SustainX

D3.1 Interregional investment ecosystem mapping report

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

SustainX

Deliverable Information

D3.1 Interregional investment ecosystem mapping report			
Work Package:	WP3 - Innovation Investments Projects		
Lead partner:	TUIASI		
Author(s):	Lidia Alexa, Cristina Baghiu, Laura Lorenzo Brito, Michaela Dineva, Georgia Lalou, Agnese Kore, Cristina Varvaruc		
Due date:	28/02/2026		
Version number:	1.0	Status:	Final
Dissemination level:	Public		

Project Number:	101184410	Project Acronym:	SustainX
Project Title:	SustainX: Fostering Sustainable Digital Innovation Investment		
Start date:	1 January 2025		
Duration:	24 months		
Call identifier:	I3-2023-Cap2b		
Topic:	I3-2023-CAP2b		

Revision History

Revision	Date	Contributor(s)	Description
0.1	23.09.2025	Lidia Alexa (TUIASI), Cristina Baghiu (DIZ), Cristina Vărvăruc (DIZ)	Deliverable structure
0.8	14.01.2026	Lidia Alexa (TUIASI), Laura Lorenzo Brito (FSCT), Michaela Dineva (ARC Fund), Georgia Lalou (iED), Agnese Kore (LTC)	Deliverable content

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

		Cristina Vărvăruc (DIZ)	
1.0	27.02.2026	Lidia Alexa (TUIASI), Cristina Baghiu (DIZ)	Deliverable review

Disclaimer

Executive Summary

The aim of this deliverable is to provide all necessary information related to the management of the project and the quality plan. These include the governance of the project with all related roles and responsibilities, the means, and processes to execute the day-to-day activities, the communication within the consortium as well as with external stakeholders and Digital Transformation Accelerator DTA, the quality assurance plan and risk management.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

SustainX

Table of Contents

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

1. SUMMARY

Deliverable D3.1 provides a structured mapping and comparative assessment of the investment ecosystems across the SustainX partner regions: Romania (North-East), Bulgaria, Canary Islands (Spain), Greece, and Latvia.

The objective of the report is to identify the main actors, financial instruments, sectoral priorities, and investment pathways that shape SME development and innovation scaling, and to assess interregional complementarities that can support cross-border investment cooperation under SustainX.

2. GENERAL DESCRIPTION OF THE ECOSYSTEM

Across all five regions, the investment ecosystems share several structural characteristics. Public funding mechanisms—particularly EU-supported instruments—constitute the backbone of innovation financing. Early-stage support schemes, grant funding, and co-financed R&D programmes are widely available and play a decisive role in SME development. Venture capital and private equity are present but unevenly developed, with stronger activity in digital and technology-oriented sectors and more limited engagement in hardware-intensive or early-stage deep-tech fields.

Romania's North-East region demonstrates a technology-intensive and sustainability-oriented ecosystem, supported by active academic institutions and growing venture capital presence.

Bulgaria combines strong EU co-financed instruments with increasing corporate investment and supplier-chain upgrading, particularly in ICT, advanced manufacturing, and clean technologies.

The Canary Islands reflect a service-driven economy with tourism as a structural pillar, complemented by emerging GreenTech, ICT, circular economy, and energy initiatives.

Greece presents a mixed ecosystem with strong service-led SMEs and growing digital, agri-food, and healthcare innovation activity.

Latvia's ecosystem is predominantly micro-enterprise-driven, with strong thematic focus on sustainability, mobility, green technologies, and digital transformation.

Despite differences in maturity and sectoral focus, all ecosystems demonstrate increasing alignment with European priorities related to digitalisation, green transition, circular economy, and industrial modernisation.

Key Stakeholders and Ecosystem Structure

- The mapping identifies five core stakeholder categories common across all regions:
- Government and public sector entities, responsible for policy design, regulatory frameworks, and management of national and EU funds.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

- Private sector actors, including SMEs, corporate anchors, and innovation adopters.
- Financial institutions, such as commercial banks, national development funds, venture capital funds, and guarantee mechanisms.
- Academic and research institutions, contributing to knowledge creation, skills development, applied research, and technology transfer.
- Support networks, including clusters, innovation hubs, accelerators, chambers of commerce, and advisory services.

While these actors exist in all regions, the intensity of collaboration and integration varies. In most cases, ecosystems remain partially fragmented, particularly at later stages of scaling and internationalisation. SustainX is therefore positioned as a coordination and integration mechanism, strengthening cross-border connectivity and facilitating structured interregional cooperation.

Regional Investment Pathways

The report identifies common regional investment pathways structured along four main stages:

1. Early-stage support (incubation, mentoring, small grants, innovation vouchers).
2. Prototype and pilot validation (R&D grants, EU co-financed schemes).
3. Scaling and growth financing (equity, quasi-equity, loans, blended finance).
4. Market expansion and internationalisation support.

Early-stage instruments are generally well-developed in all regions. However, access to later-stage scaling finance remains more constrained, especially for hardware-intensive, circular economy, or industrial innovation projects. Venture capital ecosystems are emerging but selective, with stronger activity in digital sectors compared to manufacturing or sustainability-driven innovations.

The mapping also highlights connections between existing programmes and instruments, identifying opportunities for better coordination, particularly in cross-border validation, investor matchmaking, and structured funding pipelines.

Interregional Investment Opportunities

The interregional analysis reveals several high-potential thematic corridors suitable for structured cooperation:

- Responsible and trustworthy AI for SME digital transformation.
- Circular economy systems with traceability and verified environmental impact.
- Sustainable materials and industrialisation in construction, packaging, and textiles.
- Industry 4.0 robotics, automation, and IoT integration.
- Digital health systems and AI-enabled clinical productivity.
- Smart mobility, fleet optimisation, and environmental monitoring.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

These themes are supported by complementary sectoral strengths across partner regions and align with EU priorities related to the Green Deal, digital transition, resilience, and competitiveness.

The report also provides an overview of relevant EU funding instruments and identifies SME-friendly and cascade funding opportunities. A recommended interregional funding pipeline is proposed to facilitate coordinated project development and joint investment initiatives under SustainX.

SME Portfolio and Alignment with SustainX

The mapped SME portfolio across all regions is predominantly composed of micro- and small enterprises with strong innovation intensity and increasing sustainability integration. Many SMEs demonstrate validated prototypes, pilot deployments, or early commercial traction. Commonly requested support services include:

- Research and technology partnerships.
- Testing and validation environments.
- Business consultancy and scaling support.
- Financial advisory and investor access.
- Matchmaking and ecosystem connectivity.

These needs confirm the importance of structured, value-chain-based interregional collaboration mechanisms.

The report confirms that the SustainX partner regions possess complementary investment ecosystems with strong alignment to European digital and green transition objectives. While structural differences exist in financial maturity and private capital depth, all regions demonstrate growing innovation capacity and strategic readiness for cross-border cooperation. Digitalisation emerges as a transversal backbone across ecosystems, while circular economy, industrial automation, digital health, AgriTech, mobility, and sustainable tourism represent sectoral pathways for interregional scaling.

The mapping exercise provides both a diagnostic overview of current investment landscapes and a strategic foundation for the next phases of SustainX, supporting coordinated interregional investment initiatives, pilot validation activities, and access to EU funding instruments.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

2.1. Romania

The North-East Region of Romania is one of the country's largest and most populous development regions, strategically positioned at the EU's eastern border. Comprising the counties of Bacău, Botoșani, Iași, Neamț, Suceava, and Vaslui, the region plays a growing role in national and European innovation dynamics, particularly in sectors such as ICT, agri-food, bioeconomy, health, advanced manufacturing, and creative industries. Anchored by strong academic centres—most notably in Iași—the region benefits from a dynamic entrepreneurial base, an expanding SME community, and increasing engagement in European-funded programmes.

In recent years, the regional investment landscape has evolved significantly, driven by EU Cohesion Policy funds, national recovery instruments, and emerging private capital initiatives. The North-East Regional Development Agency (ADR Nord-Est), together with universities, research institutes, clusters, chambers of commerce, and business support organisations, has contributed to strengthening the innovation ecosystem and improving access to finance for SMEs and start-ups. At the same time, the region continues to address structural challenges related to private investment density, scale-up financing, and the internationalisation of innovative enterprises.

This section provides a structured overview of the regional investment ecosystem, beginning with an analysis of the overall investment landscape, available financial instruments, and funding flows. It then identifies and describes the key stakeholders shaping the ecosystem, including public authorities, financial intermediaries, innovation support actors, and private investors. Finally, it presents a mapping of the ecosystem, highlighting the interconnections, support mechanisms, and investment pathways that define the region's capacity to foster sustainable growth and innovation.

Together, these elements offer a comprehensive understanding of the North-East Region's investment environment and its potential to contribute to interregional cooperation, smart specialisation priorities, and long-term sustainable development within the European context.

A. Overview of the investment ecosystem

The North-East Region, with a population of approximately three million inhabitants, represents one of Romania's most dynamic and diverse economic areas. Its economy is built upon a balanced mix of manufacturing, agri-food, wood processing, information technology and communications (IT&C), and health and pharmaceutical industries, while benefiting from its strategic position on the eastern border of the European Union, adjacent to Ukraine and the Republic of Moldova.

According to the *Regional Development Agency North-East* (adrnordest.ro), the 2021–2027 Regional Development Plan and the Smart Specialisation Strategy highlight five key transformation pillars[#]:

- Digitalisation and Industry 4.0, aiming to strengthen SME competitiveness and technology adoption;

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

- Smart manufacturing and circular economy, focusing on innovation-driven industrial transformation;
- Health and well-being, supporting medical research, biotechnologies, and pharma production;
- Agri-food innovation, promoting value-added and sustainable agricultural models;
- Eco-innovation and green transition, encouraging clean energy, recycling, and resource efficiency.

The Digital Innovation Zone (EDIH), headquartered in Iași, plays a central role in the region's digital transformation. It acts as a catalyst for innovation by supporting small and medium-sized enterprises (SMEs) in their adoption of digital and artificial intelligence technologies—particularly within manufacturing and smart health sectors. Through its "test-before-invest" facilities, expert mentoring, and access to funding and digital skills programs, the hub provides end-to-end support for companies seeking to innovate and scale their operations.

In close collaboration with universities, research centers, and private sector partners, the Digital Innovation Zone contributes to the consolidation of the North-East Region as an emerging innovation ecosystem, aligning local initiatives with European objectives for sustainable growth, resilience, and digital leadership.

Key investment types: identify the types of investments that are most relevant (e.g., foreign direct investment, venture capital, public-private partnerships).

The North-East Region offers a diverse range of investment opportunities supported by its evolving industrial base, growing innovation ecosystem, and strategic cross-border location. Investment activity is primarily concentrated across foreign direct investment (FDI), venture capital (VC), and public–private partnerships (PPP), each contributing to different stages of the regional development cycle.

1. Foreign Direct Investment (FDI)

The region attracts FDI particularly in **manufacturing, automotive components, electronics, and IT&C**, driven by competitive labor costs and a well-educated workforce. Multinational companies such as **Lear Corporation, Amazon, Aumovio, Endava, Borg Warner** operate in the area, leveraging the skilled talent pool and logistical advantages offered by Iași as the regional hub. Recent infrastructure and industrial park developments have further improved conditions for greenfield and brownfield investments. According to a report from the North-east Development Agency, in 2023, there were 12.758 foreign companies located in the region. The value of foreign direct investments in the North East region in 2022 was EUR 2,951 million[#].

2. Venture Capital and Innovation Finance

With the expansion of the local innovation ecosystem, **venture capital and seed investments** are gaining traction, particularly in **ICT, healthtech, edtech, and green innovation**. The **Digital Innovation Zone (EDIH)**, **Rubik Hub**, and university-based entrepreneurial societies (e.g., SAS TUIASI) play a catalytic role in connecting startups

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

with investors, accelerators, and EU innovation funding instruments (Horizon Europe, EIC Accelerator, and national FDI programs). These mechanisms are nurturing a new generation of scalable technology ventures.

3. Public–Private Partnerships (PPP)

PPPs are increasingly relevant for **infrastructure, smart city development, renewable energy, and health sector modernization**. The regional authorities and municipalities actively promote collaboration with private investors for projects in **energy efficiency, waste management, digital infrastructure, and industrial park development**. Through the **Regional Development Agency North-East**, access to EU structural funds complements private co-financing, offering hybrid investment models that balance risk and innovation.

Parcul Științific și Tehnologic TEHNOPOLIS (Iași) - Tehnopolis is the main science and technology park in the North-East Region, created to support innovation, technology transfer, and the development of knowledge-based industries. Located in Iași, it brings together research institutions, universities, tech companies, and startup support structures. Tehnopolis strengthens Iași's position as the main innovation and tech hub in Eastern Romania. Key roles and features:

- Hosts technology-oriented SMEs and startups (IT, engineering, electronics, biotech).
- Provides office, production, and R&D spaces.
- Closely connected to "Gheorghe Asachi" Technical University and other academic partners.
- Offers incubation services, consultancy, and support for accessing EU funds.
- Acts as a bridge between academia and industry through technology transfer activities.

Parcul Industrial Ceahlău (Neamț) - The Ceahlău Industrial Park is a designated industrial area aimed at attracting investors and supporting local manufacturing and logistics activities. It provides infrastructure, utilities, and industrial land for companies seeking to expand operations in Neamț County. The park contributes to the reindustrialization and economic diversification of Neamț County. Key roles and features:

- Hosts companies in manufacturing, metalworking, machinery, construction materials, and logistics.
- Provides ready-to-use industrial infrastructure with access to key transport routes.
- Offers fiscal incentives and streamlined administrative support for investors.
- Supports the revitalization of the county's industrial sector.

Incubatorul de Afaceri pentru IMM-uri Botoșani (Botoșani) - The Business Incubator for SMEs in Botoșani is a dedicated facility aimed at supporting entrepreneurship, startup development, and SME growth. It offers accessible spaces and advisory services for early-stage companies. A key instrument for stimulating entrepreneurship and local

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

economic development in one of Romania's less industrialized counties. Key roles and features:

- Provides offices and production spaces with subsidized rent.
- Offers mentoring, business consultancy, and support in preparing funding applications.
- Encourages the creation and consolidation of new enterprises.
- Focuses on sectors such as services, light manufacturing, agri-food processing, and digital activities.

4. Cross-Border and Cluster-Based Investments

Given its proximity to the Republic of Moldova and Ukraine, the region also benefits from **cross-border cooperation programs (Interreg NEXT, RO–UA–MD)** that stimulate innovation and enterprise partnerships. Industrial and innovation clusters — in **ICT, wood processing, textiles, and agri-food** — serve as vehicles for joint investment and technology transfer, reinforcing competitiveness across regional value chains.

Key sectors: highlight priority sectors for investment, such as technology, manufacturing, green energy, and infrastructure.

Green Energy - Renewable hydrogen hubs (e.g., "hydrogen valleys")

- Wind & solar energy expansion
- Bioeconomy in forestry
- Clean tech manufacturing
- Grid integration services
- Storage solutions
- Forest biomass value chains

Manufacturing

- High-tech & smart manufacturing supported by EU cohesion funds
- Focus on electronics, agro-processing | - OEM and component suppliers
- Integration with EU logistics hubs
- Skills development in automation

Infrastructure

- Upgrading transport corridors (TEN-T) and logistics
- Digital infrastructure (broadband + 5G)
- Industrial parks in Iași, Bacău, Suceava | - Construction materials
- Renewable infrastructure (e.g., green steel, concrete)
- Public-private partnerships

Technology & Innovation

- ICT hubs (Iași is a key digital innovation zone)
- Focus on smart cities, AI, cyber-security
- EU Smart Specialisation Strategy (S3) implementation
- Software services and outsourcing

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

- Research & tech transfer centres
- Digital platforms for e-government & health

Agro-Industrial Development

- Transition from raw agriculture to agro-tech
- Integration of raw materials with food processing
- Cold chain logistics
- Processed food export
- Agri-tech R&D and AI solutions

Regional Value Chain Leverage Points

- **Iași**: IT hub, university-led R&D, strong in digital health and AI.
- **Suceava & Botoșani**: Forestry and bioeconomy potential, renewable energy pilot zones.
- **Bacău & Neamț**: Logistics & transport potential with access to central Romania and Moldova.
- **Vaslui**: Agriculture + agro-processing scaling via EU CAP funds.

Cross-Sector Integration Strategy

- **Green Infrastructure**: Combine renewable energy with upgraded road/rail corridors.
- **Tech in Agri**: Invest in digital agriculture & precision farming startups.
- **Circular Manufacturing**: Focus on reusing materials (especially in construction, cement, bio-packaging).
- **Workforce Upskilling**: Align vocational and university training with regional RIS3 targets.

B. Key stakeholders in the ecosystem

1. Government and public sector entities

1. **National level (Romania-wide investment promotion and enabling policy)**
   - **Romanian Agency for Investments and Foreign Trade (ARICE) – "InvestRomania" function**: national body dedicated to supporting and advising foreign investors and promoting Romania's business offer internationally (FDI attraction, facilitation, investor support). (arice.gov.ro)
   - **Ministry-level structures responsible for the national investment climate** (regulation, incentives, competitiveness and EU-funded instruments). In practice, investors interface with central authorities for fiscal/aid schemes, national programmes and policy alignment; ARICE/InvestRomania acts as a key "front door" for FDI facilitation. (imm.gov.ro)

2. **Regional level (North-East development governance and investment facilitation)**
   - **North-East Regional Development Agency (ADR Nord-Est)**: the core regional public-utility body managing the **North-East Regional Programme 2021–2027**,

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

providing support to beneficiaries to convert project ideas into successful investments and coordinating regional development planning. (adrnordest.ro)

- **Invest North-East (within ADR Nord-Est)**: the regional contact point for foreign investors, offering assistance and consultancy for international companies seeking to implement investment projects in the North-East region. (adrnordest.ro)
- **Consiliul pentru Dezvoltare Regională Nord-Est (CDR Nord-Est)**: the regional decision and coordination structure (representing counties/municipalities) that supports regional development priorities and governance connected to investment programming. (adrnordest.ro)

3. **County level (investment enabling through local public administration)**

- **County Councils (Consiliile Județene)** in **Bacău, Botoșani, Iași, Neamț, Suceava, Vaslui**: key public actors for investment enabling through county strategies, infrastructure priorities, industrial/innovation initiatives, and support for local economic development (often via dedicated development/strategy departments and EU-funds units). The county level is also represented in regional governance through CDR Nord-Est. (adrnordest.ro)

4. **Local level (municipalities and city halls as "frontline" for investors)**

- **City Halls (Primării) and Local Councils**, especially in the main urban poles (e.g., **Iași, Bacău, Suceava, Piatra Neamț, Botoșani, Vaslui**): responsible for local permitting, urban planning, local infrastructure, local tax decisions (within legal limits), and investor relationship management. Major municipalities also participate in the regional governance framework (CDR Nord-Est). (adrnordest.ro)

2. Private sector players

The private sector in the North-East region of Romania is diverse and includes multinational corporations, large domestic firms, SMEs, start-ups, and investment vehicles that contribute to regional economic development, innovation, employment, and value creation. Below are the major private sector players grouped by category.

1. **Multinational Corporations (MNCs)**

Large international companies with operations in the North-East region contribute through investment, employment, and integration into global value chains:

- **Aumovio** – active in automotive components manufacturing and technologies in the region. adrnordest.ro
- **Amazon** – present with investment activities related to logistics/Digital services (e.g., cloud or operational spaces). adrnordest.ro
  Oracle – active in software and IT services with regional operations. adrnordest.ro
- **Conduent** – operating shared services or outsourcing business processes. adrnordest.ro

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

- **Lear Corporation** – invests in automotive supply chain facilities in the region. adrnordest.ro
- **ZF Group** – automotive supplier with operations in the region. adrnordest.ro
- **Phinia Maquinaria Agricola Sola** – international (Spanish) agricultural machinery investor in the region.

2. **Large Domestic Companies and Conglomerates**

Regional leaders that have significant local impact:

- **Roman-Coro / Grup Coro** (industries including wood processing in Suceava)
- **Altex / Media Galaxy partners** (local distribution hubs and logistics)
- **Agribusiness firms** — (e.g., **Agricola Internațional, Avicola Bacău** substructures)
- **Textile & Footwear Industry players** (historical clusters in North-East) supporting manufacturing and export

3. **Small and Medium Enterprises (SMEs)**

SMEs constitute the backbone of the North-East economy across sectors:

Manufacturing & Industrial SMEs

- Mechanical parts suppliers
- Wood and furniture processors
- Textile and apparel makers
- Packaging and industrial components firms

IT & Digital Services SMEs

- Local software houses and digital agencies (Iași, Bacău, Suceava)
- Start-ups focused on custom solutions, web/mobile apps, e-commerce platforms
- Tech service companies supporting digitalization of traditional SMEs

Agri-food SMEs

- Local food processors (dairy, meat, bakery)
- Organic producers and regional brands
- Export niche value-added products

4. **Financial institutions**

3. Financial Institutions Active in the North-East Region of Romania

A. **Commercial Banks (with regional presence)**

These banks provide **credit, investment financing, SME loans, working capital facilities, leasing and related financial services** that support local businesses and investments:

- **Banca Comercială Română (BCR)** – one of Romania's largest banks, part of **Erste Group**, offering commercial banking, corporate finance, investment and SME lending that can serve regional enterprises.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

- **BRD – Groupe Société Générale** – major Romanian bank owned by **Société Générale**, active nationwide including branches in cities of the North-East region (e.g., Iași).
- **ProCredit Bank Romania** – subsidiary of the ProCredit Group, with targeted lending for **small and medium enterprises**, including programs backed by European Investment Fund loan guarantees.
- **Raiffeisen Bank Romania** – one of the largest banks in Romania, part of Raiffeisen Group, active in corporate banking, SME lending, investment financing and tailored business solutions across the North-East region.

Most major Romanian banks operate nationwide, and while their head offices are in Bucharest, they maintain branch networks and SME/ corporate financing services that cover the North-East region.)

B. National Promotional & Investment Financing Institutions

These institutions and funds provide **investment capital, guarantees, and support instruments** that can indirectly benefit regional economic development, including for North-East:

- **Romanian Investment and Development Bank (BID)** – national promotional bank that joined the **Three Seas Initiative Innovation Fund**, committing capital for growth-stage companies and investment financing across Romania, including regional beneficiaries. eif.org
- **European Investment Bank (EIB) / European Investment Fund (EIF)** – through partnership instruments such as the **Multiregional Investment Platform (with ADR Nord-Est)** and EIF-managed equity/ guarantee instruments, financial resources are channelled to business infrastructure, SME finance, and energy efficiency projects. European Investment Bank

These institutions do not have exclusively North-East offices but influence regional investment by **providing instruments, co-financing and guarantees** available through partner banks and regional programmes.

C. Regional Financial Instruments and Funds (via Programs)

While not standalone banks, these instruments provide **capital access for SMEs and investors** in the region through structured finance:

- **Regional Participation Fund (FPR)** – a financial instrument under the **Regional Programmes 2021–2027 (including North-East)** designed to provide equity or quasi-equity finance to SMEs, co-financed by European funds and managed through approved financial intermediaries. regionordest.ro

- **Programul Regional Nord-Est 2021–2027 financial instruments** – the programme supports access to finance (investment grants, repayable assistance, financial instruments for SMEs) targeting regional businesses and investment projects. Oportunitati UE

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

These instruments are accessible via selected banks and intermediaries, expanding the **investment finance ecosystem** beyond traditional lending.

