Thomas Ritter and Carsten Lund Pedersen in the Harvard Business Review).

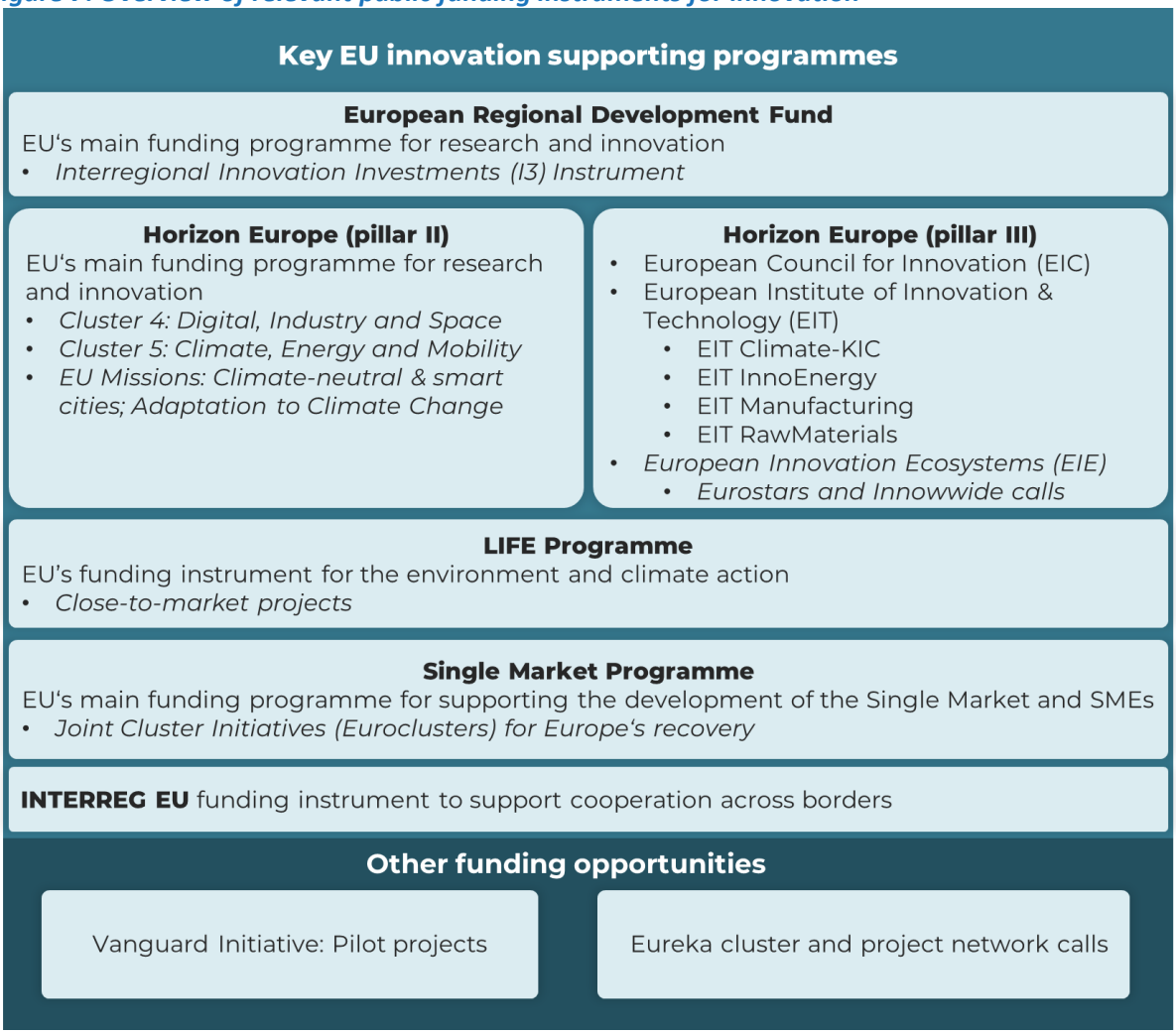
04

Public funding instruments for innovation

4. Public funding instruments for innovation

Public funding schemes play a pivotal role in strengthening innovation in Europe. This chapter outlines diverse public funding opportunities for projects, supporting the development of innovative ideas and bringing them to fruition. Thereby, these funding opportunities address the challenges that are outlined in Chapter 1. This chapter 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 7 gives an overview of relevant funding schemes that are presented in the chapter.

Figure 7: Overview of relevant public funding instruments for innovation



Source: ECCP (2025).

Key EU innovation supporting programmes

Interregional Innovation Investments (I3) Instrument

Total programme budget within the work programme 2025-2027

~€159 million

Participating countries

Thematic priorities

Green transition

Digital transition

Smart Manufacturing

More information on the I3 Instrument:

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

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 €75.8 million to €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 are 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 support strands** for interested organisations. Both strands only fund projects which belong to one of **three thematic areas, including 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 to increase the capacity of regional innovation ecosystems in less developed regions

Call for proposals

Under the Interregional Innovation Investments Instrument (I3), there **no open calls at the moment**. EISMEA plans to publish three calls this year. More details will be available once the Work Programme (WP) 2025-2027 is adopted. The next calls are expected as follows:

- **For I3 Strand 1,** the call will open on 22 May 2025, with a closing deadline on 20 November 2025.
- **For I3 Strand 2a,** the call will open on 22 May 2025, with a closing deadline on 20 November 2025.
- **For I3 Strand 2b**, the call will open on 23 October 2025, with a closing deadline on 19 March 2026.

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 "Capacity Building Strand 2b" can be found here.

Advice services and support tools

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

- Guidelines for applicants incl. an FAQ section.
- Presentation and recording of the I3 instrument Info section (Strand 1 & 2a).

Horizon Europe (Pillar II)

Total programme budget 2021-2027

€93.5 billion

Participating countries

+ third countries associated to HE + other third countries

Pillar II of HE Relevant Clusters:

Cluster 4: Digital, Industry and Space

Cluster 5: Climate, Energy & Mobility

Relevant EU Missions:

Climate-neutral & smart cities

Adaptation to Climate Change

Relevant European Partnerships:

Built4People Partnership

Support tools

- Partner Search Services
- Online manual guide on the procedures from proposal submission to managing your grant.
- Materials from HE Cluster 5 Info Day
- Factsheet Tips and tricks to apply for Horizon Europe calls

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. The Programme targets to invest approximately more than €30 billion in the digital, industrial, special, climate, energy and mobility fields. 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 work programme for 2025, different calls for proposals will be launched in Cluster 4: Digital, Industry and Space and Cluster 5: Climate, Energy & Mobility, also in the areas of Mobility and Construction. For Cluster 4: **Digital, Industry and Space**, the topics centre around the following destinations:

- Climate neutral, circular and digitalised production
- Increased autonomy in key strategic value chains for resilient industry
- World leading data and computing technologies
- Digital and emerging technologies for competitiveness and fit for the Green Deal
- Open strategic autonomy in developing, deploying and using global space-based infrastructures, services, applications and data
- A human-centred and ethical development of digital and industrial technologies

For Cluster 5: **Climate, Energy & Mobility**, the topics centre around the following destinations:

- Climate sciences & responses for the transformation towards climate neutrality
- Cross-sectoral solutions for the climate transition
- Sustainable, secure & competitive energy supply
- Efficient, sustainable & inclusive energy use
- Clean & competitive solutions for all transport modes
- Safe, resilient transport & Smart Mobility services for passengers & goods

Call for proposals (non-exhaustive list)

Calls under Cluster 4: Digital, Industry and Space calls

There are still no new calls for 2025. The last round of calls recently finished, and a new one will be announced in the coming months.

