European Innovation Council



# SCALING DEEP TECH IN EUROPE

THE EUROPEAN INNOVATION COUNCIL IMPACT REPORT 2025

# DISCLAIMER

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# **SCALING DEEP TECH IN EUROPE**

## **EUROPEAN INNOVATION** COUNCIL

**IMPACT REPORT 2025** 

## **COMMISSIONER'S FOREWORD**



**Ekaterina ZAHARIEVA** European Commissioner for Startups, Research and Innovation

The recent reports by Mario Draghi, Enrico Letta and Manuel Heitor send a clear message: Europe needs to increase its competitiveness and achieve technological sovereignty in key sectors of the economy. The European Innovation Council (EIC) is crucial in this and has already proved to be a game-changer. This Impact Report shines a spotlight on the EIC's achievements so far and highlights its vital role in supporting Europe's next generation of high risk and disruptive innovations, at all stages of maturity. Its impact ranges from generating a pipeline of over **1350 unique innovations**, to supporting over 700 startups and SMEs across 30 countries, crowdina in over EUR 2.6 billion of additional investment and leveraging over 3 euros of investment for every euro we invest through the EIC. The extent of cross-border investment within Europe, and the growing cohort of co-investors, demonstrate the value of the funding leverage made possible by the EIC's networks.

Still, too many of Europe's most promising technology companies are acquired or relocated outside Europe, mainly due to a lack of large financing rounds. But work is underway to change this. The EIC's Strategic Technologies for Europe Platform (STEP) will provide investments of **up to EUR 30 million**, which in turn will catalyse investment rounds **above EUR 100 million**, with the aim of scaling up critical technology companies in digital, biotech and clean tech.

Furthermore, with the establishment of the Trusted Investors Network, we have assembled a cohort of **over 100 investors from across Europe** – mainly private venture capital funds, but also public investment banks and others – who collectively represent **over EUR 100 billion** of assets. These investors have committed to working with the EIC to help companies grow in Europe.

These developments have not come a moment too soon. In the coming months the members of the College including myself will work with Member States and the Parliament to define the future EU budget and its priorities. We must channel our resources to meet common challenges where taxpayers' money brings the highest added value.

President von der Leyen made clear in her Political Guidelines and in my mission letter that a key step in this journey will be to expand the EIC. My first months as Commissioner have only strengthened my resolve to do so. The forthcoming EU Startup and Scaleup Strategy will be a key milestone, making it simpler, cheaper and faster for European startups to grow.

At these crucial moments for Europe's future, I invite you to reflect on the EIC's achievements as we strive to build on this success. In an uncertain world, I believe an expanded EIC is key to our future competitiveness and strategic autonomy in critical technologies.

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## 1. EXECUTIVE SUMMARY

This report provides an overview of the impacts delivered by the innovators funded by the European Innovation Council (EIC), a EUR 10 billion programme of the European Union launched in 2021 to identify, support and scale-up breakthrough technologies and deeptech start-ups.

It focuses on the Horizon Europe EIC portfolio of over 700 start-ups, 400 advanced research projects, and 180 translation projects funded in the period 2021-24 inclusive. The report also assesses the longer-term impacts of an "extended EIC portfolio", which includes projects and companies funded under the Pilot phase of the EIC with ca. 800 start-ups and SMEs from 2018 to 2020 and 400 technology projects from 2014 to 2020.

Since its launch in 2021, the EIC has allocated over **EUR 6 billion** in support and:

Established the EIC Fund as one of the largest deep tech investors in Europe with:

- Over **150 completed investment rounds** in start-ups and SMEs including over **60** in 2024:
- Over EUR 1.6 billion in co-investment from other, primarily private investors, corresponding to over EUR 3 of additional investment for each EURO of direct investment through the EIC Fund;
- Investments alongside over 600 VCs, corporates and strategic investors, including the 25 largest VCs in Europe; and
- A Trusted Investor Network (TIN) with over 100 investors, to accelerator co-investments and build a deep tech investor community.

Built leading portfolios of start-ups and technologies in all the critical technology **areas** identified for Europe's future competitiveness and economic security, including:

- **EUR 850 million** for **quantum and semiconductors** contributing to the Chips Act;
- **EUR 725 million** for developing or applying **artificial intelligence**;
- **EUR 700 million** for **energy generation and storage** solutions;
- **EUR 625 million** for **biotechnology and biomanufacturing** in areas including industrial biotechnology, agrifood biotech and healthcare biotech; and
- **EUR 500 million for advanced materials**:
- **EUR 300 million** for space technologies

#### Supported the best innovators, male and female, from all European countries:

- **30% women led companies** supported in 2024 (female CEO/CTO/CSO);
- EIC supported start-ups and SMEs in **30 countries**; and
- Over 20% female research project coordinators and participants in 2024.

### Looking back over a longer time period of the extended EIC portfolio, key impacts include:

- Investments of over EUR 1 billion into 272 unique companies with over EUR 2.6 billion of additional investment mobilised since the launch of the EIC Fund in 2020:
- Companies averaging over 50% employment growth and 55% **revenue growth** in the two years following EIC support;
- 80% of equity investments catalysed by the EIC involve a non-domestic investor with a majority of these seeing flows of investment across Europe/countries associated to the programme;
- Portfolio companies attracting over EUR 12 billion of additional investments, primarily from venture capital, with a prevalence of cross border capital;
- Over **70 companies** achieving '**centaur**' valuations (above EUR 100 million), including six with a valuation above EUR 500 million;
- Over **1 350 unique** innovations from EIC Pathfinder and Transition projects, with 75% assessed as market creating or targeting an emerging market;
- Over 100 start-ups established or in the process of being projects; and
- 1000 EIC companies and projects matched to corporates, procurers and potential investors resulting in over 230 signed deals.

established to commercialise results of EIC Pathfinder and Transition

# THE EUROPEAN INNOVATION COUNCIL AT A GLANCE

The European Innovation Council (EIC) is a flagship initiative of the European Commission striving to turn disruptive European science into groundbreaking commercial propositions and accelerate the scale- up of game-changing innovations.

With a budget of **over EUR 10 billion** under the Horizon Europe Programme (2021 – 2027), it seeks to position Europe as a global leader in the current wave of deep tech innovation: innovation that is rooted in cutting edge science, technology and engineering.

The EIC provides integrated support at all stages of technological maturity for innovators across Europe and looks to ensure that we turn excellent European deep tech research into innovations and also industrialise and deploy radical deep tech innovations at scale.