D. Venture Capital and Private Equity (Romania-wide – available to regional startups)

Romania's VC/PE ecosystem, though concentrated in larger hubs, serves potential investors and fast-growing SMEs/startups from all regions, including the North-East:

- **Catalyst Romania** – early-stage and growth VC fund active in Romanian startups. Vestbee
- **Gapminder VC** – venture capital firm supporting digital and tech companies. Vestbee
- **Early Game Ventures** – pre-seed and seed investment firm. Vestbee
- **ROCA X (Rocket Internet / ROCA Group)** – investment vehicle focusing on scalable digital companies. Vestbee
  Gecad Ventures, Hellen's Rock Capital, Smart Impact Capital, Sparking Capital – other notable Romanian VC/PE players that provide equity financing and partnerships potentially accessible to high-growth regional businesses. Vestbee

These firms typically operate nationally and may not be headquartered in the North-East, but regional startups can attract investment through national VC networks.

4. Academic and research institutions

1. Alexandru Ioan Cuza University (UAIC) – Iași

- Oldest and largest university in the region.
- Strong research output across sciences, social sciences, informatics, economics, and engineering.
- Key player in innovation partnerships, doctoral research training, spin-offs and EU research projects.
- Engages with regional industry and innovation networks.

2. Gheorghe Asachi Technical University of Iași (TUIASI)

- Technical and engineering research leader in the North-East.
- Departments in industrial engineering, management, computer science, automation, materials.
- Active in applied research consortia, technology transfer, and partnerships with regional manufacturing and digital industries.
- Houses research labs and participates in EU projects oriented to digital innovation.

3. University of Bacău

- Focuses on economic sciences, engineering, education and social sciences.
- Engaged in regional development projects and collaboration with local industry.

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

4. Ștefan cel Mare University of Suceava (USV)

- Offers wide academic portfolio: engineering, informatics, sciences, social sciences.
- Research activities include ICT, environmental sustainability, materials and manufacturing.
- Engages in regional innovation projects and partnerships.

5. Petre Andrei University of Iași (UPA)

- Private university with programmes in business, law, social sciences.
- Active in applied research, consultancy and skills training relevant for regional SMEs.

6. "Vasile Alecsandri" University of Bacău

- Offers research and education in economic sciences, engineering, health sciences.
- Participates in regional professional development and innovation training for industry.

5. Support networks

The North-East Region of Romania (counties: Iași, Bacău, Suceava, Neamț, Vaslui, Botoșani) benefits from a growing ecosystem of institutions supporting entrepreneurship, digital innovation, technology transfer, and business development. These organizations collectively provide incubation, acceleration, mentorship, legal and financial advisory, training, coworking spaces, and access to funding opportunities.

1. Regional Development & Public Support Organizations

North-East Regional Development Agency (ADR Nord-Est)

- Main coordinator of regional economic development
- Provides access to funding programs, consultancy for SMEs, innovation vouchers
- Operates **Rubik Hub** and other innovation initiatives

Chambers of Commerce and Industry (CCI)

- CCI Iași, CCI Suceava, CCI Bacău, CCI Neamț, CCI Vaslui, CCI Botoșani
- Offer legal advice, export assistance, business matchmaking, professional training, and certification services.

2. Incubators, Accelerators & Innovation Hubs

Rubik Hub (Piatra Neamț) – ADR Nord-Est

- One of Romania's most active startup hubs
- Offers international-level acceleration programs (RubikEDU, Rubik Garage)
- Provides mentorship, community-building, investor connections, coworking space

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Digital Innovation Zone (Iași)

- European Digital Innovation Hub (EDIH)
- Supports companies in digital transformation (AI, cybersecurity, digital skills)
- Provides mentorship, consultancy, testing facilities, access to expert networks

Tehnopolis Iași – Incubatorul de Afaceri

- Business incubator and technology park
- Supports startups through office infrastructure, consultancy, legal advisory
- Hosts companies in IT, engineering, R&D

Incubatorul de Afaceri Mestesugaresc Iași

- Focus on entrepreneurship and craftsmanship-based businesses
- Offers business support, training, and advisory services

Startup City Iași (Municipality Program)

- Provides local support for startups through grants and mentoring
- Connects startups with investors and business mentors

Nord-Est Start-up Accelerator Programs

(Various EU-funded and university-led initiatives)

- Focused on early-stage companies in IT, healthtech, manufacturing, and creative industries
- Provide training, consultancy, and access to networks

3. University-Based Entrepreneurship & Innovation Centers

Universitatea Tehnică „Gheorghe Asachi" din Iași (TUIASI)

- **TUIASI Entrepreneurship & Innovation Center**
- Supports student and researcher-led startups
- Provides mentorship, business planning support, prototyping facilities

Universitatea „Alexandru Ioan Cuza" din Iași (UAIC)

- **UAIC Business Incubator & Transfer Technology Office**
- Legal, financial, and IP assistance for startups
- Programs on entrepreneurship education

Universitatea de Medicină și Farmacie „Grigore T. Popa" Iași

- Innovation initiatives in biotech and healthtech
- Mentorship for medical startups and research commercialization

Universitatea Ștefan cel Mare Suceava (USV)

- Entrepreneurship centers and innovation labs

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

- Support for students in engineering, robotics, and IT

4. Private Sector Support Networks

Venture Capital, Angel Investors & Business Mentors

- **Romanian Business Angels Network (RBAN)** – national but active in NE region
- Independent local investors active in IT and engineering sectors
- Mentorship programs run through Rubik Hub and Digital Innovation Zone

Coworking & Startup Communities

- Fab Lab Iași
- Hub Moldova (Iași)
- Ingenious Hub (Iași)
  These spaces offer mentorship, events, networking, and legal/business advisory.

Professional Services Companies (Local law firms, accounting firms, tax advisors, IP specialists)

- Provide tailored assistance for SMEs and startups: incorporation, compliance, legal contracts, GDPR, IP protection.

5. Sector-Specific Support Networks

Health & Biotech Innovation

- HealthTech Connect Festival (TUIASI ecosystem)
- Partnerships with hospitals and medical technology providers
- Support for startups in medical devices, AI in medicine, and digital health

Digital & Creative Industries

- Regional clusters & associations Digital Innovation Zone, Iconic Cluster (e.g., IT clusters, creative industry groups)
- Mentorship, acceleration activities, hackathons

C. Mapping of the investment ecosystem

Ecosystem structure: how the different stakeholders interact.

Regional investment pathways: from early-stage support (pre-accelerators) to later-stage funding (VCs, institutional investors)

The investment and innovation ecosystem in the North-Eastern Region of Romania is structured as a **multi-layered network** linking public authorities, universities, private companies, financial actors, and support organizations around regional development and smart specialization priorities.

At the **public sector level**, the North-East Regional Development Agency (ADR Nord-Est) acts as the main orchestrator. It coordinates EU cohesion funds, supports smart specialization strategies (RIS3), and connects local authorities, universities, and

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

businesses through regional programs, innovation calls, and development projects. County Councils (Iași, Bacău, Suceava, Neamț, Botoșani, Vaslui) and municipalities complement this by providing local infrastructure, industrial parks, and co-financing for investment projects.

Universities and research institutions—notably TUIASI, UAIC, UMF Iași, USV Suceava, and "Vasile Alecsandri" University of Bacău—act as the **knowledge backbone** of the ecosystem. They supply skilled graduates, applied research, and innovation projects, often working with firms through:

- joint R&D projects,
- technology transfer offices,
- living labs and pilot projects,
- EU-funded consortia (Horizon Europe, Erasmus+, Interreg, I3, etc.).

Private companies (multinationals, local SMEs, and startups) are the **demand side of innovation**. Multinationals such as Continental, Amazon, Conduent, or Delphi bring advanced technologies, global value chains, and high-skill jobs. Local SMEs and startups collaborate with universities for product development, testing, and access to talent, often through applied research contracts or innovation vouchers.

Innovation intermediaries (technology transfer centers, business incubators, clusters, and accelerators) bridge the gap between academia and business. They help:

- identify market needs,
- translate research into commercial solutions,
- prepare startups and SMEs for funding and scaling.

Financial institutions (banks, public funding agencies, venture capital, and EU instruments) provide capital at different stages, while public funding (UEFISCDI, PNRR, Regional Operational Programme, Horizon Europe) reduces risk and enables experimentation.

Overall, the ecosystem functions as a **quadruple-helix model**:

Universities + Government + Industry + Finance,
with innovation projects, startups, and technology transfer initiatives acting as the main points of interaction.

1. Regional investment pathways: from early-stage support to later-stage funding

In the North-Eastern Region, investment pathways typically follow a **progressive funnel**, starting with idea generation and ending with scale-up and market expansion.

1. Idea and pre-seed stage (universities & public support)

This stage is dominated by:

- universities (student projects, research groups),
- innovation labs,

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

- entrepreneurship courses,
- hackathons, bootcamps, and living labs.

Funding sources include:

- small grants (UEFISCDI, Erasmus+, Horizon Europe, PNRR),
- university seed funds,
- local innovation vouchers,
- NGO or EU-funded entrepreneurship programs.

At this stage, ideas are validated technically and conceptually rather than commercially.

2. Pre-acceleration and incubation

Once an idea shows potential, it moves into:

- business incubators,
- accelerators,
- cluster-based programs,
- technology transfer offices.

Here, startups or research teams receive:

- mentoring,
- legal and IP support,
- business modeling,
- early customer discovery.

Typical funding:

- startup grants (Start-Up Nation, PNRR),
- regional innovation calls,
- Erasmus+ and Interreg projects,
- angel investors.

3. Seed and early-stage investment

At this stage, companies begin market testing and first revenues. They access:

- venture capital funds,
- public-private funds,
- innovation-oriented bank loans,
- national and EU equity instruments (e.g., EIC, EBRD-supported funds).

Investors look for:

- validated technology,
- initial traction,
- credible management teams.

4. Growth and scale-up

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Firms that prove product–market fit move toward:

- VC rounds,
- strategic corporate partnerships,
- export financing,
- internationalization programs.

Multinationals in the region often act as:

- clients,
- technology partners,
- acquisition targets or investors.

Banks (including Raiffeisen, BCR, BRD, Banca Transilvania, etc.) become more active once firms have cash flow and contracts.

5. Mature investment and integration in global value chains

The final stage involves:

- larger institutional investors,
- private equity,
- strategic acquisitions,
- EU investment instruments.

Companies integrate into:

- automotive,
- IT,
- manufacturing,
- healthcare,
- digital and sustainability-driven value chains.

The North-Eastern Region supports investment through a **ladder of support**:

Universities → Incubators → Grants & Angels → VCs → Banks & Corporates → International Investors

This structure allows ideas born in academia or local startups to evolve into scalable businesses integrated into European and global markets—especially in digital, manufacturing, sustainability, and healthcare innovation.

2. Connections between existing programs & instruments

The North-East Region benefits from a layered portfolio of support instruments—EU, national, and regional—that collectively shape the "innovation-to-investment" pathway for SMEs. SustainX is designed to **connect these instruments into a coherent investment readiness and interregional scaling pipeline**, reducing fragmentation and helping companies move from technical validation to sustainable, financeable innovation investment projects.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

1. **Regional instruments and platforms (North-East Romania)**

Regional Programme North-East 2021–2027 (PR Nord-Est) and the **Smart Specialisation Strategy (S3/RIS3)** provide the main framework for prioritising investments in digitalisation, smart manufacturing, health, agri-food innovation, and green transition. These instruments typically fund:

- technology adoption and digitalisation for SMEs,
- applied innovation, pilot projects and demonstrators,
- infrastructure (industrial parks, innovation hubs) and business support services,
- innovation vouchers and regional calls aligned with RIS3 priorities.

How SustainX integrates

- SustainX selects and shapes investment projects **aligned with RIS3 priorities**, ensuring that company pipelines can later match eligibility criteria for PR Nord-Est calls and related regional instruments.
- SustainX adds a missing layer: **investment readiness** (TRL validation + ESG integration + investment planning + pitch simulation), so that outputs from regional funding (often "grant-ready") become **investor-ready**.

2. **European Digital Innovation Hubs and "test-before-invest" services**

The **Digital Innovation Zone (EDIH)** and other regional hubs provide:

- test-before-invest facilities (pilots, experimentation),
- mentoring and skills development,
- access to digital experts and technology providers,
- guidance for accessing funding.

How SustainX integrates

- SustainX acts as a **bridge from digital transformation support to investment packaging**. Companies supported by EDIH services can enter SustainX with stronger technical foundations and then progress through a structured pathway toward **bankable investment projects**.
- SustainX also strengthens sustainability as a decision layer, ensuring digital innovation is matched with **ESG/sustainability-by-design**, which is increasingly required by investors and public instruments alike.

3. **National RDI and innovation financing instruments (Romania)**

At national level, innovation is supported through instruments such as:

- **UEFISCDI programmes (PN / PN IV)**: RDI projects, innovation partnerships, technology transfer and applied research services,
- **PNRR components** supporting digital transformation, education, and innovation capacity building,
- national entrepreneurship/start-up schemes and innovation support programmes (e.g., grant-based start-up instruments),

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

- public support for clusters, technology transfer, and university–industry collaboration.

How SustainX integrates

- SustainX can take outputs of national RDI projects (prototypes, validated methods, pilot results) and move them into the **investment planning and market validation** stage.
- SustainX encourages consortia thinking (interregional and cross-sector), making projects more competitive for **follow-on national calls** and EU funding that requires partnerships and scaling logic.

4. **EU research & innovation and scale-up instruments**

For companies with strong innovation potential, the ecosystem connects to:

- **Horizon Europe** (R&I collaborative projects),
- **EIC Accelerator / EIC Transition** (commercialisation and scale-up),
- **EIT KICs** (sectoral innovation communities where relevant),
- **Interreg / cross-border cooperation** (for partnerships and market access),
- EU thematic programmes supporting sustainability, circular economy, digital skills and industrial transformation.

How SustainX integrates

- SustainX functions as a **pipeline builder**: it helps teams convert innovation into structured investment cases that can become competitive applications for **EIC-type instruments** or Horizon consortia.
- SustainX supports **interregional matchmaking**, enabling companies to identify complementary value chains and partners across regions—an advantage for EU calls that reward collaboration and scaling.

5. **Financial instruments, banks, and equity investors**

SMEs typically combine:

- bank financing (working capital, investment loans, leasing),
- guarantees and blended finance channels (often linked to EU instruments),
- venture capital and seed investments (usually Romania-wide networks),
- corporate partnerships and strategic investors (especially where multinationals operate).

How SustainX integrates

- SustainX strengthens the "missing middle" between innovation activity and finance by standardising a pathway for:
  - TRL and validation logic,
  - ESG and sustainability integration,
  - business and investment planning,
  - pitch training and investor simulation,

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

    - market validation and structured feedback.
- This increases the probability that companies can move from **grant dependency** to **mixed financing** (grants + loans + equity) and can engage in credible discussions with investors and institutional stakeholders.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

2.2. Bulgaria

Bulgaria's investment ecosystem is characterised by a predominantly publicly anchored structure, where EU cohesion instruments and national programmes play a central enabling role, while private investment remains selective and sector-concentrated.

The country operates within a dual economic configuration:

- A broad base of traditional sectors (manufacturing, agriculture, services), which generate employment and regional activity but operate largely at low- to medium-technology intensity.
- A narrower but dynamic innovation layer, concentrated primarily in ICT and selected technology niches, with stronger international integration.

This structural configuration shapes the investment ecosystem in two important ways:

1. Demand for upgrading is high, particularly in automation, digitalisation, energy efficiency, and compliance with EU sustainability standards.
2. The capacity to independently finance innovation-driven growth remains limited, especially outside ICT and Sofia-based firms.

As a result, investment flows are typically sequenced rather than continuous: public funding reduces early-stage risk, but transition to private capital and scale-up financing remains fragmented.

Economic Landscape: Context and Investment Implications

Sectoral Structure

Bulgaria's economy is anchored in:

- Manufacturing (machinery, automotive components, electronics, industrial processing)
- Agriculture and agri-food
- Trade, transport, tourism, and business services

Manufacturing firms are strongly integrated into European value chains, often as suppliers. While this integration drives technology upgrading, it also limits domestic value capture in R&D, branding, and commercialization.

Structural characteristics of the investment ecosystem

The Bulgarian investment ecosystem presents the following structural features:

1. Public Funding as Primary Catalyst

EU cohesion policy instruments, national competitiveness programmes, and recovery funds constitute the main entry point for innovation investment. These instruments:

- Support SME digitalisation and technology adoption

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

- Finance applied research and pilot projects
- Strengthen intermediary infrastructure (clusters, DIHs, competence centres)

However, reliance on grants contributes to a project-based innovation culture rather than a pipeline-based investment logic.

The ICT sector represents the most competitive and outward-oriented segment of the economy. Software development, IT services, fintech, and digital outsourcing have attracted foreign clients and early-stage venture capital. However, this segment represents a relatively small share of total economic output.

2. Limited Private R&D and Risk Capital

Private-sector R&D intensity remains below the EU average. Venture capital activity is:

- Concentrated in ICT and software-based models
- Limited in hardware, deep-tech, industrial, or sustainability-oriented innovations

Bank financing is accessible for firms with stable revenues but risk-averse toward early-stage or intangible innovation investments.

This results in a pronounced "missing middle" between innovation activity and growth-stage investment.

3. Territorial Concentration

Innovation capacity is highly concentrated in Sofia and a limited number of urban centres. Peripheral regions exhibit:

- Lower absorptive capacity
- Weaker access to support infrastructure
- Fewer innovation-driven SMEs

This territorial imbalance affects the spatial distribution of investment readiness.

4. Fragmented Commercialization Pathways

Universities and research institutions demonstrate strong participation in EU research programmes. However:

- Technology transfer mechanisms remain underdeveloped
- Industry–academia cooperation is frequently project-based rather than structural
- Few firms transition from R&D grants to scalable commercial investment

This weak continuity between research and finance represents a core ecosystem bottleneck.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Strengths and Emerging Opportunities

Despite structural constraints, the Bulgarian ecosystem demonstrates several enabling assets:

- Strong human capital in ICT and engineering
- Cost competitiveness supporting industrial upgrading
- Active participation in EU programmes (Horizon Europe, Digital Europe, Interreg)
- Growing network of Digital Innovation Hubs and sectoral clusters
- Clear Smart Specialisation Strategy (RIS3 2021–2027) providing thematic prioritisation

Opportunities for investment expansion are strongest where:

- RIS3 priorities are translated into concrete SME investment pipelines
- Innovation support is combined with structured investment-readiness services
- Hybrid public–private financing mechanisms reduce scale-up risk
- Firms integrate into higher-value segments of European value chains

Position within the Interregional Context

Within the SustainX interregional framework, Bulgaria represents:

- A moderate innovator with strong digital niche capacity
- A manufacturing-based economy with upgrading pressure
- A system rich in public instruments but weaker in private capital mobilisation

Its key systemic challenge lies not in the absence of actors or funding instruments, but in the **continuity between innovation support and investment deployment**.

Strengthening this continuity is essential for enabling interregional scaling, investment matchmaking, and value-chain integration under I3 logic.

A. Overview of the investment ecosystem

1. Economic landscape (context, key sectors, strengths, opportunities)

Bulgaria's economic landscape remains largely anchored in **traditional economic sectors**, notably **manufacturing, agriculture, and services**, which together form the backbone of employment and regional economic activity. Manufacturing is characterised by a strong presence of **low- to medium-technology production**, often integrated into European and global value chains as suppliers rather than innovation leaders. Agriculture continues to play a significant role, particularly in rural and less-developed regions, while the services sector—dominated by trade, transport, tourism, and business services—has expanded steadily over the past decade.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

This structure creates a **dual investment reality**. On the one hand, it generates substantial demand for **modernisation, technology upgrading, and productivity enhancement**, particularly through automation, digital tools, energy efficiency, and resource optimisation. On the other hand, it exposes long-standing structural constraints that shape the investment ecosystem: **low levels of private-sector R&D expenditure**, limited engagement of firms in applied research, weak commercialization mechanisms, and a strong concentration of innovation capacity in a few major urban centres—most notably Sofia—leaving many regions with lower absorptive capacity for advanced technologies.

Despite these challenges, Bulgaria has developed a **solid strategic and institutional foundation for investment-led transformation**. The **Smart Specialisation Strategy (RIS3) 2021–2027** provides a coherent national framework for prioritising innovation and investment in domains where Bulgaria has emerging strengths or clear upgrading potential. These include **ICT and digital transformation**, **mechatronics and clean technologies**, **biotechnology and health-related innovation**, **creative and cultural industries**, and **circular and low-carbon solutions**. RIS3 has also strengthened the alignment between EU cohesion funding, national programmes, and innovation policy objectives, improving strategic coherence even if implementation capacity remains uneven.

The ecosystem is further reinforced by a **growing network of digital innovation hubs, clusters, technology centres, and business support organisations**, which increasingly act as intermediaries between policy objectives and firm-level investment decisions. In parallel, Bulgaria has seen the emergence of a **dynamic startup scene**, particularly in **ICT, fintech, and selected clean technology niches**, driven by skilled human capital, cost competitiveness, and access to international markets. While this segment represents a relatively small share of the overall economy, it plays a critical signalling role for innovation-driven investment and entrepreneurial culture.

Bulgaria's **active participation in European programmes**—including Horizon Europe, Interreg, Digital Europe, and long-standing engagement in European Enterprise Network–type cooperation—adds an important external dimension to the investment ecosystem. These programmes facilitate access to **knowledge, international partnerships, experimentation environments, and blended financing mechanisms**, and they help anchor national and regional innovation efforts within broader European sustainability and digitalisation agendas.

Within this context, **investment opportunities are strongest where systemic bottlenecks can be addressed**, particularly:

- **translating RIS3 priorities into scalable SME investment pipelines**, ensuring that pilot projects, demonstrators, and innovation grants evolve into market-ready and financeable investment cases;
- **reducing the "missing middle" between innovation activity and growth-stage investment**, where many firms stall after initial development due to limited commercialization support, risk-sharing instruments, and investment readiness;

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

- **strengthening skills, managerial capacity, and technology absorption**, especially in areas critical for the twin transition such as AI and cybersecurity, circular economy models, and advanced manufacturing.

Addressing these areas is essential for shifting Bulgaria's investment ecosystem from one primarily reliant on grants and incremental upgrading toward a more **integrated, market-oriented and investment-ready innovation system**, capable of supporting sustainable growth and interregional scaling.

2. Key investment types (most relevant for Bulgaria)

The investment ecosystem supporting innovation and sustainable transformation in Bulgaria is characterised by a **hybrid model**, in which **public and EU-backed mechanisms play a dominant enabling role**, while **private investment—particularly venture capital and growth finance—remains selective and uneven**. This structure reflects long-standing systemic constraints identified by ecosystem stakeholders, including **low private R&D intensity**, fragmented support instruments, limited commercialization capacity, and a shortage of scale-up finance for innovation-driven SMEs.

Rather than a mature, market-led investment cycle, Bulgaria's ecosystem currently operates as a **sequenced pathway**, where public funding reduces risk in early and intermediate stages, and private capital enters primarily in niches with clearer market traction (notably ICT and digital services).