Calls under Cluster 5: Climate, Energy & Mobility calls

There are still no new calls for 2025. The last round of calls recently finished, and a new one will be announced soon.

Advisory services

To obtain information about the abovementioned calls, please reach out to your National Contact Point here.

Funding for innovative start-ups under Horizon Europe (Pillar III)

European Innovation Council (EIC)

Total programme budget 2021-2027

€10.1 billion[57]

Participating countries

+ third countries associated to HE + other third countries

Thematic priorities

Support for **any technologies and innovations** that cut across scientific, technological, sectoral and application fields or represent novel combinations.

General description

The European Innovation Council is one of the flagship programmes of the HE programme to support breakthrough innovations of SMEs and start-ups. Most of the funding is awarded through "open" calls with no pre-defined thematic priorities. Support from the EIC goes beyond funding as all beneficiaries receive access to a range of tailor-made EIC Business Acceleration Services. The EIC consists of three different support strands:

EIC Pathfinder offers support for scientific, technological, or technology-oriented research and development in the earliest stages of development and research con-sortia (TRL 1-4). Each project can receive up to €4 million.

EIC Transition funds innovative activities of SMEs, start-ups and spinoffs, research organisations and universities or small consortia that go beyond experimental proof of the principle in the laboratory (validation) with TRL 4-6. Each project can receive up to €2.5 million.

EIC Accelerator supports single companies' innovations in later stages of development (TRL 6-9). Each project can receive a grant of up to €2.5 million and additional max. €10 million of equity investments, coaching, networking & mentoring.

STEP Scale Up supports single startups and SMEs, small mid-caps, investors on behalf of eligible companies. The investment component for scaling strategic technologies up of Europe entails between €10million and €30 million.

Each year, the EIC publishes a work programme, with the EIC Work Programme 2025 being currently in place.

[57] European Innovation Council: https://eic.ec.europa.eu/about-european-innovation-council_en (last access 26.02.2025)

Call for proposals

The Pathfinder, Transition and Accelerator provide "Open" funding, which can support technologies and innovations in any field. In the case of the Pathfinder and the Accelerator, the Open funding is complemented by a set of "Challenges" which target specific technologies and innovations of strategic interest for the Union

- EIC Pathfinder: The deadline for the open funding is on 21 May 2025. The deadline for the Challenge funding is on 29 October 2025. This includes the challenges: **Waste-to-value devices: circular production of renewable fuels, chemicals and materials** and **Waste-to-value devices: circular production of renewable fuels, chemicals and materials**.
- EIC Transition: The deadline for the Open funding is on 17 September 2025 and has no predefined thematic priorities.

EIC Accelerator: Short applications for the Open funding can be submitted at any time for full applications the deadline is on October 1, 2025. The EIC Challenge includes **Biotechnology driven low emission food and feed production systems,** which aims at decreasing the environmental footprint of

the food production system.[58] Another relevant EIC Challenge is the **Breakthrough innovations for future mobility,** which focuses on reducing mobility-related emissions.

Support tools

EIC FAQs: overview of the most asked questions from the EIC applicants and beneficiaries.

Advisory services

Reach out to your HE National Contact Point or to Access 2 EIC network supporting EIC applicants.

[58] EIC Accelerator Challenges. Available online: https://eic.ec.europa.eu/eic-funding-opportunities/eic-accelerator/eic-accelerator-challenges-2025_en (last access 03.04.2025)

European Institute of Innovation and Technology (EIT)

Total programme budget 2021-2027

€3 billion

Participating countries

+ third countries associated to HE + other third countries

Thematic priorities

- Urban Mobility
- **Climate Change**
- Cultural & Creative Sectors
- Digitisation
- Future of Food
- Health Innovation
- **Sustainable Energy**
- **Added-Value Manufacturing**
- **Raw Materials**

General description

As part of Pillar III "Innovative Europe", the European Institute of Innovation & Technology (EIT) primarily aims to strengthen sustainable innovation ecosystems across Europe, foster the development of entrepreneurial and innovation skills and bring new solutions to global societal challenges to the market.

It brings together organisations across business, education, and research to find and commercialise solutions to pressing global challenges. For each global challenge,

there is an ecosystem of partnerships called Knowledge and Innovation Communities (KICs). There are currently nine KICs that operate in the areas of climate change, cultural & creative sectors & industries, digital transformation, sustainable energy, food, health, raw materials, urban mobility and added-value manufacturing.

EIT Climate-KIC

The EIT Climate-KIC is Europe's leading climate innovation agency and community which has the purpose of turning climate ambitions into actions. It works to transform the place people live and work through investor, teams and open calls collaboration, thus creating pathways to upstream solutions through Circular Economy Innovation Clusters. Considering the impact it might have on energy transition, this EIT is involved in net zero city projects, which aims at accelerating European cities towards climate neutrality.

EIT InnoEnergy

EIT InnoEnergy is a Knowledge and Innovation Community that has become the world's largest sustainable energy innovation ecosystem. Its aim is to industrialise clean tech innovation to enable and grow a global net-zero economy. They invest in companies in early stages, and the current and future workforce, building resilient clean tech value chains, driving sustainable economic growth. They thus manage to speed up the energy transition through the combination of knowledge of different sectors like education, industry, finance, the public sector, etc.

EIT Manufacturing

The EIT Manufacturing is a 2019 established manufacturing community aiming to enhance people's lives through sustainable manufacturing practices and promoting sustainable innovation across Europe. The organisation considers the integration of ethics and circularity as key for the future of manufacturing in Europe. Concerning the energy transition, EIT Manufacturing has several open calls, one of them focused on Energy Transtion. The BoostUp! East 2025 aims at gathering companies with new energy solutions to improve efficiency and reduce the environmental impact.

EIT RawMaterials

The EIT RawMaterials connects the biggest knowledge and innovation communities in Europe, with the aim of overcoming innovation challenges, access funding opportunities and upskill and train talent. Among other crucial aspects, the EIT RawMaterials provides Strategic and Financial advice in alignment with EU objective that support energy transition and green energy achievement and at the same time secure raw materials sector.

Call for proposals

Open calls can be viewed in each of the EIT's single web sites, checking here. Considering the aforementioned EIT's, the following open calls can be seen:

EIT Climate-KIC

Online Capacity Building Programme for European Based Entrepreneurship Support Organisations (ESOs): Deadline 02.05.2025

ClimAccelerator 2025: Deadline 31.12.2025

EIT InnoEnergy

Just considering the ones of which the Deadline is known:

Educational Technology Platforms and Solutions for InnoEnergy Skills Institute: Deadline April 18, 2025

Online Advertising Compaign Agency: Deadline April 18, 2025

EIT Manufacturing

Teaching Factories Competition 2025 Call for Industrial Challenge Owners: Deadline April 7, 2025

Discover Vienna: Manufacturing Edition 2025: Deadline April 11, 2025

BoostUp! East 2025 – Energy Transition: Deadline April 11, 2025

INDUSAC Open Call for Students and Researchers: Deadline April 15, 2025

EIT RawMaterials

Jumpstarter 2025: Proposals must be registerd by:

- April 2, 2025, for idea submisson
- May-June, 2025, for Online Bootcamps
- June-July, 2025, for Pitch day
- July-October, 2025, for the Local Joint Training
- November, 2025, for the Grand Final
- December, 2025, for the Start-Up Launch

Tapojärvi Open Innovation Challenge 2025: Proposals must be registered by:

- February 6, 2025, for Challenge Launch
- March 31, 2025, for Application closing
- To be announced online event
- October 27, 2025, for the Final Kemi Snowcastle Event

ERMA Booster Call: Proposals must be registered by:

- March 24, 2025, for cut-off 1
- May 26, 2025, for cut-off 2
- September 8, 2025, for cut-off 3

Call for RIS Projects: Proposals must be registered by:

- January 17, 2025, for cut-off 1
- February 28, 2025, for cut-off 2
- May 30, 2025, for cut-off 3
- August 29, 2025, for cut-off 4
- November 28, 2025, for cut off 5

European Innovation Ecosystems (EIE)

Total programme budget 2021-2027

€~527 million

Participating countries

+ third countries associated to HE

Thematic priorities

EIE thematic priorities are linked to "key EU priorities"[59]. These are:[60]

- Competitiveness
- Security and Defence
- European Social Fairness
- Quality of life
- Democracy and values
- Global Europe
- EU budget and reform

Call for proposals

- The **Eurostars** funding programme call opened on 10 January 2025 and has just recently closed on 13 March 2025. Future calls for proposals will be published here.
- Two recent **CONNECT** calls were closed in early September. Future calls for proposals will be published here
- **Innowwide's** last call for market feasibility projects was opened on 23 July 2024 and closed on 15 October 2024. Information on the call is provided here.