Support from idea generation by researchers through to their commercialisation and market entry by start-ups and SMEs is delivered through three core schemes.

- the EIC Pathfinder for early-stage research on breakthrough / gamechanging technologies
- the EIC Transition for transforming research results into innovation opportunities
- the EIC Accelerator for individual startups and SMEs to develop and scale-up breakthrough innovations through a unique mix of grant funding and direct investment through the EIC Fund.

Support from the EIC also goes beyond funding. The EIC fosters an innovative ecosystem that supports companies and projects with tailor-made Business Acceleration Services, including to find opportunities with large corporates, specialist infrastructures, and access to public procurement, to help increase the impact and likelihood of market entry and scaling of EIC funded innovations.

The EIC has also developed a model of Programme Management, informed by best practice elsewhere including ARPA in the US. The approach leverages the scientific background, understanding of markets and networks of the Programme Managers to enable the EIC to both identify emerging trends and inform future activities. This has resulted in a proactive management approach integrating three elements:

- i. The selection of a portfolio of projects that share common research and innovation objectives to achieve the aims of Challenge competitions.
- ii. The development of a Strategic Plan with the Programme Managers highlighting joint activities that can span collaboration on research through to engagement with key stakeholders such as regulators, investors and corporates.
- iii. Implementation and evolution of the strategic plan based on new evidence and insights to provide optimal support to the projects and to accelerate the transition from research to market.

## QUBEDOT



## A NOTE FROM THE EIC BOARD PRESIDENT -

The EIC is now a well-oiled machine that has proven itself essential for the EU's deep tech innovation ecosystem, address pressing societal needs, while improving the competitiveness of Europe by helping innovators through the valley of death.

The EIC has a pan-European reach, attracting over 10 000 of Europe's best start-ups and innovators, and taking early-stage risks in nearly 600 research projects and over 700 start-ups and SMEs that would otherwise remain unfunded or under-funded. However, the wider policy environment in which it operates has become increasingly volatile, with impulses from conflicts close to Europe, the global competition for artificial intelligence, and the pressing imperative of climate change, including a scramble for sustainable energy, green materials and food security.

Our response to this is to ensure an approach that provides a timely response to these emerging policy imperatives while enduring with the principle of focusing on and supporting the innovator's journey. This has enabled the EIC to tap into all elements of its toolkit and build a critical mass of support that has also crowded in essential private investment into key areas such as AI, biotech, clean tech and guantum technologies to ensure that Europe can, as Mario Draghi called for, close the innovation gap with the US and China, in advanced technologies which will be critical for our future competitiveness and strategic autonomy.

> Michiel Scheffer **EIC Board President**



instruments of the FIC.

The original ChipScope project consortium, with partners across Europe, secured funding in 2016 under the Pathfinder scheme to explore the potential of gallium nitride-based microLEDs given their brightness and scalability. Success here led to support under the Transition scheme in 2020 involving partners from Spain, Italy and Germany. This consortium included QubeDot, which had been established shortly before with the idea of producing a chip-based microscope with microLEDs.

As part of the Transition project, QubeDot was able to perform comprehensive market research and set up a large network of interested end-users. The traction gained with 40 of these potential customers identified the need to set up semiconductor cleanroom facilities and realise the potential of their original visionary idea.

The funding now secured through the Accelerator scheme will help the company develop solutions for applications as diverse as augmented reality glasses and sophisticated measuring solutions.

In the first stage of expansion, it will enable the company to develop the technology to the point where it will be able to produce roughly 1 000 wafers per year, with each wafer containing 80 to 100 million LEDs.

We want to become the renowned European micro-LED producer that produces micro-LEDs for EU SMEs and listed entities but also for American companies and become the trusted supplier of high tech microLED technology outside of Asia.





### CEO and co-founder QubeDot

QubeDot, founded in 2019, and its iSMILE project focused on the development of integrated scalable microLED engines is the first idea to complete the journey across all



## Accelerating deep tech innovation

The EIC Accelerator supports start-ups and SMEs that have the ambition and commitment to scale, but require substantial funding, where the risks involved are too high for private investors alone to invest. Support is provided in the form of non-dilutive grant funding and dilutive direct investment, via the EIC Fund (see Section 3.2), as appropriate.



FIGURE 1 EIC Accelerator



Overview of the Accelerator portfolio of projects under Horizon Europe

Over **1 500 companies** have been supported since the launch of the EIC Pilot in 2018. These companies hold ca. 6 000 active patents and have, in the first two years following the receipt of EIC support, seen:





Third party data points to these companies going on to **raise over EUR 12 billion** in investments (including investment by the EIC Fund) in the period following their selection for support by the EIC. Fundraising levels appear stable in the last three years, but 2024 saw a significant increase in the amounts invested through larger rounds (above EUR 40 million).



**FIGURE 4** Investment into EIC companies following entry into the programme



**FIGURE 5** Investments into EIC companies by sector

These investments have come from across the globe including some notable flow of capital across borders within Europe.



**FIGURE 6** Source of investment by country VCs, corporates alongside corporate venture capital (CVC) and the public sector (including the EIC) account for a majority of these deals by number.



The resulting portfolio has a valuation of over EUR 30 billion, which includes over 70 companies with centaur valuations, including six with valuations above EUR 500 million.<sup>1</sup>



Lili.ai was created in 2016 based on personal experience where I had to analyse eighteen years of emails to understand why three projects were late. Making sense of a huge amount of documentation, when key team members had left the project, and we were facing a major legal dispute and 200 lay-offs, led me to create a giant with the mission to enhance coordination in major projects with insights harnessed automatically and respectfully from daily email exchanges.

Today, Lili.ai is the leader in natural language processing applied to large scale projects and works with prestigious partners like Oracle.

We analyse daily unstructured documents, such as stream of emails and attachments, for 'weak signal' detection of risks of delay. Our use cases are focused on timeline reconstruction and risk detection for large scale projects in areas such as transportation, energy, infrastructure and construction.

Europe leads the global construction market with giants like Bouygues, Vinci, Eiffage, ACS, Ferrovial, Hochtief, Strabag, Skanska, and Balfour Beatty. This strong foundation positions us to build the next AI leader in the sector.

Doing so demands joint investments: public funds to drive R&D and early proofof-concepts for industry-grade safety, and private capital to scale the solution. The EIC has therefore been instrumental in providing both money and advice in support of company growth.

The figures presented here cannot be compared to Impact Report 2023 as the analysis no longer includes companies funded under the SME instrument prior to the launch of the EIC Pilot in 2018. It also does not include the valuations of the most recent cohort of EIC companies funded under the 2024 cut-offs.