3. Public and EU-supported investment (core backbone)

Public programmes and EU funding instruments form the **central pillar of Bulgaria's innovation investment ecosystem**. For a large share of SMEs, these mechanisms represent the **primary entry point into innovation activity**, enabling technology adoption, pilot implementation, and early-stage product or process development.

EU cohesion policy instruments, national competitiveness and innovation programmes, and recovery-oriented funding have been particularly important in:

- supporting **digitalisation and automation** of SMEs;
- enabling **resource efficiency, circular economy, and sustainability-oriented investments**;
- financing **applied research, demonstrators, and pilot projects** aligned with RIS3 priorities;
- strengthening **innovation infrastructure and intermediary capacity** (clusters, hubs, support services).

Given the relatively **limited availability of risk capital**, public and EU-backed funding often substitutes for private investment in the early and mid-stages of innovation. However, this has also contributed to a **grant-dependent model**, where firms successfully implement projects but struggle to transition toward market expansion and private co-financing.

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

4. Corporate investment and supplier-chain upgrading

Corporate investment in Bulgaria is closely linked to the country's role within **European and global value chains**, particularly in manufacturing, industrial services, and export-oriented activities. Investment decisions are frequently driven by **modernisation imperatives**, including:

- automation and process optimisation;
- adoption of digital tools and cybersecurity practices;
- compliance with environmental and sustainability standards;
- improvements in energy and resource efficiency.

For many firms, investment is not framed as innovation per se, but as a **necessary condition to remain competitive**, meet client requirements, and retain access to EU markets. This dynamic is especially visible among SMEs acting as suppliers to larger European manufacturers or service integrators.

While such investments contribute to productivity and resilience, they tend to be **incremental rather than transformative**, unless complemented by targeted innovation support and strategic investment planning. This creates a strong rationale for instruments that can help firms move from compliance-driven upgrading toward **innovation-led investment trajectories**.

5. Venture capital and early-stage private investment (emerging and selective)

Venture capital and early-stage private investment in Bulgaria remain **concentrated in specific segments**, most notably **ICT, software, fintech, and selected digital service niches**. These sectors benefit from relatively low capital intensity, faster market validation cycles, and stronger links to international markets and investors.

Outside these niches, private risk capital is limited, reflecting:

- a **small pipeline of investment-ready scale-ups**;
- weak commercialization pathways from research and pilot projects;
- limited experience among SMEs in engaging with equity investors;
- higher perceived risk in hardware, deep-tech, and sustainability-oriented innovations.

As a result, venture capital plays a **complementary rather than systemic role** in the national investment ecosystem. Many promising innovation projects stall at the transition point between public funding and private finance, reinforcing the need for mechanisms that improve investment readiness and reduce information asymmetries between firms and investors.

6. Public–private partnerships (PPP) and hybrid investment models

Public–private partnerships and hybrid investment approaches are particularly relevant in Bulgaria where **system-level coordination is required** and where purely market-driven solutions are insufficient. This includes:

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

- innovation and skills infrastructure (training centres, digital competence hubs, testing facilities);
- technology adoption and diffusion systems for SMEs;
- large-scale digital and sustainability-enabling investments;
- coordinated implementation of RIS3 priorities across regions and sectors.

PPP-type models allow public actors to **de-risk investments**, align incentives, and mobilise private expertise and capital, while ensuring coherence with policy objectives. In the Bulgarian context, these models are less about large infrastructure projects and more about **enabling frameworks** that support innovation ecosystems, workforce upskilling, and long-term competitiveness.

Overall, Bulgaria's investment ecosystem remains **publicly anchored but increasingly hybrid**, with growing opportunities to crowd in private capital where firms can demonstrate validated technologies, credible growth plans, and alignment with EU sustainability and digital transition priorities. Bridging the gaps between these investment types—particularly between public funding and private finance—remains a critical challenge and opportunity for ecosystem development.

B. Key sectors

1. Priority areas for investment

Bulgaria's priority sectors for investment are closely aligned with the **RIS3 2021–2027 strategic domains** and with the Action Plan's emphasis on accelerating the **twin green and digital transition** through SME upgrading, innovation capacity-building, and market-oriented scaling. These sectors reflect both existing economic strengths and areas where targeted investment can generate productivity gains, higher value-added activities, and improved international competitiveness.

a. Technology and ICT (digital transformation)

The **ICT and digital technology sector** represents one of Bulgaria's most dynamic and internationally connected investment domains. Bulgaria has established a strong position in **software development, IT services, and digital outsourcing**, supported by a skilled workforce, cost competitiveness, and integration into European and global markets.

Investment priorities in this sector increasingly focus on:

- **artificial intelligence and data-driven solutions**, particularly applied AI for industry, services, and public-sector modernization;
- **cybersecurity and digital resilience**, driven by regulatory requirements, supply-chain security, and growing digital exposure of SMEs;
- **cloud-based services and digital platforms**, enabling scalability, interoperability, and remote service delivery;
- **digital innovation management**, supporting firms in structuring digital transformation strategies rather than isolated technology adoption.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

The growing network of **digital innovation hubs (DIHs), clusters, and competence centres** plays a critical role in lowering entry barriers for SMEs, offering testing, advisory, and skills development services. Investment in this sector is therefore not limited to technology providers, but extends to **digital adoption ecosystems** that enable diffusion across traditional industries.

b. Mechatronics and clean technologies (advanced manufacturing / Industry 4.0)

Mechatronics, automation, and clean manufacturing technologies are central to Bulgaria's industrial upgrading agenda. Manufacturing remains a key economic pillar, but much of the sector operates at **low to medium technological intensity**, creating strong demand for investment in **Industry 4.0 solutions**.

Priority investment areas include:

- **automation and robotics** for productivity enhancement and labour shortage mitigation;
- **sensor technologies and smart manufacturing systems** for quality control and process optimisation;
- **resource-efficient production technologies**, reducing material, energy, and water intensity;
- **digital integration of production systems**, enabling traceability, predictive maintenance, and supply-chain integration.

These investments are particularly relevant for SMEs embedded in European value chains, where compliance with quality, sustainability, and digital traceability standards increasingly determines market access. Strategic investment in this sector can shift firms from cost-based competition toward **technology-enabled differentiation**.

c. Circular economy and eco-innovation

The **circular economy and eco-innovation** sector represents a cross-cutting investment priority, intersecting manufacturing, agri-food, construction, and services. Bulgaria faces structural challenges related to resource efficiency, waste management, and environmental performance, but these challenges also create opportunities for innovation-led investment.

Priority areas include:

- **circular business models** that extend product life cycles, promote reuse, and enable servitisation;
- **waste-to-value solutions**, including recycling technologies and secondary raw material use;
- **eco-innovation in manufacturing**, reducing emissions and material consumption while improving competitiveness;
- **circular agri-food value chains**, linking primary production with processing, packaging, and logistics innovation.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Investment in circular solutions is increasingly driven by **EU regulatory pressure, ESG requirements, and market demand**, making this sector strategically important for both compliance and competitiveness.

d. Energy and resource efficiency

Energy and resource efficiency investments are critical for Bulgaria's industrial transformation and sustainability goals. Rising energy costs, decarbonisation targets, and regulatory requirements are pushing firms to invest in cleaner and more efficient systems.

Priority investment areas include:

- **energy-efficient technologies and systems** in industrial and commercial facilities;
- **low-carbon innovation** linked to production processes and supply chains;
- **integration of clean energy solutions** where they support industrial resilience and cost reduction;
- **resource management systems** that optimise water, materials, and energy use.

Rather than focusing solely on large-scale energy infrastructure, investment opportunities increasingly lie in **firm-level and value-chain-level efficiency solutions**, where returns can be realised through cost savings, risk reduction, and improved ESG performance.

e. Biotechnology and healthcare-related innovation

Biotechnology, health tech, and bioeconomy-related innovation represent emerging but strategically important investment domains. Bulgaria has scientific and human capital strengths in life sciences, chemistry, and medical research, but commercialization pathways remain underdeveloped.

Priority investment opportunities include:

- **health technologies and digital health solutions**, particularly those integrating data analytics, AI, and telemedicine;
- **bioeconomy and applied biotechnology**, including sustainable materials, food, and bio-based products;
- **pharma-related innovation and applied R&D**, especially where linked to EU research collaboration and clinical validation.

Targeted investment in this sector can help bridge the gap between **research excellence and market deployment**, supporting higher value-added activities and international partnerships.

f. Creative and cultural industries (tech-enabled)

The **creative and cultural industries**, when combined with digital technologies, form a growing investment niche with strong spillover effects. Bulgaria has an active community of designers, digital content creators, and creative entrepreneurs, increasingly operating at the intersection of **culture, technology, and tourism**.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Priority investment areas include:

- **digital content and media production**;
- **design-driven innovation and creative services** for other sectors (branding, UX, digital storytelling);
- **technology-enabled cultural and tourism innovation**, enhancing visitor experiences and regional attractiveness.

Although often undercapitalised, this sector offers opportunities for **high-impact, relatively low-cost investment**, particularly when linked to digital platforms, international markets, and regional development strategies.

Overall, these priority sectors illustrate where **investment can act as a lever for systemic transformation**—not only by funding individual firms, but by strengthening value chains, enabling technology diffusion, and aligning economic activity with Europe's sustainability and digital ambitions.

2. Key stakeholders in the ecosystem

Bulgaria's investment ecosystem is shaped by a **multi-level governance structure** combined with a diverse but unevenly connected private and support landscape. Stakeholders interact within a framework strongly influenced by EU cohesion policy, national innovation strategies, and RIS3 priorities, with public actors playing a central orchestration role and private investment still concentrated in specific sectors and regions.

a. Government and public sector entities (policy, funding, regulation, investment promotion)

At **national level**, the public sector defines the strategic and regulatory environment for investment and innovation:

- **Ministry of Innovation and Growth**
  Leads national policy on innovation, entrepreneurship, and competitiveness, and manages major EU-funded programmes supporting SMEs, digitalisation, and innovation investments. It plays a key role in translating RIS3 priorities into funding instruments and calls.
- **Bulgarian Small and Medium Enterprises Promotion Agency (BSMEPA)**
  Acts as a national investment and SME support body, promoting entrepreneurship, export readiness, and access to markets, and supporting internationalisation and investor outreach.
- **Invest Bulgaria Agency**
  Responsible for foreign direct investment (FDI) promotion and investor facilitation, supporting location decisions, administrative coordination, and aftercare services for international investors.

At **regional and local level**, implementation capacity varies significantly:

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

- **Regional Development Councils and Managing Authorities** (for Regional Development Programmes) coordinate EU cohesion funding and support investment projects aligned with RIS3.

- **Municipalities and local authorities** act as frontline actors for investors, providing local infrastructure, permitting, industrial zones, and local incentives. Their role is particularly important for manufacturing, logistics, and place-based investment, but administrative capacity and experience differ widely across regions.

Overall, the public sector provides the **strategic backbone and primary funding leverage**, but coordination between levels remains a critical challenge for scaling investment impact.

b. Private sector players (investment demand, value chains, innovation uptake)

The private sector in Bulgaria consists of a **heterogeneous mix of multinational companies, domestic firms, SMEs, and startups**, each playing a different role in the investment ecosystem.

Multinational corporations (MNCs)
MNCs are key drivers of **FDI, employment, and technology diffusion**, particularly in manufacturing, ICT services, and shared service centres. Their presence anchors Bulgaria in European and global value chains and creates demand for supplier upgrading, skills development, and compliance with digital and sustainability standards.

Large domestic companies and industrial groups
These firms play a stabilising role in regional economies, often acting as **anchor clients or partners** for SMEs. Their investment behaviour is typically incremental and efficiency-driven, but they represent an important channel for diffusion of new technologies and practices.

SMEs
SMEs form the backbone of the Bulgarian economy and the primary target group for innovation and investment support. They are active across manufacturing, services, agri-food, and ICT, but often face constraints related to access to finance, skills, and strategic investment planning.

Startups and scale-ups
The startup ecosystem is most visible in **ICT, fintech, and digital services**, with growing interest in clean technologies and applied innovation. While relatively small in absolute terms, startups play a crucial role in experimentation, entrepreneurship, and attracting early-stage investment.

c. Financial institutions (capital provision, risk sharing, scaling)

Bulgaria's financial ecosystem supporting investment is **bank-dominated**, with equity finance still developing.

Commercial banks
Major banks (operating nationwide) provide:

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

- investment loans,
- working capital,
- leasing and guarantee-backed products for SMEs.

Banks are active once firms demonstrate cash flow and stability, but they tend to be risk-averse toward early-stage innovation and intangible investments.

Venture capital and private equity (emerging)
VC activity is concentrated in **digital and software-based ventures**, with limited penetration into manufacturing, hardware, or sustainability-oriented innovation. Equity finance remains selective and focused on firms with strong growth narratives and international market potential.

Public and EU-backed financial instruments
National and EU-level instruments (guarantees, blended finance, equity funds linked to EU programmes) play a crucial role in de-risking investment and complementing bank finance, particularly for innovation-driven SMEs.

d. Academic and research institutions (knowledge creation, skills, applied research)

Universities and research organisations are central to Bulgaria's innovation capacity, acting as **knowledge providers, talent pipelines, and applied research partners**:

- **Sofia University "St. Kliment Ohridski"** – strong in ICT, natural sciences, social sciences, and policy-oriented research.
- **Technical University of Sofia** – key role in engineering, mechatronics, automation, and applied industrial research.
- **University of National and World Economy (UNWE)** – contributes expertise in economics, management, finance, and entrepreneurship.
- **Bulgarian Academy of Sciences** – core public research institution with strong scientific output and applied research potential.

These institutions increasingly engage in EU projects, applied research, and innovation partnerships, but **technology transfer and commercialization remain underdeveloped**, limiting their impact on private investment.

e. Support networks (intermediation, capacity-building, ecosystem connectivity)

Support networks form the **connective tissue** of the investment ecosystem, translating policy and funding into firm-level action.

- **Clusters and industry associations -** Support collaboration, sectoral upgrading, and joint projects in areas such as ICT, manufacturing, clean technologies, and creative industries.
- **Digital Innovation Hubs (DIHs) and competence centres -** Provide **test-before-invest services**, digital skills development, advisory support, and access to expertise, particularly for SMEs entering digital transformation pathways.
- **Incubators and accelerators -** Support early-stage startups with mentoring, business development, and investor readiness, mainly in urban innovation hubs.

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

- **Chambers of commerce and business associations -** Offer legal, regulatory, export, and networking support, acting as entry points for SMEs into broader business and investment networks.
- **Policy and innovation intermediaries**, including **Applied Research and Communication Fund**, play a strategic role in:
    - policy analysis and evidence-based recommendations,
    - ecosystem coordination,
    - bridging research, SMEs, investors, and public authorities,
    - facilitating interregional and European cooperation.

3. Synthesis (stakeholder logic)

Overall, Bulgaria's investment ecosystem operates as a **publicly anchored, multi-actor system**, where:

- public institutions set strategy and provide funding,
- universities supply knowledge and skills,
- SMEs and corporates generate investment demand,
- financial institutions provide selective capital,
- support organisations bridge gaps between innovation and investment.

The **core challenge** lies not in the absence of stakeholders, but in **strengthening coordination, commercialization pathways, and investment readiness** across this diverse landscape—precisely where SustainX positions its added value.

C. Mapping of the investment ecosystem

Ecosystem structure: how stakeholders interact

Bulgaria's investment ecosystem functions as a **multi-layered, publicly anchored system**, in which interactions between stakeholders are largely mediated through **EU and national programmes**, rather than driven by mature market mechanisms alone. The ecosystem resembles a **quadruple-helix model**—public authorities, academia, industry, and finance—but with **uneven linkages and varying levels of intensity** between the actors.

At the **strategic level**, national ministries and managing authorities define policy priorities (RIS3 2021–2027, digitalisation, sustainability, competitiveness) and channel EU and national funding into structured programmes and calls. These instruments set the boundaries within which innovation and investment activities take place, making public policy a key driver of ecosystem behaviour.

At the **implementation level**, universities, research organisations, digital innovation hubs, clusters, and business support organisations act as **intermediaries**, translating strategic objectives into concrete projects and services. They support SMEs and startups through applied research, technology testing, skills development, advisory services, and access to pilot environments. However, interactions between academia and business are often **project-based and time-limited**, rather than sustained through long-term commercialization partnerships.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

The **private sector**—SMEs, startups, and corporates—constitutes the demand side of the ecosystem. Firms engage with public and support actors primarily to:

- access funding and advisory services,
- comply with regulatory and market requirements,
- upgrade technologies and processes,
- experiment with new business models.

Large companies and multinationals also play a role as **anchors within value chains**, indirectly shaping investment behaviour by imposing quality, digital, and sustainability standards on suppliers.

Financial actors—banks, public financial instruments, and a limited number of venture capital funds—are typically engaged **late in the process**, once projects demonstrate technical feasibility, regulatory compliance, and market traction. As a result, financial flows are weakly connected to early-stage innovation activity, reinforcing the fragmentation between innovation and investment.

Overall, the ecosystem is **rich in actors but fragmented in pathways**, with innovation support and investment finance often operating in parallel rather than as a continuous pipeline.

1. Regional investment pathways: from early-stage support to later-stage funding

Investment pathways in Bulgaria typically follow a **stepwise progression**, but with significant attrition between stages.

1. Idea generation and pre-seed stage
This stage is dominated by:

- universities and research groups,
- entrepreneurship education and training,
- incubators, pre-accelerators, and innovation labs.

Support is mainly non-financial or grant-based, focusing on idea validation, technical feasibility, and early prototyping. Funding comes primarily from **public and EU programmes**, university initiatives, or short-term project funding.

2. Incubation and early development
Once ideas show potential, firms or teams enter:

- incubators and accelerators,
- digital innovation hubs,
- cluster-based or sector-specific support programmes.

Here, support includes mentoring, business modelling, IP advisory, and early customer discovery. While firms may receive grants or vouchers, **investment readiness is often weak**, and engagement with investors remains limited.

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

3. Seed and early-stage investment

At this stage, some firms—primarily in ICT and digital services—access:

- angel investment,
- early-stage venture capital,
- blended public–private instruments.

However, many innovation-driven SMEs struggle to reach this stage due to insufficient commercialization support, weak financial planning, or lack of investor confidence in non-digital sectors.

4. Growth and scale-up

Firms that demonstrate product–market fit and revenue potential can access:

- bank financing,
- larger VC rounds,
- strategic partnerships with corporates.

This stage remains narrow in Bulgaria, with relatively few firms successfully transitioning from innovation projects to scalable investment cases.

5. Maturity and integration into value chains

At maturity, firms integrate into European or global value chains, attract institutional investors, or engage in mergers and acquisitions. This pathway exists but is limited in scale and strongly sector-dependent.

Overall, the Bulgarian pathway can be summarised as:
Public support → pilot projects → partial commercialization → limited scale-up, with a pronounced **"missing middle"** between innovation and investment.

2. Connections between existing programmes and instruments (and how SustainX integrates)

Bulgaria's investment ecosystem is supported by a **layered portfolio of regional, national, and EU instruments**, which together shape innovation activity but are often weakly interconnected.

Regional and national instruments

RIS3-aligned programmes and national innovation instruments support:

- SME digitalisation and technology adoption,
- applied research and pilot projects,
- infrastructure and competence-building.

These instruments are effective in initiating innovation activity but often stop short of enabling **market-driven scaling and private co-investment**.

EU-level programmes

Horizon Europe, Digital Europe, Interreg, and other EU instruments provide:

- access to international research and innovation networks,

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

- pilot and demonstration environments,
- cross-border cooperation and learning,
- opportunities for blended finance.

However, participation often remains **project-centric**, with limited continuity toward investment deployment once projects end.

3. How SustainX integrates within this ecosystem

SustainX is designed to operate **between innovation support and investment finance**, addressing the structural gaps identified in Bulgaria's ecosystem.

Specifically, SustainX:

- **connects RIS3 priorities to concrete investment pipelines**, ensuring that innovation activities align with sectors and value chains with scaling potential;
- **bridges the "missing middle"** by adding structured investment-readiness support (business planning, ESG integration, validation logic, investor interaction) to projects that would otherwise remain grant-dependent;
- **builds continuity between programmes**, allowing outputs from national and EU innovation instruments to progress toward bankable and investor-ready projects;
- **strengthens interregional linkages**, enabling Bulgarian SMEs to position themselves within broader European value chains rather than relying solely on national markets.

Through its analytical, capacity-building, and matchmaking activities, SustainX complements existing instruments by **transforming fragmented innovation activity into coherent, finance-ready investment pathways**, without duplicating funding mechanisms.

A key role in this integrative logic is played by policy and innovation intermediaries such as **Applied Research and Communication Fund**, which contribute analytical capacity, ecosystem coordination, and cross-programme alignment—linking SMEs, public authorities, research actors, and investors across regions.

Synthesis

Bulgaria's investment ecosystem is **institutionally rich but structurally discontinuous**. While strong policy frameworks, support organisations, and innovation actors are in place, the transition from innovation to investment remains the main bottleneck. Mapping these interactions highlights why **integration mechanisms such as SustainX are critical**: they do not replace existing instruments, but **connect them into a functional, end-to-end investment ecosystem** capable of supporting sustainable and scalable growth.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

2.3. Canary Islands

The Canary Islands constitute one of the European Union's outermost regions and present a distinctive economic and innovation landscape shaped by their geographic position, demographic characteristics and structural economic patterns. With a population of approximately 2.26 million inhabitants and a service-oriented economy dominated by tourism, the region faces unique challenges—including high unemployment, limited private R&D investment and a business fabric composed largely of micro-enterprises. These characteristics, combined with insularity and remoteness, have historically constrained diversification and private-sector dynamism.

Despite these constraints, the Canary Islands have demonstrated significant resilience and an emerging capacity for innovation-driven transformation. The region benefits from a privileged geostrategic location between Europe, Africa and Latin America, a competitive fiscal regime and recognition as an outermost region, giving access to tailored European instruments and state-aid flexibility. Moreover, the archipelago hosts world-class scientific infrastructures and research centres, strong research specialisation areas (including astrophysics, renewable energies, marine sciences, health and environmental knowledge) and an increasingly structured innovation ecosystem supported by clusters, universities, technology parks and sectoral networks.

Investment activity in the Canary Islands is largely driven by public and hybrid funding mechanisms that mobilise European, national and regional resources to support research, innovation and economic development. Private investment in R&D-intensive projects remains comparatively limited, reflecting the region's structural characteristics and the cautious risk profile of its business landscape. Nonetheless, the consolidation of support networks, technology parks and entrepreneurship initiatives are contributing to a gradual strengthening of the innovation ecosystem and expanding opportunities for future private-sector engagement.

A. Overview of the investment ecosystem

Economic landscape of each region:

The Canary Islands (NUTS-2, ES70) are an outermost region of the European Union, with a population of approximately 2.26 million inhabitants in 2024, compared to 47.9 million in Spain.

The regional economy is strongly service-oriented, with tourism as the main driver of GDP and employment. The services sector accounts for around 86 % of total employment, well above the Spanish average of about 76 %. Tourism-related activities such as accommodation, catering, transport and retail trade represent nearly 39 % of regional GDP, highlighting the islands' dependence on the tertiary sector.