Partner search & networking

Partner search is offered through the call website on the Funding and Tenders portal for each call. Also, the national funding body can help you to find project partners by contacting other national funding bodies in Eureka's network (consisting of over 45 member countries).

General description

As part of the Horizon Europe programme, the European Innovation Ecosystems aims 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. In this context, one can also mention the Regional Innovation Valleys that were created after a call in 2023.

[59] European Innovation Ecosystems (EIE) (2024): https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2023-2024/wp-10-european-innovation-ecosystems_horizon-2023-2024_en.pdf (last access: 10.04.2025).

[60] Conference of the Future of Europe (2025): https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/new-push-european-democracy/conference-future-europe_en#final-reports-and-proposals (last access: 10.04.2025).

Types of topics funded

Calls for proposals are divided into two focus areas. 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. In addition, the **European Partnership on Innovative SMEs/EUROSTARS-3** supports innovative SMEs to increase their research and innovation capacity and productivity as well as to access new markets by offering Eurostars and Innowwide funding.

EUROSTARS funding

Eurostars is a funding instrument that supports innovative SMEs and project partners (large companies, universities, research organisations and other types of organisations) by funding international collaborative R&D and innovation projects. **By participating, organisations can access public funding for international collaborative R&D projects in all fields.** To apply, several criteria must be fulfilled, for instance:

- The project consortium needs to be led by an innovative SME from a Eurostars country[61] and is composed of at least two entities that are independent of one another.
- The project consortium includes entities from at least two Eurostars countries with at least one organisation coming from an EU or Horizon Europe Associated Country[62].
- The budget of the SMEs from the participating countries (excluding any subcontracting) is 50% or more of the total project cost.
- The project duration is 36 months or less.

The amount of funding your organisation receives when you participate in a project is managed by your national funding body.

INNOWWIDE funding

Innowwide provides 6-month grants of €60,000 to assist innovative small and medium-sized enterprises (SMEs) in evaluating the feasibility of their research or business aspirations in global markets. In other words, Innowwide funding could be used to assess whether your local partner (or subcontracted organisation) can cooperate with you in a future international R&D project or to understand whether your product-, process- or service-market combination could be commercialised in selected target market.

Innowwide funding is available only for SMEs in EU27 Member States or Iceland, Israel, Norway or Türkiye. However, you are allowed to subcontract to your partner in your selected target country in Africa, the Americas, Asia or Oceania.

Subcontracted partners sign a commitment before you submit your project application. To stay updated on open calls for projects, please follow the Eureka website.

[61] Eurostars countries: Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Türkiye, and the United Kingdom.

[62] Eurostars countries which are not an EU member state or a Horizon Europe Associated Country: Canada, South Korea, Singapore, South Africa, Switzerland, and the United Kingdom.

LIFE Programme: close-to-market projects

Total programme budget 2021-2027

~€5.4 billion[63]

Participating countries

Four relevant LIFE subprogrammes

- Climate Change Mitigation and Adaptation
- Circular Economy and Quality of Life
- Clean Energy Transition
- Nature and biodiversity

Call for proposals

Every year the EC publishes LIFE calls for proposals. Applicants for close-to-market projects can apply in both abovementioned areas. An overview of call for anticipated submission deadlines and proposals for 2025 is provided here and looks as follows:

- Standard Action Projects (SAPs) for **climate change mitigation and adaptation**: Deadline date: 23 September 2025
- Standard Action Projects (SAPs) for **circular economy and quality of life**: Deadline date: 23 September 2025
- Coordination and Support Action Grants (CSA) for clean energy transition sub-programme: Deadline date: 23 September 2025
- Coordination and Support Action Grants (CSA) for clean energy transition sub-programme: Deadline date: 23 September 2025

Support tools

- Dedicated page on support for applicants
- Materials from EULife23 INFO DAYS
-

Advisory services

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 close-to-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.

[63] European Commission (2025) https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/life2027 (last access 26.02.2025).

Relevant topics funded included reductions in CO2 emissions, business coaching as well as up- and reskilling and many more. To get inspired, find more examples of completed close-to-market LIFE projects here.

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

Total programme budget between 2021-2027

~€84million

Participating countries

Thematic priorities

Strand 1

Technologies for net-zero emissions and critical raw materials

Strand 2

Tourism

Aerospace & Defence

Retail

Digital

Creative-cultural industry

Textiles

Proximity/Social economy

Construction

Energy-intensive industry

Electronics

Agri-food

Renewable Energy

Mobility-Transport

Health

Call for proposals

The first Euroclusters call, with a budget of €42 million was published in 2021.[64] A second Euroclusters call, with an additional €42 million budget, was published in 2024.[65] The deadline to submit a proposal for this call was 5 February 2025.

General description

As part of the European Single Market Strategy, the Euroclusters 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 Euroclusters calls foresee to enable cluster organisations to speed up twin transition processes and to improve up- and re-skilling of the skilled workers as well as the increase internationalisation. In September 2022, the first 30 Euroclusters have started their activities. In 2024, a new call has opened, with 16 new Euroclusters selected and starting to operate in 2025, with eight Euroclusters focusing on technologies for net-zero emissions and critical raw materials. The maximum project duration is 36 months. Each project can receive up to approximately €2.625 million in funding.

[64] European Commission (2025): https://eismea.ec.europa.eu/funding-opportunities/calls-proposals/joint-cluster-initiatives-euroclusters-europes-recovery_en (last access 28.04.2025)

[65] European Commission (2025): https://eismea.ec.europa.eu/funding-opportunities/calls-proposals/joint-cluster-initiatives-euroclusters-europes-recovery-smp-cosme-2024-cluster_en#details (last access 28.04.2025)

Types of topics funded

The focus of the new Euroclusters is divided into two strands. The first strand focuses on technologies for net-zero emissions and critical raw materials, while the second strand covers other value chains within or across the 14 EU Industrial Ecosystems. Projects may only address one of the two strands.

Consortium Structure

Eurocluster consortia must consist of at least three cluster organisations from at least three different EU Member States. Additionally, the consortium must include at least one partner from a less developed region to ensure balanced participation and support regional innovation.

Target audience

Eurocluster projects primarily support cluster organisations and cluster networks, with a strong focus on SME support. At least 75% of the grant must be allocated to SMEs through Financial Support to Third Parties (FSTP), which is limited to activities directly contributing to the project's main objective.

Additional information

More information can be found on the dedicated Eurocluster website on the ECCP.

