

Regional Report:

Aragón Innovation Ecosystem

1. Regional Innovation Strategy Overview

Aragón is an autonomous community in northeastern Spain and the fourth-largest region in Spain by area, covering approximately 47,720 square kilometers. Despite its size, Aragón has a modest population of around 1.35 million people, making it the 11th most populous region in the country. This results in a low population density, with large expanses of rural and mountainous terrain, particularly in the Pyrenees to the north.

Geographically, Aragón is strategically located, sharing borders with France and several other Spanish regions, including Catalonia, Valencia, and Castile and León. Its capital, Zaragoza, is a key urban and economic center, well-connected by road and rail to Madrid and Barcelona.

Economically, Aragón is one of Spain's most industrialized and export-oriented regions, hosting a diverse array of companies across sectors such as ICT, automotive, construction and agricultural machinery, paper production, metallurgy, electronics, chemicals, and the agri-food industry. The industrial sector's contribution to Aragón's economy is particularly significant—six percentage points higher than the national average—highlighting its outsized role in regional development.

The automotive industry plays a central role, with the PSA Group (Opel) plant in Figueruelas standing out as a major employer and production hub, capable of manufacturing up to half a million vehicles annually. This sector is supported by a network of over 350 related companies, making Aragón one of the top three automotive clusters in Spain.

The agri-food industry is another cornerstone of the regional economy, contributing over 10% to Aragón's GDP. The region is renowned for its high-quality agricultural products, including wine, olive oil, ham, and stone fruits. Prominent companies in this sector include for example Jorge Group, Chocolates Lacasa, La Zaragozana (producer of Cervezas Ámbar), and La Bella Easo, part of the Bimbo Group.

Aragón has seen rapid growth in the ICT and services sectors, attracting major firms such as DXC Technology, Adidas, Deloitte, KPMG, and Vueling, which have established technology and consulting centers in Zaragoza. Amazon Web Services has recently amplified its data centres in Aragón, and plans to integrate more services based in analysis, AI and machine learning.

Since Aragón occupies a strategic position at the crossroads of major transportation corridors linking Spain's most economically dynamic regions with southern France, it has

become a key logistics hub with international reach. Its prominence in logistics is underpinned by extensive experience and significant investment in transport and communication infrastructure. These strengths are further enhanced by specialized education and research in the field, particularly through the Zaragoza Logistics Center (ZLC). The regional capital Zaragoza is a national leader in intermodal logistics operations.

These areas are all promising for the development of new companies. The IAF, the Aragonese Institute of Development, highlights agrifood, health, logistics and mobility, energy and the audiovisual sector as most promising for startup development, without forgetting the importance of the defense sector through dual technology. The deep digitalization of the traditional sectors as well as Artificial Intelligence and Big Data are, in their view, the predominant emerging trends.

According to the Regional Innovation Scoreboard 2023, Aragón (ES24 in the table below) is classified as a Moderate Innovator. It has a Regional Innovation Index (RII) score of 83.6, which places it 147th out of 239 European regions. Compared to the previous assessment, Aragón's innovation performance has improved by 7.4 percentage points, indicating a positive trend in its innovation capacity.

	ES24	ES	EU
Share of employment in:			
Agriculture & Mining (A-B)	6.0	4.2	4.4
Manufacturing (C)	18.8	12.5	16.4
Utilities & Construction (D-F)	7.8	7.7	8.3
Services (G-N)	59.7	68.6	63.7
Public administration (O-U)	7.7	7.0	7.2
Average number of employed persons per enterprise	3.8	4.0	5.1
GDP per capita (PPS)	30,600	27,000	32,400
GDP per capita growth (PPS)	0.9	-0.2	2.5
Population density	28	94	106
Urbanisation	77.4	86.6	75.8
Population size (000s)	1,330	47,400	447,210

Table: Key figures on Aragón. Source: Regional Innovation Scoreboard 2023, European Commission.

The following radar graph depicts the strengths and weaknesses in comparison to Spain (organe line) and the EU (blue line):

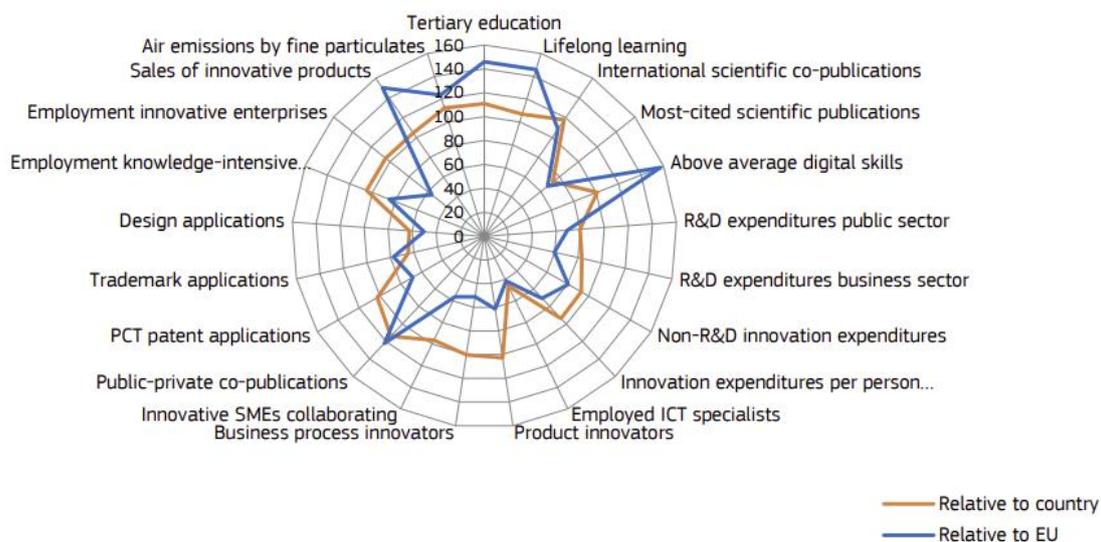


Figure: Radar graph on performance of Aragón. Source: Regional Innovation Scoreboard 2023, European Commission.

Regarding the innovation activities, it scores as follows on the Regional Innovation Scoreboard by the Commission:

Innovation activities	2023	vs 2017	vs 2022	Evolution 2017-2023	Indicator	EU	vs EU	vs 2022	Evolution 2017-2023
3.1.1 SMEs introducing product innovations (Regional)	78.4	+35.8	+34.8		1136 (national)	78	+10	+10	
3.1.2 SMEs introducing business process innovations (Regional)	73.5	+10.1	+19.1		1136 (national)	73	+11	+11	
3.2.1 Innovative SMEs collaborating with others (Regional)	73.7	+6.9	+8.1		1136 (national)	73	+10	+10	
3.2.2 Public-private co-publications (Regional)	141.1	+23.3	+3.4		1136 (national)	141	+10	+10	
3.2.3 Job-to-job mobility of HIRST	-	0	0		1136 (national)	-	0	0	
3.3.1 PCT patent applications (Regional)	62.6	+5.7	+5.8		1136 (national)	62	+10	+10	
3.3.2 Trademark applications (Regional)	94.8	+8.3	+1.8		1136 (national)	94	+10	+10	
3.3.3 Design applications (Regional)	45.3	+11.5	+2.9		1136 (national)	45	+10	+10	

Figure: Performance in Innovation Activities in Aragón. Source: Regional Innovation Scoreboard 2023, European Commission.

Aragón has several strategies that set out the direction for research, development and innovation. These strategies lay the basis for the support of the development of startups. Central elements are the overarching regional innovation strategy, the smart specialisation strategy, an innovation plan, a strategy on AI, and taking part in the entrepreneurial discovery process. The following paragraphs will give an overview of these strategies and help to understand the innovation focus in the region.

1.1. Regional Innovation Strategy

The “III Plan Autonómico de Investigación, Desarrollo e Innovación de Aragón (2021–2027)” is a strategic framework that defines the region’s research, development, and innovation priorities. It aligns with the S4 Aragón 2021–2027 Smart Specialisation Strategy, which emphasizes rural development, agri-food innovation, sustainable mobility, green energy, and digital transformation. The plan also integrates key European funding frameworks such as Horizon Europe, Next Generation EU, and ERDF, ensuring robust support for rural innovation. This innovation strategy targets high-impact sectors in Aragón, which are technology, health, energy, and agri-food. The goal is to concentrate investment in R&D and technological innovation to drive value creation, employment, and regional economic transformation.

It sets out the following objectives:

- Promote scientific excellence
The activities outlined in the strategy focus on training, attracting, and retaining talent, as well as improving the infrastructure. The goal is to strengthen the capabilities of the innovation ecosystem, enhancing its competitiveness and ability to attract resources.
- Create R&D&I ecosystems
Interactive processes between the public and private sectors are encouraged to identify new ideas that can be transformed into innovative processes or products. Resources are provided to support the actors with the greatest potential to benefit from these opportunities.
- Promote international, national, and regional cooperation
The aim is to maintain collaborations with leading international organizations and significantly increase participation and leadership in projects such as Horizon Europe. This includes boosting Aragón’s presence in international forums and consolidating its role in global events.
- Strengthening the management, coordination, and funding of R&D&I
Leadership, alignment, and coordination among institutions and organizations within the R&D&I ecosystem are promoted to enhance their responsiveness. This is key to improving the overall management of research and innovation activities.
- Encourage a culture of science and scientific vocations
The plan aims to inspire scientific curiosity among groups not traditionally involved in R&D&I by creating educational and outreach environments that foster scientific vocations, critical thinking, and active citizen participation.

1.2. Smart Specialisation

The S4 Strategy (2021–2027), officially known as the “Estrategia de Especialización Inteligente y Sostenible de Aragón”, is a regional innovation strategy aligned with European Union requirements for accessing structural funds. It is deeply integrated into the “III Plan Autonómico de Investigación, Desarrollo e Innovación (III PAIDi)” and serves as a roadmap for transforming Aragón’s economy through research, development, and innovation. Smart Specialisation Strategies are regional innovation strategies that aim to boost economic growth and job creation by enabling regions to identify and develop their own competitive advantages. The concept was introduced by the European Union as a key component of its cohesion policy.

The S4 Aragón Strategy builds on the Smart Specialization Strategies (RIS3) from 2014-202. It aims to:

- Identify and prioritize Aragón’s unique strengths and competitive advantages.
- Concentrate investments in areas with the highest potential for innovation, economic growth, and job creation.
- Align regional efforts with EU priorities like the Green Deal, digital transformation, and resilience post-COVID-19.