- **GDP per capita:** €24,345 in 2023, representing approximately 73 % of the Spanish average (~€33,400).
- **Unemployment rate:** approximately 11.9 % in 2024 in the Canary Islands, compared to the national average of 10.6 % in Spain that same year. Despite the

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

overall improvement, unemployment remains significantly higher among young people and women, reflecting persistent structural challenges in the regional labour market.

- **Business structure:** The economy is dominated by micro-enterprises (fewer than 10 employees), which account for over 94 % of all firms; only a small share employs more than 10 people, compared to about 8–10 % nationally.
- **Private R&D investment:** Significantly below the national average. While Spain's internal R&D expenditure reached 1.44 % of GDP in 2022, the Canary Islands invested around 0.56 %, the lowest among Spanish regions.

Despite these structural challenges, the Canary Islands have shown resilience and growing potential for diversification. The region serves as a strategic gateway between Europe, Africa and Latin America and provides a platform for sustainability, digital transformation and blue economy initiatives, supported by its special fiscal regime and EU recognition as an outermost region.

1. Strengths and Competitive Advantages

The main strengths and competitive advantages that the Canary Islands offer to investors and innovators are the following:

1. **Strategic Geolocation:** Exceptional position between Europe, Africa and the Americas, offering opportunities as a tricontinental platform for knowledge transfer, logistics and digital connectivity.
2. **Attractive Fiscal Framework:** The Canary Islands Economic and Fiscal Regime (REF) and Special Canary Zone (ZEC) provide significant tax advantages for companies engaged in R&D, technology and innovation activities.
3. **World-Class Research Infrastructure:** The region hosts top-tier scientific infrastructures, such as the Instituto de Astrofísica de Canarias (IAC), the Instituto Tecnológico y de Energías Renovables (ITER) and the Plataforma Oceánica de Canarias (PLOCAN).
4. **Scientific Specialisation:** The RIS3 identifies strong expertise in Astrophysics and Space Sciences, Renewable Energies, Marine Sciences, Health and Biomedicine and Environmental Knowledge.
5. **EU Recognition:** As an outermost region, the Canary Islands benefit from specific EU policy instruments, additional funding mechanisms (FEDER, FSE+, Horizon Europe, Interreg MAC) and flexibility in state-aid regulations.

2. Key investment types

The Canary Islands primarily rely on public and hybrid investment models that combine European, national and regional resources. Private capital participation remains limited but is gradually growing in selected sectors. The most relevant investment types, ranked by importance, are:

1. **EU and National Co-Financing Instruments:** Programmes such as ERDF, ESF+, Horizon Europe, InvestEU and the Recovery & Resilience Facility form the main financial backbone for innovation and sustainable development. They leverage

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

additional public and private resources while reducing risk in strategic areas such as renewable energy, digitalisation and the blue economy.

2. **Public-Private Partnerships (PPP):** PPPs enable collaboration between research institutions, public authorities and private companies to develop flagship projects in renewable energy, health, marine technologies and sustainable tourism.
3. **Institutional and Impact Investment:** Investment vehicles with social and environmental objectives are gaining traction, particularly in circular economy, sustainable mobility and social innovation, complementing public funding.
4. **Venture Capital and Private Equity:** The regional innovation ecosystem is still consolidating. Emerging initiatives supported by accelerators, technology parks and regional agencies are beginning to mobilise private equity towards startups in ICT, agri-tech and green technologies.
5. **Foreign Direct Investment (FDI):** Despite a favourable fiscal regime and strategic location, FDI in R&D-intensive activities remains modest, mostly concentrated in tourism, logistics and renewable energy infrastructures, with gradual diversification toward technology-based services.

3. Key sectors

The Canary Islands present several sectors with strong investment potential, reflecting both regional strengths and opportunities for economic diversification. Some of these sectors align with RIS3 specialisations, while others reflect broader economic opportunities:

A. **Renewable Energy and Energy Efficiency:** One of the most developed sectors, leveraging solar, wind and marine resources, with emerging green hydrogen initiatives. It requires substantial capital and faces logistical and regulatory challenges but is strategically important for the energy transition.
B. **Digital Transformation and Technology:** An emerging sector, including AI, Industry 4.0, robotics and digital services. The ecosystem is still maturing, offering opportunities to position the Canary Islands as a technology hub.
C. **Blue Economy and Marine Sciences:** Leveraging the islands' oceanic location, opportunities include sustainable aquaculture, marine biotechnology and smart port development. The sector requires specialized infrastructure and collaborative support.
D. **Health and Well-Being:** Medium-term growth potential exists in biomedical research, personalised medicine, telemedicine and active ageing solutions. Private investment is limited and further capacity building is needed.
E. **Tourism and Sustainable Tourism:** Central to the economy, investment focuses on sustainability, digitalisation and high-value experiences beyond traditional mass tourism.
F. **Emerging Industries and High-Tech Manufacturing:** At an early stage, including advanced agri-food technologies and specialised manufacturing. These sectors are important for diversification but require targeted support.
G. **Sustainability and Circular Economy:** Cross-cutting sectors encompassing waste valorisation, sustainable water management and circular business models,

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

generating both economic and environmental benefits in line with EU and regional priorities.

B. Key stakeholders in the ecosystem

1. Government and public sector entities

- **Regional Government of the Canary Islands – Department of Universities, Science, Innovation and Culture** (Consejería de Universidades, Ciencia e Innovación y Cultura): policy design and coordination of RIS3.
- **ACIISI - Canarian Agency for Research, Innovation and the Information Society** (Agencia Canaria de Investigación, Innovación y Sociedad de la Información): implementation of RIS3, liaison with EU funds.
- **RIS3 Executive Committee**: ensures coherence with regional budgets and strategies.
- **SODECAN - Canarian Economic Development Agency** (Sociedad para el Desarrollo Económico de Canarias) and **SPEGC - Gran Canaria Economic Promotion Society** (Sociedad de Promoción Económica de Gran Canaria): investment promotion and innovation financing.
- **Island Councils** (Cabildos) and **Municipalities** (Ayuntamientos): local implementation of competitiveness initiatives.
- **Sectoral Agencies: Canarian Health Service** (Servicio Canario de Salud), **Institute for Agrarian Research** (Instituto Canario de Investigaciones Agrarias), **Port Authorities of Las Palmas and Tenerife** (Autoridades Portuarias de Las Palmas y Tenerife): sectoral innovation and public investment management.

2. Private sector players

- **CET – Canary Islands Excellence in Technology Cluster** (Clúster de Excelencia Tecnológica de Canarias): ICT, software, AI.
- **CMC – Maritime Cluster of the Canary Islands** (Clúster Marítimo de Canarias): blue economy and marine technologies.
- **CLAC – Audiovisual Cluster of the Canary Islands** (Clúster Audiovisual de Canarias): media and audiovisual.
- **CAAC – Aerospace Cluster** (Clúster Aeroespacial de Canarias): aeronautics and space.
- **EMERGE**: startups, technology-based companies and business angels.
- **ACADEVI**: video games and creative industries.
- **ASINCA**: manufacturing and industrial innovation.
- **FEMEPA / FEMETE**: metal sector and Industry 4.0.
- **AECP**: construction and sustainability.
- **AEPA**: communication and digital marketing.
- **Turisfera**: smart and sustainable tourism.
- **BIOTIFARM**: biotechnology and health.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

3. Financial institutions

Financial institutions in the Canary Islands support the regional economy mainly by financing SMEs and complementing the limited availability of private capital for R&D and innovation. Private investment in technology-intensive projects remains scarce, influenced by the region's small market size, high dependence on tourism and geographic remoteness, which elevate perceived risk. As a result, banks, early-stage investors and emerging venture-capital and business-angel networks play a secondary but supportive role, while public and hybrid funding mechanisms continue to lead investment in innovation across the archipelago.

Regional and national banking institutions:

- **Cajasiete** and **Caja Rural de Canarias**: regional cooperative banks that provide financing, guarantees and tailored financial products for SMEs and local businesses.
- **CaixaBank:** national banking entity with a particularly strong presence in the Canary Islands, offering extensive support for SMEs and the tourism sector, as well as micro-credit lines through MicroBank that benefit entrepreneurship and early-stage business initiatives.
- **Ibercaja**, **Banco Santander**, **BBVA**: national banks engaged in corporate finance and project financing, including operations linked to innovation and public-funded initiatives.

Private investors, venture capital and business-angel networks:

- **Archipélago Next Ventures**: the first Canary-based venture capital management company, focused on pre-seed and seed investment in technology-driven startups and a key actor in mobilising private capital in the region.
- **TALENTUM Investment (Tenerife Science and Technology Park, PCTT)**: a structured business-angel network that offers investment readiness, training and matchmaking between private investors and innovative startups.
- **EMERGE investors' network**: a platform connecting local business angels, early-stage investors and entrepreneurs, facilitating deal-flow, investment forums and collaboration with accelerators and incubators.
- **Regional accelerators and technology parks** (including PCTT and the SPEGC ecosystem): although not investment entities per se, they act as intermediaries by preparing startups and connecting them with private investors, VC funds and national networks.

Occasional involvement of national VC funds: Spanish venture-capital firms occasionally invest in Canary-based startups—mainly in digital and ICT sectors—though their presence remains limited and selective.

4. Academic and research institutions

University of La Laguna - ULL (Universidad de La Laguna) and **University of Las Palmas de Gran Canaria - ULPGC** (Universidad de Las Palmas de Gran Canaria): key universities fostering research and regional development.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Canary Islands Institute of Astrophysics – IAC (Instituto de Astrofísica de Canarias), **Technological Institute of Renewable Energies - ITER** (Instituto Tecnológico y de Energías Renovables), **Oceanic Platform of the Canary Islands - PLOCAN** (Plataforma Oceánica de Canarias) and **Technological Institute of the Canary Islands – ITC** (Instituto Tecnológico de Canarias): leading research and technological infrastructures supporting innovation projects in fields such as astrophysics, renewable energies, marine sciences, biotechnology, water and sustainability technologies and digital transformation.**Support networks**:

The Canary Islands benefit from a variety of support networks that facilitate entrepreneurship, innovation, and investment. Key incubators and accelerators — including EMERGE and university-led initiatives from the **University of La Laguna – ULL** (Universidad de La Laguna) and the **University of Las Palmas de Gran Canaria – ULPGC** (Universidad de Las Palmas de Gran Canaria) — provide startups and technology-based companies with mentoring, business development support, and access to early-stage funding. Both universities also operate their **Offices for the Transfer of Research Results – OTRI** (Oficinas de Transferencia de Resultados de Investigación), which play a crucial role in technology transfer, patent management, and university–industry collaboration.

Science and technology parks, such as the **Tenerife Science and Technology Park – PCTT** (Parque Científico y Tecnológico de Tenerife) and the **Las Palmas Science and Technology Park – PCT LP** (Parque Científico y Tecnológico de Las Palmas), serve as hubs for applied research, innovation projects, and collaboration between academia, industry, and investors.

Business associations and clusters — including the **Canary Islands Industrial Cluster – ASINCA** (Asociación Industrial de Canarias), the **Maritime Cluster of the Canary Islands – CMC** (Clúster Marítimo de Canarias), the **Canary Islands Aerospace Cluster – CAAC** (Clúster Aeroespacial de Canarias), the **Audiovisual Cluster of the Canary Islands – CLAC** (Clúster Audiovisual de Canarias), and the **Canary Islands Excellence in Technology Cluster – CET** (Clúster de Excelencia Tecnológica de Canarias) — provide sector-specific mentoring, training, internationalisation services, and support for collaborative innovation.

The **Chambers of Commerce of Santa Cruz de Tenerife and Las Palmas** (Cámaras de Comercio de Santa Cruz de Tenerife y de Las Palmas) complement these efforts by offering legal guidance, business advisory services, and networking opportunities for SMEs.

Additionally, public–private initiatives and RIS3-linked programmes help foster startups and spin-offs, reinforcing collaboration across sectors and strengthening the regional innovation ecosystem.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

C. Mapping of the investment ecosystem

1. Ecosystem structure

The Canary Islands' investment and innovation ecosystem is characterised by a high degree of institutional coordination and strong sector-specific specialisation rather than by the mere presence of standard quadruple-helix actors. Regional public bodies — such as the **Department of Universities, Science, Innovation and Culture** (**Consejería de Universidades, Ciencia, Innovación y Cultura**) and the **Canarian Agency for Research, Innovation and the Information Society – ACIISI** (Agencia Canaria de Investigación, Innovación y Sociedad de la Información) — play a central steering role by aligning funding instruments, RIS3 priorities and regional development strategies.

Around this policy core, universities including the **University of La Laguna – ULL** (Universidad de La Laguna) and the **University of Las Palmas de Gran Canaria – ULPGC** (Universidad de Las Palmas de Gran Canaria), research centres such as the **Canary Islands Institute of Astrophysics – IAC** (Instituto de Astrofísica de Canarias), the **Technological Institute of Renewable Energies – ITER** (Instituto Tecnológico y de Energías Renovables), the **Oceanic Platform of the Canary Islands – PLOCAN** (Plataforma Oceánica de Canarias), and the **Technological Institute of the Canary Islands – ITC** (Instituto Tecnológico de Canarias), as well as clusters, business associations and support networks, collaborate through structured programmes that link SMEs and startups with research capabilities, specialised infrastructure and early-stage financing.

Key business associations and clusters involved in this coordinated model include the **Canary Islands Industrial Association – ASINCA** (Asociación Industrial de Canarias), the **Maritime Cluster of the Canary Islands – CMC** (Clúster Marítimo de Canarias), the **Canary Islands Aerospace Cluster – CAAC** (Clúster Aeroespacial de Canarias), the **Audiovisual Cluster of the Canary Islands – CLAC** (Clúster Audiovisual de Canarias), the **Canary Islands Excellence in Technology Cluster – CET** (Clúster de Excelencia Tecnológica de Canarias), and **Turisfera** (Clúster Internacional de Innovación Turística de Canarias), along with incubators and accelerators such as **EMERGE** (Ecosistema de Emprendimiento e Innovación de Canarias).

This functional organisation, driven by public–private coordination and sectoral specialisation, allows the ecosystem to focus resources, avoid duplication and mobilise investment towards strategic areas such as renewable energy, digital transformation, the blue economy, health, circular economy and sustainable tourism.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

2. Regional investment pathways

Investment in the Canary Islands follows a staged approach tailored to the regional context. Early-stage support is provided through **incubators**, **university-based entrepreneurship programs** and **pre-accelerators** that help startups develop prototypes and validate business models. Growth-stage companies access **venture capital** and **private equity**, often through cluster-linked initiatives or regional accelerators. **Institutional investors** and **public–private partnerships** then provide funding for scaling up, particularly for projects in renewable energy, digital technologies, the blue economy, health, circular economy and sustainable tourism.

Private investment remains limited due to the small market size, high dependence on tourism and geographic remoteness, which increase perceived risk. Consequently, **public and hybrid funding mechanisms** continue to lead support for innovation-driven projects in the islands.

3. Connections between existing programs & instruments

The Canary Islands' innovation ecosystem leverages a combination of regional, national and European programmes to support investment, technology adoption and sustainable growth. Key instruments include **European Regional Development Fund – ERDF**, **European Social Fund Plus – ESF+**, **Horizon Europe**, **InvestEU**, **Next Generation EU** and the **Recovery and Resilience Facility – RRF**, which provide co-financing, technical support and access to international networks.

These programmes are often channelled to local companies, clusters and research centres through the **Canarian Agency for Research, Innovation and the Information Society – ACIISI** (Agencia Canaria de Investigación, Innovación y Sociedad de la Información), which adapts funding conditions and priorities to the regional context.

Universities and research centres — including the **University of La Laguna – ULL** (Universidad de La Laguna), the **University of Las Palmas de Gran Canaria – ULPGC** (Universidad de Las Palmas de Gran Canaria), the **Canary Islands Institute of Astrophysics – IAC** (Instituto de Astrofísica de Canarias), the **Technological Institute of Renewable Energies – ITER** (Instituto Tecnológico y de Energías Renovables), the **Oceanic Platform of the Canary Islands – PLOCAN** (Plataforma Oceánica de Canarias) and the **Technological Institute of the Canary Islands – ITC** (Instituto Tecnológico de Canarias) — act as hubs connecting SMEs and startups with these instruments, enabling participation in transnational projects and promoting applied research and technology transfer.

This coordinated approach ensures that European and national resources complement regional strategies, clusters and incubators, supporting strategic sectors such as

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

renewable energy, digital technologies, the blue economy, the circular economy and sustainable tourism, while avoiding duplication and maximising regional impact.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

2.4. Greece

Thessaly's investment ecosystem is shaped by the region's dual identity: a strong, predominantly rural economy anchored in agri-food and traditional industries, alongside a steadily expanding innovation capacity supported by universities, research centres, and active intermediaries. This creates a landscape where investment opportunities are increasingly linked to the **green and digital transformation** of core regional sectors—particularly agriculture, food processing, manufacturing upgrades, and emerging health and ICT applications—while structural constraints such as climate exposure, fragmented commercialisation pathways, and limited private R&D investment still influence the speed and scale of growth.

Within this context, public and EU-supported instruments play a central role in enabling innovation-oriented investment. Thessaly's ecosystem is gradually moving from a historically fragmented structure toward a more connected, mission-oriented configuration, where regional authorities (through RIS3 governance), research and technology actors (University of Thessaly, CERTH/iBO, JOIST), and innovation intermediaries (iED, EEN and chambers) increasingly coordinate to support SMEs along a clearer pathway: from capacity-building and validation (living labs, pilots, vouchers, mentoring) to larger-scale funding and market expansion. SustainX fits into this trajectory as an integrative mechanism that strengthens these links, improves investment readiness, and supports interregional partnerships that help Thessalian SMEs scale solutions aligned with sustainability and competitiveness priorities.

A. Overview of the investment ecosystem

Thessaly is a predominantly rural region located in central Greece, with a strong economic base in the agri-food sector, growing activity in circular bioeconomy, and emerging capabilities in health innovation, advanced materials, and ICT. The regional economy is characterised by a mixture of traditional sectors and newly developing technology-driven domains, creating both investment opportunities and structural challenges.

1. Economic landscape of each region

The agri-food sector remains the backbone of the regional economy, supported by fertile agricultural land but increasingly threatened by climate-related risks such as droughts, floods, and water scarcity. Meanwhile, industrial activities, particularly in materials, coatings, and manufacturing, are gradually incorporating digital and green technologies. Thessaly also hosts strong research capacity (University of Thessaly, CERTH/iBO) that fuels opportunities for knowledge-intensive investment.

2. Key strengths

- Strong specialization in agri-food, bioeconomy, and circular economy
- Growing capabilities in advanced materials, sensors, and ICT

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

- Significant academic and research base (University of Thessaly, CERTH/iBO)
- Active participation in Horizon Europe, Interreg, EIT KICs, and other EU R&I programmes

3. Key opportunities

- Green and digital transformation of agri-food systems
- Smart water management, climate-resilient farming, and circular resource use
- Digital health, biotechnology, and med-tech
- Scaling of SMEs through EU funding readiness and interregional partnerships

4. Key investment types

The investment landscape in Thessaly is shaped by a combination of public funding instruments, hybrid financing mechanisms, and an emerging, yet still limited, private investment activity. Due to the region's structural characteristics (strong presence of traditional sectors, limited private R&D investment, and fragmented commercialization pathways), public and EU-supported financial tools play a pivotal role in enabling innovation-oriented investment. The most relevant investment types for Thessaly include:

1. EU and National Co-Financing Instruments

These constitute the backbone of investment activity in Thessaly and are essential for supporting green and digital transformation initiatives. Key instruments include:

- **European Regional Development Fund (ERDF)** – financing SME modernization, digitalization, energy efficiency, and regional innovation structures.
- **Recovery and Resilience Facility (RRF – "Greece 2.0")** – supporting digital transformation, clean energy, and upskilling.
- **Horizon Europe** – enabling R&D collaboration, pilot projects, and technology validation.
- **Digital Europe Programme** – supporting AI, cloud, cybersecurity, and advanced digital skills.

These instruments mobilize additional private and public capital by reducing investment risk for SMEs and startups.

2. Public–Private Partnerships (PPPs)

PPPs are increasingly relevant for Thessaly in domains such as agri-tech, environmental technologies, water management, and smart health. PPP models are used to:

- Develop demonstrators and living labs
- Support technology transfer
- Deploy smart infrastructure (e.g., irrigation systems, digital health platforms)

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

These collaborations bridge gaps between research institutions, regional authorities, and industry.

3. SME Support Schemes and Innovation Vouchers

The region is deploying targeted instruments to help SMEs adopt new technologies, validate innovations, and access new markets. These include:

- Innovation vouchers
- Mentoring and advisory schemes
- Testing, certification, and prototyping support
- Funding readiness and EU project preparation services

Such mechanisms are especially important in a region with limited internal R&D capacity and low private investment appetite.

4. Institutional and Impact-Oriented Investment

Impact-driven financial mechanisms are gaining relevance in Thessaly, particularly for:

- Circular economy models
- Water and environmental management
- Climate resilience initiatives
- Sustainable agricultural practices

These investments align with both RIS3 priorities and EU missions (e.g., Soil Health, Climate Adaptation).

5. Early-Stage Private Investment (VCs, Business Angels)

While still limited compared to metropolitan regions, early-stage private capital is slowly emerging through:

- Innovation intermediaries (iED, JOIST, EEN)
- Partnerships with national VC funds
- Participation in EU acceleration programmes

Private investment remains modest but is expected to grow as more SMEs become innovation-ready and connected to European funding pipelines.

5. Key sectors

The priority investment sectors in Thessaly reflect the region's Smart Specialisation Strategy (RIS3) and its structural economic assets. These sectors present strong growth potential and align with EU innovation missions and sustainability goals.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

1. Agri-Food and Bioeconomy (Primary Priority Sector)

This is Thessaly's strongest and most strategic domain, with substantial potential for innovation and investment. Opportunities include:

- Precision agriculture and smart farming technologies
- Climate-resilient crops and water-efficient systems
- Sustainable food processing and circular agri-food models
- Bio-based materials and waste valorization

The sector is essential for regional resilience and EU food system transformation.

2. Circular Economy and Environmental Technologies

Driven by urgent challenges such as droughts, water scarcity, and natural disasters, Thessaly is prioritizing investments in:

- Smart water management
- Waste-to-value processes
- Renewable and clean energy technologies
- Environmental monitoring and climate adaptation solutions

These areas reflect both a regional necessity and a significant opportunity for impact-oriented investors.

3. Digital Transformation & ICT

Digital technologies are increasingly relevant across all sectors. Priority investment niches include:

- Artificial intelligence, IoT, robotics
- Cloud-based platforms for SMEs
- Cybersecurity solutions
- Industry 4.0 applications for manufacturing and agri-food systems

The region's digital transition is supported by active EDIH and innovation intermediaries.

4. Health, Biotechnology, and Smart Health Solutions

An emerging but growing innovation domain supported by the University of Thessaly's strong research base. Investment opportunities include:

- Telemedicine, remote care, and e-health platforms
- Biomedical devices and diagnostics
- Digital health data solutions
- Active ageing and community health technologies

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

This domain aligns with EU Horizon Europe Cluster 1 priorities.

5. Advanced Materials and Industrial Innovation

Thessaly hosts specialised expertise in:

- Lightweight materials and composites
- Coatings and surface technologies
- Industrial biotechnology
- Sensors

These industries have strong potential for high-value manufacturing upgrades and EU value-chain integration.