INTERREG Europe

Total programme budget 2021-2027

€379 million

Participating countries

Topics

- **Smarter Europe**
- **Greener Europe**
- More connected Europe
- More social Europe
- Europe closer to citizens
- Better regional governance

Call for proposals

There is currently one call concerning the NEXT-Mediterranean Sea Basin (NEXT-MED) programme. It consists of a call from green transition projects, supporting energy efficiency, circular economy and climate adaptation among other things. The budget amounts to €83.7 million, with an application deadline of 15 April 2025. More information can be found here.

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 a series of EU funding programmes of interregional cooperation 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
- Digitisation
- SME competitiveness
- S3, industry and entrepreneurship
- Digital connectivity

Greener Europe:

- Energy efficiency
- Renewable energy
- Smart energy systems
- Circular economy
- Climate change

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

Advice services

Please see a list of national contact points

INTERREG specific programmes

INTERREG has four types of programmes: cross-border, transnational, interregional and outermost regions.[66] Concerning cluster organisations, it is primarily among the two first types where the focus should be set. First, Interreg cross-border cooperation, known as **Interreg A**, supports cooperation between NUTS 3 regions from at least two different Member States lying directly on the borders or adjacent to them. The goal is to solve shared challenges in border areas, create new growth opportunities and strengthen partnerships to support balanced development across Europe. Secondly, Interreg transnational cooperation, 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. To find the right programme that covers geographical area of your interest, please visit a dedicated portal with all Interreg programmes.

[66] Interreg (2025): https://interreg.eu/about/types-of-programmes/ (last access 09.04.2025)

Interreg Baltic Sea Region (2021-2027)

Total Programme Budget:

ERDF co-financing: €250.9 million (Norwegian co-financing: €1.9 million) [68]

Participating Countries

Thematic Priorities:

Innovative Societies: 1.1. Resilient economies and communities, 1.2. Responsive public services

Water-Smart societies: 2.1. Sustainable waters, 2.2. Blue economy

Climate-neutral societies: 3.1. Circular economy, 3.2. energy transition, 3.3. smart green mobility

Cooperation governance: 4.1. Project platforms, 4.2. Macro-regional governance

Call for Proposals

A call for small projects opened on the 25th of March. For more information concerning next calls, please check this link.

General Description:

This programme focuses on striving towards a green and resilient Baltic Sea region. The objective is to bring together cultures, perspectives and expertise to get the best ideas and joint solutions, to jointly drive the transition to a green and resilient region make people's life better.

Three aspects describe the value statement of the Programme: 1) Supporting transition: to create sustainable framework conditions in the Baltic Sea region, supporting the transition towards greener and more resilient societies and economies. 2) Customer Orientation: the Programme is demand driven and support public authorities in meeting the needs of their target groups 3) Transfer of knowledge and capacity building: Important component of transnational activities in all policy objectives.

Specific objectives of the thematic priorities:

1. Innovative Societies:

1.1. Resilient economies and communities

Resilience is understood as the ability to respond to external unwanted disturbances. The programme encourages actions that help to avoiding, withstand and recovering from them. Objectives are to:

- Strengthen European identity
- Increase innovation
- Adapt S3
- Adjust innovation ecosystems
- Untap digitalisation
- Consider uneven territorial development

[68] Interreg Baltic Sea Region (2025): https://interreg-baltic.eu/wp-content/uploads/2022/04/2023.02.10_IBSR_Programme-document_SUMMARY.pdf (last access 09.04.2025).

1.2. Responsive public services

Support of actions that improve organisational set-ups and processes to respond to public needs and deliver less bureaucratic and more cost-efficient public services. Objectives are to:

- Deliver sound services
- Harmonise systems and standards
- Develop solutions responsive to change
- Apply emerging digital technologies
- Promote service providers-community interactions
- Develop across sector and borders public responses

2. Water-Smart societies:

2.1: Sustainable waters

Supporting actions to improve water quality and a more sustainable management. Objectives are to:

- Adapt existing solutions to prevent water pollution
- Adapt water management practices to the changing climate
- Implement cross-sectoral actions

2.2: Blue Economy

Support actions concerning the sustainable use of fresh and sea waters as well as marine resources in innovative business development. Objectives are to:

- Encourage blue business actions
- Facilitate sea space joint use to mitigate conflicts
- Strengthen blue businesses resilience
- Mitigate blue businesses impact on climate change

3. Climate-neutral societies

3.1: Circular Economy:

Promote the shift from linear to circular resource use, keeping products and materials in use for longer time while connecting to water, energy, transport and land use. Objectives are to:

- Create and promote circular environments
- Redefine S3
- Create business opportunities for environmental benefits
- Untap digitalisation
- Mind uneven territorial effects

3.2: Energy transition: Actions promoting the decarbonisation of energy systems to reduce greenhouse gas emissions, increase energy efficiency and increase renewables energy production. Objectives are to:

- Adapt policies
- Increase renewables distribution
- Coordinate plans and share solutions
- Mobilise industries and citizens to adapt energy solutions

3.3: Smart green mobility: Ensuring well-functioning cross-border green mobility systems, that ensure smooth movement of people and goods in an across urban and rural areas while saving resources, integrating different transport modes and accelerating digitalisation. Objectives are to:

- Harmonise mobility systems across borders
- Mobilise transport companies and citizens to use smart green solutions
- Support public authorities in introducing smart green solutions and reducing air pollution in cities

4. Cooperation governance:

4.1: Project platforms:

Support cooperation of EU-funded projects, which bring the results of various projects from different EU funding programmes to stakeholders in the Baltic Sea region in a structured way. They show how the different results complement each other, making use of synergies across EU funds. Objectives are to:

- Synthesise and interlink project solutions relevant for the region
- Help public authorities access project results
- Communicate and transfer solutions to broader target groups
- Target public authorities, pan-Baltic organisations and EUBSR stakeholders

4.2: Macro-regional governance:

Actions that implement and strengthen governance and communication activities in the EU Strategy for the Baltic Sea Region (EUSBSR), which may facilitate policy discussions and trigger policy changes. Objectives are to:

- Support EUSBSR policy areas in implementing their policy areas and engaging with stakeholders
- Provide national coordinators assistance to the national coordinators of the EUSBSR
- Encourage EUSBSR and non-EU countries strategies synergies

Partner Search:

If you seek partners to support your project idea, please check the dedicated partner search platform.

Advisory Services:

Should you need any further assistance please see contact point offered on the webpage.

Types of Grants:

Should you be interested in knowing more about funding, check the following link.

Interreg Germany-Denmark

Total Programme Budget:

€93,8 million[69]

Participating Countries:

Thematic Priorities (Priority or Key Areas):

Innovative Region: Innovation strengthening SMEs, start-ups, and research cooperation (and more)

Green Region: Green Transition, supporting climate-friendly initiatives and sustainable resource use (and more)

Attractive Region: Labour Market & Education, enhancing job opportunities and vocational training (and more)

Functional Region: Culture & Tourism – Promoting cross-border cultural exchange and tourism development (and more)

Call for Proposals

Call for new proposals has not yet been registered for this Interreg Programme. Nonetheless, updates can be followed on this website.

General Description:

Supported by the ERDF, this programme focuses on strengthening cross-border collaboration between Germany and Denmark by bringing cultures, perspectives and expertise together, to get the best ideas and solutions. In total, 11 programme partners, two Danish regions and nine German cities and districts from Schleswig-Holstein, participate in the programme. Focus areas to this initiative understand economics, employment, education, tourism and culture.

Further Details concerning the Thematic Priorities (Priority or Key Areas):

Each Priority or Key area has one or several specific objectives:

1. An Innovative Region:
   Specific objective 1: Development and expansion of research and innovation capacities and the introduction of advanced technologies

2. Green Region:
   Specific objective 1: Development of smart energy systems, grids and storage systems outside the trans-European energy network (TEN-E)

   Specific objective 2: Promoting climate change adaptation and disaster resilience, including ecosystem-based approaches

   Specific objective 3: Promoting the transition to a resource-efficient and circular economy

[69] Interreg Germany Denmark (2025): https://www.interreg-de-dk.eu/en/ (last access 09.04.2025).