## **Milie TAING** CEO and founder at Lili.ai

## 3.2

## Investing in deep tech start-ups and SMEs

The investment arm of the EIC, the **EIC Fund**, has invested **over EUR 1 billion** in the startups and SMEs selected through the EIC Accelerator evaluation process - the **average age** of these companies at the time of selection was **six years**, with an average of ca. **15 employees** at this time.

Agriculture & Food Energy Climate & Environmental Tech Built Environment Mobility Health Biotechnology Medical Technologies Space Advanced Manufacturing & Advanced Materials Al, Data & ICT Quantum, Advanced Computing & Semiconductors Social Innovation, Culture & Creative Industries 00 60 EIC Fund investment (€m)

> **FIGURE 9** EIC Fund investment distribution by key sectors

The EIC Fund syndicates and leverages the domain knowledge and expertise of specialised funds and has to date co-invested with nearly **500 VCs**, over **30 government and sovereign funds** and **120 corporate/strategic investors**, alongside several hundred business angels, individuals and founders, among others. The result sees over 80% of the deals catalysed by the EIC, involving at least one non-domestic investor, with a majority of these (ca. 70%) involving cross-border flows of investment within Europe/ countries associated to the programme. This is close to **double (43.4%) the European average** for such flows.



Country of origin of VCs, government and sovereign funds, and corporate/ strategic co-investing with the EIC

## LOCI ORTHOPAEDICS



## **Dr Brendan BOLAND**

Loci Orthopaedics, executive chairperson and co-Founder

**Loci Orthopaedics** develops novel technologies to address major unmet clinical needs in orthopaedic medicine. The implant that the company has designed recreates the natural biomechanics of the

joint, aiming to provide a safer and more effective solution. The company has received ongoing EIC support with grant funding from the EIC Accelerator and equity investment in the company's Series A funding round via the **EIC Fund**.

Receiving the EIC Accelerator grant provided much needed capital to progress the development of a new implant technology through key milestones. These milestones enabled the company to secure major private equity investment from a venture capital firm, and the venture investment divisions of one of the world's largest MedTech companies. While the grant funding was key to enable the company to reach important milestones, the EIC Accelerator was also an endorsement of the company. It provided potential investors with reassurance that the company was tackling a major unmet clinical need with a real commercial opportunity. This validation was further endorsed by the EIC Fund's equity investment, and the company is continuing to grow.

#### CASE STUDY

The VCs co-investing alongside the EIC include the **25 biggest VCs** in Europe, whether measured in terms of number of investments performed over the past five years or the assets under management.

BPI France
Invest-NL
Enterprise Ireland
CDP VENTURE CAPITAL
Centro para el Desarrollo Tecnológico Industrial
Quantonation
High-Tech Gruenderfonds
B2Venture
Verve Ventures
Credit Agricole
Innovacom (Paris)
Supernova Invest
Liftt SpA
Mp Pensjon Pk
BNP Paribas Developpement
Credit Mutuel Equity
Bayern Kapital
TRUMPF Venture
UnternehmerTUM
Panakes Partners
Denmark's Export and Investment Fund (EIFO)
imec.xpand
Noshaq
United Bankers
360 CAPITAL PARTNERS SAS

NUMBER OF UNIQUE INVESTMENTS	INVESTORS HQ
16	France
8	Netherlands
8	Republic of Ireland
7	Italy
7	Spain
6	France
6	Germany
6	Switzerland
6	Switzerland
6	France
5	France
5	France
5	Italy
5	Norway
4	France
4	France
4	Germany
4	Germany
4	Germany
4	Italy
3	Denmark
3	Belgium
3	Belgium
3	Finland
З	France

## ATLANTIC BRIDGF

Since its establishment in 2020, the EIC Fund has:

- Signed **384 investment agreements** and invested in **272 companies** with approved investments worth over EUR 1 billion;
- Catalysed funding rounds worth an average of ca. EUR 16 million under Horizon Europe;
- Crowded in over EUR 2.6 billion of additional investment since the launch of the EIC Fund in 2020 with over EUR 3 of additional equity investment leveraged for every EURO of investment through the EIC Fund;
- Facilitated cross border flow of investment with 80% of companies receiving support from non-domestic, primarily European, investors; and
- Provided equity for **over 70%** of the companies with the remainder receiving SAFE notes or convertible loans.

The scale of activity points to the EIC becoming one of the most active European deep tech investors in the last 24 months<sup>2</sup>:

INVESTOR	COUNTRY	NUMBER OF DEALS	LATEST FUND SIZE
BPI France	France	397	€400 m
SFC Capital	United Kingdom	274	~€100 m
EIC Fund	EU	174	€2.7 bn
High Tech Grunderfonds	Germany	148	€660 m
ENISA	Spain	113	€98.5 m

2024 also saw the launch of the Trusted Investors Network (TIN), which will play a pivotal role in supporting deep tech innovation. With a pool of over **EUR 100 billion** in assets under management, the network is uniquely positioned to support Europe's most promising companies as they scale and reach new markets.



## Elaine COUGHLAN

Founder and Managing Partner at Atlantic Bridge, a European deep tech VC Fund with over EUR 1.3 billion assets under management.

Having long term strategic investment partners is essential when investing in deep tech portfolio companies. These companies are generating and scaling breakthrough technologies, solving difficult global problems and as a result, the time horizon can be longer. They require patient and strategic investors with expertise and willingness to invest across the investment cycle to scale such technologies globally and deliver outsized returns.

The EIC is such a partner and as a result Atlantic Bridge have worked with the EIC and co-invested with the EIC Fund. The addition of the EIC to the syndicate catalysed the scale of the capital round and enabled the companies to expand the investment round by a significant multiple.

Due to the high-performance threshold of the EIC and their expertise, it gives confidence to smaller and generalist type investors to co-invest in deep tech. The EIC has a wide network of investors and have been very open and helpful in showcasing European deep tech companies to this investor base.

European companies also require technical expertise and operational experience of scaling companies globally. Access to this expertise and capital is being built on the foundation that is the EIC Trusted Investor Network - this is a new valuable piece of infrastructure in Europe, which will grow and deepen, and help accelerate the scaling of this generation and future generations of deep tech European companies.

## **Business Acceleration**

3.3

The EIC's Business Acceleration Services connect portfolio companies and researchers with corporates, investors, buyers, accelerators and venture builders among many others.