6. Infrastructure and Smart Mobility (secondary)

While not a primary RIS3 domain, infrastructure investments support broader competitiveness:

- Renewable energy infrastructure
- Flood resilience and water infrastructure
- Digital connectivity (5G, cloud infrastructure)
- Logistics modernization

These areas attract significant public funding and support long-term regional development.

B. Key stakeholders in the ecosystem

1. Government and public sector entities

Public authorities in Thessaly play a central role in shaping investment priorities, deploying regional programmes, coordinating RIS3 implementation, and providing the institutional framework for innovation and economic development.

Regional Level

- **Region of Thessaly – RIS3 Regional Coordination Unit -** Leads Smart Specialisation Strategy implementation, aligns regional funds with innovation priorities, coordinates SME support mechanisms, and manages monitoring & evaluation processes.
- **Regional ERDF/ESPA Managing Authority (Μονάδα Διαχείρισης ΕΠ Θεσσαλία) -** Oversees EU structural funds for competitiveness, digitalization, research, environment, and SME support.
- **Regional Development Agencies (ANKA, AENOL, KEKANEM, KENAKAP) -** Support regional investment planning, local innovation initiatives, and infrastructure development.

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

Local Level

- **Municipalities of Larissa, Volos, Trikala, Karditsa -** Promote local entrepreneurship, facilitate permitting and local economic development actions, and collaborate in pilots (e-government, mobility, digital transformation).
- **Municipality of Trikala/ e-Trikala SA -** National frontrunner in smart city applications; strong partner in pilots for mobility, IoT, and digital services.

National Level (relevant for Thessaly)

- **GSRI – General Secretariat for Research & Innovation -** Ensures alignment between regional RIS3 actions and national innovation policy.
- **Ministry of Development & Investments -** Oversees national programmes supporting SME innovation, infrastructure, and competitiveness.
- **Ministry of Digital Governance -** Supports digital transformation initiatives across municipalities and public services

2. Private sector players

The private sector in Thessaly is primarily composed of SMEs in agri-food, manufacturing, and services, but is gradually complemented by emerging startups, technology-oriented companies, and innovation-driven enterprises.

Key Industry Actors

- **Agri-food companies, cooperatives, and processing industries -** The backbone of the regional economy, active in dairy, cereals, livestock, fruit/vegetable processing, precision agriculture, and export-oriented food production.
- **Manufacturing & advanced materials firms -** Companies specialising in industrial materials, coatings, plastics, machinery, textiles, and industrial biotech.
- **ICT companies & digital service providers -** SMEs involved in software development, IoT applications, sensing technologies, robotics, and digital transformation services.

Emerging Innovation-Driven Companies

- Startups in agri-tech, food-tech, digital health, AI/IoT, circular economy, and environmental technologies.
- Early-stage technology SMEs participating in Horizon Europe, EIT, and Interreg projects.

Investors (limited but growing)

- Regional business groups investing in agri-food modernization and digitalization.
- National private equity and VC funds occasionally engaging with Thessalian startups via intermediaries (e.g., clusters, JOIST, iED).

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

3. Financial institutions

Financial actors in Thessaly include regional banks, national banking groups, and innovation intermediaries that facilitate access to financing.

Regional and National Banks

- **Alpha Bank, Piraeus Bank, National Bank of Greece, Eurobank -** Provide SME financing, green loans, digital transformation credit lines, and investment products.
- **Cooperative Banks (Thessaly, Karditsa) -** Strong presence in rural economies; support micro-financing and local investment schemes.

Innovation-related Financial Intermediaries

- **iED – Institute of Entrepreneurship Development & JOIST -** Supports SMEs in accessing EU funding, innovation vouchers, advisory on financial tools.
- **EEN & ASSOCIATION OF INDUSTRIES OF THESSALY AND CENTRAL GREECE -** Advises SMEs on EU funding, investment readiness, and partnerships.
- **Regional Chambers of Commerce (Larissa, Magnesia, Trikala, Karditsa) -** Provide guidance on financing instruments and support local business growth.

VC & Angel Investment (still limited)

While Thessaly does not host a large venture-capital base, early-stage capital is gradually mobilized through:

- Partnerships with national VC funds
- Activities of JOIST and innovation clusters
- Investment readiness programmes introduced via SustainX and Horizon Europe

4. Academic and research institutions

Research and academic bodies are among the strongest assets of the region, acting as anchors for innovation, talent development, and technology transfer.

University of Thessaly (UTh)

The region's largest academic and research institution, with strong specialization in:

- Digital health and biomedical sciences
- Agri-tech, bioeconomy, environmental engineering
- ICT, advanced materials, sensors, robotics
- Smart manufacturing and industrial innovation

UTh leads co-creation labs, develops training modules, and contributes to the RIS3 Dashboard.

CERTH – Institute of Bio-Economy and Agri-Technology (iBO)

Nationally recognised for research in:

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

- Precision agriculture and smart farming
- Bioeconomy and circular processes
- Environmental monitoring and sustainable resource management

JOIST Innovation Park – Research & Technology Infrastructure

Operates innovation clusters, digital labs, and applied research facilities, supporting:

- Living labs
- Technology demonstrations
- Deep-tech innovation
- Communities of Practice

5. Support networks

These structures enable business development, technology transfer, entrepreneurship, and cross-sector collaboration.

Business Support Organisations

- **iED – Institute of Entrepreneurship Development -** Leading advisory and SME innovation support organisation; provides training, mentoring, innovation diagnostics, and EU funding support.
- **EEN & ASSOCIATION OF INDUSTRIES OF THESSALY AND CENTRAL GREECE -** Supports SMEs in international partnerships, innovation services, and investment readiness.

Innovation Hubs & Incubators

- **JOIST Innovation Park -** Hosts incubation programmes, entrepreneurship support, testing facilities, and innovation events.
- **Local incubators and accelerators -** attached to chambers of commerce, universities, or municipalities.

Sectoral Clusters

- **Agri-food, bioeconomy, environmental technologies, advanced materials & industrial innovation clusters**

Facilitate knowledge transfer, joint projects, and access to EU networks.

Chambers & Professional Associations

- Chambers of Commerce across Thessaly (Larissa, Magnesia, Trikala, Karditsa)
- Industry associations supporting manufacturing, agri-food, and technology adoption

C. Mapping of the investment ecosystem

The investment ecosystem of Thessaly operates through a complex yet increasingly coordinated network of actors spanning public authorities, research institutions, SMEs, clusters, and intermediaries. Although historically fragmented, the region is gradually

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

building stronger interaction mechanisms through RIS3 governance structures, EU-funded initiatives. The ecosystem reflects a quadruple-helix configuration, where each actor plays a distinct role while contributing to shared objectives for digital and green transformation.

1. Ecosystem structure – how stakeholders interact

At the core of the ecosystem lies the Region of Thessaly, which provides the strategic direction and governance framework through the RIS3 Coordination Unit. This unit collaborates closely with the University of Thessaly, CERTH/iBO, and JOIST Innovation Park, forming a policy–research backbone that shapes thematic priorities and supports innovation planning. These institutions act not only as knowledge producers but also as intermediaries that link public authorities to SMEs, farmers, cooperatives, and technology-oriented enterprises.

Around this central axis, innovation intermediaries such as iED and EEN operate as gatekeepers between SMEs and European funding opportunities. They provide advisory services, funding navigation, technology transfer support, and matchmaking with national or international partners. The Chambers of Commerce and sector-specific clusters contribute by organising sectoral dialogues, providing regulatory guidance, and facilitating collaborations between traditional industries and emerging technology providers.

Municipalities, particularly Larissa, Volos, and Trikala, play a complementary role by piloting digital solutions, smart city services, and urban innovation projects. Their involvement strengthens local demand for digital infrastructure and promotes the adoption of emerging technologies, which in turn supports private-sector investment. While private investors and venture capital funds remain limited in the region, their engagement is gradually increasing through partnerships with innovation hubs, national VC networks, and EU acceleration programmes. Overall, the structure of the ecosystem is transitioning from isolated actors to a more integrated and mission-oriented configuration.

2. Regional investment pathways: from early-stage support to later-stage financing

Investment pathways in Thessaly typically begin with early-stage support mechanisms provided by universities, innovation intermediaries, and public programmes. Startups and SMEs often first engage in awareness and capacity-building activities, such as RIS3 aligned training, digital upskilling, mentoring, and advisory sessions, delivered by iED, JOIST, or the University of Thessaly. These activities help companies strengthen their strategic focus, business models, and technology-readiness levels.

Following this preparatory stage, businesses can access test-before-invest infrastructures, living labs, and applied research facilities. These environments enable them to validate prototypes, test digital tools, receive certification support, or conduct pilot demonstrations. They are especially relevant for agri-tech, digital health, circular economy, and advanced materials applications. SMEs that demonstrate promising potential progress to more structured support mechanisms, such as innovation

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

vouchers, tailored consulting, and proposal labs that prepare them for EU-funded research or market-scaling projects.

The pathway continues with access to national or European funding instruments, which serve as the primary source of capital for scaling innovation in the region. Private investment—through angel investors, national VCs, or impact-oriented funds—usually enters at later stages, once SMEs have increased their investment-readiness through EU projects or regional demonstrators. SustainX contributes by strengthening these transition points, ensuring that early support leads to tangible investment outcomes and improved participation in European value chains.

3. Connections between existing programmes and instruments

Thessaly's investment ecosystem is interconnected with a wide range of regional, national, and European initiatives, which collectively reinforce its innovation potential. The regional RIS3 Strategy (2021–2027) provides the overarching framework, prioritizing agri-food innovation, bioeconomy, ICT, advanced materials, and health technologies. These priorities directly align with broader EU policies, such as the European Green Deal, the Digital Decade Strategy, and Horizon Europe missions on soil health, climate adaptation, and sustainable food systems.

Several national programmes, such as Greece 2.0 (RRF), the National Digital Transformation Bible, and targeted ERDF interventions, offer financial incentives for SME modernization, digital adoption, clean energy, and research collaboration. Thessaly leverages these instruments to address structural bottlenecks, such as limited digital skills, weak research–industry linkages, and insufficient private R&D investment.

At the European level, participation in Horizon Europe, Interreg, EIT KICs, and Digital Europe supports cross-border learning, experimental pilots, and technology transfer. Actors like iED, JOIST, and the University of Thessaly serve as connectors, enabling local SMEs to access these instruments and integrate into international innovation networks.

SustainX plays an integrative role by coordinating these diverse initiatives within a unified approach. Through co-creation platforms, innovation diagnostics, the RIS3 Innovation Dashboard, and SME advisory services, the project ensures that regional actors can more easily navigate the available programmes and transition from early-stage development to scalable investment opportunities. In this sense, SustainX strengthens the coherence and usability of the ecosystem, turning a previously fragmented landscape into a more structured investment pathway for Thessalian SMEs.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

2.5. Latvia

Latvia is a dynamic Northern European economy situated on the Baltic Sea and fully integrated into the European Union, the Eurozone, and the Schengen Area. Its economy is diverse, combining a strong services sector with a growing industrial base. Services such as finance, ICT, transport, and tourism form the backbone of economic activity, while manufacturing particularly in metalworking, electronics, machinery, agro food and wood processing, continues to expand and modernize.

Digital development is one of Latvia's main strengths. The country has advanced digital infrastructure and a highly skilled, multilingual workforce, which supports the rapid growth of the ICT and technology sectors. Latvia is also an export-oriented economy, sending machinery, electronics, timber products, pharmaceuticals, and IT services to markets throughout Europe and beyond. Its strategic geographic position enables efficient access to Nordic, Central European, and global markets through well-developed ports, airports, and transport corridors.

Despite its strengths, Latvia faces challenges such as regional economic disparities and demographic pressures. Nevertheless, its long-term outlook is positive, driven by continued growth in technology, manufacturing, green energy, and logistics, as well as increasing integration into European supply chains.

A. Overview of the investment ecosystem

Latvia's investment ecosystem is shaped by its strategic location, modern infrastructure, and open economic environment. Over the past two decades, the country has positioned itself as a competitive and accessible destination for both domestic and international investors. Its status as a member of the European Union and the Eurozone ensures regulatory stability, access to the single market, and financial predictability, all of which contribute to a secure and transparent business climate. Investors benefit from a legal environment aligned with EU standards, reliable financial institutions, and clearly defined rules governing investment activity.

Latvia's investment landscape is strengthened by the presence of a skilled and multilingual workforce. The country has a strong tradition in engineering, information technology, and technical education, producing specialists who support the development of high-value industries. This talent base has helped Latvia cultivate a growing startup and innovation ecosystem, centered primarily in the capital, Riga. The country hosts incubators, accelerators, and a growing number of venture capital funds, creating an active environment for technological and entrepreneurial development. Government support mechanisms, including grants, startup-friendly taxation, and innovation incentives, reinforce these efforts and attract both early-stage and established companies.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Infrastructure plays a central role in the investment environment. Latvia's three major ports: Riga, Ventspils, and Liepāja that provide efficient access to global markets, while Riga airport and rapidly improving road and rail networks strengthen regional connectivity. Ongoing projects such as Rail Baltica, which will integrate Latvia into the wider European high-speed rail system, are expected to further enhance its logistical advantages and expand opportunities for investment in transport, trade, and industrial sectors.

Foreign direct investment remains an important driver of economic growth, with strong contributions from Nordic countries, Germany, the Netherlands, and other European partners. Investors are drawn not only by Latvia's geographic access to both Western Europe and Eastern markets, but also by its stable macroeconomic environment and commitment to long-term modernization. Public–private partnerships are increasingly used to develop infrastructure, energy, and municipal services, opening additional channels for private capital to participate in national and regional development projects.

Together, these elements create a well-rounded and evolving investment ecosystem. Latvia's combination of strategic geography, supportive policies, skilled labor, and modern infrastructure provides a strong foundation for sustained investment activity. As the country continues to advance in areas such as green energy, technology, and high-value manufacturing, its investment ecosystem is expected to grow even more robust and internationally competitive.

Economic landscape of each region: provide an overview of the economic context in each region, including key sectors, strengths, and opportunities for investment.

Latvia's regions each contribute uniquely to the national economy. The capital region of Riga and its surrounding area is the country's economic engine, driven by finance, ICT, corporate services, logistics, and startup ecosystem. Its strong infrastructure and skilled workforce make it the primary hub for innovation and high-value investment.

Kurzeme, located in western Latvia, has an economy shaped by its ports in Liepaja and Ventspils. The region is strong in logistics, maritime services, metalworking, and renewable energy, particularly wind power. Its industrial parks and port infrastructure create clear opportunities for manufacturing and energy-related investment.

Vidzeme, in the north, is characterized by forestry, agriculture, and a growing bioeconomy. With its clean environment and access to natural resources, the region offers opportunities in sustainable wood processing, agri-tech, and eco-tourism. Emerging clean-tech initiatives are also beginning to take hold.

Latgale, the eastern region, has a developing industrial base supported by special economic zones that offer incentives to investors. Manufacturing, food processing, and

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

woodworking dominate the local economy. With its favorable investment conditions and cross-border position, Latgale presents opportunities for production expansion and cost-efficient industrial development.

Zemgale region located in southern Latvia, is one of the country's most fertile and agriculturally productive regions. Its economy is centered on high-quality crop farming, dairy production, and food processing, supported by rich soil and strong agricultural traditions. In recent years, the region has also expanded its manufacturing base, particularly in machinery, construction materials, and logistics due to its proximity to Riga and strategic cross-border connections with Lithuania. With well-developed transport routes and available industrial land, Zemgale offers attractive opportunities for investment in agri-business, food processing, and logistics-oriented industries.

Key investment types: identify the types of investments that are most relevant (e.g., foreign direct investment, venture capital, public-private partnerships).

Latvia attracts several concrete forms of investment that shape its economic development. Foreign direct investment (FDI) is the most significant, with strong inflows from Nordic countries, Germany, and the Netherlands into sectors such as manufacturing, shared service centers, logistics, and real estate development. The country also has an expanding venture capital market, supporting ICT, fintech, deep-tech, and startup growth through regional VC funds, accelerators, and government-backed innovation programs. In addition, Latvia actively uses public–private partnerships (PPPs) for major infrastructure projects, including transportation networks, renewable energy facilities, and municipal services, creating structured opportunities for long-term private investment. These concrete investment channels provide a stable foundation for both international and domestic investors seeking growth in Latvia.

Key sectors: highlight priority sectors for investment, such as technology, manufacturing, green energy, and infrastructure.

Latvia offers a range of priority sectors that attract both domestic and international investors, reflecting the country's strengths in technology, manufacturing, green energy, and infrastructure. These sectors are positioned to benefit from supportive government policies, strategic geographic location, and a skilled, multilingual workforce.

The technology sector is one of the fastest-growing areas in Latvia, centered mainly in Riga. The country has a strong ICT talent pool, advanced digital infrastructure, and an active startup ecosystem. This sector includes software development, fintech, cybersecurity, artificial intelligence, and other high-value digital services. Several Latvian-born startups, such as Printful, Lokalise, and Aerones, have achieved international

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

recognition and attracted significant venture capital, demonstrating the sector's potential for both innovation and investment.

Manufacturing remains a cornerstone of the Latvian economy, particularly in metalworking, machinery, electronics, automotive components, and wood-processing industries. The sector benefits from competitive labor costs, modern industrial parks, and access to European and global markets. Recent investments in food processing, bioeconomy, and specialized manufacturing highlight the diversification and modernization of Latvia's industrial base.

Green energy and sustainability are increasingly important priorities for investment. Latvia is developing wind, solar, biomass, and bioenergy projects to reduce energy dependency and meet EU environmental targets. The country's abundant natural resources and commitment to the circular economy create opportunities in renewable energy, sustainable forestry, and environmentally friendly manufacturing.

Infrastructure and logistics are also critical areas for investment, driven by Latvia's strategic position as a transport and trade hub in Northern Europe. The country's ports in Riga, Liepaja, and Ventspils, along with major road and rail networks, support cargo transit and distribution. Projects like Rail Baltica enhance connectivity with the broader European market, creating opportunities for investors in transport, warehousing, and logistics services.

Agri-food sector, as part of the broader bioeconomy, leverages Latvia's fertile land and strong agricultural traditions, offering investment potential in sustainable farming, food processing, and innovative agritech solutions.

Other emerging sectors with investment potential include **life sciences and medical technologies**, with research institutions supporting biotechnology, pharmaceuticals, and clinical testing, as well as tourism and hospitality, particularly in wellness, eco-tourism, and high-end accommodations.

Overall, Latvia's key sectors reflect a balance between traditional industries and innovative, high-growth areas. The combination of a skilled workforce, strategic location, supportive policies, and access to European markets makes these sectors attractive for both strategic investors and venture capital.

B. Key stakeholders in the ecosystem

Government and public sector entities: list the local, regional, and national governments in fostering investment (e.g., investment promotion agencies, economic development offices).

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

The Latvian investment ecosystem is supported by a network of government and public sector entities at the national, regional, and local levels. The Investment and Development Agency of Latvia (LIAA) is the main national body promoting foreign direct investment, exports, and innovation. Regional and municipal governments also play a role by offering incentives, managing industrial and special economic zones, and facilitating permits and infrastructure development. Together, these public institutions coordinate to attract investment, support business development, and create favorable conditions for both local and international investors.

Private sector players: list the key private companies and investors driving the ecosystem (e.g., multinational corporations, SMEs, startups, private equity).

Latvia's private sector constitutes a critical driver of economic growth and investment. Multinational corporations, including Tech Mahindra and Printful, operate large-scale facilities and business centers, contributing capital, technological expertise, and international business practices to the domestic economy. SMEs form the foundation of local industry, with significant activity in manufacturing, food processing, and logistics. The country's startup ecosystem is dynamic and increasingly prominent on the international stage, with companies such as Lokalise and Aerones attracting venture capital and global recognition. Complementing these developments, private equity and venture capital firms, including BaltCap and Livonia Partners, actively invest in high-growth sectors such as ICT, deep technology, and green innovations, supporting the scaling of innovative enterprises and reinforcing Latvia's broader investment ecosystem.

Financial institutions: list the banks, venture capital firms, and other financial institutions that have an active role in funding regional investments.

Latvia's financial sector plays a central role in supporting investments across the country, from regional development to high-growth startups. The banking sector is well-established, with major banks such as Swedbank, SEB, and Citadele providing corporate financing, project loans, and trade finance for both local and international investors. In addition to traditional banking, venture capital and private equity firms are increasingly active, including BaltCap, Livonia Partners, and Imprimatur Capital, which fund technology, manufacturing, and green energy projects. Government-backed institutions such as ALTUM provide guarantees, grants, and co-financing to stimulate entrepreneurship, infrastructure development, and regional investment. Together, these financial institutions create a diverse funding ecosystem that supports business growth, innovation, and strategic investment throughout Latvia.

Academic and research institutions: list the universities and innovation hubs that foster regional development and research-driven investment.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Latvia's academic and research institutions play a vital role in fostering innovation, regional development, and research-driven investment. The country's leading universities, including University of Latvia , Riga Technical University (RTU), Latvia University of Life Sciences and Technologies (LLU), and Riga Stradiņš University (RSU), provide highly skilled graduates in engineering, technology, life sciences, and business. These institutions actively collaborate with industry and government to support applied research, technology transfer, and innovation projects.

Innovation hubs and science parks further strengthen the research ecosystem. Riga TechGirls,, TechHub Riga, and the regional business incubators (LIAA support programme) serve as incubators and accelerators, helping startups scale, attracting venture capital, and linking research outputs to commercial applications. Regional innovation centers also work closely with SMEs and multinational companies to develop new products, sustainable solutions, and advanced technologies. Together, universities and innovation hubs provide the knowledge, talent, and infrastructure necessary for research-driven investment and long-term economic growth in Latvia.

Support networks: outline organizations providing services such as business support, mentorship, legal assistance, etc. (e.g., incubators, accelerators, chambers of commerce).

Latvia's investment ecosystem is reinforced by a diverse range of support networks that provide business services, mentorship, and legal assistance to investors, startups, and established companies. Regional incubators and accelerators offer mentoring, access to financing, and networking opportunities for early-stage and growth-stage businesses. The Latvian Technological Center (LTC) plays a central role in fostering innovation by supporting research and development projects, facilitating collaboration between academia and industry, and providing technical expertise to businesses looking to scale or commercialize new technologies. Latvian Chamber of Commerce and Industry (LTRK) and regional business associations, provide advocacy, market intelligence, and business matchmaking services, helping both local and international investors navigate the market. Legal, accounting, and consulting firms specializing in corporate services, tax, and regulatory compliance further assist companies in establishing operations and managing risks. Collectively, these networks create a supportive environment that enables businesses to grow efficiently, innovate, and connect with key stakeholders across Latvia and the broader European market.

C. Mapping of the investment ecosystem

Latvia's investment ecosystem is structured around a collaborative network of public institutions, private companies, financial bodies, academic institutions, and support organizations. Government agencies like the Investment and Development Agency of Latvia (LIAA) coordinate with regional authorities to create investment-friendly policies,

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

business support programmes and facilitate permits. Private sector players, including multinational corporations, SMEs, and startups, drive economic activity while interacting with banks, venture capital funds, and government-backed financing institutions such as ALTUM to secure funding. Universities, research centers, and innovation hubs, including the Latvian Technological Center, provide knowledge, talent, and R&D support, which is reinforced by incubators, accelerators, and chambers of commerce offering mentorship, legal, and business services. Together, these stakeholders form an interconnected ecosystem where collaboration and resource sharing enable efficient investment, innovation, and regional development.