3. Attractive Region:
   Specific Objective 1: Enhancing equal access to inclusive and high-quality education, training and lifelong learning services by developing accessible infrastructure, including by fostering the resilience of distance and online education
   and training and education

   Specific objective 2: Strengthening the role of culture and sustainable tourism in economic development, social inclusion and social innovation

4. Functional Region:
   Specific Objective 1: Improving the efficiency of public administration bodies by promoting their legal and administrative cooperation and cooperation between citizens, civil society actors and institutions, with the aim of removing legal and other obstacles in border regions

   Specific Objective 2: Building mutual trust, by promoting cooperation between citizens.

Partner search & networking:

If you seek partners to support your project idea, please check the dedicated matchmaking site.

Advisory services:

Should you need any further assistance, check the contact list in this link or contact this e-mail: **info-interreg@rsyd.dk**

Types of Grants:

Funding from the European Union through the European Regional Development Fund (ERDF) granted to this programme.

Interreg North-Sea

Total Programme Budget:

€158 million

Participating Countries:

Thematic Priorities:[70]

- **Robust and smart economies**
- **Green transition**
- **Climate resilience, biodiversity & pollution**
- Better governance

Call for Proposals:

Call for new proposals has not yet been registered for this Interreg Programme. Nonetheless, updates can be followed in this website.

General Description:

This Programme brings people together across borders from the 7 participating countries. The programme is mainly dedicated to support its stakeholders and ensure the programme is well developed and performed. The main intention is to fund ideas, that make the North Sea Region a more sustainable and inclusive place for its citizens. These might concern the just transition to put an end to fossil fuels, as well as energy poverty, ensuring biodiversity, green and inclusive mobility, etc.

Further details concerning the Thematic Priorities:

1. Robust and smart economies: this aspect focuses on supporting a resilient economy that is the backbone of a green, dynamic North Sea Region where no one is left behind. A sound economy is the basis for stable employment and peace of minds for citizens. Specific objectives are 1) Developing and enriching research and innovation capacities and the uptake of advanced technologies 2) Developing skills for smart specialisation, industrial transition and entrepreneurship.

2. Green transition: Most countries involved in this Programme act as world class leaders in green energy transition, which puts the region in a very good position to foster development in this field. Specific objectives understand 1) Promoting energy efficiency & reducing greenhouse gas emissions, 2) Promoting renewable energy, 3) Promoting smart energy systems, storage and grids, 4) Promoting the transition to a circular economy 5) Promoting sustainable multimodal urban mobility.

[70] Interreg North Sea (2025): https://www.interregnorthsea.eu/about-us (last access 09.04.2025)

3. Climate resilience, biodiversity & pollution: The Programme supports actions that soften and reverse pollution, degrading ecosystems and extreme weather. Specific objectives are to 1) Promote climate change adaptation and disaster risk prevention, resilience, considering eco-system-based approaches 2) Enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas and reducing all forms of pollution

4. Better governance: Allowing a birds-eye perspective on the whole sector, the programme supports multi-level governance enabling joint strategizing and planning. This priority sets a special focus on marine governance and land-sea interactions. The only specific objective it considers is 1) Better governance.

Partner search and networking:

If you search partners to support your initiatives and ideas, check this website.

Advisory services:

Should you ned any further assistance, check this website or send an email to the following email address: info@interregnorthsea.eu

Type of Grants:

The Interreg North Sea Programme operates two types of projects. Small- and regular-scale projects. The former receives a €500.000 grant, while the latter receive a €2 to €6 million grant.[71]

[71] Interreg North Sea (2025): https://www.interregnorthsea.eu/project-type#:~:text=The%20Interreg%20North%20Sea%20Programme%20operates%20with%20two,on%20the%20purpose%20and%20scope%20of%20your%20idea (last access 09.04.2025)

Other intergovernmental funding for innovation

Vanguard Initiative (ADMA focus)

The Vanguard Initiative, launched in 2014, is a network of 39 European regions (also from Danube Region countries), 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 market-uptake of new products and innovations in Europe.

The Vanguard Initiative is currently focused on thematic interregional **Pilot Projects** 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 here.

The most relevant pilot project domain in this context is **"Advanced Manufacturing for Energy Related Applications in Harsh Environments" (ADMA)**. Led by Italian regions Emilia-Romagna and Lombardia, ADMA takes advantage of its member regions (Asturias, Basque Country, Dalarna, Flanders, Friuli Venezia Giulia, Lombardia, Małopolska and Scotland), posing a specialised offshore technologies ecosystem. Cluster organisations, research institutions, advanced manufacturing base in marine renewables and wider offshore and subsea energy applications are also part of this initiative.[72]

EUREKA cluster calls

EUREKA 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 EUREKA cluster programme and the EUREKA network projects.

[72] ADMA (2025): https://www.s3vanguardinitiative.eu/pilots/advanced-manufacturing-energy-related-applications-harsh-environments (last access 09.04.2025)

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 low-carbon energy and advanced manufacturing. The focus of EUREKA clusters should be on close-to-market community activities. The average project budget is around €6.75 million, and calls follow the bottom-up approach. Upcoming calls will be published on the EUREKA website or national partner websites.

Besides the EUREKA cluster calls, the EUREKA Network projects offer funding for R&D projects in international cooperation consortia. The average costs per project are in average around €1.34 million. The final deadline for the EUREKA Network projects is 31 December 2025.

05

Private funds for innovative business initiatives

EUROPEAN CLUSTER COLLABORATION PLATFORM

Strengthening the European economy through collaboration

5. Turn your project idea into practice: private funding for innovative business initiatives

The recently published 2024 edition of the European Innovation Scoreboard shows that the EU's innovation ecosystems are progressing, but global competitors – China in particular – are catching up quickly. While the EU performs strongly on indicators such as doctoral graduates, international scientific co-publications, public sector R&D expenditure, and the share of SMEs introducing product innovations, it is looking more stagnant when it comes to private sector R&D expenditure, public-private co-publications, the collaboration between innovative SMEs and trademark applications.[73]

It is therefore **paramount to intensify private sector R&D investments**, public-private research collaboration, innovation collaboration among SMEs and the translation of research into commercially valuable intellectual property rights. Clusters are the right place to make this happen - not only since they can promote the use of private funding and provide relevant contacts (e.g., business angel networks, corporate venture capital), thereby specifically supporting smaller companies, but also established companies that need to be taken to the next level of development.

This chapter will give an overview of private funding opportunities and how they relate to innovation activities. It will thereby focus mainly on energy transition and lay a special emphasis on the Danish context.

- The first part will then provide an overview of different sources of private funding for innovative businesses in the AI development for industrial applications centred on equity and debt financing. It will also point to business support services that help these firms to network and find markets for their products.
- The second part gives a short glimpse on the support coming from the EU for the activities of private financing actors, mostly in the form of co-financing and guarantees through the EIB and EIF.

[73] European Commission (2024): Press release on the 2024 edition of the European Innovation Scoreboard (EIS). Available online: https://ec.europa.eu/commission/presscorner/detail/en/ip_24_3666 (last access 28.02.2025); see also Greenacre, Martin; Francica, Eleonora (2024): Innovation report delivers 'wake-up call' for Europe. Science Business. 10.07.2024. https://sciencebusiness.net/news/horizon-europe/innovation-report-delivers-wake-call-europe (last access 14.04.2025).