The S4 strategy defines six main areas of specialization:

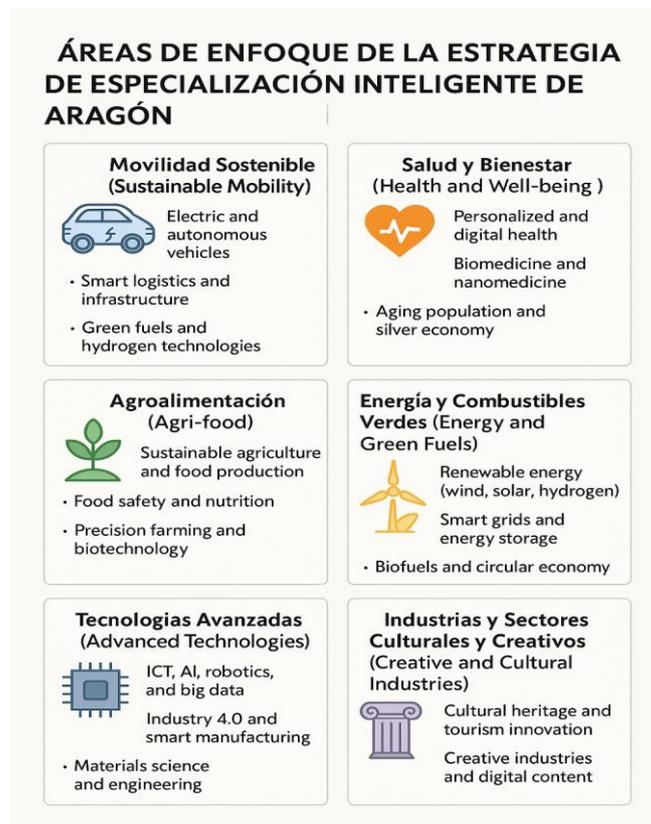


Figure: Focus areas of Aragón’s Smart Specialisation Strategy

The Aragonese smart specialisation strategy is closely aligned with both national and EU innovation strategies, forming part of a broader, multi-level governance framework designed to foster innovation, competitiveness, and sustainable development.

At the EU level, S4 is a cornerstone of the EU Cohesion Policy and the European Research and Innovation Strategy. It encourages regions to identify and develop their own competitive advantages through a process known as the Entrepreneurial Discovery Process (EDP). Aragón's S4 aligns with this by focusing on regional strengths such as agri-food, logistics, renewable energy, and digital technologies; participating in interregional cooperation and value chains, which is a key EU priority to foster synergies across borders; and contributing to the European Green Deal and Digital Europe objectives by promoting sustainable and digital innovation.

Spain's national innovation strategy emphasizes a decentralized innovation governance, allowing regions like Aragón to tailor their strategies; coordination mechanisms between national and regional levels to ensure coherence in funding and policy implementation.; and support for strategies of smart specialisation as a tool to channel EU structural funds effectively.

Aragón's S4 supports these goals by engaging local stakeholders, including businesses, academia, and civil society in the EDP (see next paragraphs); aligning its priorities with national missions in areas like climate change, digital transformation, and health innovation; and leveraging national and EU funds (e.g., ERDF, Horizon Europe) for regional innovation projects.

1.3. Entrepreneurial Discovery Process (EDP)

The Entrepreneurial Discovery Process in Aragón is a central mechanism of the Smart Specialisation Strategy, designed to ensure that innovation priorities are rooted in the region's unique strengths and stakeholder insights. The EDP is a participatory, bottom-up process that brings together businesses, research institutions, public authorities, and civil society to identify regional strengths and innovation opportunities, co-create and validate strategic priorities, and continuously adapt the strategy based on feedback and emerging trends.

Within the EDP, Aragón has set up thematic working groups to work on its priority areas, including agri-food, mobility, and renewable energy. They serve as platforms for stakeholder collaboration and feedback. Aragón also participates in the S3 Community of Practice and uses tools provided by the European Commission's S3 Platform, such as the mapping tool Eye@RIS3 to identify interregional cooperation opportunities and the S3 Thematic Platforms, designed for collaboration on shared challenges across EU regions.

1.4. Innovation Plan

In October 2024, the Government of Aragón launched the "Innovation Plan 2024-2027", with an initial investment of €7.6 million. This plan aims to integrate all stakeholders of the regional innovation ecosystem, including companies, technological centres, and

universities. One of its key initiatives is the creation of the Innovation Office, aimed at positioning Aragón on the innovation map and facilitating the attraction of funds for projects. The tasks of the Innovation Office are to analyse trends in funding and project financing opportunities, organize events, and support the various stakeholders of the regional innovation system in securing funding, applying for calls, and developing projects.

The Plan will also conduct an analysis of the R&D&I system in the region. It will focus on key issues such as the interaction between different actors, identifying collaboration networks in the field of innovation, and supporting the regional government in international calls.

1.5. AI Strategy

The “Aragonese Artificial Intelligence Strategy (EAIA)” is a comprehensive regional initiative designed to position Aragón as a leader in the development, application, and governance of artificial intelligence. It aligns closely with Spain’s National AI Strategy (ENIA) and the European Union’s digital transformation goals, aiming to harness AI’s transformative potential across scientific, economic, social, and environmental domains.

The strategy is built around seven strategic objectives, including:



Figure 2: EAIA’s strategic objectives

These objectives are supported by six action pillars: research and development, talent and training, data and infrastructure, integration into strategic sectors, public administration modernization, and ethical and regulatory frameworks. Furthermore, the EAIA outlines 25 concrete measures to drive progress, including the creation of a Human Behaviour Sandbox for testing human-centered AI (see in the following point), the

establishment of a regional AI research excellence network (AIA NET), and the launch of programmes to accelerate AI-based startups (AIA ScaleUp). It also proposes the development of a regional data office to promote the data economy, the expansion of interdisciplinary AI education through master's programmes and micro-credentials, and the creation of a certification and validation centre for AI technologies. Additionally, the EAIA envisions Aragón as a living laboratory for AI, capable of leading strategic projects, attracting investment, generating high-quality employment, and contributing to a more ethical, inclusive, and sustainable technological future. It proposes a dynamic, evolving framework that can adapt to rapid technological changes while maintaining a clear focus on regional strengths and global relevance.

Regarding the thematic focus, the strategy mentions applying AI in sectors where Aragón has competitive advantages: sustainable mobility, agri-food, green energy and hydrogen, health and well-being, smart tourism, and public administration.

Aragón's research ecosystem has over 390 entities involved in AI-related activities. The region boasts excellence in areas such as cognitive systems, computer vision, and health applications. Key infrastructures like the University of Zaragoza and the Aragón European Digital Innovation Hub (EDIH), recognized at the European level, provide a solid foundation for innovation and technology transfer.

1.6. Initiatives on national level with regional implications

The Spanish government has taken significant steps to support entrepreneurship, notably through the Startup Law ("[Ley de Fomento del Ecosistema de la certificación Empresas Emergentes](#)") (2023), which provides a tailored regulatory framework and fiscal incentives for innovative companies. The law includes provisions for regulatory sandboxes, simplified administrative procedures, and enhanced support for emerging companies. Spain is leading in startup participation in sandboxes, with 100 startups involved, the highest among surveyed countries from the Global Entrepreneurial Monitor (GEM).

Spain has five regulatory sandboxes in place, covering:

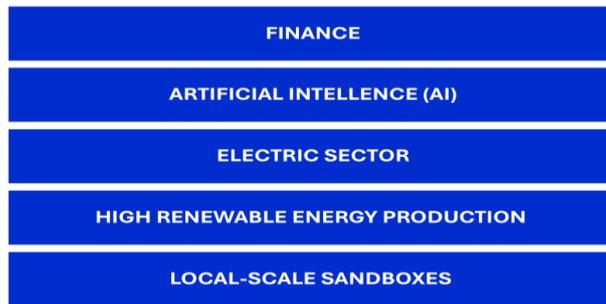


Figure 3: Spain's regulatory sandbox landscape

On its pilot AI regulatory sandbox, Spain is collaborating with the European Commission aiming to define best practices for implementation. It is designed to support companies—including startups and SMEs—in testing and implementing AI technologies in line with the upcoming EU AI Act. The sandbox is funded through Spain's Recovery, Transformation and Resilience Plan, and is part of the Spanish National AI Strategy, with a budget of approximately €4.3 million over three years. While the sandbox is coordinated at the national level, companies from any region, including Aragón, can participate. The goal is to connect regulators with innovators to co-develop best practices and ensure compliance with future EU regulations.

1.7. Partnership for Regional Innovation

Aragón is part of the EU's "Partnership for Regional Innovation" (PRI), a pilot initiative launched by the European Commission and the Joint Research Centre, in collaboration with the Committee of the Regions. It brings together a cohort of 63 participants—including 38 regions, 7 cities, and several national governments and networks—with the aim of enhancing the coherence and impact of innovation-related policies across the EU. Its key objectives are to bridge the innovation divide between more and less advanced regions, coordinate regional, national, and EU-level innovation policies in support of the twin green and digital transitions, strengthen place-based innovation ecosystems, respecting each region's unique economic and social fabric, support the New European Innovation Agenda, especially its flagship on regional innovation valleys, as well as encourage strategic policy experimentation to accelerate transformation at territorial level.

Aragón's participation in the PRI initiative underscores its commitment to aligning regional development strategies with European priorities, particularly:

- The European Green Deal, through investments in renewable energy, decarbonisation, and sustainable transport.
- The Digital Europe programme, via support for digital infrastructure, AI experimentation, and advanced manufacturing.
- Smart Specialisation Strategies (S3), which have been an essential component of Aragón's regional innovation policy since the 2014–2020 period, with a renewed S3 2021–2027 strategy.

1.8. Support for Circular Economy

The “Aid for the Promotion of the Circular Economy” (Ayudas al Impulso de la Economía Circular) is part of the “Strategic Subsidy Plan 2024–2027” (Plan Estratégico de Subvenciones) led by the Government of Aragón. The scheme is aligned with the regional strategy “Aragón Circular” and supports the transition to a more sustainable and resource-efficient economic model. The programme specifically targets start-ups and SMEs based in Aragón that are developing initiatives contributing to circularity, environmental sustainability, and resource efficiency.

The funding line provides support for projects in the following areas:

- Waste reuse and recycling: Initiatives that recover and repurpose waste materials, reduce landfill use, and extend the lifecycle of products.
- Innovation in the circular economy: Development of new products, services, business models, or technologies that embed circular principles—such as eco-design, product-as-a-service, or closed-loop production.
- Sustainable industrial processes: Implementation of cleaner technologies, resource-efficient manufacturing, and reductions in water and energy consumption.

The programme is managed by the Instituto Aragonés de Fomento, the regional development agency of Aragón. It is co-financed by the European Regional Development Fund as part of the Aragón ERDF Programme 2021–2027, under the specific objective of supporting the transition to a circular and resource-efficient economy.

1.9. Aragonese Institute for Development: Strategic Plan 2024–2027

The Instituto Aragonés de Fomento (“Aragonese Institute for Development” - IAF) has launched its Strategic Plan for 2024–2027, which marks a significant shift in its approach to fostering economic growth and innovation in the region. The support mechanisms include funding, mentoring, infrastructure and access to innovation networks.