The **Corporate Partnership Programme** connects EIC-funded innovators with large corporates to collaborate and develop new business models and opportunities. EIC beneficiaries obtain scale, resources, sales channels, connections and forge new business opportunities, while corporates can identify new emerging technologies and have access to great ideas that can positively impact their business.

## GALP



### Ang CASACA Galp Global Director of Innovation

engagement The recent between the EIC and Galp, as part of the EIC Corporate Partnership Programme, was a transformative experience. Hosting 15 EIC-funded start-ups and scaleups from 11

countries at Galp's Lisbon Headquarters provided a unique opportunity to connect pioneering start-ups with high-level decision-makers. Their energy, creativity, and ambition reaffirmed my belief in the potential of European innovation. From hydrogen breakthroughs to cutting-edge energy storage, the solutions aligned with Galp's decarbonisation goals, demonstrating how start-ups and corporates can collaborate to accelerate the transition toward a more resilient energy system.

CASE STUDY

## SUNOYSTER SYSTEMS

## **Carsten CORINO** Founder of SunOyster Systems

SunOyster Systems GmbH (SOS) develops innovative solar technologies that can meet any demand for electricity and heat in an efficient, cost-effective and aesthetically pleasing way. In July 2024, with great support from the EIC, we presented one of these solar solutions at the Galp Innovation Day in Lisbon. SunOyster's lightweight modules with a glass front are a solution for load-restricted roofs. They weigh only 5 kg/m<sup>2</sup> and are simply glued to various roof materials. Therefore, they are ideal for most petrol station roofs. Galp operates 1400 of them in Portugal and Spain. As one kWh from the light solar modules costs only 3 euro cent, a solar system of 45 kWp can then generate a cash flow of EUR 100 000 over 20 years and save 600 tons of carbon dioxide. Galp was convinced and defined two pilot projects. SOS has already delivered the equipment, which will now be installed in the second quarter of 2025.

Without EIC funding we probably would not have made it through the famous 'valley of death' and the EIC corporate day helped us again to get in touch with a big corporate for our up-to-date product portfolio. Hardware is hard! There are high costs and relatively long development cycles associated with the R&D and ongoing refinement of hardware solutions such as solar technologies. Private VCs are shy investing in hardware as it is more difficult to scale. As cleantech is desperately needed to achieve sustainable development of our society, it is of special importance that public bodies promote these technologies.

The Innovation Procurement Partnership Programme connects EIC innovators with public and private buyers and provides supports participation in public and private bids. Utility companies, hospitals or cities have a lot to gain from EIC-funded deep tech innovations that can help achieve market and/or policy goals and raise the living standards of citizens.

## MYSPHERA



## Daniel **VERA MANERO**

**Chief Marketing Officer** at Mysphera

The EIC Innovation Procurement Programme assisted **Mysphera** in submitting an offer in the Dynamo Pre-Commercial Procurement with a group of buyer hospitals from Italy,

Poland, Portugal, Spain and the UK, to develop solutions that contribute to the resilience of the healthcare systems for crises such as pandemics and cyberattacks.

EIC support was instrumental in our journey, providing funding and mentorship that enabled us to accelerate R&D efforts, refine our AI-driven predictive analytics, and expand internationally. The EIC's Innovation Procurement Partnership Programme facilitated strategic partnerships with healthcare providers, enabling us to conduct large-scale pilots in key European hospitals.

The EIC's credibility helped accelerate market adoption, providing hospitals with confidence in our solutions' reliability and long-term viability. Thanks to this support, Mysphera has transitioned from a regional innovator to a European leader in hospital automation.

The **co-investment support programme** helps EIC beneficiaries to become investor ready and access investors through pitching events. It has a database of more than 800 investors, including Venture Capitalists (VCs) and business angels. Co-investing in companies carefully selected by the EIC is a great investment opportunity, as well as an opportunity to support breakthrough, market-creating innovations across Europe and beyond.

## LIFTT

Liftt has collaborated with the EIC to enhance its deep-tech scouting and expand its network of European investors. The EIC's tools and Investor Days, have facilitated the identification of high-potential startups, resulting in six EIC-backed companies joining the LIFTT portfolio: Comptek Solutions, PrediSurge, Sparrow Quantum, Voiseed, BetaGlue Therapeutics, and EBAmed.

Our collaboration with the EIC has been a key driver of innovation, allowing us to expand our portfolio and contribute to the growth of a dynamic and collaborative European deep-tech ecosystem. We look forward to continuing this shared mission of supporting groundbreaking innovation and turning research into market-ready solutions.

CASE STUDY

## Giovanni **TESORIERE CEO** at Liftt

### CASE STUDY



## SPARROW QUANTUM APS



## Kurt **STOKBRO**

**CEO at Sparrow Quantum Aps** 

Sparrow Quantum is a spin-out from a powerhouse of innovation, Professor Peter Lodahl's research group at the Niels Bohr Institute. We specialise in advancing lightmatter interfaces, the critical components

required to scale optical quantum technologies.

Support from the EIC led to private investments in a pre-seed round of EUR 4 million in 2023 and growth from five to 30 employees since receiving support in 2022. We are now in the final stages of closing a Series A founding round, which will take us to the next level. The EIC's Business Acceleration Services - through the investment pitching events - have helped connect with investors (including Liftt).

**CASE STUDY** 



The **EIC Scaling Club** launched in 2024 is an EIC-funded curated community where scale-up support is being provided to **120 deep-tech companies** from the EIC portfolio and beyond to help them grow into European tech champions.

## **ELAPHE**

Luka

**Elaphe** is developing technologies to simplify electric vehicle architecture to make them cheaper to build, more efficient, safer and more performant. We do so by creating

advanced in-wheel motors that require no gears and fit directly into the spaces already available in the wheels of cars, commercial vehicles and other vehicle types, and software that enables advanced vehicle functions by using the newly created control opportunities from in-wheel motors.

Our objectives are to reduce cost of vehicles by 20% and make them 20% less consumptive, and thus remove major obstacles to wider EV adoption. We also believe this technology will play a key role in MaaS (Mobility as a Service) vehicles in the long-term future, introducing unprecedented safety, comfort and function for decades to come.

As early believers in electric mobility, our work started in the early 2000's, with the first 10 years focused on basic research, the next five years focused on prototyping, testing and validation for road use, and we have now begun commercializing the technology, and in doing so, we work with most major OEM groups on advanced development.