Overview: Sources of private funding and business support services

Sources of (external) private financing for innovative businesses can be divided into equity and debt. Equity comes in different forms and from a range of different actors. This chapter covers the most important variants for innovative businesses, including venture capital, corporate venture capital, business angels and family offices. Furthermore, debt financing through bank loans, still the dominant form of business financing in the EU, will be covered in the second part of this overview.[74] Finally, the third part gives a short summary of available business support services facilitating the acquisition of financing for innovation projects.[75]

Equity financing

Equity financing means to raise capital by selling ownership stakes (equity) in a company to investors. In exchange for their investment, shareholders become partial owners of the business and may receive a portion of its profits or have voting rights in decision-making. There are **different sources of equity financing**, including venture capital firms, corporate venture capital, business angels, as well as family offices.

General market intelligence on private equity and venture capital actors can be consulted at the following sources:

- **InvestEurope**, the European private equity association, provides data and reports on fundraising, investment and divestment from over 1,800 private equity and venture capital firms in Europe.
- **Dealroom**, a market intelligence provider with a focus on European venture capital, monitors startup and venture capital developments and provides reports, briefings and other materials.
- Further recent insights into the European investment landscape can be found in the annual **State of European Tech** report.
- **The Danish investors' association** provides comprehensive information on the Danish capital market.

[74] Hobza, Alexandr et al. (2022): The financing of innovation. Quarterly R&I literature review 2022/Q2. Directorate-General for Research and Innovation. Available online: https://research-and-innovation.ec.europa.eu/system/files/2022-09/ec_rtd_quarterly-ri-review_022022.pdf (last access 14.04.2025).

[75] For more information in the context of Denmark, see the Ministry of Foreign Affairs of Denmark guide on opening a business in Denmark.

Venture capital

Venture capital is generally expected to play a crucial role in the commercialisation of innovative technologies and product ideas. Venture capital 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. Venture capital firms that are focused on specific sectors or innovation ecosystems can also provide valuable support beyond funding, including business strategy guidance, mentorship, and network connections.

Although venture capital certainly plays its role in financing innovative young businesses, it also comes with some limitations that are worth keeping in mind.[76] Those limitations derive from the typical business model of venture capital 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. Recently, however, venture capital funds are increasingly focussing on deep tech – a development that is actively supported by the European Commission.[77] In general, within each sector, start-ups that focus on scalable technologies are best positioned for venture capital investment.

The European venture capital landscape has been developing dynamically over the last decade, although the size of venture capital investment flows as a share of GDP is still far behind the US and banks remain the dominant providers of capital for the moment. Within the EU, Denmark's venture capital investment reached approximately €240.7 million in 2024, about a quarter of the investment volume in France (€1 billion), one-eighth of Germany (€2 billion), while being close to the investment volume in Italy (€267 million).[78]

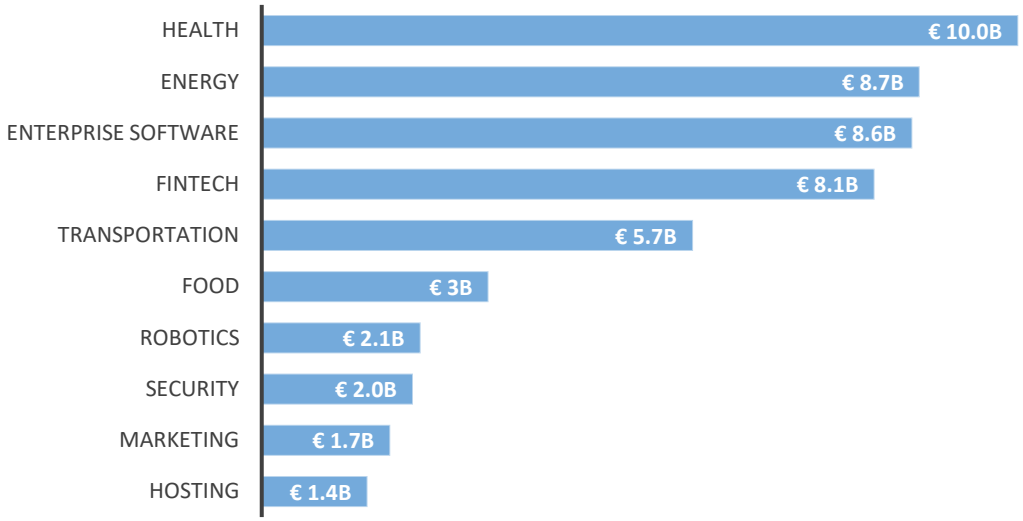
As shown in Figure 8, health, fintech, energy, and enterprise software are the leading industries in venture capital investment in Europe (2024). The energy sector attracts the second highest level of funding, reflecting the growing importance of investments in energy transition and the importance of clean technologies in reducing carbon emissions. Additionally, the transportation sector is also receiving significant venture capital investments, focusing on developing sustainable and smart transportation solutions that integrate clean technologies to enhance efficiency, reduce emissions, and promote greener mobility options.

[76] For a more general evaluation of venture capital's role in financing innovation, see Lerner. J. & Nanda, R. (2020): Venture Capital's Role in Financing Innovation: What We Know and How Much We Still Need to Learn, Journal of Economic Perspectives, 34:3, 237-61. Available online: https://www.aeaweb.org/articles?id=10.1257/jep.34.3.237 (last access 14.04.2025).

[77] European Commission (2024): Commission announces first steps towards a network of VC investors in deep-tech innovation. Directorate-General for Research and Innovation. Available online: https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/commission-announces-first-steps-towards-network-vc-investors-deep-tech-innovation-2024-06-13_en (last access 14.04.2025).

[78] Dealroom (2025): Europe. Available online: https://dealroom.co/guides/europe (last access 14.04.2025). Note: Data for 2024.

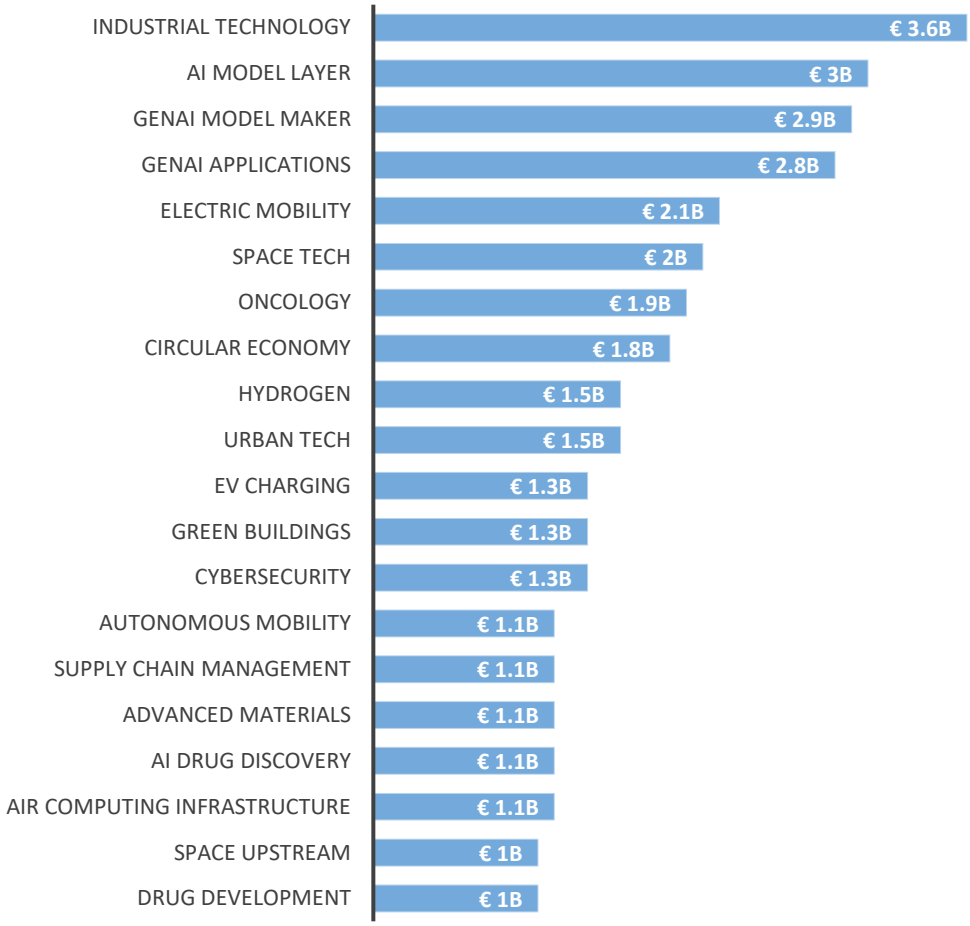
Figure 8: Industries by venture capital investment in Europe, 2024