The plan is structured around five main strategic axes, each with dedicated programmes:

Growth – Through the “Aragón grows and competes” programmes, the IAF will support 100 companies annually that show strong growth potential.

The focus is on helping SMEs scale up, diversify, and enter new markets.

- Innovation: The “Aragón Technological Hub” initiative will help businesses adopt new technologies, aiming to boost productivity and competitiveness.
- Entrepreneurship: The “Innovative Entrepreneurship” programme will accelerate or create 80 startups per year, fostering a dynamic startup ecosystem.
- Territory: This axis includes initiatives like the Just Transition Fund, particularly targeting the province of Teruel, to ensure balanced regional development.
- Connectivity: The “IAF Conecta” programme aims to improve communication and collaboration between businesses and public administration

2. Strengths and Capacities of the Regional Ecosystem

Aragón demonstrates a balanced entrepreneurial profile within Spain, with several indicators highlighting its strengths. The latest data available from the GEM report on Spain, with extensive data from 2023-2024 (latest data available), draws the following conclusions:

- **Total Early-stage Entrepreneurial Activity (TEA):** At approximately 6.5%, Aragón ranks in the mid-range among Spanish regions, slightly below the national average of 6.8%. This suggests a healthy but not overly aggressive startup culture.
- **Consolidated Businesses:** With around 7.0% of the population involved in established businesses (compared to the national average of 6.7%), Aragón shows a strong presence of mature enterprises, indicating long-term business sustainability.
- **Business Closures:** The region boasts one of the lowest closure rates in Spain, at just 2.0%, well below the national average of 3.2%. This reflects a resilient business environment and effective support systems.

The TEA encompasses both nascent entrepreneurs—those who have begun the process of launching a business but have not yet paid salaries or generated profits for more than three months—and new entrepreneurs, whose businesses are less than 42 months old. In Aragón, 2.9% of the adult population is engaged in nascent entrepreneurship, while 2.6% is involved in new ventures. Beyond these early stages, the Global Entrepreneurship Monitor Aragón 2023-2024 also notes a significant increase in entrepreneurial potential, with 8.8% of the population expressing intentions to start a business within the next three years. This is a notable rise from 6.5% in 2022 and the highest level recorded in the past ten years. Meanwhile, the rate of consolidated entrepreneurship—businesses operating for more than 42 months—also grew to 7.9%, surpassing the national average of 6.7%. These figures suggest a healthy level of business continuity in Aragón, further supported by a relatively low business abandonment rate of ~2.0%, which has remained stable over the past three years and is significantly lower than the national rate of 3.2%.

Regarding “softer” indicators of the regional performance, Aragonese entrepreneurs report a moderate perception of opportunities, which is higher than the national average, and a lower-than-average fear of failure, suggesting a more optimistic and confident entrepreneurial mindset. The motivations behind entrepreneurship in Aragón are diverse. While survival remains the most cited reason in the Global Entrepreneurship Monitor Aragón 2023-2024, mentioned by 57.1% of entrepreneurs, this figure has declined from previous years, indicating a shift toward more opportunity-driven ventures. Other common motivations include the desire to create wealth (42.2%), to make a difference in the world (35.3%), and to continue a family tradition (23%).

Key Indicators Compared to National Averages

Indicator	Aragón	Spain Average
TEA	~6.5%	6.8%
Consolidated Businesses	~7.0%	6.7%
Business Closures	~2.0%	3.2%
Perceived Opportunities	Moderate	Low
Fear of Failure	Lower	49%

Table: Key Indicators in Aragón Compared to National Averages. Source: GEM España 2023–2024.

This performance can only be achieved with a stable and accessible innovation ecosystem. The Aragonese R&D&I system is composed of a set of public and private organizations and infrastructures that develop their activities to produce, develop and value science, technology and innovation in Aragón.

Universities and related entities

Universities and research centres in Aragón play a fundamental role in driving innovation, strengthening the region's capacity to compete in high-value sectors and supporting the transition towards a knowledge-based economy. Aragón has two universities, the University of Zaragoza and the University of San Jorge, including their affiliated centres. Additionally, there are associated centres of the University of Distance (UNED) located in Aragon. Both universities offer a wide range of undergraduate, postgraduate, and research programmes, and both are active in supporting entrepreneurship and innovation in the region. The University of Zaragoza stands out as one of Spain's most prestigious public universities, with strong research capabilities across disciplines such as engineering, biotechnology, materials science, and artificial intelligence.

Then, there are University Research Institutes, own of the University of Zaragoza and mixed (with the CSIC, CITA or CIRCE). They are centres that promote and carry out multidisciplinary research activities or specialization in different scientific, technical and cultural fields in which research staff, technologist, support, as well as research groups are integrated:

- I3A: Engineering
- IUMA: Mathematics and Applications
- BIFI: Biocomputing and Physics of Complex Systems
- IUCA: Environmental Sciences
- CIRCE: of resources and energy consumption (UZ - Circe Foundation)
- ISQCH: of chemical synthesis and homogeneous catalysis (UZ-CSIC)
- INMA: Nanoscience and Materials (UZ-CSIC)
- IA2: Agrifood (UZ - CITA)
- IPH: Heritage and Humanities
- IEDIS: employment, digital society and sustainability

Through these various research institutes and groups, the university contributes cutting-edge knowledge to regional innovation ecosystems. These centres engage in applied research, often in partnership with local firms, facilitating the development of new products, processes, and services.

Moreover, the universities in Aragón are key players in regional Smart Specialisation Strategies, where their research agendas are aligned with strategic sectors such as agro-industry, logistics, renewable energy, and digital technologies. Through participation in EU-funded programmes (e.g. Horizon Europe, Interreg, and Erasmus+), they attract external funding and promote international collaboration.

Aragón's universities and research centres play a vital role in fostering entrepreneurship and open innovation. The university-based incubator, entrepreneurship chairs, technology transfer office (OTRI), and regional innovation contests (e.g. IDEA Awards) provide researchers and students with pathways to commercialise their ideas. The OTRI (Oficina de Transferencia de Resultados de Investigación, or Office for the Transfer of Research Results) is a key institutional mechanism within Aragón's universities and research centres that facilitates the valorisation and commercial exploitation of scientific and technological knowledge. Its primary mission is to act as a bridge between academia and the socioeconomic environment, ensuring that research outputs do not remain confined to laboratories but are transformed into real-world applications, innovative products, and competitive business solutions. At the University of Zaragoza, the OTRI manages intellectual property (IP), supports the spin-off creation, and fosters partnerships with businesses and public institutions. It advises researchers on patenting, licensing, and industrial protection strategies, and ensures compliance with national and European legislation on technology transfer. The OTRI also supports contract research and collaborative projects by providing legal, administrative, and strategic assistance, thereby streamlining cooperation between research groups and external stakeholders.

Additionally, university spin-offs demonstrate how academic research can be translated into high-impact entrepreneurial ventures.

Some examples of start-ups and spin-offs from UNIZAR related to the focus areas of the INNOVATE-EU project are:

3DSCANNER, Spin-off Unizar, 2007, <https://3dscanner.es/>

The company was founded by an interdisciplinary and multidisciplinary scientific team resulting from research carried out by the Department of Design and Manufacturing Engineering at the Higher Polytechnic School of Huesca and the Department of Ancient Sciences at the University of Zaragoza. The types of services provided include 3D laser scanning, cartography and GIS, photogrammetry, virtual reality, database programming and dataset processing, and remote sensing.

Epic power, Spin-off Unizar, 2012, <https://www.epicpowerconverters.com/>

The company offers power electronics focused on energy efficiency, bidirectional DC energy conversion, batteries, renewables, and hydrogen.

Kampal, Spin-off Unizar, 2014, <https://www.kampal.com/>

It is a company specialised in artificial intelligence applied to the field of R&D&I. They carry out innovative projects related to data intelligence, both for public administrations and private companies.

J3D Vision, Spin-off Unizar, 2016, <https://j3dvision.com/>

Their technological solutions enable the company to develop highly specialised systems in precision engineering and precision measurement techniques, both contact and non-contact. This includes equipment development, mathematical modelling, optimisation, laser and optical measurement technologies, as well as artificial intelligence.

Newfood Development, Spin-off Unizar, 2017, <https://newfood.es/>

The company works on the research, development, and innovation of food products that address the current needs of society.

Maximiliana, Start-up Unizar, 2018, <https://maximiliana.es/>

Maximiliana is a tech start-up based in Zaragoza that offers a mobile phone and integrated service specifically designed for older adults, making it easier for them to communicate with their family through accessible technology.

Blipol RH Analytics, Start-up Unizar, 2019, <https://blipol.es/>

The company works on data mining software applied to the field of human resources to improve talent management.

h2i Analytics, Spin-off Unizar, 2019, <https://hdosi.es/>

The company offers consulting services related to groundwater, including the assessment and forecasting of water resources. Research, design, and development of technological products for the treatment and use of data related to the monitoring and evolution of water reserves.

Lemon, Start-up Unizar, 2021, <https://www.lemontech.es/>

The company specialises in manufacturing teleworking devices that replace computers for connecting to the company. They ensure the security of company data.

HF Magic Lab, Spin-off Unizar, 2025

They work on the development, production, and commercialisation of innovative and technological products and services in the field of radiofrequency electronics and work with electromagnetic fields.

More examples: <https://spinup.unizar.es/empresas-spinoff-startup-Unizar>

Regional Development Agency

The **Instituto Aragonés de Fomento** (“**Aragonese Institute for Development**” - IAF) plays a critical role in startup support in Aragón. It is a public Regional Development Agency. Its legal framework dates back to the law 7/1990, which established it with the purpose of promoting modernization and the economic and social development of Aragón. In essence, the IAF acts as the executive arm of the Government of Aragon in terms of business development, offering comprehensive support to companies and entrepreneurs in the community to boost their growth, competitiveness, and innovation. Since the beginning of its activity in 1990, the agency has worked with start-ups, although

the sectors or industries in which it has focused have varied over the years, depending on the economy and reality of the territory itself. Currently, the sectors are mainly Health, Agri-food, and ICT. Intentions are also aimed at giving a greater boost to the aeronautical and audiovisual. However, as a regional development agency, they cover and support start-ups regardless of their sector or activity if they have an innovative component with which to go to market.

IAF currently uses two sources of funding. On the one hand, as a public body, they receive direct funding from the Government of Aragón for the implementation of programmes and operations. On the other hand, a large part of the current activity of IAF is financed with European funds of shared management, such as Social Fund and ERDF, as well as Next Generation EU and Recovery and Resilience Facility (RRF), with which the programme “TechFabLab” is financed.