Connections between existing programs & instruments: ongoing regional/national/EU initiatives supporting innovation investments (how SustainX is integrating with the other programs and instruments).

The innovation-investment ecosystem of Latvia is built around a network of national agencies, EU instruments, financial institutions, and support programmes that layer together to support projects from early-stage to scale. Through this network, initiatives complement each other: research support, business incubation, grants, loans, equity, and EU-wide collaboration.

National and EU funding / support programmes

At the national level, Investment and Development Agency of Latvia (LIAA) is a central hub for innovation support. LIAA runs a variety of programmes including "Business Incubation Support," "Innovation Vouchers," support for science-intensive start-ups, and commercialisation support for research institutions and businesses.

These programmes enable early-stage companies, start-ups, and SMEs to access grants, technical support, and co-funding for research, development, prototyping, product certification or technology transfer — helping move innovations from lab or idea stage toward market readiness.

At the same time, the national development finance institution ALTUM provides financial instruments such as loans, loan guarantees, and equity-based support. ALTUM supports innovation, green and energy-efficiency investments, and business growth — bridging the funding gap especially for medium-size companies or more capital-intensive projects.

Because Latvia is part of the EU, many of these national programmes are co-financed through EU structural funds and EU-level frameworks, for example via the InvestEU Programme, the European innovation & research funding instruments, and cohesion funds (ERDF / ESF / CF / Just Transition Fund) that allocate funds across 2021-2027 for regional development, innovation, and infrastructure.

This layered support EU + national + national financing institution forms a base where public support de-risk early R&D and innovation, making it easier for private investors or companies to step in later with larger capital or scaling.

Integration of different programmes (SustainX)

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

SustainX is part of this broader European-level cooperation under the Interregional Innovation Investments (I3) Instrument with coordination through the Latvian Technological Center (LTC) in Latvia. SustainX aims to support SMEs in their green and digital transition, foster interregional partnerships, enable innovation investments, and facilitate business model validation and pilot projects.

By linking to I3, SustainX connects Latvian SMEs with partners elsewhere in the EU (other participating regions) — offering access to cross-region collaboration, shared expertise, and possibly co-funding or co-development opportunities that would be difficult within a purely domestic framework.

SustainX thus acts as a bridge: combining EU-level funding and coordination with local execution via LTC and sits neatly alongside other national support programmes (LIAA vouchers, ALTUM financing, incubation support) to give SMEs a viable pathway from early-stage innovation to scaled-up, sustainable, and export-ready business.

From early-stage innovation to larger investments

A company or SME in Latvia may initially leverage the LIAA Innovation Voucher program or participate in incubation support programme to develop a prototype or initial product offering. Enterprises with a strong research and development focus or a science-intensive profile can further access specialized support programs specifically designed for science-intensive startups, providing targeted funding and resources to advance R&D activities and accelerate technology commercialization.

As the company matures and pursues growth, it can secure larger-scale financing through bank loans, venture capital, or private equity, often complemented by national or EU co-funded programs. Additionally, public–private partnership frameworks provide opportunities to attract institutional or private investors, effectively bridging the "valley of death" that frequently constrains the scaling of early-stage innovators.

The integration of Latvia's national, regional, and EU-level programs encompassing research support, grants, loans, and cross-border collaboration initiatives creates a comprehensive and flexible ecosystem for innovation-driven investment.

For investors and companies, this coordinated framework reduces entry risk through targeted grants and vouchers, facilitates access to financing via institutions such as ALTUM and EU-backed funds, and provides pathways for scaling operations or entering international markets through partnership programs like SustainX and other EU initiatives.

For innovators and SMEs, the ecosystem establishes a structured progression from early-stage research and development to commercialization and growth. By combining public and private funding with international collaboration opportunities, it supports the transformation of innovative ideas into market-ready products and sustainable business ventures.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

2.6. Conclusions

The interregional investment ecosystem of Latvia is characterized by a well-coordinated network of public institutions, private enterprises, financial organizations, academic and research institutions, and support networks. The integration of national and EU-level programs, combined with specialized instruments and EU initiatives, creates a multi-layered framework that facilitates innovation, R&D, and business growth. Multinational corporations, SMEs, and dynamic startups drive economic activity, supported by banks, venture capital, and government-backed financing mechanisms. Academic and research centers, along with incubators and accelerators, provide talent, expertise, and technical support, while regional authorities and chambers of commerce ensure streamlined access to regulatory and business support services. Collectively, this ecosystem enables efficient investment, encourages innovation, and provides structured pathways for enterprises to scale, contributing to sustainable regional and national economic development.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

3. INTERREGIONAL INVESTMENT OPPORTUNITY ANALYSIS

3.1. Introduction

The purpose of this section is to provide a structured overview of common European-level investment opportunities relevant to all SustainX partner regions (Romania, Greece, Bulgaria, Spain, Latvia and Germany).

Given the project's strategic objective to strengthen interregional innovation ecosystems and to prepare investment-ready cases under the I3 Instrument, it is essential to map funding instruments that:

- Support interregional cooperation and value chains
- Enable digital and green transition investments
- Facilitate SME scaling and market deployment
- Complement national and regional S3 priorities
- Are accessible to multi-country consortia

The analysis focuses on programmes under the 2021–2027 Multiannual Financial Framework (MFF) that are accessible to all consortium countries and are particularly suited for innovation deployment, interregional cooperation and investment mobilisation.

This section aims to:

1. Identify concrete 2025–2026 call examples relevant for interregional consortia;
2. Provide a structured funding pathway from validation to large-scale investment;
3. Support the development of future I3-ready investment cases within SustainX.

The funding instruments presented below form a **complementary ecosystem**, enabling a progressive transition from early validation to cross-regional market deployment.

3.2. Overview of key EU funding instruments general presentation

The following table provides a structured overview of the core European funding instruments that are most relevant for interregional cooperation and investment deployment. It highlights their main objectives, typical funding conditions, consortium requirements and strategic relevance for SustainX. The table is intended to serve as a practical reference framework for partners when identifying suitable calls, designing cross-regional consortia and positioning future investment-ready projects within the appropriate European funding pathway.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Table 1. Core European Investment Opportunities for Interregional Consortia

Programme / Instrument	Type of Support	Typical Funding / Co-financing	Consortium Requirements	Best Fit for SustainX
Interregional Innovation Investments (I3) Instrument	Innovation deployment & value-chain integration	€2–10M per project; approx. 70% EU funding (varies by strand)	Min. 3–5 partners from different eligible regions; strong interregional value-chain logic	Flagship instrument for interregional demonstration, testing, and scaling of mature innovations
Horizon Europe (Clusters, EIC Pathfinder/Transition)	R&I and Innovation Actions	Up to 100% (Research & CSA); ~60–70% (Innovation Actions)	Min. 3 partners from 3 eligible countries (for most collaborative calls)	Technology development, validation, advanced prototypes, climate & digital solutions
Digital Europe Programme (DIGITAL)	Deployment, testing, interoperability, digital capacity	50–100% funding depending on topic	Usually 3 entities from 3 Member States/Associated Countries	Digital infrastructure, AI, cybersecurity, testing facilities, SME digital uptake
Interreg (Cross-border / Transnational)	Territorial cooperation	70–80%co-financing typical (programme-dependent)	Multi-country partnerships within programme area	Pilots, governance models, policy alignment, ecosystem building
LIFE Programme	Environment & climate deployment	~60% funding (higher for some sub-programmes)	Single or multi-country; no fixed minimum consortium in some strands	Circular economy, climate mitigation/adaptation, green transition investments
EIC Accelerator	Grant + equity (blended finance)	Grant up to €2.5M + equity up to €10M+	Single SME applicant (no consortium required)	High-growth innovative SMEs scaling validated solutions

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Programme / Instrument	Type of Support	Typical Funding / Co-financing	Consortium Requirements	Best Fit for SustainX
Innovation Fund	Large-scale decarbonisation	Large grants (high capital investments)	Individual or consortium; high maturity required	Industrial-scale net-zero and clean tech investments
InvestEU (SME Window)	Loans, guarantees, blended finance	Via financial intermediaries	SME-level	Scaling and market roll-out beyond grant phase

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

3.3. SME-friendly and fast-track opportunities (Cascade Funding)

Cascade funding (Financial Support to Third Parties – FSTP) represents a rapid access mechanism for SMEs and start-ups.

Key characteristics:

- No consortium required. Simplified application procedures
- Typical grants up to €100,000
- Often no co-financing required
- Shorter implementation periods (6–18 months)

Typical thematic areas:

- AI and robotics
- Smart farming
- Digital twins
- Urban mobility
- Green and circular innovation
- Data spaces and interoperability

Cascade funding is particularly relevant for:

- Early testing and proof-of-concept
- Entry-level internationalisation
- Preparing SMEs for larger Horizon, DIGITAL or I3 projects

Recommended monitoring tools:

- EU Funding & Tenders Portal
- EISMEA call updates
- Cascade Funding Hub
- EIT Knowledge and Innovation Communities (KICs)

3.4. Recommended interregional funding pipeline for SustainX

To maximise impact and scalability across all consortium regions, the following progressive funding pathway is recommended:

Stage 1 – Validation & SME engagement

Instrument: Cascade Funding. Purpose:

- Test solutions
- Validate prototypes
- Engage SMEs in cross-regional pilots

Stage 2 – Technology development & advanced pilots

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Instrument: Horizon Europe / Digital Europe. Purpose:

- Develop advanced prototypes
- Demonstrate cross-border functionality
- Integrate digital and green technologies
- Strengthen TRL 5–7 solutions

Stage 3 – Interregional deployment & value chain integration

Instrument: I3 Instrument (EISMEA). Purpose:

- Scale validated innovations
- Build interregional value chains
- Integrate less-developed regions
- Mobilise regional co-investment

This stage is particularly aligned with SustainX objectives of building structured interregional investment cases.

Stage 4 – Market roll-out & large-scale investment

Instruments:

- EIC Accelerator
- InvestEU
- Innovation Fund
- Private co-investment

Purpose:

- Commercial scaling
- Industrial deployment
- Infrastructure expansion
- Long-term financial sustainability

Strategic alignment with consortium regions – All identified programmes:

- Are open to EU Member States and Associated Countries
- Support digital and green transition priorities
- Align with Smart Specialisation Strategies (S3)
- Enable interregional collaboration
- Allow participation of SMEs, clusters, universities, public authorities and innovation intermediaries

This ensures that the funding landscape described above is applicable to the entire SustainX consortium without regional exclusion.

3.5. Conclusions

The European funding ecosystem offers a structured and scalable pathway from early validation to large-scale interregional deployment. For the SustainX consortium, the I3

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Instrument represents the most strategically aligned funding mechanism for interregional investment integration, while Horizon Europe, Digital Europe and LIFE provide strong complementary instruments for development and piloting. Cascade funding and EIC/InvestEU instruments further strengthen the investment pipeline by supporting SME engagement and long-term financial sustainability. Together, these opportunities create a coherent framework for developing and scaling interregional innovation investments across Romania, Greece, Bulgaria, Spain, Latvia and Germany.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

4. THE LIST OF INVESTMENT PROJECTS MAPPED

Introduction

4.1. Romania

Below is an aggregated analysis of the 26 Romanian SMEs that responded within the SustainX framework. The objective of this assessment is to provide a structured overview of the participating companies, including their business models, stage of development, sustainability orientation, financial health, funding needs, requested services, and strategic alignment with SustainX objectives.

The analysis is based exclusively on the information provided by the SMEs and reflects a diverse portfolio of Romanian companies operating in ICT, AI, HealthTech, AgriTech, Circular Economy, Manufacturing, GreenTech, EdTech, and service-based sectors. The cohort is predominantly composed of micro-enterprises, with representation across early-stage, growth, and established companies, demonstrating varying levels of technological maturity and market validation.

By consolidating the individual responses into aggregated indicators and percentages (calculated from the total of 26 SMEs), this section aims to:

- Provide a clear profile of the Romanian SME portfolio supported through SustainX;
- Identify common trends in innovation focus, sustainability integration, and business readiness;
- Highlight shared funding and strategic partnership needs;
- Demonstrate the overall alignment of the cohort with the green and digital transition priorities underpinning the SustainX project.

The findings confirm a technology-intensive and sustainability-oriented Romanian SME ecosystem with strong potential for scaling, interregional collaboration, and contribution to European innovation, resilience, and competitiveness objectives.

A. Company Profiles

No.	Company name	Representative name	Industry sector	Size
1	AGEO SRL	A. G.	Other	Micro (1-9)
2	Green Rent SRL	A. B.	AgriTech	Micro (1-9)
3	S.C. INATECH S.R.L.	B. C.	HealthTech	Micro (1-9)
4	Falcon Trading	B. M.	ICT/Software	Small (10-49)
5	Fides Consult SRL	B. I.	Other	Micro (1-9)
6	SM CRIS CONSTRUCTION	C. S.	HealthTech	Micro (1-9)
7	EVERYWARE COMPUTING SRL	C. T.	ICT/Software	Micro (1-9)

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

8	JS LEAGUE TECHNOLOGIES SRL	D. M.	EdTech	Micro (1-9)
9	Devmind S.R.L.	E. R.	ICT/Software	Micro (1-9)
10	Strongbytes Consulting SRL	F. C.	ICT/Software	Micro (1-9)
11	Holz Meister Robotics SRL	G. N.	Manufacturing	Micro (1-9)
12	Reverse PET S.R.L.	I. B.	GreenTech	Micro (1-9)
13	UNDA COLLECTIVE SRL	C. B.	Manufacturing	Micro (1-9)
14	BMT CONSULT SRL	M. P.	Other	Micro (1-9)
15	Benoli Tech SRL	I. M.	ICT/Software	Medium (49-249)
16	S.C. ICONSULTING S.R.L.	M. M.	ICT/Software	Micro (1-9)
17	AV ARTELIER DECOR SRL	R. I.	Circular Economy	Micro (1-9)
18	SC EMPORIO VELATHRI SRL	R. P.	ICT/Software	Micro (1-9)
19	DATA SPACE SRL	S. B.	ICT/Software	Micro (1-9)
20	Bosotech Inovare SRL	S. B.	ICT/Software	Micro (1-9)
21	YOUPLAN DEVELOPMENT SRL	T. F.	Other	Micro (1-9)
22	T&E Com Serv SRL	V. U.	Manufacturing	Micro (1-9)
23	UVIA.LAND SRL	V. U.	Manufacturing	Micro (1-9)
24	METASENSYS SRL	V. U.	ICT/Software	Micro (1-9)
25	Recycllux SRL	S. U.	Circular Economy	Micro (1-9)
26	DIGITALYA OPS	C. O.	ICT/Software	Small (10-49)

B. Business profile and strategy

Business model distribution

- B2B / B2B SaaS / Enterprise licensing models: 72%
- Hybrid models (hardware + SaaS / service + subscription / B2B2C): 20%
- B2C / D2C with subscription components: 8%

The majority of SMEs operate scalable digital business models, predominantly subscription-based SaaS platforms, enterprise licensing, or API-based infrastructures. A smaller but significant segment combines hardware and software (e.g., robotics, IoT, medtech, bio-fabrication).

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

Core activities

Across the portfolio, the main activities include:

- Software/platform development and AI model development (64%)
- R&D and prototyping (including hardware and bio-materials) (52%)
- Data analytics, AI integration, ESG or decision-support systems (48%)
- Testing, pilot deployment, and validation activities (56%)
- Integration services, onboarding, and support (44%)

The portfolio is strongly innovation-driven, with a high share of technology development and applied research activities.

Value proposition trends

The SMEs primarily offer:

- Digitalisation and automation solutions for SMEs and industry
- AI-driven decision support and optimisation tools
- Circular economy and sustainability-enabling platforms
- Resource efficiency, waste reduction, and carbon-reduction solutions
- Responsible AI, compliance-ready and regulation-aligned tools

Approximately 76% explicitly position their value proposition around digital transformation, sustainability, or circular economy impact.

Current business status

Stage of development

- Early-stage: 48%
- Growth stage: 28%
- Established: 24%

The portfolio is therefore dominated by early-stage innovators, with a strong pipeline of scalable growth-stage companies.

Significant achievements and milestones

- EU-funded projects participation (ERDF, SMIS, Horizon-related, Women TechEU, etc.): 40%
- Awards / recognitions / international distinctions: 20%
- Pilot deployments or validated prototypes (TRL progression mentioned): 56%
- Patent filed or in preparation: 12%
- Operational paying customers / profitable operations: 36%

The data shows strong innovation validation activity, with more than half already engaged in pilot deployments or validation processes.

Sustainability initiatives

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Sustainability is strongly embedded across the portfolio:

- Explicit strong alignment with SustainX / Green Deal / Twin Transition objectives: 84%
- Circular economy, waste reduction, or sustainable materials focus: 32%
- Energy efficiency / industrial efficiency solutions: 16%
- Digital solutions reducing resource consumption (paperless, optimisation, ESG tools): 60%
- Carbon reduction / regenerative / bio-based innovation: 12%

The portfolio demonstrates a high degree of sustainability integration, particularly through digital enablement and circular business models.

Financial Health

Based on the declared status:

- Healthy financial position: 36%
- Moderate financial position: 28%
- Struggling: 16%
- Not specified: 20%

While over one-third of SMEs report healthy financial status, nearly half fall into moderate or struggling categories, indicating vulnerability typical of early-stage innovation ecosystems.

Main funding needs

- R&D and technology development: 64%
- Market expansion / scaling: 52%
- Infrastructure investment: 40%
- Technology adoption and integration: 44%
- Working capital support: 32%
- Training / mentoring support: 20%

The data indicates a strong need for scaling support and technology maturation, especially for early-stage and hardware-intensive projects.

Most requested partner categories

- Technology providers: 64%
- Research / Universities: 56%
- Testing / Validation sites: 56%
- Distributors / Channels: 28%
- Public authorities: 20%
- Investors: 24%
- NGOs / ecosystem actors: 16%

The portfolio shows a strong orientation toward ecosystem collaboration, particularly for validation, co-development, and cross-regional scaling.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Portfolio observations

- The SME cohort is **technology-intensive, innovation-driven, and strongly aligned with digital and green transition priorities**.
- Nearly half of the companies are early-stage, indicating high growth potential but also higher financial vulnerability.
- R&D, validation, and market expansion represent the dominant funding priorities.
- The ecosystem requires strong interregional collaboration with research institutions, technology providers, and testing environments to accelerate TRL progression and EU-level scaling.
- Sustainability integration is structurally embedded across the majority of the portfolio, particularly through digitalisation, circular models, and AI-driven efficiency improvements.

C. Participation in SustainX Project

Services requested

The SMEs indicated interest in a broad range of strategic, technical, and financial support services through the SustainX project, and are presented below:

- Business consultancy: 68%
- Matchmaking / ecosystem partnerships: 64%
- Testing & validation support: 52%
- Technology adoption support: 48%
- Financial advisory: 48%
- Training & mentoring: 40%
- Sustainability assessment: 40%
- Other specialised support services: 16%

Observations

- The high demand for business consultancy and matchmaking (over 60%) indicates strong interest in structured scaling support and interregional partnerships.
- More than half of SMEs require testing and validation, reflecting the large proportion of early-stage and TRL-transitioning innovations.
- The significant demand for financial advisory and technology adoption services (48%) confirms scaling and investment-readiness as priority needs.
- Sustainability assessment is explicitly requested by 40% of SMEs, reinforcing the strategic importance of measurable environmental and ESG impact.

Overall, the requested services demonstrate a clear need for integrated innovation acceleration support, combining strategic guidance, ecosystem integration, validation infrastructure, and financial readiness.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

D. Alignment with SustainX goals

Based on the descriptions provided, SMEs align with SustainX objectives in the following ways:

- Digital transformation of SMEs and industries: 68%
- Circular economy, waste reduction, or sustainable materials: 32%
- AI-driven responsible innovation and compliance-ready systems: 44%
- Energy efficiency / resource optimisation solutions: 20%
- Sustainable healthcare and social impact innovation: 20%
- Green and regenerative business models: 16%

Strategic contribution to SustainX

Across the portfolio, SMEs contribute to SustainX goals by:

- Enabling digitalisation and smart services transformation
- Supporting resource efficiency and reduction of material waste
- Promoting responsible AI and data-driven sustainability practices
- Developing circular and service-based business models
- Strengthening cross-regional innovation ecosystems
- Improving SME competitiveness within the EU green and digital transition

The data confirms that the SME portfolio is structurally aligned with the SustainX mission of fostering green innovation, sustainable growth, digital transformation, and interregional collaboration.

4.2. Bulgaria

Below is an aggregated analysis of the 14 Bulgarian SMEs that responded within the SustainX framework. The objective of this assessment is to provide a structured overview of the participating companies, including their business models, stage of development, sustainability orientation, financial health, funding needs, requested services, and strategic alignment with SustainX objectives.

The analysis is based exclusively on the information provided by the SMEs and reflects a diversified portfolio of Bulgarian companies operating in ICT and software development, AI and digital infrastructure, industrial automation, manufacturing, AgriTech, circular product innovation, laboratory and technical equipment supply, and business advisory services. The cohort is predominantly composed of micro-enterprises, with a higher concentration of established companies compared to early-stage startups, indicating operational maturity but limited scale.

By consolidating the individual responses into aggregated indicators and percentages (calculated from the total of 14 SMEs), this section aims to:

- Provide a clear and evidence-based profile of the Bulgarian SME portfolio supported through SustainX;

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

- Identify common trends in digitalisation, industrial modernisation, and sustainability integration;
- Highlight shared funding requirements, scaling challenges, and partnership needs;
- Assess the structural alignment of the Bulgarian cohort with the green and digital transition priorities underpinning the SustainX project.

The findings indicate a commercially oriented and technically capable SME ecosystem, strongly positioned in digital transformation and industrial efficiency solutions. While explicit sustainability certification remains limited, sustainability is embedded primarily through digital enablement, resource optimisation, automation, and selected circular innovation cases. The Bulgarian cohort demonstrates solid operational stability and strong demand for advisory, financial, and market-access support, confirming high relevance for SustainX intervention and interregional scaling mechanisms.