Source: ECCP (2025), own elaboration based on Dealroom data. Note that the figures have been converted from USD to EUR using the ECB currency converter's exchange rate of 7 March 2025.

Looking at technology-specific venture capital investments, Figure 9 illustrates the growing importance of sustainable technologies. Leading the charge are significant investments in electric mobility and hydrogen, which are vital components of the clean energy transition, promoting lower emissions and alternative energy sources. The circular economy also garners substantial funding, emphasizing the critical role of recycling and resource efficiency in energy sustainability. Areas such as urban tech and EV charging infrastructure receive notable attention, facilitating smart energy solutions that integrate digitalisation for improved efficiency. Additionally, green buildings and advanced materials are prioritised for their contributions to energy efficiency and waste reduction, underscoring the shift towards a more sustainable built environment. Cybersecurity remains a crucial investment area, necessary for safeguarding these evolving infrastructures.

Figure 9: Technology segments by venture capital investment in Europe, 2024



Source: ECCP (2025), own elaboration based on Dealroom data. Note that the figures have been converted from USD to EUR using the ECB currency converter's exchange rate of 7 March 2025.

Corporate Venture Capital

A specific form of venture capital is provided by established, large companies in the form of corporate venture capital (CVC).[79] 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 is gaining importance across sectors in Denmark, as Danish corporations look to invest in startups and innovation to complement their core business activities and to achieve goals such as accessing innovative technologies, gaining insights into emerging markets, and fostering a culture of innovation within their organisations

[79] See also Siota, J.; Alunni, A-; Riveros-Chacón, P.; Wilson, M. (2020): Corporate Venturing: Insights for European Leaders in Government, University and Industry. European Commission, Joint Research Centre, Publication Office of the European Union, Luxembourg. Available online: https://publications.jrc.ec.europa.eu/repository/handle/JRC119084 (last access 14.04.2025).

- Danish CVCs typically focus on sectors that align with national strengths and priorities, such as renewable energy, life sciences, information technology, and sustainability.
- Danish corporate venture capital players across sectors include for example Novo Group venture capital arm Novo Holdings (life sciences and biotech), the leader in renewable energy Ørsted Ventures, which invests in startups developing clean energy solutions, or Maersk Growth (logistics).

Business Angels & Family Offices

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 overcoming the 'valley of death' and navigating the challenges of developing and commercialising innovative sustainable technologies. Family offices are entities that manage the wealth of wealthy families. Some family offices invest in startups and venture capital as part of their investment portfolio.

- Danish business angels are organised in the Danish Business Angels Network (DanBAN). Entrepreneurs looking for investment and support can register to be listed at the website.
- Family offices, a growing phenomenon in Denmark, are also becoming more structured and networked as they seek to manage wealth, investments, and family affairs effectively. For example, the Nordic Family Office Summit held in 2024 brought together family office professionals from across the Nordic countries, including Denmark, to discuss investment strategies, share insights, and explore collaboration opportunities.[80]
- On the European level, business angels are organised in the European Business Angels Network (EBAN) and Business Angels Europe.

Debt financing

Debt financing in the form of loans, credit lines or – more recently – quasi-equity is important for businesses that want to scale up their production, modernise and digitalise their structures, or bring new products to the market.

- The most recent round of the Survey on the Access to Finance of Enterprises (SAFE) in the euro area, conducted by the ECB on 20 November 2024 and 18 December 2024 and focussing on SMEs, shows positive developments regarding access to bank loans over the two quarters.[81]

[80] SEB (2024): Inspiring exchange of experiences at the Nordic Family Office Summit https://sebgroup.com/press/news/2024/inspiring-exchange-of-experiences-at-the-nordic-family-office-summit (last access 10.04.2025).
[81] ECB (2025): Survey on the Access to Finance of Enterprises in the euro area. Fourth quarter of 2024. January 2025. Available online: https://www.ecb.europa.eu/stats/accesstofinancesofenterprises/pdf/ecb.safe202501~e940f53e7c.en.pdf (last access 14.04.2025).

- While borrowing costs were exceptionally high in 2023[82], by mid-2024 European companies enjoyed significantly lower borrowing costs over their US competitors.[83] At the same time, European businesses expect the availability of external financing to improve further.[84]
- Under these improving conditions, financing innovation projects through bank loans becomes more feasible again after a difficult phase of rising interest rates. This is supported by the ECB's latest decision to lower its key interest rates by 25 basis points as of 12 March 2025.[85]
- Access to bank financing further increases for small firms that receive a public innovation subsidy.[86]

Business support services

Business support services, in a broad sense, for both startups and established SMEs are provided by a variety of actors.

- The Danish Growth Fund is a government-backed investment fund that supports small and medium-sized enterprises through financing options like loans, equity investments, and guarantees.
- The Innovation Fund Denmark provides Danish companies funding for innovative projects and research initiatives, supporting companies in developing new technologies and solutions.
- The Danish Business Authority is the actor responsible for promoting business development and offering support services related to starting and running a business, including regulatory guidance and digital services.
- On the European level, the European Institute for Innovation and Technology's (EIT) 'communities' focused on 'global challenges', such as EIT Digital, EIT InnoEnergy or EIT Urban Mobility are organising different stakeholders around their innovation ecosystem and regularly collaborate with private investors to organise networking and matchmaking events with startups and young enterprises. EIT offices, community hubs and members can be discovered via the EIT ecosystem map.
- Specific support for startups and companies in the energy transition sector is offered, for example, by EIT InnoEnergy in the form of industrial transformation company builder. This initiative aids entrepreneurs in addressing the growing demand for decarbonisation by aligning with the core pillars of sustainability, growth, and sovereignty

[82] Kraemer-Eis, Helmut et al. (2023): The European Small Business Finance Outlook 2023. EIF Research and Market Analysis. Working Paper 2023/96. Available online: https://www.eif.org/news_centre/publications/eif_working_paper_2023_96.pdf (last access 14.03.2025).
[83] Healy, Euan (2024): 'Reverse Yankee' deals boom as Europe's low borrowing costs lure US groups. Financial Times. 17.05.2024. Available online: https://www.ft.com/content/b5260974-be06-4e56-a792-1b07b20de4cc (last access 14.03.2025).
[84] ECB (2025): Survey on the Access to Finance of Enterprises in the euro area. Fourth quarter of 2024. January 2025. Available online: https://www.ecb.europa.eu/stats/accesstofinancesofenterprises/pdf/ecb.safe202501~e940f53e7c.en.pdf (last access 14.04.2025).
[85] See https://www.ecb.europa.eu/press/pr/date/2025/html/ecb.mp250306~d4340800b3.en.html (last access 10.03.2025).
[86] Chiappini, Raphael et al. (2022): Can direct innovation subsidies relax SMEs' financial constraints? Research Policy 51:5. Available online: https://www.sciencedirect.com/science/article/abs/pii/S004873332200021X (last access 14.04.2025).