Research and innovation institutes

Research and innovation are also promoted by key public and semi-public research and innovation infrastructures and bodies governed by public law under the Administration -of the Autonomous Community of Aragon whose purpose is scientific research, technological development and knowledge transfer. The key institutions are:

Technological Institute of Aragon (ITAINNOVA)

It specializes in applying advanced technologies to drive industrial competitiveness and sustainable development. ITAINNOVA supports companies—especially SMEs and startups—through R&D, prototyping, testing, and digital transformation services in areas such as artificial intelligence, robotics, materials science, and logistics.

Centre for Agri-Food Research and Technology (CITA)

This public research institution is committed to advancing the agri-food sector through scientific innovation, sustainability, and knowledge transfer. Operating under the Government of Aragón, CITA conducts multidisciplinary research in areas such as plant and animal science, food quality and safety, environmental systems, and agri-food economics. Its mission is to enhance the competitiveness and sustainability of agriculture and food production while improving rural livelihoods and promoting environmentally responsible practices. It holds collaborations with farmers, businesses, and educational institutions.

Aragonese Institute of Health Sciences (IACS): It is dedicated to advancing biomedical knowledge and improving healthcare through evidence-based decision-making, scientific research, and technological innovation. The IACS plays an important role in supporting the regional health system by promoting translational research and managing health data infrastructures.

These institutions provide specialised facilities and technical support to companies, particularly SMEs, helping them to integrate advanced technologies, improve their competitiveness, and scale innovative solutions. They are instrumental in bridging the gap between research and market, especially in traditional sectors undergoing digital and green transformations.

Technology Centres

Technology centres and transfer centres offer support structures, intermediation and promotion, as well as industrial research intermediaries aimed at consolidating, specializing- in and technifying the business sector:

- Aragonese Institute of Development (IAF) as a development agency
- Offices of Transfer of Research Results (OTRI) available to our mere agents of the system, from universities to Aragonese research organizations (ITAINNOVA, CITA and IACS).
- Office of European Projects (OPE) of the University of Zaragoza
- Fundación Empresa-Universidad de Zaragoza (FEUZ)
- Aragonese Centre for Industrial Design (CADI)
- the CIRCE Foundation
- AITIIP Foundation
- Research institute in vehicle repair center Zaragoza

Technology Parks

Aragón also has scientific-technological parks that promote the culture of innovation and competitiveness of companies and institutions installed in the park or associated with them. These technology parks are:

Walqa Technology Park in Huesca, which has become a central hub for startups and tech companies, particularly in the fields of telecommunications and software engineering.

TechnoPark MotorLand in Alcañiz, focusing on automotive technologies and innovation. This specialized park plays an essential role in the region's automotive industry, offering a space for companies to grow and collaborate. Additionally, **PLAZA** (Zaragoza Logistics Platform) is another essential part of the region's innovation ecosystem. As one of Europe's largest logistics platforms, **PLAZA** integrates cutting-edge technologies and serves as a hub for logistics, transportation, and e-commerce companies. It is a focal point for innovation in supply chain management, providing an ideal environment for businesses to incorporate new technologies and improve operational efficiencies. **PLAZA** contributes significantly to Aragón's position as a leader in the logistics sector, linking technological development with industrial growth.

Parque Tecnológico DAT Alierta is a new development. This 79-hectare technology district, planned near the Río Ebro Campus, is designed to become one of Europe's leading tech hubs. With the collaboration of the Government of Aragón, the University of Zaragoza, and various tech companies, the park will offer cutting-edge facilities for research, business incubation, and academic institutions. The first phase is slated to begin in 2026, with the project's full completion expected by 2029.

Cluster organisations

Aragón has many **industry clusters** whose objective in the field of innovation is the sharing of knowledge and specialised facilities, the contribution of technology transfer and its dissemination among the members:

- Aragon Aeronautical Association (AERA)
- Association for Research, Development and Innovation in Aragon (IDIA)
- Food and Beverages (INNOVALIMEN)
- Aragon Automotive Cluster (CAAR)
- Water Cluster (ZINNAE)
- Cluster Health in Aragon (ARAHEALTH)
- Public Works Machinery (ANMOPYC)
- Cluster Mountain Tourism (FATPA)

- Cluster of companies of Information Technology, Electronics and Telecommunications of Aragon (TECNARA)
- Elevator Components (AECAE)
- Aragon Energy Cluster (CLENAR)
- Logistic Cluster of Aragon (ALIA)

- Cluster of Agricultural Machinery of Aragon (CMAA)
- Spanish cluster of pig producers (i+Porc), nationally located in Aragon.
- Cluster Foundation for the development of new Hydrogen technologies in Aragon

Further key players in Aragón's innovation ecosystem

EDIH Aragón

Aragón EDIH is a multi-partner hub—led by ITAINNOVA, the Aragonese Development Agency (IAF) and the University of Zaragoza—that helps SMEs and public bodies test before investing, train in AI & HPC, and access EU funding. Its remit is to accelerate regional digitalization and smart-specialisation goals.

Cámara de Comercio Zaragoza

Zaragoza's Chamber of Commerce, Industry & Services provides end-to-end support for company creation, export and e-commerce, coordinates EU projects, and mentors entrepreneurs to boost business competitiveness across the province

Aragón Emprende

A public-private foundation that runs the “Red Aragonesa de Centros de Emprendimiento”, offering training, mentoring, networking and awards that help early-stage founders move from idea to market.

CEPYME Aragón

The regional branch of Spain's SME confederation represents small firms and self-employed professionals in social dialogue, while providing legal, labour and digital-transition advisory services.

Aragón Investiga

The Government of Aragón's R&D&I portal maps research actors and infrastructures, public financing instruments and collaborative opportunities, linking science with entrepreneurs to foster tech-based ventures.

Zaragoza Activa

The city's entrepreneurship and social-innovation agency offers coworking, maker labs, pre-incubation programmes and the large-scale "Red ZAC" community events network.

CIEM Zaragoza

A zero-emission incubator that provides offices, coworking, mentoring and corporate-innovation programmes, serving as a living lab for sustainable urban entrepreneurship in Zaragoza.

La Terminal

The startup incubator-accelerator housed (managed by Hiberus) in the Etopia innovation-and-technology centre consolidates high-growth digital and creative ventures through equity-free acceleration and corporate partnerships.

CEEI Aragón

Created in 1992 as an investment instrument of the Government of Aragón, the European Business & Innovation Centre now runs three incubators in Zaragoza, Huesca and Teruel, each offering workspace and a supportive innovation environment. Its portfolio of programmes—including the early-stage "NEO" track and the growth-focused "MatriX" pathway—delivers personalised growth plans, mentoring, market-access and community perks, an approach that has already produced regional scale-ups such as Libelium and Certest Biotec.

FZC

A non-profit founded in 2004 that advances Zaragoza's "knowledge city" vision by organising tech-art festivals, STEAM education, open-innovation challenges and entrepreneurship programmes from its base at Etopia.

Additionally, Aragón has several foundations belonging to the public sector that form part of the innovation ecosystem:

- ARAID: Aragonese Agency for Research and Development Foundation
- CEFCA: Centre for the Study of Cosmos Physics of Aragon
- FTA: Zaragoza Logistic Center Foundation
- FITA: Agro-Food Innovation and Transfer Foundation of Aragon
- IISA: Foundation Institute of Health Research of Aragon
- CIRCE Foundation
- AITIIP Foundation
- DYNOPOLIS: Joint Paleontological Foundation of Teruel

- IBERCIVIS Foundation
- LPIS: Foundation Research Seminar for Peace
- Foundation for the Development of New Hydrogen Technologies



Figure. Stakeholders in Aragón's R&D&i ecosystem. Source: Gobierno de Aragón, III PAIDI.

Funding and support opportunities for startups

According to GEM, a key strength of the region lies in its locally governed entrepreneurship policies, which are widely perceived as more effective than national-level programmes. This localized approach allows for tailored support that better meets the needs of Aragonese entrepreneurs. Aragon's CEEI Aragón and Fundación Aragón Emprende are examples of institutions that leverage this local autonomy effectively.

There are different programmes in place that support startups in Aragon. Key initiatives are detailed in the following paragraphs:

IAF: Programa de Aceleración StartTech 2025

This acceleration program is designed to drive the digital transformation of startups and SMEs through the use of advanced technologies. It provides a highly personalized itinerary that includes 18 hours of specialized training, 6 hours of group work and 20 hours of individual mentoring. A fundamental component is its focus on networking events, which connect participants with a vital network of investors, institutions and consolidated companies, facilitating access to essential financial resources and strategic positioning. The program seeks rapid and sustainable growth, selecting a limited number of 10 companies to participate.

IAF: TechFabLab (eHealth & AgroTech)

These programmes represent innovative and flexible acceleration initiatives, each with a unique and personalized itinerary adapted to the needs and level of maturity of each project.

eHealth 2025: This programme specifically targets the digital health sector, providing 40 hours of dedicated support per participating startup, including 20 hours of specialized mentoring. It fosters collaboration through open and internal sessions and ensures participation in key networking events, innovation fairs, Demo Days and strategic challenges. Priority is given to projects focusing on digital health and SMEs that are less than 10 years old.

AgroTech 2025: Designed to stimulate the sustainable growth of agri-food startups and SMEs in Aragon, this programme offers 49 hours of comprehensive support. It includes one-on-one (1-to-1) mentoring, concise and hands-on (1-hour) training sessions, access to relevant technology and expert guidance to implement agile, sustainable and cost-effective solutions. The phases of the programme include an initial diagnosis, a period of acceleration (combining training and mentoring) and a Demo Day. Priority is given to projects focused on the transformation of agri-food products and SMEs that are less than 10 years old.

Programa de Ayudas a la Industria y la Pyme (PAIP)

This is a broader funding initiative by the Aragonese government, co-financed by EU ERDF funds, aimed at boosting industrial competitiveness. The programme covers investments, R&D, innovation consulting, training, and IP protection. It is open to a wide range of legal entities including startups and SMEs across sectors, cooperatives, foundations, and associations. The 2025 calls focus on industrial transformation and development.

Startup support provided by the University of Zaragoza

The University of Zaragoza supports startups and entrepreneurial initiatives through two main pillars: the OTRI (Oficina de Transferencia de Resultados de Investigación) and the CEMINEM SPINUP incubator.

OTRI – Office for the Transfer of Research Results

The OTRI is the university's central unit for promoting innovation and entrepreneurship. It supports startups and spin-offs through:

1. SpinUP Programme

It is aimed at researchers and entrepreneurs who want to create a company based on university research. The programme offers mentoring, legal advice, and business development support and helps with intellectual property protection and technology transfer.

2. Finding funding and Grants

The OTRI provides guidance on public and private funding opportunities and offers support in preparing proposals for national and European innovation programmes.

3. Networking and Collaboration

The OTRI connects startups with industry partners, investors, and innovation networks as well as facilitates contracts and collaboration agreements with companies.