The EIC has helped Elaphe through its mentorship programmes, notably EIC Scaling Club, which has provided some incredible insights and support. Its acceleration services has also been supportive in getting our company ready for scaling up, and we have participated in the EIC International Tradefair Programme, which has helped create awareness in key target markets and facilitated conversations with our customer and partner base.

# **AMBROZIC**

### CCO, CFO and Member of Board of Directors, Elaphe

**Tech2Market** aims to help researchers and innovators from projects funded under EIC Pathfinder and Transition schemes in their transition from lab to market and to provide tailored support for the market deployment of research results. It includes services with two complementary approaches: Entrepreneurship and Venture Building.

**Ecosystem Partnerships** links beneficiaries to services such as, incubation, acceleration, growth and scale-up with sectorial insights, business development, networking and market knowledge provided by the best ecosystem players in Europe and beyond.

The EIC also offers **internationalisation services** to EIC innovators bringing them to trade fairs within and outside Europe and by offering soft-landing support in United States.

## **KEY FACTS**

- Over **1000 companies and projects** matched to corporates, procurers and potential investors
- **230 concluded deals** with investors, corporates, investors, procurers and business partners
- Nearly 400 jobs created from concluded deals
- EUR 362 million of investment raised through investor outreach
- 96% of coached beneficiaries recommending the service to their peers
- 180 ecosystem partners offering over 450 services to EIC beneficiaries
- 9 start-ups created and 16 CEOs onboarded following Tech2Market support.
- **EUR 316 million** raised by EIC Scaling Club companies (since April 2024)

## Priming the next generation of start-ups

EIC Transition, a novel instrument introduced under Horizon Europe, provides a unique opportunity to turn excellent European deep tech research into innovations. It provides up to EUR 2.5 million to enable innovative researchers, spinouts and SMEs to exploit promising deep tech research results, demonstrate and mature the technology and at the same time develop and refine their business plans for specific applications and look towards commercialisation.



The scheme has played a critical role in valorising the outputs of early-stage research supported under the EIC and other parts of the Framework Programme, including the European Research Council (ERC).

## **IPRONICS**



## Dr. Ana Belén **GONZÁLEZ GUERRERO**

VP of Business Development, iPronics

iPronics is a company founded in 2019 based on the outputs of a European Research Council (ERC) Advanced Grant

and a subsequent Proof of Concept project awarded to the Polytechnic University of Valencia. This support laid the foundations for the first technical stages of a Field Programmable Photonic Gate Array (FPPGA), and the company secured an EIC Transition grant in 2022.

iPronics has pioneered a technology based on programmable silicon photonics chips, versatile enough for applications like wireless signal processing, data centers, machine learning, and advanced computing.

EIC support has been pivotal in the development, production, and commercialisation of our first product, the iPronics SmartLight Processor. Shipped to over 20 customers across diverse applications - computing, telecom, and data centres - it enabled us to explore our technology's potential and understand market needs. We also showcased our team's ability to complete the product cycle—from design to production, certification, commercialisation, and customer support. By proving our technology's reliability and our team's execution, we secured our recent Series A funding.

This process, guided by the EIC Transition, has now led us to select the Optical Circuit Switch as our next product. Now, with EIC Accelerator backing, we're accelerating and scaling up production to meet Al's urgent demand for efficient technologies that cut costs and power consumption.

We also availed of coaching support from the EIC, to select from high-level experts in technology and commercialisation. We accessed the consultancy services of a renowned photonics expert, who was crucial in helping us refine our company's positioning, messaging, and technology's value proposition.

## **183 projects**

## have been funded to date under Horizon Europe, with the majority involving a commercial partner.



Independent analysis based on the Innovation Radar methodology, assessing a subset of **103 projects** including 13 funded under a Pilot action under Horizon 2020 point to 276 innovations with over **75%** of these innovations either **market creating** or targeting an emerging market for which there is a growing demand with few solutions.

## **KEY FACTS**

- Nearly half the projects, **90**, originate from ERC Proof of Concept projects
- 43% of supported ideas come from EIC Pathfinder (or predecessor programmes)
- 13% of innovations have a clear potential to create new markets
- 62% are targeting emerging markets
- **19 start-u**ps have either been established or are in the process of being established with 31 others likely to be established. A further 40% of all participants are SMEs
- Over 100 patents have been registered by funded projects
- 152 innovations are being supported through fund **raising** or plan to do so
- Licensing activities are underway or planned for 79 innovations.

## ROCCQET

# Eva

Innovation and Product Manager at ROCCQET

**Qilimanjaro Quantum Tech** is a full-stack (hardware, software and applications/ algorithms) guantum computing company that uses superconducting flux qubits to build application-specific quantum devices. Qilimanjaro follows a co-design approach that brings the design of the quantum chip closer to the use-case through the development of QASIC (quantum app-specific chips). This advanced quantum expertise is channelled into tailor-made solutions to our customers: deployment and integration of on-prem quantum computers; custom support on quantum algorithms; and a forthcoming remote access to our quantum computing platforms, through a Quantum as a Service (QaaS) model.

EIC support has been fundamental in pursuing our company mission to create an analog guantum computer to harness the tangible benefits of guantum computing. Breakthrough advancements have been carried out within the framework of Qilimanjaro's EIC Transition flagship project: RoCCQeT. This ambitious project develops the different layers of the quantum computer stack, from frontier hardware to software and personalised algorithms.

CASE STUDY



# **MARTÍN FIERRO**



## 3.5

## Supporting technology breakthroughs

The EIC Pathfinder, focused on support for groundbreaking research at low TRLs, has to date supported 402 early-stage high-risk, high-gain inter and transdisciplinary projects under Horizon Europe (2021-24).

A mix of open (i.e., sector and/or technology agnostic) and challenge-based (i.e., targeted) calls look to ensure that the EIC is positioned at the forefront of developments in science and technology and can both identify and support technologies emerging from the science base that could create new value propositions and/or disrupt existing markets.



**FIGURE 14** 

EIC Pathfinder

According to independent analysis based on the Innovation Radar methodology, when including results from predecessor programmes under Horizon 2020 and based only on their final review, 300 completed research projects have generated over 1100 innovations. Over 75% of these innovations are either market creating innovations or are targeting an emerging market for which there is a growing demand with few solutions.

- **88 start-ups** have either been established or are in the process of being established with over 100 others likely to be established.
- Nearly 400 patents have been registered by completed projects
- **24%** of Pathfinder project innovations have a clear potential to create **new markets**
- Over 50% are targeting emerging markets
- Over 200 innovations are being supported through fund raising or plan to do so
- Licensing activities are underway or planned for nearly 200 innovations.