The role of EU support for private funding

The EU provides a range of important instruments (see also Chapter 3) to finance innovation, expansion, and modernisation in startups and SMEs, also within cluster organisations. Next to direct grants, loans or – most recently – direct equity investment, a large part of EU funding is earmarked to back up and facilitate private investment.[87] The European Commission also acts to facilitate matching processes and provide information about access to finance.The European Investment Bank (EIB) is a key financing partner for SMEs and mid-caps as well as for startups. The EIB supports businesses through loans for on-lending and partial portfolio guarantees to banks, advisory services with a broad range of assistance to urban and regional development. Mid-cap companies can receive direct support for R&D investments. An adjacent line of financing is provided through venture debt for SMEs and mid-caps developing highly innovative technologies, solutions or platforms. According to the latest report, EIB Group activity in Denmark in 2024 was up by 48% from the previous year at €2.1 billion.[88]

The European Investment Fund (EIF) is the EU's provider of risk finance to 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. It facilitates SMEs' access to finance in cooperation with a wide range of financial intermediaries and backs up banks and guarantee institutions active in SME lending with portfolio and counter-guarantees. This way, by effectively reducing the risk for private investors, clusters are further supported and incentivised to allocate funds to SMEs within their networks.

Cluster organisations can play an important role in attracting private funding by leveraging EU support to highlight regional strengths and opportunities. This involves coordinating with regional stakeholders to showcase the potential for innovation and growth within the cluster. By highlighting success stories and showcasing the potential for achieving significant returns, clusters can position themselves as attractive investment destinations. The European Commission contributes to this by facilitating matching processes and providing information about access to finance, which is crucial for cluster organisations seeking to attract private investors. Cluster organisations can use these resources to connect SMEs with venture capitalists and other private investors who are looking for sustainable investment opportunities, particularly in sectors such as energy transition.

In conclusion, the EU's role in facilitating private funding through mechanisms like the EIB and EIF, combined with strategic efforts by cluster organisations to capitalise on these resources, is essential in drawing private investment. By creating transparent, innovative, and collaborative environments, clusters can effectively attract SMEs and private funding, fuelling further growth and innovation.

[87] See also https://single-market-economy.ec.europa.eu/smes/funding-and-support_en (last access 09.04.2025).

[88] EIB (2024): EIB Group investment in Denmark 2024. Available online: https://www.eib.org/en/press/all/2025-035-2024-marks-year-of-record-high-eib-group-investment-in-denmark (last access 09.04.2025).

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https://www.eif.org/news_centre/publications/eif_working_paper_2023_96.pdf (last access 14.04.2025).

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The Progress Playbook (2024): How Denmark and Estonia became the world's climate action leaders (last access 17.04.2025).

Annex

Table 1: Overview of cluster organisations in Denmark and their main addressed EU industrial ecosystems

No.	Cluster organisation	Assigned main Industrial Ecosystem
1	BigScience.dk	Aerospace & Defence
2	CenSec	Aerospace & Defence
3	CLEAN	Renewable Energy
4	Copenhagen Fintech	Digital
5	DAMRC	Energy Intensive Industries
6	Danish Life Science Cluster	Health
7	Danish Materials Network	Renewable Energy
8	Danish Sound Cluster	Creative & Cultural Industries
9	Dansk Center for Lys (Danish Lighting Center)	Energy Intensive Industries
10	DigitalLead	Digital
11	Energy Cluster Denmark	Renewable Energy
12	Filmby Aarhus	Creative & Cultural Industries
13	Food & Bio Cluster Denmark	Agri-food
14	Indo Nordic Innovation Cluster	Health
15	InnoBYG[89]	Construction
16	Lifestyle & Design Cluster	Creative & Cultural Industries
17	MADE - Manufacturing Academy of Denmark	Energy Intensive Industries
18	Maritime & Logistics Innovation Denmark - MARLOG	Mobility-Transport-Automotive
19	Maritime Cluster Copenhagen North[90]	Mobility-Transport-Automotive
20	Medicon Valley Alliance	Health
21	Odense Robotics	Energy Intensive Industries
22	WE BUILD DENMARK	Construction

Source: ECCP (2025).

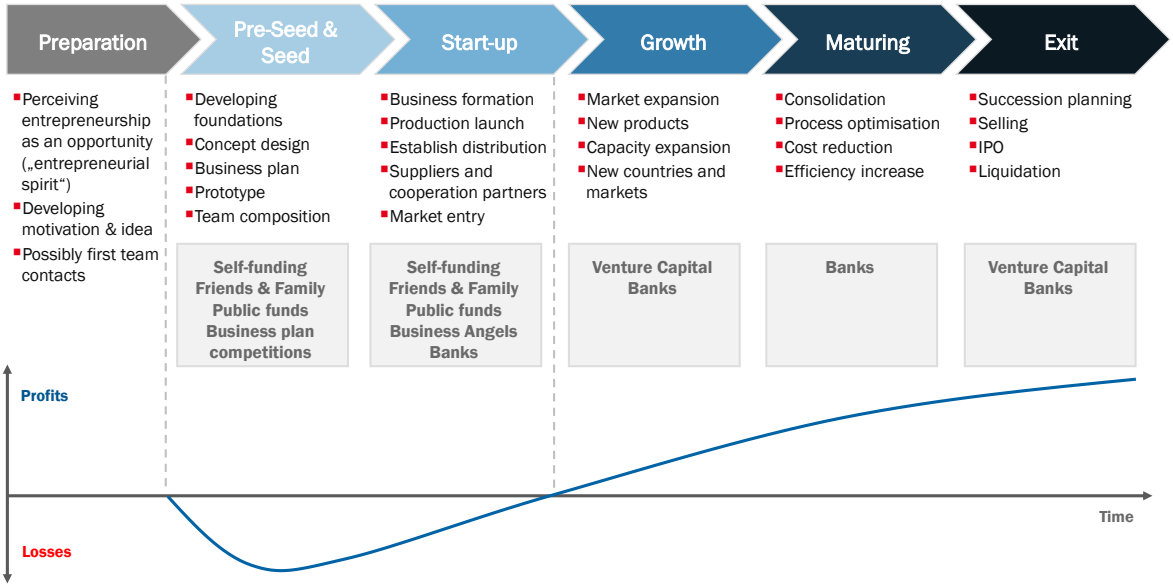
[89] Even though the cluster organisation is still profiled on the ECCP, InnoBYG does not seem to be active anymore.
[90] Even though the cluster organisation is still profiled on the ECCP, Maritime Cluster Copenhagen North does not seem to be active anymore.

Financing innovation: The European Valley of Death

There is a yawning gap between Europe's world-class research and inventiveness and its sluggish commercialisation of innovation. Startups 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.[91]

The Valley of Death occurs in the stage after initial funding (e.g., from public funds or business angels) ends before institutional investors like banks and venture capital are ready to support the market expansion of proven and market-ready products (see Figure 10).

Figure 10: Start-up life cycle and financing



Source: Own elaboration by Prognos (2025).

The Valley of Death is, however, not only experienced by start-up entrepreneurs but also by SMEs and their partners looking for external funding for innovation projects. Financing an innovation project from the start to its commercialisation is a challenge and it can take multiple interlocking streams of funding – public and private – to deliver it.

[91] European Patent Office & European Union Intellectual Property Office (2019) and Siota et al. (2020), p. 16.