4. Promotion of Technological Innovation

The OTRI helps valorise research results and bring them to market and offers support for licensing and commercialization.

CEMINEM SPINUP – University Incubator

Located on the Campus Río Ebro, the CEMINEM SPINUP incubator is a physical and strategic space for early-stage startups and spin-offs. Its services include:

- Office space and shared facilities
- Business mentoring and coaching
- Access to university labs and technical resources
- Participation in acceleration programs
- Support for internationalization and scaling

The incubator is designed to foster collaboration between academia and industry and is managed in close coordination with the OTRI team.

MATRIX programme offered by CEEI Aragón

The CEEI Aragón (Centro Europeo de Empresas e Innovación de Aragón) offers a comprehensive suite of services to support startups, particularly those with innovative and technology-based business models. This pioneering initiative MATRIX was launched in 2025 to support innovative startups across Spain, with a strong base in Zaragoza. It is designed to provide personalized, high-impact support to early-stage companies:

- Customized Support Plans: Each startup receives a development plan tailored to its specific needs—whether in product development, market access, funding, or team building
- Valued at €10,000 per Startup: The support package includes mentoring, training, and access to resources equivalent to this value
- Sector Diversity: The first cohort includes startups in:
 - Agrotech (e.g., Denodel – smart farming sensors)
 - Foodtech (e.g., Omnivorus – plant-based chocolate)
 - Edtech, Cybersecurity, IoT, and Biotech

The strategic goals of this programmes are to foster a new generation of tech-driven startups in Aragon, bridge the gap between innovation and market readiness, and position Aragon as a national innovation hub, complementing its growing ecosystem of international firms and local champions

Chamber of Commerce Zaragoza: ARIES Programme (Aragón, Impulso de Empresas)

Among the offers from Zaragoza's Chamber of Commerce is the ARIES Programme, which is designed to assist both new and existing SMEs, including startups. The services include:

- **Business Creation and Expansion** – Personalized support for launching new ventures, including business model definition, technical, legal, and fiscal guidance, commercial and financial feasibility studies (commercial and financial, as well as help with administrative setup (e.g., Social Security, tax registration)

- **Competitive Improvement** – Consulting in areas like digital transformation and Industry 4.0, data analysis and cybersecurity, and market intelligence and sustainability
- **Networking and Collaboration** – Through the ARIES Business Network, startups can connect with other businesses, access digital resources (guides, podcasts, newsletters), and participate in networking events
- **Access to Financing** – Guidance on funding opportunities and help preparing financial plans

In addition, startups can get access to the **Impulsa Startup programme**, which is run by the *Cámara de España* through the Chamber in Zaragoza. The Impulsa Startup programme is a national initiative designed to support the creation, development, and acceleration of technology-based startups. It is co-financed by the European Social Fund Plus (FSE+) under the 2021–2027 framework. Through this programme, startups can receive mentorship from experienced professionals, training in business modeling, market validation, and investor readiness, personalized guidance from Chamber of Commerce tutors, as well as networking opportunities with other startups and investors. The programme has two phases:

1. **Crea y Crece (Create and Grow)**
 - a. Learn startup creation methodologies (e.g., Lean Startup, Design Thinking)
 - b. Develop and validate a Minimum Viable Product (MVP)
 - c. Receive up to 40 hours of live training (in-person or virtual)
 - d. Present your idea to potential investors
2. **Despega (Take Off)**
 - a. Focus on scaling the business model
 - b. Prepare for investment rounds
 - c. Receive mentoring and support for growth and expansion

Prototyping at the ITAINNOVA (Instituto Tecnológico de Aragón)

ITAINNOVA offers several initiatives to support startups, particularly those focused on technology, innovation, and sustainability. One of the most notable is the **Digital Imagination Center (DIC)**, a creative and collaborative space designed to help entrepreneurs and startups in ideating and prototyping innovative solutions, learning and experimenting with emerging technologies, and connecting with other innovators and tech professionals. The space is open to early-stage startups, innovators and entrepreneurs. Apart from using the facility itself, ITAINNOVA organises workshops, hackathons, and tech co-creation labs.

Services provided by CIEM Zaragoza

CIEM (Centro de Incubación Empresarial Milla Digital) offers a robust ecosystem for startups, combining physical infrastructure, mentoring, and innovation programs. Main services include:

- **Startup Acceleration Programme:** CIEM runs a proprietary acceleration program that helps startups develop and scale their business models, receive one-on-one mentoring, access investment and funding opportunities, and connect with national and international corporations.
- **Workspaces:** Private offices for startups and coworking spaces that foster collaboration and networking among entrepreneurs
- **Corporate incubators:** CIEM helps large companies create their own startup incubators
- **Birdy and Birdy Innova:** These are entrepreneurship programmes for students, encouraging innovation through real-world business challenges
- **Capacitación Profesores:** Training for educators to promote entrepreneurial thinking in schools
- CIEM also hosts **Demo Days**, innovation meetups, and thematic events through **Initland**, their innovation platform.

Aragón Emprende

They offer a comprehensive suite of services aimed at supporting entrepreneurs and startups throughout Aragón. Core services include:

1. **Business Creation Support:** Guidance on choosing the right legal structure, help with administrative procedures, and access to a **business plan creation tool** online
2. **Training and Resources:** Workshops, courses, and events on entrepreneurship, as well as specialized programs like EREA, which supports rural innovation ecosystems
3. **Recognition and Awards:** Competitions such as the IDEA Contest to highlight innovative projects
4. **Red ARCE (Red Aragonesa de Centros de Emprendimiento):** A network of local entrepreneurship centers across Aragón, facilitating collaboration and knowledge sharing among entrepreneurs
5. **Events and Networking:** Regular events to connect entrepreneurs, mentors, and investors, as well as opportunities to showcase projects and gain feedback

Zaragoza Activa

This initiative offers a wide range of services to support startups, entrepreneurs, and innovators in Zaragoza, including

1. InfoActiva: Personalized Business Support that helps entrepreneurs to define and validate their business idea, create a business plan, access funding and subsidies, and navigate legal and administrative procedures. This service includes personalized mentoring and is available at their two main locations: La Azucarera and Las Armas.

2. Red ZAC (Zaragoza Activa Community): A collaborative network that offers workshops, talks, and networking events, and access to co-working spaces.

3. Business Incubation and Coworking: Zaragoza Activa provides **physical spaces** for startups.

4. Training and Acceleration Programmes, including

- **“Convierte tu Idea en un Negocio”** (Turn Your Idea into a Business)
- **Flip&Do:** A startup acceleration initiative
- **Demo Days** to pitch to investors and mentors

Incubation at La Terminal

La Terminal Zaragoza is a startup incubator and innovation hub located within ETOPIA – Center for Art and Technology. Known activities and past programmes include:

Startup Incubation and Acceleration

- Incubation spaces for early-stage startups, including private offices and coworking areas
- Acceleration programs focused on creative industries, digital technologies, and social innovation
- Access to mentoring, training, and business development support

Innovation and Prototyping

- Collaboration with ETOPIA’s labs and maker spaces for prototyping and testing
- Support for art-tech and digital media projects
- Opportunities to participate in innovation challenges and hackathons

Community and Networking

- Events, meetups, and demo days to connect with investors, mentors, and other startups
- Partnerships with public and private institutions to foster collaboration

Training and Capacity Building

- Workshops and seminars on entrepreneurship, digital skills, and creative business models

Fundación Ibercaja

Additionally, banks can be an interesting source to achieve funding and innovation opportunities. Ibercaja, through Fundación Ibercaja and in collaboration with AJE Zaragoza (Asociación de Jóvenes Empresarios), offers a dedicated programme to support young entrepreneurs and startups in Zaragoza:

1. **Access to Financial Products: Preferential banking conditions** for AJE Zaragoza members, and tailored financial solutions for startups, including loans and credit lines.
2. **Training and Workshops:** Regular training sessions on business development, innovation, and digital skills as well as access to entrepreneurship events and networking opportunities.
3. **Mentoring and Professional Guidance:** Personalized support from experienced professionals and business leaders, as well as guidance on business planning, strategy, and scaling.
4. **Use of Fundación Ibercaja's Espacio Joven:** A space dedicated to youth entrepreneurship and employability, which hosts events, workshops, and collaborative initiatives.

Private Investment Ecosystem: Business Angels in Aragón

ARABAN – Aragón Business Angels Network - was founded in 2010. ARABAN is the main formal business angel network in the region. It connects private investors with early-stage, high-potential startups, focusing on scalable business models and innovative solutions. It typically co-invests with other angels and occasionally VCs, facilitating seed and pre-Series A funding rounds. The network is supported by institutions such as CEEI Aragón and Fundación Emprender. ARABAN is also a member of AEBAN (the Spanish Business Angels Association), giving it access to national and international investment networks.

Venture Capital Presence

While Aragón is not a primary VC hub compared to Madrid or Barcelona, its VC presence is expanding, particularly in tech and deeptech sectors. Sodiari (Sociedad para el Desarrollo Industrial de Aragón) is a public-private financial instrument that invests in SMEs and startups. It offers participative loans and capital investment as a bridge between public funding and private VC rounds, and works in close cooperation with clusters and incubators. Furthermore, local VC actors like ZAYSA Capital, and family offices sometimes engage in follow-on rounds. They often invest in agri-food tech, mobility, energy, and digital innovation, aligned with Aragón's Smart Specialisation Strategy.

Access through national support: ENISA

ENISA (Empresa Nacional de Innovación) is a public company under Spain's Ministry of Industry and Tourism. It was established to support the creation, growth, and consolidation of innovative and viable business projects, especially among young entrepreneurs and SMEs. ENISA provides participative loans that sit somewhere between equity and traditional debt — ideal for startups without significant collateral or operating history.

ENISA offers different loan lines based on the startup's stage and profile:

Loan Type	Amount	Target Group
ENISA Jóvenes Emprendedores	€25,000 – €75,000	Entrepreneurs under 40
ENISA Emprendedores	€25,000 – €300,000	Recently created innovative startups
ENISA Crecimiento	€25,000 – €1.5M	Scaling-up SMEs
ENISA AgroInnpulso	€25,000 – €1.5M	Innovative agro-food businesses
ENISA Emprendedoras Digitales	€25,000 – €1.5M	Women-led digital startups

Many startups and SMEs in Aragón leverage ENISA loans in combination with regional support tools, such as the SODIAR participative loans, support for business planning and applications, and cluster networks offering mentoring and investor links. ENISA loans are often used to unlock additional financing, such as co-investment from ARABAN business angels, VC follow-on rounds, CDTI or EU programmes (e.g. EIC Accelerator).

Access through national support: CDTI

CDTI (Centro para el Desarrollo Tecnológico Industrial) is a public agency under the Spanish Ministry of Science, Innovation and Universities. Its mission is to promote innovation and technological development in Spanish companies through public funding instruments and international cooperation programmes. The agency is particularly attractive to R&D-intensive startups, offering grants, soft loans, and blended finance tailored to projects with a strong technological component and market potential.