## SOLAR FOODS



## Arttu **LUUKANEN**

#### Solar Foods, Senior Vice President

Solar Foods has industrialised the most sustainable method of producing food that uses two primary feedstocks: renewable electricity and CO<sub>2</sub> captured from the atmosphere. This process is centred around

a naturally occurring hydrogen oxidising bacteria that produces nutritious protein called Solein via gas fermentation. The EIC funded HYDROCOW project aims at expanding the spectrum of food products that can be produced by this most sustainable method of production.

Being a part of the EIC's CO<sub>2</sub> and Nitrogen valorisation portfolio also provides substantial added value towards future integration of this precision fermentation technology into novel methods of CO<sub>2</sub> capture, purification and utilisation in addition to methods for Nitrogen assimilation. It has enabled us to establish two new consortia that are looking to start new projects around the core technology - turning CO, and electricity into added value products.

The infrastructure associated in producing food using gas fermentation is capital intensive. By way of example, Solar Foods' first factory – a scaling demonstration - was an investment of EUR 42 million. Our current models predict that the first phase capital expenditure for the first industrial scale plant – our second factory - will cost EUR 134 million for its first phase of construction. Thus, vast public and private investments are crucial to bring this 'new potato' – a new primary caloric supply for humankind – available to all.





## **Supporting Women Innovators**

The EIC continues to actively promote and support the role of women entrepreneurs and researchers to boost Europe's innovation capacity. This includes the prioritisation of women CEOs invited to EIC Accelerator interviews and dedicated initiatives including Women TechEU, to support early-stage deep tech start-ups funded and led by women and its Women Leadership Programme to provide coaching and mentoring to EIC-funded women entrepreneurs.





### of companies supported in the EIC Accelerator in 2024 -42 in total - are women led (female CEO/CTO/CSO) with the overall portfolio featuring **134 women led companies**

women coordinators of Transition projects

women coordinators of Pathfinder projects

of the 2021/22 cohort of Women TechEU beneficiaries have secured support through the EIC Accelerator with

## AMSIMCEL



## Anca MARCU

CFO and Member of Board of Directors, AMSIMCEL

**AMSIMCEL** develops HyperPV - a physical verification tool (design rule checking), that accelerates the verification of AI and advanced chip designs by at least 20 times

compared to major players in the market. Support from the EIC will help finalise the optimisation of HyperPV for a production-ready environment while ensuring its seamless integration and performance within existing EDA ecosystems. The innovative solution will undergo rigorous testing through multiple pilot projects with semiconductor companies, focusing on validating consistent design verification acceleration across various design scales.

EIC support has helped us build and consolidate our team and develop our tool, allowing us to successfully conclude our first paid customer pilot. EIC has supported our fundraising efforts by organising sector-specific pitching events, facilitated valuable introductions and meetings with key industry players and provided us with deeper insights into the ecosystem. Valuable insights from our coach - a seasoned expert in the semiconductor industry - has helped us build a strong and effective go-to-market strategy.

CASE STUDY





Since the beginning of Horizon Europe in 2021 over EUR 6 billion has been provided through the EIC in support of:

- 402 EIC Pathfinder research projects on emerging technologies, involving over 2,000 European and international partners
- **183 EIC Transition projects** to create spinouts and commercial opportunities from research results
- 706 start-ups and SMEs under the EIC Accelerator
- These EIC supported companies and projects cover all countries of the European Union and beyond.





All projects have been mapped onto a revised taxonomy, comprised of 11 sectors (primaries), several associated sub-sectors (secondaries) and specific technologies (tertiaries). All projects have been assigned to a single primary category, and at least one secondary and one tertiary from the very same category. Where appropriate, projects have also been assigned to one other secondary and up to five other tertiaries.



## **Digital, Industry and Space**

### 4.1.1 Advanced Manufacturing and Materials

Advanced manufacturing and materials are key underpinning technologies that contribute to the competitiveness, resilience, and strategic autonomy of European industries. The demand for novel materials and manufacturing processes are expected to grow in support of key policy agendas, such as the development and deployment of green technologies, and the EIC has to date provided EUR 500 million to support over 90 projects in this sector under Horizon Europe.



Number of EIC projects developing Advanced Manufacturing and Materials by technology area

Technologies within this sector also underpin developments across a number of other sectors. This is evidenced by the provision of over EUR 500 million in support directed towards companies and projects developing advanced materials with some of these developments integral to sectors such as quantum, advanced computing and semiconductors, medical technologies and energy.



Integration of advanced materials developments across primary sectors

## **SPOTLIGHT ON MID TO LONG-TERM** AND SYSTEMS INTEGRATED ENERGY STORAGE

Advanced manufacturing and materials are pivotal in the development and enhancement of novel energy storage technologies. They can drive improvements in efficiency, sustainability, and performance. Mid and long-term energy storage are fundamental technologies to bridge the intermittency of renewable energy sources (RES) to implement the Green Deal but also the REPowerEU policies (60% rate of RES as of 2030), with both strategic for Europe.

The **EIC portfolio established in this area** looks to develop a range of breakthrough solutions for thermal, mechanical, chemical and electrochemical storage to optimise processes and system integration opportunities, while minimising or avoiding the use of critical raw materials. A key strand of the portfolio activities of the funded projects surrounds the types of materials used, including their synthesis and characterisation but also their implementation in real systems. Regulatory issues and techno-economic analysis are also tackled, allowing for a benchmarking of the different technologies defining their precise positioning in relationship with competing technologies in the same technical or application field.



## ECOLYTE

## PAOLO BONDAVALLI

#### EIC Programme Manager for advanced materials for energy



My role as a Programme Manager is to develop a vision on how advanced materials may change the energy sector.

This has been partially implemented through two Pathfinder portfolios - one focused on mid to long-term energy storage, and another on clean and efficient cooling.

A significant part of my work involves identifying market trends and stakeholders to help projects move in the right direction from the very beginning. Beyond the Pathfinder programme, i.e. in the Accelerator and Transition programmes, I actively assist companies to secure funding, connecting them to stakeholders and partners.

I have been raising awareness among researchers to help them develop an entrepreneurial mindset and a strong network. This is achieved through a Junior Scientists Forum and the organisation of a series of webinars featuring deep tech entrepreneurs with established start-ups/spin-offs.