A. Company Profiles

No.	Company name	Representative name	Industry sector	Size
1	UpHeel LTD	N. F.	Retail / Commerce (Footwear Accessories / Circular Product Design)	Micro (1–9)
2	AFC Ltd	I.Z.	ICT / Software (Artificial Intelligence / DeepTech)	Micro (1–9)
3	LAM'ON Ltd	G. S.	Manufacturing (Sustainable Packaging / Circular Materials)	Micro (1–9)
4	ALEKS 1977	P.D.	AgriTech / FoodTech (Heliculture & Bio-based Products)	Micro (1–9)
5	Analyse This Ltd	M.A.	ICT / Software (Data Analytics / Business Intelligence)	Micro (1–9)
6	Bastun Media Ltd	R.M.	ICT / Software (Digital Media & Communication Services)	Micro (1–9)
7	BIOKOM EOOD	P.S.	Manufacturing (Monitoring & Tracking Systems)	Micro (1–9)
8	BODOR Ltd	B.R.	Manufacturing (Industrial Laser & Smart Manufacturing Equipment)	Micro (1–9)
9	DIMILOR LTD	V.D.	ICT / Software (Digital Innovation & Platform Solutions)	Micro (1–9)
10	Economic Institute of Teams	E.K.	Consulting / Organizational	Micro (1–9)

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

			Development	
11	Evrotrust Technologies AD	I.T.	ICT / Software (Digital Identity & eSignature)	Small (10–49)
12	Labora Expert OOD	V.V.	Manufacturing (Laboratory & Testing Equipment)	Micro (1–9)
13	Ral Automation Ltd	P.I.	Manufacturing (Industrial Automation & Robotics)	Micro (1–9)
14	Somenso EAD	S.K.	ICT / Software (Custom Software Development & IT Integration)	Small (10–49)

B. Business profile and strategy

Business model distribution

- B2B technology / industrial solution providers (equipment, automation, AI, digital infrastructure): 64%
- Service-based B2B consulting / digital services models: 21%
- Product-based innovation (physical product / circular consumer solution): 14%

The majority of Bulgarian SMEs operate B2B-oriented business models, primarily delivering digital transformation services, industrial equipment, automation, or AI-based solutions. A smaller but important segment includes product innovators in circular economy and bio-based production (e.g., sustainable packaging and agricultural niche products).

The ecosystem is predominantly service and technology integration oriented, rather than platform-SaaS subscription-heavy, with a strong emphasis on implementation and industrial deployment.

Core activities

Across the portfolio, the main activities include:

- Software development, AI, digital integration services: 43%
- Industrial equipment distribution and automation integration: 36%
- R&D and product/material development: 14%
- Consulting, training, and advisory services: 7%
- Monitoring, tracking and technical infrastructure provision (embedded within industrial actors): included within the 36% industrial category

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

The portfolio shows a balanced mix between digital solution providers and industrial modernisation actors. Compared to purely digital ecosystems, Bulgaria demonstrates a stronger industrial technology integration layer and applied implementation capacity.

Value proposition trends

The SMEs primarily offer:

- Digital transformation and automation solutions
- Industrial efficiency and modernization technologies
- Circular economy and sustainable material substitution (limited but high-impact segment)
- AI-driven optimisation and analytics
- Process digitalisation and secure digital identity infrastructure

Approximately 71% explicitly position their value proposition around digital transformation or industrial efficiency. Approximately 14% explicitly position around circular economy or sustainability-driven innovation. Only a small portion (7%) integrate formal sustainability certification or structured ESG positioning. The portfolio demonstrates strong digital orientation, with sustainability embedded in selected cases rather than universally structured.

Current business status

Stage of development

- Early-stage: 21%
- Growth stage: 21%
- Established: 57%

Unlike highly startup-dominated ecosystems, the Bulgarian cohort is weighted toward established micro-enterprises, indicating operational stability but limited scale.

The portfolio therefore reflects a technically capable but micro-scale mature ecosystem, with fewer high-growth startups and more established small operators.

Significant achievements and milestones

- Certified sustainability compliance (e.g., compostable material certification): 7%
- Operational advanced digital infrastructure (e.g., digital identity deployment): 14%
- TRL progression / MVP development mentioned: 14%
- Active industrial technology deployment (automation, laser systems, monitoring): 36%
- Participation in EU-funded innovation projects (declared or implied): limited explicit evidence

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Patent filings or formal IP portfolios are not strongly visible in the declared data.

Overall, validation occurs mostly through commercial deployment rather than structured R&D frameworks.

Sustainability initiatives

Sustainability integration levels:

- Advanced / Certified sustainability: 7%
- In planning: 14%
- Implicit / indirect contribution (efficiency, digitalisation, reduced material use): 71%
- No declared sustainability framework: 7%
- Circular economy / sustainable materials focus: 14%
- Industrial efficiency / automation enabling energy reduction: 36%
- Digital solutions reducing resource use (paperless, optimisation, AI efficiency): 43%

The Bulgarian portfolio demonstrates moderate structural sustainability integration, primarily via digital enablement and efficiency improvement rather than regenerative or carbon-neutral innovation models.

Financial health

- Healthy financial position: 14%
- Moderate financial position: 86%
- Struggling: 0% (declared)

The ecosystem is financially stable at operational level but shows limited capital buffers. Most companies operate in the micro-scale turnover band (€100k–€500k), with only two small enterprises exceeding this. This reflects operational viability but limited internal scaling capacity.

Main funding needs

- Technology adoption and integration: 57%
- Market expansion / scaling: 29%
- R&D and product development: 14%
- Working capital: 7%
- Large-scale industrial scaling (CAPEX-intensive): 7%
- Training and mentoring support (service development and capability building): 36%

The portfolio indicates stronger demand for:

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

- Commercial scaling
- Technology upgrading
- Market access and distribution

Rather than purely research-stage financing.

Most requested partner categories

- Investors: 100%
- Distributors / channels: 86%
- Technology providers: 7%
- Testing / validation sites: 14%
- Research / universities: 0% (explicitly declared)
- Public authorities: 0% (explicitly declared)

The dominant demand is clearly commercial:

- Investment
- Market access
- Distribution partnerships

Research collaboration is relatively weakly requested compared to other regions. This indicates that the Bulgarian cohort is commercially motivated and market-oriented, but less embedded in formal R&D ecosystems.

Portfolio Observations

The Bulgarian SME cohort is:

- Micro-enterprise dominated
- Technically capable and digital-oriented
- Moderately aligned with sustainability priorities
- Commercially driven rather than research-driven
- Operationally stable but capital-constrained

Compared to high-startup ecosystems, Bulgaria shows:

- Fewer early-stage disruptive innovators
- More established small integrators and service providers
- Strong industrial modernisation capacity
- Selective but high-potential green manufacturing (LAM'ON as flagship case)

The ecosystem requires:

- Investment readiness structuring
- Cross-regional distribution partnerships

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

- Pilot and validation environments
- Scale-up financing mechanisms
- Sustainability formalisation (ESG integration beyond implicit efficiency gains)

SustainX can therefore play a catalytic role in:

- Connecting industrial modernisers to research/testing environments
- Supporting green material scale-up
- Facilitating structured investment matchmaking
- Embedding sustainability governance more systematically

C. Participation in SustainX Project

Services requested

The SMEs indicated interest in the following strategic, technical, and financial support services through the SustainX project (percentages calculated on the basis of 14 mapped BG SMEs.):

- Business consultancy: 100%
- Financial advisory: 100%
- Technology adoption support: 93%
- Training & mentoring: 93%
- Matchmaking / ecosystem partnerships: 43%
- Testing & validation support: 21%

Observations

The Bulgarian cohort demonstrates very strong demand for structured advisory support, with all companies requesting both business consultancy and financial advisory services. This confirms a clear need for:

- Investment readiness structuring
- Business model optimisation
- Strategic growth planning

Technology adoption (93%) and training & mentoring (93%) are also dominant, indicating that the ecosystem is:

- Implementation-oriented
- Focused on upgrading operational capabilities
- Seeking structured support for scaling and competitiveness

Matchmaking (43%) is moderately requested, while testing & validation (21%) appears less dominant compared to early-stage-heavy ecosystems. This reflects the higher

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

share of established micro-enterprises and industrial integrators rather than deep-tech R&D startups.

Overall, the requested services confirm that the Bulgarian SMEs prioritise commercial strengthening and capability upgrading, rather than purely research-stage experimentation.

Alignment with SustainX Goals

Based on the portfolio descriptions, alignment with SustainX objectives is as follows:

- Digital transformation of SMEs and industries: 71%
- Industrial modernisation and automation: 36%
- Circular economy and sustainable materials: 14%
- AI-driven innovation and responsible digitalisation: 14%
- Implicit resource efficiency through digitalisation and automation: 71%
- Explicit sustainability certification / structured ESG positioning: 7%

Strategic Contribution to SustainX

Across the portfolio, Bulgarian SMEs contribute to SustainX goals by:

- Enabling SME digitalisation and smart industrial transformation
- Supporting automation and industrial efficiency upgrades
- Providing AI-based optimisation tools
- Delivering secure digital infrastructure (e.g., identity systems)
- Introducing circular product innovation (limited but high-impact cases)
- Enhancing EU competitiveness of micro-enterprises through technology upgrading

Structural Interpretation

The Bulgarian SME cohort is:

- Strongly aligned with the digital and industrial modernisation pillar of SustainX
- Moderately aligned with circular economy objectives
- Less focused on formally structured ESG or sustainability certification frameworks
- Highly commercially oriented and scale-driven

Compared to more R&D-heavy regions, Bulgaria's alignment is strongest in:

- Industrial efficiency
- Digital transformation implementation
- Technology integration

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

SustainX can therefore maximise impact in Bulgaria by:

- Strengthening investment readiness
- Formalising sustainability integration beyond implicit efficiency gains
- Facilitating cross-regional distribution and commercial partnerships
- Supporting green manufacturing scale-up cases (e.g., sustainable materials)

4.3. Canary Islands

The Canary Islands portfolio comprises 17 SMEs mapped under the SustainX framework, representing a cross-section of the region's entrepreneurial landscape. The companies operate across Tourism/HoReCa, GreenTech, Circular Economy, ICT/Software, HealthTech, and Energy, reflecting both the structural characteristics of the regional economy and its ongoing diversification toward innovation-driven activities.

The portfolio is predominantly composed of micro-enterprises, with limited representation of small-sized companies. This composition illustrates a business ecosystem characterised by lean organisational structures, early growth dynamics, and evolving investment readiness. The mapped SMEs span different development stages, from early concept validation to more consolidated market operations.

Sectorally, tourism-related businesses account for a significant share of the portfolio, consistent with the economic profile of the Canary Islands. At the same time, the presence of companies in green technologies, circular economy models, digital services, and health-related innovation indicates a gradual strengthening of technology-based and sustainability-oriented initiatives within the region.

Overall, the mapped projects demonstrate heterogeneous levels of technological maturity, financial capacity, and strategic positioning. Together, they provide a representative overview of the Canary Islands' SME ecosystem within SustainX, combining traditional regional strengths with emerging innovation pathways.

A. Company Profiles

No.	Company name	Representative name	Industry sector	Size
1	IMPRESSORA TF SL	D.D.	GreenTech	Micro (1-9)
2	CANARY PLANET	L.A.R.C.	Tourism/HoReCa	Micro (1-9)
3	MY TOUR PLAN	G.R.	Tourism/HoReCa	Micro (1-9)
4	TECNOFLY CANARIAS, S.L.	Á.I.Q.G.	ICT/Software	Micro (1-9)
5	Vulkania Labs SL - Kanara	L.M.E.	HealthTech	Micro (1-9)
6	Water2kW S.L.	J.S.	HealthTech	Small (10-49)

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

7	Planificación Básica de Consultoría, S.L.U. - Plan B	A.J.S.P.	GreenTech	Micro (1-9)
8	Aquatera Atlántico	N.A.A.R.	Energy	Micro (1-9)
9	Senda Ecoway	L.Á.T.	Tourism/HoReCa	Micro (1-9)
10	Rising Pixel S.L.	L.C.	ICT/Software	Small (10-49)
11	GalloBuey	F.L.A.	Circular Economy	Micro (1-9)
12	La Musicleta	R.C.M.	Tourism/HoReCa	Micro (1-9)
13	AJJ Campervan S.L	A.M.S.	Tourism/HoReCa	Micro (1-9)
14	Multilingual Events	A.B.B.B.	GreenTech	Micro (1-9)
15	CoffeeFungi	C.P.O.	Circular Economy	Micro (1-9)
16	Ecatar Canarias SLU (Ataretaco)	J.F.H.L.	Circular Economy	Small (10-49)
17	World Travel Tenerife	Á.M.F.Á.	Tourism/HoReCa	Micro (1-9)

B. Business profile and strategy

Business model, core activities and value proposition

Business model distribution

- Project-based services / B2B / B2C: 65%
- Hybrid models (technology + service / digital + consulting / e-commerce + R&D): 25%
- Pure product-based or R&D collaborations: 10%

Most SMEs in the Canary Islands operate micro-enterprises (1–9 employees) with flexible business models. The majority provide service-oriented or B2B/B2C offerings, while a smaller segment combines technology, product innovation, and research collaborations. The ecosystem demonstrates diversity in business models adapted to sectoral and project-specific needs.

Core activities

- Development of sustainable materials, green hydrogen, plant-based bioactives: 35%
- Digital solutions, geospatial analytics, ICT services: 30%
- Consultancy, training, and advisory services: 15%
- Tourism and cultural service provision: 15%

- Renewable energy and circular economy operations: 10%

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

The Canarian SMEs contribute to SustainX objectives across a spectrum of innovation. Many focus on sustainability and circular practices, including green materials, renewable energy, or circular economy solutions. Others emphasize digital transformation and technology integration, such as software development, AI-driven tools, and digital service delivery. Some are advancing sector-specific or service-oriented innovations, including tourism, consultancy, or social and cultural solutions. This variety reflects both the predominant sustainability orientation of the Canary Islands SMEs and the broader diversity of business models and activities within the portfolio.

Value proposition trends

- Environmental impact reduction / circular economy / sustainable solutions: 58%
- Operational efficiency / process or service improvement: 25%
- Personalized, accessibility, or cultural & educational services: 12%
- Technology-driven innovation without explicit sustainability framing: 5%

The Canarian SME portfolio demonstrates a strong orientation toward sustainable solutions, with over half explicitly positioning around environmental or circular economy impact. A significant share focuses on efficiency, personalization, or technology innovation, highlighting the breadth of strategic approaches present in the region.

Current business status

- Early-stage (research, prototype, pilot projects): 47%
- Growth-stage (market expansion, refining business model): 35%
- Established enterprises (consolidated operations and revenue streams): 18%

The Canarian portfolio is dominated by early-stage companies, but includes a meaningful proportion of growth-stage and established SMEs, reflecting a spectrum of innovation maturity and market readiness. Several SMEs are validating ideas and prototypes, some are conducting pilot tests or technology demonstrations, and a few have reached advanced commercial deployment with recognized achievements.

Significant achievements and milestones

- Pilot deployments / technology validation: 52%
- Participation in EU-funded or regional innovation programs: 28%
- Awards or recognitions (innovation, sustainability, tourism, ICT): 20%
- Commercial operations / paying customers: 35%

These figures illustrate active innovation validation, engagement with funding programs, and initial market traction across the Canary Islands ecosystem.

Sustainability initiatives

- Implemented or certified initiatives (circular economy practices, carbon reduction measures, renewable energy integration, social inclusion programmes): 47%
- Planning / in development: 29%

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

- Limited sustainability focus (primarily technology or business validation): 24%

The Canarian SMEs show varying levels of sustainability integration. Nearly half of the companies have already embedded or certified sustainability practices in their operations. Another portion is actively planning initiatives that will be implemented as their projects develop, while a smaller share currently focuses on validating their business models or technologies, with sustainability integration expected at later stages.

Financial health

Most SMEs are micro-enterprises with relatively modest turnover, reflecting their early-stage or growth-phase status. Some have more established revenue streams supporting ongoing operations and market expansion, while others rely on grants, sponsorships, or project-based income. Overall, the financial situation is generally stable, though additional funding is often necessary to support scaling, technology development, or market growth.

Funding requirement

- <€50,000 (concept validation, early-stage projects): 12%
- €50,000–€250,000 (technology development, operational scaling, digitalisation): 62%
- €250,000–€1.5M (industrial scaling, infrastructure, deep-tech R&D): 26%

Funding needs differ across the portfolio, reflecting company stage, sector, and project focus. Some SMEs require modest amounts to support early-stage concept validation, while others aim for larger investments to advance R&D, technology adoption, or infrastructure scaling. The most frequently indicated funding range, between €50,000 and €250,000, is typically directed towards technology development, market expansion, digitalisation, operational consolidation, and scaling of production or service capacity.

Type of strategic partners needed

- Investors / funding partners: 48%
- Universities / research organizations / technology providers: 35%
- Distributors / public authorities / NGOs: 28%

SMEs emphasize partnerships tailored to their stage, sector, and objectives. Some seek investors, universities, or technology providers to accelerate innovation, while others prioritize distributors, authorities, or NGOs to expand market reach and impact. Collaboration is a key driver for growth, innovation, and capacity building across the Canary Islands portfolio.

C. Participation in SustainX Project

Services requested

- Business consultancy: 65%
- Matchmaking / ecosystem partnerships: 53%

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

- Technology adoption support: 41%
- Testing & validation support: 35%
- Financial advisory: 29%
- Training & mentoring: 24%
- Sustainability assessments: 29%

The Canarian SMEs demonstrate strong interest in integrated support services, particularly business consultancy, ecosystem partnerships, and technology validation. Early-stage companies additionally emphasize financial advisory and mentoring to prepare for investment and scaling.

Alignment with SustainX goals

The Canarian SMEs show strong alignment with SustainX objectives, particularly in sustainability and green transition, reflecting the high number of companies with environmentally-oriented business models.

- Sustainability / Green Transition (including circular economy and resource efficiency): 76%
- Digital / Technological Innovation: 35%
- Tourism / Social Innovation: 41%

The portfolio contributes to SustainX by:

- Developing and scaling environmentally sustainable solutions, including circular economy practices, renewable energy integration, green biotech, and carbon reduction initiatives.
- Leveraging digital and technological innovation to improve efficiency, decision-making, and service delivery across sectors.
- Advancing sustainable tourism models and social innovation, promoting community engagement, inclusion, and responsible travel practices.

Overall, the Canarian SME cohort is strongly oriented towards sustainability, with a meaningful share also driving digital innovation. This makes them well-positioned to contribute to SustainX's objectives of fostering green, socially responsible, and technologically enabled innovation across the region.

4.4. Greece

General introduction

A. Company Profiles

No.	Company name	Representative name	Industry sector	Size
1	RMR	V.S.	Manufacturing	Micro (1-9)
2	EGNITE	A.F.	ICT/Software	Micro (1-9)
3	RedefineCare GP	T.D.	ICT/Software	Micro (1-9)

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

4	CORPHES	C.K.	AgriTech	Micro (1-9)
5	KONSTANTINOS GRIGORIOU	K.G.	Other – Accounting / Financial & Business Advisory Services	Micro (1-9)
6	NARKISSOS	E.G.	MedTech	Micro (1-9)
7	Efodia Karieras PC	A.K.	EdTech	Micro (1-9)
8	DOS Luxury Holistic Beauty PC	C.P.	HealthTech	Micro (1-9)
9	QUALIA	A.T.	Tourism/ HoReCa	Micro (1-9)
10	THE FACTORY P.C.	B.S.	Other – Innovation Hub / Business Support / Education & Innovation Services	Small (10-49)
11	REDPLUS+ Branding & Digital Marketing Agency	A.S.	ICT/Software	Micro (1-9)
12	Open Mellon S.A.	V.A.	EdTech	Micro (1-9)
13	No limit styles	A.K.	Other	Micro (1-9)
14	ΛΕΥΚΑΔΙΤΗΣ GTC AE	T.L.	Retail/ Commerce	Micro (1-9)
15	DOMOTEK CONSULTING ENGINEERS P.C.	M.D.	Energy	Micro (1-9)
16	HELPAGRI	K.M.	AgriTech	Micro (1-9)

B. Business profile and strategy

Business model, core activities and value proposition

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

The dominant **business logic** is service-led enablement combined with targeted product and solution scaling. Many of the companies operate as B2B or professional service providers that help other SMEs run better and grow—through accounting and financial advisory, agricultural consultancy, engineering and compliance services for the built environment, digital transformation (web/e-commerce, performance marketing, analytics), and specialised regulatory services such as dangerous goods packing and documentation. In parallel, a smaller but strategically important subset follows product-based models, commercialising premium offerings such as biofunctional agri-food/aromatic products and luxury natural cosmetics enhanced by digital personalisation, while another subset delivers experience-based cultural services (performances, workshops, gastronomy events). The innovation hub in the group functions as an ecosystem platform, providing incubation, training and matchmaking that reinforce the scaling capacity of the whole regional cluster.

The **core activities** therefore cluster around three complementary pillars: (1) operational and regulatory support services that reduce risk and administrative burden for clients; (2) digitalisation and market-facing growth services that improve visibility, sales channels and performance measurement; and (3) innovation and product development activities, including R&D, quality-oriented production, and the packaging of repeatable offerings that can be transferred across markets. This combination means that the portfolio does not only "deliver services," but actively supports SMEs in building structured capabilities—better decision-making, better workflows, stronger market access and clearer investment narratives.

As a **collective value proposition**, the portfolio strengthens the Thessaly ecosystem by offering practical, immediately deployable solutions that improve SME competitiveness while also creating pathways for innovation scaling. It combines trusted local delivery capacity with modern tools, sector know-how and partner networks, enabling businesses to expand into new markets, professionalise operations, develop differentiated offerings and build cross-regional collaborations aligned with SustainX objectives.

Current business status

Overall, the portfolio is weighted toward **Growth** and **Established** entities, with a smaller share of **Early-stage** ventures. This indicates a group that is largely beyond the ideation phase and is either already operating with stable services/products or actively scaling into new markets and customer segments. In practical terms, most participants have the delivery capacity to implement improvements quickly (tools, processes, partnerships, pilots) and to convert SustainX support into measurable outcomes such as new channels, packaged offerings, and expanded client bases.

In terms of milestones and achievements, the portfolio includes several strong signals of maturity and credibility. There is at least one long-standing professional services firm with a recognised quality certification (ISO 9001:2015) and decades of operation, which demonstrates institutional reliability and process maturity. The portfolio also includes an innovation hub with significant operational activity and market reach, acting as a multiplier for ecosystem-building and cross-regional collaboration. On the innovation

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

side, there are companies with clear differentiation and market traction through recognisable achievements such as multiple international awards in luxury skincare and an established healthcare software solution serving specialised healthcare units. In addition, several firms operate in high-compliance environments (e.g., dangerous goods packaging and documentation), which itself reflects a milestone of operational capability and regulatory know-how. Taken together, these stages and milestones show a portfolio that combines operational stability with credible growth potential, supported by demonstrable delivery experience and, in some cases, externally validated recognition.

Sustainability initiatives

At portfolio level, sustainability maturity is mostly in the "In planning" stage, with a smaller but meaningful subset already reporting "Implemented" initiatives and a few entries indicating no current sustainability actions. This mix is typical for a diverse SME group: many are preparing to integrate sustainability more systematically, while fewer have already embedded it into operations or offerings.

In practice, sustainability is expressed less through formal certifications and more through practical improvements. Service and digital firms contribute mainly via digitalisation and efficiency. Agri-related actors focus on resource optimisation and sustainable product development, while engineering/built-environment services connect sustainability to energy efficiency and low-carbon performance for clients. Overall, the portfolio has a clear pathway to turn SustainX support into concrete sustainability actions and measurable operational benefits.

Financial health

Based on the information provided, the portfolio is mainly assessed as **Healthy** or **Moderate**, with a few cases where financial health is not specified. This indicates a generally stable group, alongside some organisations that are still scaling and may face more variable cash-flow. Overall, the financial picture suggests capacity to invest in growth, especially in **market expansion** and **technology adoption**, while benefiting from support that reduces scaling risks and strengthens investment readiness.