They offer:

- **Proyectos de I+D (R&D Projects):** Soft loans covering up to 85% of total budget (75% reimbursable loan + 10% non-reimbursable tranche for SMEs). This scheme is deal for startups with in-house R&D, developing new products, processes or services. Eligible expenses are salaries, subcontracting, materials, patents, certifications.
- **NEOTEC Programme:** CDTI awards non-repayable grants of up to €250,000–325,000, covering 70% of eligible costs. These are available to new tech-based companies (<3 years old) with proprietary technology and a clear R&D plan. Startups must show high innovation intensity and a strong business model. The

programme is particularly attractive to deep tech, AI, biotech, or advanced manufacturing ventures.

- **LICA (Line for the Expansion of Innovative Companies):** Blended finance to support scale-up of innovative SMEs. CDTI combines its loans with co-investment from private investors or VCs. It is suitable for startups in growth stage looking to expand technology-based business lines.
- **CIEN Projects:** CDTI supports collaborative R&D projects involving large companies + SMEs + research centres. The funding can reach up to €20 million per project. Startups can participate as SMEs in consortia, especially when aligned with cluster initiatives or regional RIS3 strategies.

European funding: European Investment Bank

In April 2025, the EIB signed a €234 million loan agreement with the Government of Aragón to co-finance investments promoting the green and digital transition, boosting local industry competitiveness, and supporting economic development in rural areas. The loan will co-finance diverse projects including transferring knowledge in advanced technologies to businesses in Aragón; the One Health Teruel health biotechnology project; the reuse of local waste and decontamination of land affected by lindane use; improved energy efficiency in public healthcare and educational buildings in Aragón; and local social employment and active inclusion initiatives.

The finance contract falls under the EU regional development and cohesion funds operational programme for 2021-2027 and will channel financing from the European Regional Development Fund (ERDF), the European Social Fund Plus (ESF+) and the Just Transition Fund.

Remarks on the startup funding amounts in Spain

In their study “CICLO DE VIDA DE STARTUPS, LOCALIZACIÓN Y FINANCIACIÓN. ÉXITOS EN EL ECOSISTEMA EMPRENDEDOR DE ARAGÓN”, the authors Usero and Villaneuva outline a funding framework common for Spain, which gives information on the amounts a startup usually receives in each of its development stages.

In the beginning, there is the **pre-seed stage**, where funding rarely exceeds €200,000. The support typically comes from personal networks, business angels, accelerators, and public entities. The goal at this stage is to develop a minimum viable product (MVP) and an initial business model.

The **seed stage** follows, with investments ranging from €200,000 to €500,000. This stage involves a broader mix of investors including family offices and crowdfunding platforms. Here, the focus shifts to refining the product, validating the business model, and building a core team.

The **early stage** includes Bridge rounds and Series A and B, with funding between €500,000 and €20 million. These rounds are crucial for scaling operations, improving profitability, and preparing for larger investments.

Finally, the **growth stage** involves Series C and beyond, requiring over €20 million, often from private equity and large investment funds.

Examples of successful start-ups

Bitbrain

Bitbrain, founded in 2009 in Zaragoza as a spin-off from the University of Zaragoza, has evolved into a global leader in neurotechnology. The company integrates neuroscience, artificial intelligence, and advanced hardware to develop innovative EEG (electroencephalography) devices and human monitoring technologies, along with software solutions for real-world applications and research. Bitbrain was established by María López Valdés and Javier Mínguez, aiming to transition brain-computer interface applications from the laboratory to practical, everyday use. Their foundational work in neurotechnology, biomedical engineering, AI, and data science laid the groundwork for the company's future innovations. Over the years, Bitbrain has expanded its reach, with its technologies serving as the foundation for over 1,500 neuroscience studies. The company collaborates with major corporations like L'Oréal, Johnson & Johnson, Disney, SEAT, Nissan, Hero, Grupo Sonae, and Telefónica. Bitbrain has also participated in significant European R&D programs, including FP7-CORBYS, FP7-NETT, and H2020-MOREGRASP, further solidifying its position in the neurotechnology sector. As of recent reports, Bitbrain employs approximately 60 individuals and continues to experience growth.

Libelium

Libelium, founded in 2006 in Zaragoza, is a pioneer in Internet-of-Things sensor technology for smart-city applications. The company strengthened its portfolio in 2022 by acquiring HOPU, a specialist in environmental monitoring and digital twins, and now exports its sensor platforms to more than 100 countries while keeping its R&D headquarters in Zaragoza. Lesson: focus on a global niche from day one and fill portfolio gaps through targeted acquisitions.

Certest Biotec

Certest Biotec started in 2002 in San Mateo de Gállego as a laboratory spin-off and has grown into a multinational diagnostics manufacturer. Over the last five years it has generated €264 million in cumulative turnover, including €160 million in 2022 alone, and boasts a workforce that is 80 % female. Lesson: reinvest margins aggressively in R&D and broaden the product scope—e.g., from rapid tests into pharma—to keep the innovation pipeline full.

Embou–MásMóvil

Embou, created in 2003 in Zaragoza and now part of the MásMóvil Group, specialises in delivering broadband to rural areas. By 2023 it had extended high-speed coverage to 98% of Aragón, increased revenue by 24%, and achieved a Net Promoter Score of 42. Lesson:

solving a pressing local problem—such as the digital divide—can open the door to integration with large industry players and underpin long-term growth.

Funiglobal (Funidelia)

Funiglobal—the group behind Funidelia—began in 2011 in Huesca and later consolidated its operations in Zaragoza. Specialising in long-tail costume e-commerce, it closed 2023 with €26 million in revenue and is completing a new 7,500 m² logistics hub in PLA-ZA to support continued growth. With 87% of sales already international, Funiglobal shows how leveraging Aragón’s logistics infrastructure and diversifying the catalogue to reduce seasonality can power sustained expansion. Lesson: exploit regional logistics advantages and smooth demand peaks through product diversification.

Hiberus Tecnología

Hiberus Tecnología, established in 2011 in Zaragoza, has evolved from an IT consultancy into a digital-services scale-up with its distinctive “Infinite Blue” culture. After acquiring Devoteam México, it now employs more than 500 people outside Spain and is targeting €500 million in revenue and 8,000 professionals by 2028 through a blend of organic growth and bolt-on acquisitions. Lesson: scale-ups can emerge far from major capitals if they internationalise early and cultivate a strong, values-driven culture.

3. Gaps and Weaknesses of the Regional Ecosystem

Aragón is a region with considerable entrepreneurial potential but limited integration of startups into its economic fabric (Usero/Villanueva 2024). While infrastructure and sustainability-related policies receive positive ratings in the GEM Aragón 2023-2024, challenges remain in areas such as bureaucratic complexity, access to finance, and entrepreneurial education. Despite these hurdles, Aragón performs well compared to other Spanish regions in several key indicators, and initiatives like the ARIES program and Fundación Aragón Emprende play a crucial role in supporting and consolidating entrepreneurial efforts.

The following gaps and weaknesses were identified:

3.1. Access to funding

In Aragón, despite the presence of local talent, many startups migrate to cities like Madrid, Barcelona, or Valencia in search of better funding opportunities. This outflow underscores the need for a robust local financing ecosystem to support the growth and sustainability of startups (Usero/Villanueva 2024). Key support institutions include public entities like CEEI Aragón and CEMINEM SPINUP, as well as private organizations such as Zebra Ventures and Araban. These institutions offer a range of services, from coworking spaces and mentorship to direct financial support. A deeper look into the institutional dynamics reveals that most successful startups in Aragón have participated in local incubators or accelerators. University-affiliated startups tend to rely more on public funding, while those from private initiatives are more successful in securing early-stage investments. External accelerators are frequently used due to the limitations of local structures.

However, public funding mechanisms are often criticized for being bureaucratic and difficult to access. Private funding, while present, is limited in scale and often lacks the capacity to support startups through later growth stages. There is a significant gap in mid-stage and growth funding. This highlights a broader issue: the lack of professionalized investment structures in Aragón capable of supporting startups through their full lifecycle. Usero/Villanueva argue that this gap must be addressed to prevent the outflow of promising companies and to build a more resilient regional economy. Many companies seek external funding, which can lead to a loss of local talent and economic benefits. The study highlights the need for a more cohesive and well-funded local ecosystem to retain and nurture high-potential startups (Usero/Villanueva 2024).

3.2. Startup growth and scalability

Start-up growth potential in Aragón is moderate. While 42.9% of nascent entrepreneurs expect to create 1–5 jobs within five years, only 3.4% anticipate scaling to 20 or more

employees. Most initiatives remain small, with over half having no employees beyond the founder. This reflects a cautious growth outlook and limited ambition for rapid scaling.

Internationalization is also limited. Over 82% of start-ups do not export, and only 3.6% export more than 75% of their output. This low export intensity indicates that most businesses are focused on local or national markets, which constrains their scalability.

Usero/Villanueva conclude that while Aragón has a solid foundation for startup creation and early development, it lacks the financial infrastructure to support sustained growth. The median seed capital required to launch a start-up is around €19,733, with significant gender disparities—women-led ventures typically raise less capital than those led by men. Informal investment (e.g., business angels) remains underdeveloped, with only 4.3% of the population acting as informal investors, below the national average (Global Entrepreneurship Monitor Aragón 2023-2024). Public funding is often seen as inadequate or difficult to access, and private funding is fragmented and sometimes competitive rather than collaborative. Usero/Villanueva recommend the development of local venture capital structures and stronger public-private partnerships.

3.3. Collaboration challenges among the quadruple helix actors

Challenges remain in strategic collaboration between large corporations, research centres, and SMEs, particularly in the most remote areas of Aragón. Aragón's quadruple-helix actors recognise one another's value but still operate in silos. Start-ups complain that joint R&D calls are "project-heavy, pilot-light"; corporations cite IP-ownership uncertainty; universities struggle to align academic calendars with market timetables; and policymakers face overlapping competences between the regional and municipal levels. Distance amplifies the problem: for companies outside Zaragoza-Huesca, 74% of experts say that "physical remoteness slows knowledge transfer". Fragmented governance—rated just 3.6/10 for "government prioritisation of entrepreneurship"—creates a patchwork of regulations, tender formats and reporting templates that discourages cross-sector projects (GEM Aragón 2023-2024).

3.4. Gender disparities

Gender disparities in financing further compound these structural issues. Women-led ventures receive significantly less capital than those led by men, with average investments of €24,566 compared to €58,561. Women are more likely to rely on institutional financing, while men tend to use personal and family savings. Interestingly, experienced investors (business angels) are used exclusively by women, though this remains a marginal source of funding overall (GEM Aragón 2023-2024).