**Ecolyte** develops next generation stationary energy storage based on renewable materials. The EIC programme more broadly has helped improve performance in all components of the energy storage systems, and the EIC Programme Manager, Paolo Bondavalli, has supported Ecolyte in a wealth of ways, including providing contacts with other SMEs working in the field, identifying funding opportunities and offering advice on how to gain traction faster. Paolo has also helped find suitable partners to build an ecosystem and value chain in the field of stationary energy storage.

In addition, the Junior Scientist forum established by Paolo is one of the most important activities in the Portfolio. They create a space where the scientists - PhD students and postdocs - can come together and discuss ideas and collaboration opportunities. For the PhD students, it is an excellent opportunity to widen their scientific network and to get in touch with other leading scientists in the field. This also has a positive impact on the established researchers, as new ideas can come into existing projects and new collaborations evolve.



## **Stefan SPIRK CEO of Ecolyte GmbH**

### 4.1.2 Al, Data & ICT

Generative AI & Foundation Models

Neural & Cognitive Networks

Robotics & Autonomous Agents

Text Mining & Data Processing

Computer Vision & Image Recognition

Synthetic Data & Data Augmentation

Data Protection & Privacy Enhacement

Global Positioning & Navigation Systems

Virtual Worlds & Immersive Technologies

Gaming, Interactive & Non-linear Media

Secure Protocols & Network Resilence

Cyberthreat Detection & Incident Management

Web3, Web4, Blockchains & Fintech

Digital Twins & Virtual Identities

Data Management & Information Architectures

5G, 6G, Mobile Connectivity & Mobile Devices

The EU aspires to be the global leader and foster the development and deployment of responsible Artificial Intelligence (AI). The area and wider sector therefore feature strongly in the work of the EIC with several initiatives at all stages of technology maturity, including an early-stage Pathfinder Awareness Inside Challenge, and a current Accelerator Challenge on the use of Generative AI across key application domains.

The EIC portfolio for this sector features over 70 projects funding.

The underpinning nature of these technologies is exemplified by the extent of support for AI, which encompasses both companies and projects developing the next generation of AI tools, but also its development and application to a range of sectors. This points to a portfolio worth over EUR 725 million in support for companies and projects during the first four years of Horizon Europe, with medical technologies one of the key application domains.

for this sector features over <b>70 projects</b> in receipt of <b>EUR 300 million</b> in	Agriculture & Food	
	Energy	
Accelerator Projects Transition Projects Pathfinder Projects	Climate & Environmental Tech	
tive AI & Foundation Models	Built Environment	
Machine & Deep Learning Jeural & Cognitive Networks	Mobility	
Vision & Image Recognition	Health Biotechnology	
At Mining & Data Processing       Data & Data Augmentation       & Information Architectures	Medical Technologies	
ction & Privacy Enhacement	Space	
oning & Navigation Systems	Advanced Manufacturing & Advanced Materials	
ds & Immersive Technologies	Advanced Manufacturing & Advanced Matchais	
eractive & Non-linear Media Cryptography	Al, Data & ICT	
otocols & Network Resilence	Quantum, Advanced Computing & Semiconductors	
0 20 40 60 80 100 120	Social Innovation, Culture & Creative Industries	0 10

**FIGURE 20** Number of EIC projects developing AI, Data and ICT by technology area



Al projects mapped against primary sectors

## **SPOTLIGHT ON AWARENESS** INSIDE

The mission of this portfolio is to strengthen the European position in the race for future Generative AI by exploring the possibility of enriching such systems with some or all the functions associated with consciousness and/or awareness in a way that is appropriately aligned with European values and ethics guidelines.

Awareness and consciousness are key for the next generation of AI systems, because they enable a deeper understanding of the environment, its own strengths and limitations, and the context it operates in, allowing for more informed decisionmaking, enhanced autonomy, and improved human-AI collaboration.

With awareness and consciousness, AI systems can perceive and respond to context, nuances, and complexities, making them more reliable, safe, and trustworthy. By incorporating awareness and consciousness, AI systems can begin to mimic human intelligence, making them more effective and efficient in various applications, and paving the way for a new era of AI that can learn, adapt, and interact with humans in a more natural and meaningful way.





The Awareness Inside portfolio is dealing with very hot topic regarding the awareness and consciousness capabilities of AI systems. Three innovative start-ups developing those Al capabilities are emerging from the portfolio with the potential to become pioneers in this area.

Since joining the EIC in 2024, I have focused on strengthening exploitation strategies by establishing a working group for start-ups to share experiences, benefit from the EIC's Business Acceleration Services and explore potential commercialisation pathways.

This vision was recently showcased at the AI Everything Global event in Dubai, where our portfolio's start-ups were presented to a worldwide audience, including investors, demonstrating the potential of European innovation in AI and attracted significant interest from global stakeholders.

The event highlighted the growing recognition of the importance of awareness and consciousness in AI systems, and our portfolio's pioneering work in this area is poised to shape the future of AI development and deployment, both in Europe and globally.



## **HEDI KARRAY** EIC Programme Manager for Artificial Intelligence

## EMERGE



among simple artificial entities.

## DAVIDE BACCIU

#### Pr. of Machine Learning, University of Pisa, EMERGE project coordinator

**EMERGE** develops a new framework, combining philosophy, mathematics, and artificial intelligence, to explore how collaborative awareness - a shared understanding of existence, environment, and goals - can emerge from interactions

Thanks to the support of the EIC, EMERGE has successfully accelerated the transfer of project innovations at an early stage and launched two start-ups, both of which have secured pre-seed funding.

EIC Programme Manager Hedi Karray plays a key role in supporting the growth of EMERGE, by creating networking opportunities with relevant stakeholders in space, robotics, and logistics, helping to connect our innovations with potential users and markets. Hedi boosts the visibility of EMERGE by promoting our results through workshops and dissemination events, ensuring our innovations reach a wider audience and drive further advancements.



### **4.1.3** Quantum, Advanced Computing & Semiconductors

The European Chips Act looks to strengthen Europe's technological leadership in this sector with a series of actions designed to, among others, strengthen Europe's research and technology leadership towards smaller and faster chips; increase production capacity; and reinforce European capacity to innovate in the design, manufacturing and packaging of advanced chips.

The EIC is making a strong contribution to this agenda with over EUR 850 million of support for semiconductor and quantum technologies alone, of which nearly EUR 600 million has targeted start-ups and SMEs under the Accelerator.