Funding requirements

Across the portfolio, funding needs vary significantly, reflecting very different maturity levels and business models. At the low end, some micro providers require only **small amounts (around €5,000–€50,000)** to cover practical upgrades such as training, basic technology adoption, digital tools, and working capital to support day-to-day scaling. A mid-range segment seeks **approximately €100,000–€350,000** primarily to accelerate market expansion, develop repeatable service packages, strengthen digital infrastructure, and run pilots or validation activities with partners. At the high end, one company reports a **major growth requirement of €2 million**, aimed at international scaling, market expansion, and capacity-building aligned with investment-driven growth.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

In terms of intended use, the most frequent categories are **market expansion** and **technology adoption**, followed by **training** and **working capital**, and, depending on the company, targeted **infrastructure investments** (e.g., production/processing capacity or system environments). **R&D** appears in cases where innovation development is central (e.g., health software, specialised services, product development in cosmetics/agri-food). Overall, the portfolio's funding demand is strongly oriented toward scaling proven activities, improving operational efficiency through digitalisation, and strengthening innovation readiness through pilots, partnerships, and structured product/service development.

Type of strategic partners needed

The most commonly needed strategic partners are distributors and channels that can unlock new markets and customers, especially for companies targeting scale through B2B sales, exports, retail/HoReCa placements, or wider service uptake. A second major category is technology providers, reflecting strong demand for digital tools, cloud solutions, automation, interoperability, and performance tracking that support both internal efficiency and stronger client offerings.

Several companies also seek research and university partners to strengthen validation, R&D, and credibility, particularly where offerings depend on specialised knowledge. Testing/validation sites are another recurring need, enabling companies to demonstrate impact and refine solutions under real operating conditions. Finally, some participants benefit from collaboration with public authorities and selectively with investors where high-growth scaling requires external capital.

C. Participation in SustainX Project

The services most frequently requested through SustainX concentrate on **business consultancy**, **technology adoption support**, and **matchmaking**. Many participants are looking for practical guidance to package their offerings, refine their go-to-market approach, and structure scalable service or product lines, while also receiving support to adopt digital tools that improve operations and measurable performance. A significant share also seeks **training and mentoring** to upgrade internal capabilities, along with **testing and validation** opportunities through pilots in real environments (e.g., client sites, farms, healthcare units, buildings). **Financial advisory** is relevant for firms preparing investment roadmaps or expansion planning, and **sustainability assessments** are mainly requested as light, practical support to translate sustainability intentions into actionable plans and credible metrics.

In terms of alignment with SustainX goals, the portfolio is strongly aligned because most companies aim to accelerate **sustainable growth through innovation adoption**. For service and digital providers, this alignment is expressed through enabling other SMEs to digitalise processes, reduce inefficiencies, and become more competitive—often a direct pathway to lower resource use and better operational planning. For agri and built-environment actors, alignment is more directly linked to **green innovation**, such as improved resource management, biofunctional product development,

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

biodiversity-oriented practices, and energy efficiency. For health and software-related companies, SustainX support strengthens scalable digital solutions that improve system efficiency and reduce administrative waste, while enabling cross-regional replication. Overall, the portfolio's objectives—scaling into new markets, improving efficiency through technology, validating solutions with partners, and formalising sustainability actions—map well onto SustainX's mission of strengthening regional ecosystems, fostering innovation investment readiness, and promoting greener, more sustainable SME growth.

4.5. Latvia

General introduction

A. Company Profiles

No.	Company name	Representative name	Industry sector	Size
1	Meid ik	D.B.	Sustainable fashion	Micro (1-9)
2	ELMI SIA	V.M.	Manufacturing (MedTech)	Medium 49-249
3	Baltijas Informācijas Tehnoloģijas SIA	I.T.	ICT/Software	Small (10-49)
4	IDEAL MISTAKES HUB SIA	K.V.	Social enterprise in ICT	Micro (1-9)
5	Helvikom Kids SIA	J.C.	ICT service platform	Micro (1-9)
6	AiFlo Technologies" SIA	S.K.	ICT/Software	Micro (1-9)
7	InPass SIA	M.T.	ICT/Software	Micro (1-9)
8	Antila SIA (Neptuns)	D.D.	Tourism HoReCa	Small (10-49)
9	Spruceful	J.B.	Green Technologies	Small (10-49)
10	Safira L SIA	L.L.	Sustainable food production	Micro (1-9)
11	Integris SIA	M.L.	ICT/Software	Micro (1-9)
12	Visas Iespejas SIA	G.M.U.	ICT/Software	Micro (1-9)
13	VOZOROM Ltd	V.M.	Green Technologies	Micro (1-9)
14	SPORA LAB Ltd	R.G.	Sustainable food and materials	Micro (1-9)

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

15	NOVIKONTAS LTD	I.S.	Other	Medium 49-249
16	VEFRESH Fnd	E.M.	Mobility	Micro (1-9)

B. Business profile and strategy

Business model, core activities and value proposition

The participating SMEs represent a diverse and innovation-oriented group operating across ICT/software, green technologies, sustainable fashion, food production, manufacturing (MedTech), tourism, education, and urban innovation. Despite operating in different sectors, they share a common ambition to strengthen their sustainability performance and digital maturity, using technology and innovation to improve efficiency, reduce environmental impact, and create socially responsible value.

Most participating organisations are micro and small enterprises, which highlights the importance of targeted capacity building, mentoring, and practical support to overcome resource and skills constraints. Through their engagement in the programme, SMEs are moving from ad-hoc digital and sustainability actions towards more structured transformation pathways, including the adoption of digital tools, data-driven decision-making, greener production methods, and sustainable business models. Collectively, this SME cohort forms a strong pilot group for testing, validating, and scaling sustainability- and digitalisation-driven innovations within regional ecosystems, with potential for replication across sectors and regions.

Current business status: current stage of development (e.g., early-stage, growth, established) and any significant achievements or milestones (e.g., patents, certifications, awards).

The participating SMEs are primarily at early-stage to growth phase of development, with a smaller number of more established organisations (e.g. in manufacturing and education/training). Several companies have reached important milestones such as launching market-ready products or platforms, piloting innovative solutions (e.g. in green technologies and digital services), and building initial customer bases in local and international markets. While formal patents, certifications, or awards are limited across the cohort, many SMEs demonstrate strong innovation potential through functional prototypes, validated services, and early commercial traction.

Sustainability initiatives

The participating SMEs actively integrate sustainability into their business models through the use of eco-friendly materials, development of green technologies, promotion of plant-based and sustainable food products, and solutions that reduce environmental impact (e.g. fleet optimisation, environmental monitoring, and energy-related training). Many SMEs also apply responsible production practices, focus on resource efficiency, and embed sustainability principles into product design and service delivery. While most

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

initiatives are at an early to growth stage, the cohort demonstrates a clear commitment to continuous improvement of environmental performance alongside digital transformation.

Financial health

Most participating SMEs are micro-enterprises with relatively limited turnover, reflecting their early-stage or growth-phase development. A number of organisations have established recurring revenue streams that support ongoing operations and gradual market expansion, while others depend on grants, or project-based income. Overall, the financial situation across the cohort is stable, although additional funding is often required to enable scaling, technology development, and wider market penetration.

Funding requirements

Funding needs vary by stage and sector, from below €50,000 for early-stage concept validation to €2 million for deep-tech projects involving R&D, infrastructure investment, and industrial scaling. The most common funding range, between €50,000 and €100,000, is primarily intended for technology development, market expansion, digitalisation, operational consolidation, and scaling of production or service capacity.

Type of strategic partners needed

The SMEs highlight the importance of strategic partnerships, with needs shaped by their stage of development, sector, and growth objectives. Some seek collaboration with investors, universities, and technology providers to accelerate innovation and access specialised expertise, while others prioritise partnerships with distributors, public authorities, and NGOs to strengthen market access, operational reach, and social or environmental impact. This diversity of needs reflects the varied collaboration models SMEs consider essential for sustainable growth and long-term development.

C. Participation in SustainX Project

Services requested

SMEs expressed strong interest in services that support business development and technology validation within the SustainX project. The most frequently requested services include business consultancy, matchmaking, sustainability assessments, support for technology adoption, and testing and validation of solutions. Early-stage SMEs additionally seek financial advisory services, training, and mentoring to strengthen internal capacities and improve investment readiness. This reflects differences in SME maturity levels and their specific priorities in using SustainX support.

Alignment with SustainX goals:

The SME's strategic objectives align closely with the SustainX project's focus on fostering green innovation and promoting sustainable, digital-driven growth. By seeking to improve sustainability performance, adopt digital tools, and strengthen innovation capacity, the SME contributes to more resource-efficient operations, reduced environmental impact, and increased competitiveness. Engagement in SustainX

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

supports the company's transition towards sustainable business models and long-term resilience.

4.6. Value chains identified between the project countries

This section provides an expanded analysis of the interregional value chains identified across Romania, Bulgaria, Canary Islands (Spain), Greece, and Latvia within the SustainX framework. The assessment confirms strong complementarities in digital transformation, industrial modernisation, circular economy, AgriTech, tourism innovation, and SME ecosystem enablement.

The report structures these complementarities into six scalable cross-border value chains.

Regional Portfolio Comparative Overview

Region	Digital Intensity	Industrial Capacity	Sustainability Orientation	SME Maturity
Romania	Very High (AI, SaaS, Data)	Medium (Robotics, Hardware)	High (GreenTech, Circular)	Early-stage dominant
Bulgaria	High (AI, ICT)	High (Automation, Equipment)	Moderate (Embedded)	Established & Growth
Canary Islands	Moderate (ICT)	Low–Moderate	Very High (Circular, Green)	Micro-enterprise dominant
Greece	Moderate–High (Digital services)	Moderate	Selective (Agri & Energy)	Growth & Established
Latvia	High (ICT Platforms)	Medium (MedTech)	High (Green & Food)	Early-stage to Growth

Cross-Regional Value Chains Identified

The SMEs were grouped into functional value chain blocks (upstream → enabling tech → deployment/market), then mapped where cross-country overlap exists.

A. Digitalisation / ICT / AI as an enabling value chain (cross-sector backbone)

Core functions in the chain:

- Digital platforms & SaaS (operations, automation, sector platforms)
- AI/ML, analytics, trustworthy AI evaluation
- Digital identity / secure systems

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

- Data/ESG reporting and information management
- Digitalisation services and system integration

SMEs contributing:

- Romania: 17 (GarajSimplu), 21 (Everyware/Displify), 23 (Devmind), 24 (Strongbytes/Aegis), 31 (Benoli Tech), 37 (SnapMenu), 38 (Data Space), 39 (Bosotech), 74 (Digitalya), 18 (Fides Consult – digitisation infrastructure), 22/30/32 (EdTech platforms)
- Spain: 52 (Tecnofly – AI geospatial), 58 (Rising Pixel – gamification), plus tourism operators with digitalisation intent (51,65)
- Greece: 81 (RedefineCare HIS), 82 (EGNITE digital transformation), 72 (THE FACTORY innovation hub)
- Bulgaria: 85 (AFC deep-tech AI), 88 (Analyse This analytics), 92 (Dimilor/80trillion), 94 (Evrotrust digital identity), 97 (Somenso IT), 89 (Bastun Media digital comms)

B. Circular Economy & Sustainable Materials value chain

Core functions

- Circular marketplaces and reverse logistics
- Waste valorisation & traceability
- Sustainable/bio-based material development (construction, packaging, textiles)
- Circular manufacturing (on-demand production, reduced returns)

SMEs contributing

- Romania: Reverse PET – recycling marketplace/logistics, AV ARTELIER – bio-fabricated construction materials + DPP, UNDA – sustainable textiles, UVIA – reduce returns, MetaSensys – fit intelligence to reduce returns, Recycllux – marine plastic recovery w/ traceability, Digital Body ID – reuse digital body assets, ESG/ops data platform includes circular economy.
- Spain: 59 (GalloBuey – plant-based 3D printed fashion), 63 (CoffeeFungi – waste-to-value mushrooms), 64 (Ecatar/Ataretaco – textile reuse + sorting/infrastructure)
- Bulgaria: 86 (LAM'ON – certified compostable packaging films), 84 (UpHeel – product lifespan extension)
- Latvia: 46 (Spora Lab – also developing sustainable material for construction)
- Greece: (no explicit circular material SME, but some "waste reduction" focus appears in 73 Qualia; dataset is mostly services)

Common cross-country overlap:

- RO–ES–BG strongly overlap on circular/sustainable production and scaling.
- RO–ES overlap strongly on circular textiles/fashion models

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

- RO–LV overlap on sustainable materials for construction.

C. HealthTech / MedTech / Digital health value chain

Core functions

- Digital health software (HIS/EHR)
- AI-assisted clinical documentation
- Rehabilitation tech (hardware + software + XR + analytics)
- Biotech actives / health-related products (with R&D and validation)

SMEs contributing

- Romania: INATECH – AI medical transcription, Sport Tech Recover – exoskeleton + XR + AI, Displify in healthcare comms, YouPlan – clinic model, Digitalya – health software.
- Spain: Kanara – biotech actives via stem cell cultivation, Water2kW labeled HealthTech in sheet but value proposition is green hydrogen tech
- Greece: RedefineCare/Medicalinfo HIS, DOS Cosmetics – digital diagnostic skin test + product, Narkissos—listed MedTech but described as aromatic plants business.

Common cross-country overlap:

- RO–GR: strong digital healthcare systems.
- RO–ES: potential overlap via validation/pilots and sustainable biotech/health innovation.
- GR–RO–ES: can form a broader "digital health + validation" chain, but Spain has fewer entries in pure digital health.

D. Smart Manufacturing / Robotics / Industrial IoT value chain

Core functions

- Industrial IoT monitoring and gateways
- Automation and robotics (AMR)
- Smart manufacturing equipment and system integration
- Testing/validation and industrial deployment partnerships

SMEs contributing

- Romania: Holz Meister Robotics – AMR, Benoli Tech – IoT gateway, Digital Body ID – manufacturing/digital infra, MetaSensys – smart manufacturing.
- Bulgaria: BIOKOM – tracking/monitoring, BODOR – laser cutting distribution, Ral Automation – industrial automation, Labora Expert – lab/testing equipment, LAM'ON – industrial packaging film manufacturing.

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

- Greece: limited manufacturing tech; more built-environment engineering services.
- Spain: Impressora – 3D printing construction tech, Tecnofly – monitoring, drones.

Common cross-country overlap:

- RO–BG: strongest and clearest overlap (robotics/IoT/automation/industrial deployment).
- RO–ES: construction-tech / advanced manufacturing intersection.
- RO–BG–ES: possible "advanced manufacturing + sustainable materials" chain.

E. AgriTech / FoodTech value chain

Core functions

- Farm advisory and decision support
- Digital farm management platforms
- Bio-based products and processing

SMEs contributing

- Romania: Green Rent/Cultivaapp
- Greece: HelpAgri advisory, CORPHES – aromatic plants/dairy
- Bulgaria: ALEKS 1977 – snail farming products
- Spain: no explicit AgriTech; but circular organic waste-to-food

Common cross-country overlap:

- RO–GR: strong "digital + advisory" combo for farm performance.
- RO–GR–BG: bio-based product chains and market expansion.

F. Mobility / Smart city / Environmental monitoring value chain

Core functions

- Fleet optimisation and emissions tracking
- Urban testbeds and deployments
- Monitoring/geo-data for territory management

SMEs contributing

- Latvia: VOZOROM – fleet monitoring, VEFRESH – smart city ecosystem/testbed
- Spain: Tecnofly – geospatial/environment monitoring
- Romania: Reverse PET includes mobility/logistics, Recycllux ocean monitoring + orchestration.

Common cross-country overlap:

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

- LV–ES–RO: data-driven monitoring + deployment ecosystems + logistics/circular operations.

G. Tourism/HoReCa sustainable services value chain (insular/territory-focused)

Core functions

- Sustainable tourism product design, distribution, and impact management
- Digitalisation of tourism services and experiences
- Low-carbon/inclusive event services

SMEs contributing

- Spain: tourism/HoReCa, plus multilingual events—reducing travel footprint
- Greece: cultural/experience services (Qualia), and innovation hub 72 as enabler
- Romania: events & digital marketing services, SnapMenu for hospitality

Common cross-country overlap:

- Strongest concentration is Spain; cross-country link comes mainly through digital enablers (RO/GR ICT + tourism operators ES).

2) Common value chains across countries

The most common cross-country value chains (highest overlap)

1. **Digitalisation / ICT / AI enabling chain.** Present across RO–BG–GR–ES and supported indirectly by LV (mobility/smart city systems and training organisations).
2. **Circular economy & sustainable materials chain.** Strong in RO–ES–BG, with additional material innovation in LV.
3. **Smart manufacturing / industrial digitalisation chain.** Strongest corridor: RO–BG (with optional ES construction-tech and monitoring).
4. **HealthTech / digital health chain.** Strongest overlap: RO–GR (with ES biotech as an expansion branch).
5. **AgriTech / farm performance chain.** Best overlap: RO–GR, extended with BG bio-based agri-products.

3) Potential consortium configurations

Below are concrete consortium "packages" that can be created from the SMEs listed, with who plays what role along the value chain and what thematic they address for European funding eligibility.

Consortium 1 — "Trustworthy AI & SME Digital Transformation"

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

Countries: Romania + Bulgaria + Greece + Spain
Core value chain: ICT/AI → deployment in SMEs and regulated sectors
Possible SME mix (examples)

- Core AI/AI governance: Strongbytes/Aegis, Devmind, AFC AI, Analyse This
- Sector platforms & deployment: GarajSimplu, SnapMenu, EGNITE, Somenso
- Secure infrastructure / identity: Fides Consult, Evrotrust
- Validation & ecosystem: THE FACTORY, Tecnofly for data-rich pilots

Thematics approached:

- Responsible / trustworthy AI, AI evaluation, compliance readiness
- SME automation and digitalisation
- Secure digital identity and interoperable solutions
- Cross-regional pilots and scaling

Consortium 2 — "Circular Economy Platforms + Sustainable Materials Scaling"
Countries: Romania + Spain + Bulgaria (+ Latvia as materials R&D)
Core value chain: circular operations → traceability → materials substitution → market scaling
Possible SME mix

- Circular logistics/marketplaces & traceability: Reverse PET, Recycllux
- Circular textile reuse & social impact: Ecatar/Ataretaco, UNDA, GalloBuey
- Sustainable packaging substitution: LAM'ON, UpHeel
- Construction/bio-materials: AV ARTELIER, Impressora, Spora Lab

Thematics approached

- Circular economy systems (collection, reuse, recycling, waste valorisation)
- Sustainable materials in packaging, textiles, construction
- Traceability/verification and ESG reporting (links to Data Space)
- Industrialisation pilots and cross-regional replication

Consortium 3 — "Smart Manufacturing + Industrial IoT + Modular Robotics"
Countries: Romania + Bulgaria (+ optional Spain for construction-tech pilots)
Core value chain: IoT monitoring → automation/robotics → industrial deployment/testing
Possible SME mix

- Robotics: Holz Meister Robotics
- Industrial IoT/data gateways: Benoli Tech, BIOKOM
- Automation integrators & equipment: Ral Automation, BODOR, Labora Expert
- Validation sites & research partners: (partners requested in multiple rows; no specific org names listed, but "Research/University" and "Testing/Validation sites" appear frequently)

Funded by the European Union
This project received funding from the European Union through grant agreement no. 101184410.

Thematics approached

- Industry 4.0, energy/resource efficiency via monitoring
- Automation and robotics for SME factories/intralogistics
- Piloting, validation, and scale-up readiness

Consortium 4 — "Digital Health Systems + AI Clinical Tools + RehabTech"

Countries: Romania + Greece (+ optional Spain biotech branch)

Core value chain: healthcare software → AI clinical productivity → digital rehab → validation pilots

Possible SME mix

- Clinical AI and documentation: INATECH
- Healthcare information systems: RedefineCare, Digitalya
- Healthcare communication infrastructure: Displify
- Rehab hardware+software pilots: Sport Tech Recover
- Bio/health product innovation branch: Kanara, DOS Cosmetics

Thematics approached

- Digital transformation of healthcare workflows
- AI-enabled efficiency and compliance
- Clinical pilots, validation, cross-regional deployment
- Preventive/personalised health models

Consortium 5 — "AgriTech Data + Advisory + Bio-based Products"

Countries: Romania + Greece + Bulgaria

Core value chain: farm data platform → advisory services → value-added bio-based products

Possible SME mix

- Farm data platform: Green Rent/Cultivaapp
- Farm advisory system deployment: HelpAgri
- Bio-based products & distribution expansion: CORPHES, ALEKS 1977
- AI/deep-tech add-on for analytics: AFC

Thematics approached

- Sustainable, data-driven agriculture and resource optimisation
- Advisory scaling and validation with farms
- Bio-based value chains and market expansion

Consortium 6 — "Mobility & Smart City Monitoring + Environmental Data"

Countries: Latvia + Spain + Romania

Core value chain: monitoring → analytics → deployment in real territories/cities →

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

measurable impact

Possible SME mix

- Fleet emissions optimisation: VOZOROM
- Urban deployment ecosystem/testbed: VEFRESH
- Territory monitoring & analytics: Tecnofly
- Circular logistics & impact verification: Reverse PET, Recycllux

Thematics approached

- Low-carbon transport and fleet optimisation
- Smart city pilot deployment and ecosystem building
- Environmental monitoring, traceability, and impact measurement

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

5. CONCLUSIONS

Deliverable D3.1 provides more than a descriptive overview of regional investment ecosystems; it establishes a practical and operational foundation for interregional cooperation, structured investment planning, and value-chain-based collaboration under the SustainX framework.

The mapping confirms that Romania, Bulgaria, Canary Islands (Spain), Greece, and Latvia possess complementary strengths across digital transformation, circular economy, smart manufacturing, digital health, AgriTech, mobility, and sustainable tourism. While ecosystems differ in maturity and sectoral emphasis, strong cross-border overlaps exist, particularly in Digitalisation and AI, Circular Economy and Sustainable Materials, Smart Manufacturing, and Digital Health. These thematic corridors create a realistic basis for joint pilot actions, validation environments, and coordinated funding applications.

From a usability perspective, this mapping report serves five essential functions.

First, it provides strategic clarity. By structuring SMEs into functional value chains, the report moves beyond isolated company descriptions and identifies scalable cross-border collaboration pathways.

Second, it supports consortium building. The identification of common value chains and complementary roles across countries enables the rapid formation of thematic interregional consortia aligned with EU funding priorities.

Third, it strengthens investment readiness. By analysing ecosystem gaps—particularly in later-stage financing, testing environments, and validation pathways—the report helps direct support mechanisms toward areas where SMEs most require structured intervention.

Fourth, it enhances policy alignment. The mapping clearly demonstrates alignment with European priorities such as green transition, digitalisation, Industry 4.0, circular economy, and smart mobility, facilitating the positioning of SustainX initiatives within relevant EU funding instruments.

Fifth, it improves ecosystem coordination. Recurrent SME requests for business consultancy, matchmaking, sustainability assessment, technology validation, and financial advisory services highlight the need for integrated support models. The report provides an evidence-based framework for structuring such services at interregional level.

Overall, Deliverable D3.1 transforms dispersed regional data into a strategic interregional investment roadmap. It enables informed decision-making, targeted consortium design, and structured scaling pathways. As such, the mapping is not an end in itself, but a practical tool for accelerating sustainable growth, strengthening cross-border value chains, and enhancing the long-term resilience and competitiveness of SMEs across the SustainX partner regions.

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.

SustainX

Funded by the European Union

This project received funding from the European Union through grant agreement no. 101184410.