3.5. Rural entrepreneurship

Rural entrepreneurship, traditionally a strength in Aragón, has shown signs of weakening. In the GEM 2023-2024 data, urban TEA (5.6%) surpassed rural TEA (4.8%). Although rural areas still lead in consolidated entrepreneurship, the drop in potential entrepreneurship—from 8.0% to 5.5%—is concerning, especially given the demographic importance of rural communities in the region. Additionally, some rural areas lack sufficient infrastructure and support services for innovation and technology transfer.

3.6. Low Technological Intensity

The GEM Aragón 2023–2024 report highlights that a major challenge lies in the technological and innovative profile of new businesses. A striking 90.8% of entrepreneurial initiatives in Aragón operate in low-tech sectors, with only 4.5% in high-tech.

3.7. Limited Product and Process Innovation

Innovation is also limited: 67.5% of entrepreneurs report offering non-innovative products or services, and 70% do not innovate in their processes. Export activity is similarly constrained, with 82.1% of new businesses not engaging in any international trade, and only 3.6% exporting more than 75% of their output. These figures reflect a business environment that is largely inward-looking and technologically conservative. Additionally, there is still a notable gap in the transfer of knowledge between universities, technological centres, and businesses, particularly in sectors like agriculture and renewable energy.

Only 3.1% of new ventures offer products considered innovative at a global level. Even among businesses that have survived more than 42 months, 89.4% are not innovating in products, and 84.3% are not innovating in processes (GEM Aragón 2023-2024).

3.8. Entrepreneurial motivation

The region also struggles with limited growth ambitions among its entrepreneurs. Most new businesses are very small in scale—over half have no employees beyond the founder—and only 2.6% expect to employ 20 or more people within five years. Furthermore, 45% of entrepreneurs do not plan to hire at all, suggesting a lack of scalability and long-term vision in many ventures.

While entrepreneurial intentions are rising in Aragón, they remain below the national average. In 2023, 8.8% of the population expressed intentions to start a business within the next three years, compared to 11.2% nationally. This suggests that although there is latent potential, it is not being fully activated—possibly due to perceived risks, lack of support, or structural disincentives (GEM Aragón 2023-2024).

3.9. Digitalisation

Digital adoption is another area of concern. Only 42.9% of new entrepreneurs plan to implement digital technologies, a sharp decline from 61.9% in 2022. While women and individuals with higher education levels are more likely to embrace digital tools, the overall momentum toward digital transformation appears to be slowing (GEM Aragón 2023-2024).

How to address the gaps

The following actions could address the challenges:

- Focus on high-tech entrepreneurship through targeted support and incentives.
- Improving innovation education, starting at the school level.
- Strengthening technology transfer mechanisms between universities, research centers, and startups.
- Encouraging digital transformation, particularly in rural and low-tech sectors.
- Addressing gender disparities in innovation and access to advanced financing.
- Improving entrepreneurial education as a top priority.
- Enhancing access to information and training for entrepreneurs.
- Supporting digital and sustainability skills to align with future business trends.

4. Specific Needs for Local Startups

The needs for startups can both occur because of their own capabilities as well as structural challenges. According to IAF, a common mistake that start-ups make is not properly validating their ideas before applying, which weakens their proposal. In addition, they often present an unclear or difficult to scale business model, lack a solid team and do not demonstrate an in-depth knowledge of the market and the competition. To help with these needs, at the IAF, they assess the scalability of a startup through a combination of the strength of its business model, the validation of its product/service, the capacity and experience of its team, its growth potential in the market, the integration of technology and its ability to attract financing and take advantage of strategic networks.

Regarding challenges in accessing the resources and support necessary for growth and sustainability, the following needs were drawn from the data analysed by the GEM reports with data from 2023-2024:

4.1. Financial Barriers

Access to funding remains a major hurdle, as local startups require greater access to financing, mentorship, and networking opportunities to scale their operations and enter international markets.

The median seed capital required to launch a start-up in Aragón is €19,733, but there is a notable gender gap: women-led ventures typically secure less funding than those led by men. Most entrepreneurs rely heavily on personal and family savings, with 70% using their own funds and 43% drawing on family resources. Bank financing is accessed by less than half of entrepreneurs, and informal investment (such as business angels) is underdeveloped—only 4.3% of the population acts as informal investors, below the national average (GEM Aragón 2023–2024).

4.2. Innovation and Technological Gaps

The region's start-ups are predominantly low-tech: 90.8% operate in low-technology sectors, and only 4.5% are in high-tech industries. Innovation is limited—67.5% of start-ups are not considered innovative in their products or services, and just 3.1% claim to offer globally novel products. This lack of technological intensity constrains competitiveness and scalability.

4.3. Limited Internationalization

Most start-ups in Aragón are focused on local or national markets. Over 82% do not export, and only 3.6% export more than 75% of their output. This limited international reach restricts growth potential and reduces resilience to local market fluctuations. The access to national and international markets is a consistent concern for growing startups in Aragón.

4.4. Digital Talent Development

Addressing the shortage of digital and technical skills is critical. Programmes for training and attracting talent in key areas such as artificial intelligence and emerging technologies are needed. Local startups report difficulties in accessing skilled labour, especially in fields like AI, cybersecurity, and advanced computing.

Looking at the specific challenge of the skills and talent gaps for entrepreneurship and startups growth, the following points stand out:

Entrepreneurial Education

Expert evaluations in the GEM Aragón 2023-2024 rate entrepreneurial education in schools very poorly: 2.98 out of 10, one of the lowest scores among all environmental factors.

Post-school entrepreneurial education fares slightly better, with a score of 5.1 out of 10, but still indicates room for improvement. The TEA rate is significantly higher among those with postgraduate education (8.4%) compared to those with only primary education (6.1%) or no education (0%). This suggests that higher education levels are associated with more robust entrepreneurial activity, but also that those with lower education levels may lack the skills or confidence to start a business.

There is a clear need to strengthen entrepreneurial education at all levels, especially in early education.

Training Gaps

There is a positive correlation between the level of specific training and the likelihood of starting a business, i.e., if you have received training on how to open and run a business, the chances of starting one are increasing. Most entrepreneurs have basic to intermediate training, but advanced training is still relatively rare. 13.6% of entrepreneurs report having received no specific training in entrepreneurship. (Data from GEM Aragón 2023-2024)

In terms of feedback from individual start-ups, the following insights on the biggest roadblock to success were drawn on impressions from 24 startups resident in CIEM and the vision of the centre's managers, from the period March-April 2025.

Funding beyond the first €100 k

Founders agree that regional vehicles such as SODIAR and ENISA are effective for getting off the ground, but once they need between €250 k and €1 M they are “back on the Madrid train every month.” The scarcity of local follow-on tickets slows iteration cycles and gradually pushes share ownership out of Aragón.

Small home market for scale validation

A pilot in Zaragoza helps prove technical feasibility, yet most investors demand national traction before a Series A. Because the regional consumer and corporate base is limited, teams must chase customers across Spain or the EU almost immediately, stretching both budgets and bandwidth.

Talent attraction and retention

Mid-level developers are regularly lured away by remote-first multinationals paying

roughly 20 % more. The resulting churn inflates salary expectations and jeopardises delivery schedules once a team grows beyond fifteen or twenty people.

Regulatory and administrative friction

Hardware and health-tech founders cite certification timelines that add six to twelve months to their roadmaps. Those extra months burn runway and deter investors unfamiliar with deep-tech cycles.

Fragmented mentoring and sector networks

Outside of generic pitch nights, targeted meet-ups—for example in climate-tech or fintech—are sporadic. That lack of structured, specialist networking means fewer warm introductions to anchor customers and seasoned advisors.

International connectivity gaps

While PLAZA offers inexpensive freight for product shipments, most investor or customer trips require a lay-over in Madrid or Barcelona, effectively adding a full day to each journey. Limited direct flights and slower time-critical logistics erode global visibility and raise operating costs.

Lengthy corporate procurement cycles

Large industrial and service companies in Aragón follow multinational-level tender procedures even for small pilots. Closing a first B2B contract with a “local champion” can take nine to twelve months, depriving startups of the quick wins they need to impress investors.

Scarcity of certified testing facilities

IoT hardware, medical devices and agro-food tech prototypes often have to travel to Madrid, Barcelona or Navarra for CE/ISO-accredited labs. Shipping prototypes (and engineers) outside the region adds cost and complexity, and failed tests mean repeating the journey.

Few high-profile local exits

Apart from cases such as Embou–MásMóvil or the partial sale of Libelium, Aragón still looks “illiquid” to many funds. The absence of recent, headline-grabbing exits raises the bar on metrics and lengthens valuation negotiations with external investors.

Inflexible legal frameworks for employee equity

Phantom-share or stock-option plans remain unfamiliar territory for local accountants—

and for employees who often equate variable pay with Madrid- or Barcelona-based tech giants. This limits the use of equity as a lever to retain talent when cash salaries cannot match big-tech offers.

Cultural stigma around failure

Several founders admit that *“in Zaragoza people still look down on you if you close a startup and try again.”* This conservative attitude toward risk discourages radical pivots and the launch of second ventures that could otherwise build on hard-won experience.

Bottom line

CIEM founders value Aragón’s low operating costs and supportive public programmes, yet scaling without relocating still hinges on three pillars: more local growth capital, deeper specialist networks, and faster regulatory as well as logistical pathways—now compounded by slow corporate sales cycles, scarce testing infrastructure, a thin exit market, rigid equity schemes and a persistent cultural reluctance to “fail fast.”

5. Barriers for Women and Minorities in Accessing Innovation Support Services

Despite efforts, the gender gap in entrepreneurship persists, with men more likely than women to be involved in early-stage ventures. Women and minority entrepreneurs continue to face barriers in accessing networks, mentorship, and funding, limiting their participation in the innovation ecosystem. In 2023, Spain scored poorly (3.6) for women’s equal access to entrepreneurial resources, though this may have improved in 2024 (GEM: Entrepreneurship Reality Check). The socio-economic profile of Aragón’s entrepreneurs reveals a predominance of individuals in their early forties, with a slight male majority. Educational attainment is relatively high, with over half holding university degrees, and there is a clear correlation between higher education and entrepreneurial activity. Income levels also play a role, as nearly half of all entrepreneurs belong to the top income third. Most entrepreneurs are employed full-time, and the majority rely on personal savings to fund their ventures. However, gender disparities persist in financing, with men typically investing more than women and relying more on family savings, while women are more likely to seek institutional financing.

In its publication “The Role of Women in the Startup Ecosystem 2023”, the entrepreneurial magazine El Referente places Aragón among the regions with fewer than 50 women founders in that year. In comparison, 114 men have founded startups in Aragón, of which they have records. This means women represent approximately 13.6% of startup founders in the region, which is below the national average of 15.6%.

5.1. Challenges for female entrepreneurs

Regarding the specific challenges that female entrepreneurs face, the following stand out:

Sparse deal-flow and under-representation

As said above, women account for just 13.6 % of startup founders in Aragón and only one regional scale-up has a woman on the founding team. Such low visibility reduces peer role-models, depresses investor awareness and makes gender-diverse cap-tables the exception rather than the norm.

Smaller and less diversified capital stacks

Average external capital raised by female-led ventures is €24,566—barely 42 % of the €58,561 secured by male-led peers. Women are also more likely to resort to public or institutional loans, whereas men rely on personal and family savings. Because Aragón’s informal angel base is small—only 4.3 % of adults act as informal investors—female founders have fewer warm intros to private money.

Thin informal networks and mentorship

Spain as a whole scored 3.6/10 for women’s equal access to entrepreneurial resources in the GEM Monitoring 2023. Regionally, interviews highlight that women and minority founders struggle to break into the “old-boys’” pitch nights and cluster dinners that power early customer and investor referrals; specialised mentor pools are scarce, un-catalogued and heavily reliant on personal networks.

Geographic and socio-economic penalties for rural women

For female founders outside the Zaragoza–Huesca corridor, distance multiplies the gaps. Only 5.5 % of rural women entrepreneurs receive any targeted public support, and most rely on personal savings or micro-loans filled at amounts well below those of rural men. Lower household incomes, limited broadband and higher travel costs make attending investor days or accelerators in the capital city an expensive gamble.

Structural hurdles for entrepreneurs with disabilities and other minorities

Entrepreneurs with disabilities cite bureaucratic hurdles, limited accessible training and scarce finance as the main blockers; two-thirds invest less than €50,000, largely from their own pockets or family support. Social prejudice further narrows the path to mainstream angel or VC syndicates.

Cultural and institutional bias

Experts still perceive a gender- and diversity gap in the technology sector—one of the seven main systemic weaknesses named in the regional report. Conservative risk attitudes amplify the problem: many founders report that “failing fast” is socially costlier

for women or minority entrepreneurs, discouraging second-time ventures.

Information and capability gaps

Because women founders lean more on institutional finance, they must navigate complex grant and loan paperwork—yet entrepreneurial education in schools scores only 2.98/10 in GEM expert surveys. Limited early exposure to financial literacy and digital skills leaves founders less prepared to meet stringent due-diligence requirements.

5.2. Age and entrepreneurship

According to the GEM data, youth entrepreneurship remains a vital component of the Aragonese ecosystem. Although the TEA among young people under 35 is slightly higher than among older adults, the gap has narrowed. Young people are also more likely to express entrepreneurial intentions, with 13.3% planning to start a business, compared to 7% of adults.

5.3. Rural entrepreneurship

The Global Entrepreneurship Monitor Aragón 2023-2024 gives data on rural entrepreneurship, which is particularly relevant in Aragón, where a significant portion of the population lives in municipalities with fewer than 5,000 inhabitants. Rural areas lead in consolidated entrepreneurship, suggesting stronger business longevity outside urban centers.

Looking at the data for Spain, with the latest data drawn from the “Gira Mujeres 2022 Report on Rural Women Entrepreneurs in Spain”, it is clear that rural women entrepreneurs are key to revitalizing depopulated areas, generating employment, and promoting sustainability. They show strong commitment and resilience, with lower abandonment rates and high self-confidence. Rural women are more likely to be in the consolidated phase of entrepreneurship (8.1%) than in the potential (6%) or new (4.3%) phases. However, they face structural challenges: lower income, limited digitalization, and scarce institutional support.

Most rural women entrepreneurs are over 45 years old and have secondary education. They are concentrated in the lowest income tercile (40–52%).

The main motivation to start a business is the necessity due to lack of job opportunities (79%), followed by family tradition (36%). Family-work balance influenced 39% of them to start a business.

The average startup capital is €66,520, which is higher than urban women but lower than rural men. The most common investment is €10,000, half that of urban women or rural

men. Personal savings are the main funding source (54%), followed by family/friends and bank loans. Only 5.5% received specific public support for rural women entrepreneurs.

(Gira Mujeres 2022 Report on Rural Women Entrepreneurs in Spain, based on GEM 2021–2022 data)

5.4. People with disabilities and entrepreneurship

According to the report “Emprender con Discapacidad en España. Diagnóstico de la situación actual con datos GEM 2023”, developed by the Observatorio del Emprendimiento de España in collaboration with Fundación ONCE, entrepreneurship for people with disabilities is of dual nature. While it offers autonomy and empowerment, it also exposes them to structural challenges such as limited access to financing, inadequate training, and persistent social prejudices.

People with disabilities in Spain show a relatively high perception of entrepreneurial opportunities—37.3% compared to 30.2% of those without disabilities. They also report similar levels of social support networks (47.4%) and slightly lower self-perceived preparedness to start a business (50% vs. 53.3%). Interestingly, fear of failure is less prevalent among people with disabilities (43.3% vs. 49.3%), suggesting a strong resilience. However, 68.1% still perceive entrepreneurship as difficult, reflecting the structural barriers they face. These include bureaucratic hurdles, lack of accessible training, and limited financial support.

The report reveals that 12% of people with disabilities are currently engaged in entrepreneurial activities in Spain, with 9.7% expressing the intention to start a business within three years. However, only 4.5% have managed to sustain their businesses beyond 3.5 years, compared to 6.9% of the general population. The abandonment rate is also higher (5.7% vs. 1.9%). Most people with disabilities (57.6%) start businesses out of necessity, due to limited job opportunities, while others are motivated by family tradition (33.9%) or the desire to make a difference (31.1%).

Entrepreneurs with disabilities tend to be younger, with a significant proportion under 35. Men are more likely to engage in entrepreneurship than women. Educational attainment is generally lower, with only 17% of potential entrepreneurs holding university degrees. However, many report having high or advanced levels of entrepreneurial and financial training, especially among those already running businesses. This suggests that while formal education may be limited, practical knowledge and motivation are strong.

Most businesses started by people with disabilities are in consumer services (53.7%) or business services (23.7%), with fewer in high-tech sectors. Two-thirds of these entrepreneurs invest less than €50,000, primarily from personal savings, bank loans, or family support. Most businesses are small, with fewer than six employees. Despite operating in low-tech sectors, many entrepreneurs perceive their products and processes as innovative. However, only 7% work in medium- or high-tech industries, and digital adoption remains limited—38.7% have no plans to digitize their operations.

To address the issues, the authors recommend:

- Expanding access to tailored financing options, such as soft loans and grants
- Strengthening entrepreneurial education from secondary school onward
- Promoting inclusive networks and mentorship programs
- Enhancing digital literacy and access to technology
- Raising awareness about the capabilities of entrepreneurs with disabilities
- Supporting sustainability and social impact initiatives
- Leveraging the role of specialized organizations like Fundación ONCE and Inserta Empleo.

5.5. Recommendations for making innovation support services more inclusive

Regional policies and programs are being implemented to foster inclusion, particularly for female and minority entrepreneurs in the tech and green sectors. However, these initiatives require further expansion to achieve meaningful impact.

1. Unlock Capital Where It Is Scarce

Inclusive Side-car Fund – €8 million

- Government of Aragón matches private investment euro-for-euro in seed and early-growth rounds led by women or minority founders.
- A €2 million carve-out is reserved to co-invest alongside graduates of the Micro-VC Fellowship.

Micro-VC Fellowship

- Ten diverse solo-GPs each receive €200 k to deploy over 12 months.
- Fellows gain privileged access to ITAINNOVA deal flow and mentoring in fund management, widening the pool of local capital allocators.

2. Broaden and Systemise Networks

Mentor Cloud Aragón: Single opt-in database tagging mentors by expertise, language, DEI attributes and availability; AI matching proposes three mentors to every incubated founder, countering the “old-boys’ club” effect.

Inclusive Demo-Day Quota: All publicly funded demo-days must feature $\geq 40\%$ women- or minority-led startups on stage and $\geq 40\%$ women or minority representatives on judging panels, ensuring visibility and normalising diverse success stories.

3 . Meet Founders Where They Are

Pop-up Acceleration Satellites

Two-week intensive cohorts run twice a year: one at Walqa (Huesca) and one in Teruel (alternating north/south). Travel stipends and childcare vouchers enable rural and caregiving founders to attend.

Child-care & Care-giver Support

On-site crèches or care vouchers are provided at every boot-camp, demo-day and satellite programme.

Digital-First Capacity Building

Grant-writing, financial-model and export-readiness workshops are delivered as self-paced micro-learning modules (mobile-optimised, WCAG 2.1 AA; Spanish Sign-Language interpretation on request), reducing geography and accessibility barriers.

4. Embed Inclusion in Every Public Euro

DEI KPIs in Innovation Grants

Applicants submit a concise inclusion action plan (e.g., diverse hiring pipeline, accessibility statement); progress is reviewed mid-term and a 10 % hold-back applies for non-compliance.

Inclusive Public Procurement

In Aragón's Public Procurement of Innovation (PPI) schemes, bids score an extra 10 % weighting if the company is women-/minority-led or presents a verified DEI plan.

Annual Inclusive Innovation Scorecard

IAF (or the regional Digital Innovation Hub) publishes a league table comparing incubators and accelerators on founder diversity, capital raised and mentor mix, fostering transparency and friendly competition.

5. Normalise Second Chances

Fast-Track Restart Scheme

Founders of closed startups receive a one-page "failure certificate" summarising lessons learned; they regain instant eligibility for grants and loans (the usual two-year cooling-off period is waived) and receive bespoke mentoring to refine their new venture—removing the stigma that disproportionately deters women and minority entrepreneurs from trying again.

6. Track and Adapt

Quarterly Inclusive Innovation Dashboard (published by IAF) tracks:

- Share of women-/minority-led deal flow entering incubators
- Average ticket size raised by these projects
- Number of diverse founders exits closed
- Mentor-programme Net Promoter Score, disaggregated by gender and origin
- Rural-to-urban participation ratio in each cohort

These KPIs provide the evidence base for continuous budget and programme adjustments.

5.6. Impact

By pairing targeted capital with wider networks, on-the-ground accessibility, inclusive procurement, second-chance pathways and rigorous KPI tracking, Aragón can embed diversity and resilience into every layer of its innovation ecosystem—expanding the pipeline of investable, high-growth companies that choose to start, stay and scale in the region.

Sources:

- Local diagnosis (qualitative evidence): interviews
- Statistical diagnosis (quantitative evidence): Global Entrepreneurship Monitor (GEM) Aragón 2023-24 and the Aragón Innovation Ecosystem report.
- Good practices and comparative references: OECD and European Commission instruments on inclusive innovation, plus Spanish case studies (Catalonia, the Basque Country and Madrid) where co-investment pools, micro-VC fellowships and fast-track restart schemes are already in place.
- AI tools were used in the creation of this report

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