#### Accelerator Projects

Quantum Computing & Simulation

Quantum Sensing & Measurements

Quantum Communications & Post-Quantum Cryptography

Advanced Computing & Logic Systems

Cloud, Edge, Mesh & Other Advanced Architectures

Integrated Circuitry & Advanced Packaging

Printed, Flexible & Organic Electronics

Sensors, Actuators & MEMS

IoT, Interfaces, Haptic Devices & Feedback Systems

Memories & Data Storage

Power Electronics

Spintronics & Magnetronics

Lasers & Optical Systems

Light Emission, Imaging & Displays

Wireless Communication Electronics

Antennas & Signal Processing



## **SPOTLIGHT ON DNA-BASED DIGITAL DATA STORAGE**

Current technologies for digital data storage are hitting sustainability limits regarding energy consumption and their use of rare and toxic materials. Moreover, data integrity when using those technologies is time-limited, which complicates archival data-storage.

DNA or certain classes of synthetic DNA alternatives promises information densities that are several orders of magnitude higher than classical memories, and stability for millennia rather than years. Proof of concept for DNA data archiving in vitro is now well established.

This portfolio of early-stage research projects looks to explore scalable and reliable high-throughput approaches for using DNA as a general data-storage medium.





## **ISABEL OBIETA EIC Programme Manager for Sustainable Semiconductors**



As the Programme Manager overseeing the DNA-based storage portfolio, one of the initiatives I launched was to work with European Patent Office (EPO) on an Intellectual Property cartography that allows the projects funded under this challenge competition to position their innovations in the complex DNA-based Digital Data Storage landscape.

This work was undertaken with a view to better understand the dynamic and growing landscape of DNA digital storage patents, underscoring significant contributions from both established companies and start-ups across various subfields and geographic regions, indicating a robust and evolving field of innovation. Positioning the innovative results being tackled by the DigNA portfolio is of utmost importance to find the optimum routes to exploitation of these technologies.

## DNAMIC



## Jérôme CHARMET

Pr. at University of Applied Sciences and Art of Western Switzerland (HES-SO), coordinator of the DNAMIC project

In the context of the

project, we oversee the development of an autonomous microfactory for long term DNA data storage. EIC Programme Manager Isabel and colleagues have provided continuous support, in particular in fostering interactions with other partners within the DigNA project portfolio to strengthen the European DNA data storage community through exchange of ideas, encouraging multidisciplinary collaborations among partners, and extending these connections beyond the consortium.

Isabel has coordinated a collaboration between projects in the portfolio and the European Patent Office (EPO) to develop a DNA data storage patent landscape. This resource is highly valuable for navigating the complexities of patenting in this field, and will support multiple projects in shaping their intellectual property strategies.

Isabel's critical and constructive insights have prompted us to step back and reassess our exploitation strategy. This input was highly valuable, as, in complex projects of this nature, it is common to become deeply immersed in research and development and lose sight of the broader objectives.

## EUROPEAN PATENT OFFICE [EPO]



Isabel Obieta Villalonga and Jerome Charmet were instrumental for the European Patent Office (EPO) in understanding the EIC's innovation fostering activities in the area of DNA Digital Storage, to ultimately translate EIC's technology areas into concrete and useful patent mappings.

We worked as a seamless team along the journey to understand the needs of the EIC Portfolio in the area of DNA Digital Storage and generate concrete patent intelligence to support Pathfinder beneficiaries in the early stages of technology development.

Seeing EPO and EIC experts create a common 'cartography of technology' and translate it into useful patent-based intelligence was fascinating.

The outcome is of great mutual benefit, as our experts now understand how the emerging area of DNA Digital Storage is being shaped across several inter-linked fields.

## Lluís

## **GIMENO-FABRA**

Advisor Vice-President Patent Granting Process, Team Manager End-to-End Metallurgy

## **SPOTLIGHT ON ACCESS TO FINANCE** FOR QUANTUM START-UP AND SMEs

Quantum technologies are expected to transform industries like healthcare, finance, energy, and defence, marking a major shift in information processing and secure communication. Recognising their strategic importance, governments and private sectors worldwide are ramping up investments.

The U.S. leads on quantum funding, with China making strong investments to boost security and tech leadership. Other nations, including Canada, Japan, Australia, the UK, South Korea, Israel, and several European countries, are also investing heavily.

The EU launched the EUR 1 billion Quantum Technology Flagship in 2018, but European start-ups struggle to secure large-scale funding. The EIC plays a key role in de-risking private investments, making it Europe's largest public investor in quantum start-ups. Having backed 36 start-ups under its Accelerator programme, the EIC is attracting strong private investor interest.



## SAMIRA NIK **EIC Programme Manager for Quantum Tech and Electronics**



Given the capital-intensive nature of the sector and the global competition for investment, a core part of my work has been to help our portfolio companies connect with investors, including through targeted outreach events underlining the realm of capability in Europe - for example, leading quantum computing start-ups in France, Finland, Netherlands, and Ireland; guantum software start-ups in Poland and Spain; start-

ups advancing key aspects of quantum communication in Spain; and a unique German startup specialising in quantum sensing for the semiconductor industry.

In addition, we help our beneficiaries with expert advice on topics like IP strategy, standardisation, public procurement, etc. which are essential for their business development more broadly.



## ALICE & BOB



## **CHLOÉ POISBEAU**

#### Chief Operating Officer

Alice & Bob is a quantum computing company based in Paris and Boston. Our mission is to build the first useful quantum computer powered by cat qubits. Cat qubits, which we pioneered, would allow the creation of a quantum computer with dramatically fewer resources and energy

requirements than the current state-of-the-art.

Alice & Bob will celebrate its 5<sup>th</sup> birthday in 2025, and the growth journey has been impressive: growing from two to 120 employees, starting from a research prototype to an actual quantum chip available to first users.

We joined the EIC Accelerator in 2021. The programme has offered financial support and many networking opportunities. EIC Programme Manager, Samira Nik, has helped navigate the EIC Programme and identify business acceleration initiatives that can help us grow and scale. Each step of this journey has been an amazing entrepreneurial experience, and the EIC has supported us each step of the way.



#### 4.1.4 Space

The space sector plays a key role in Europe's security and economic future and ensuring the EU's strategic autonomy is a central priority for the European Commission. Key strands of the EU's policy include the long-term European launcher policy alongside reliable and autonomous access to space.

The EIC has thus worked to support these policy ambitions and has in recent times supported nearly 50 projects in the sector spanning all stages of technology maturity.



## **SPOTLIGHT ON SPACE**

The space sector is growing rapidly with competitive driving forces, changing business models and disruptive innovations altering the sector. However, these trends also necessitate new innovations that can address emerging challenges from the exponential growth of launches. This includes the need for space debris removal and in-space mobility alongside affordable de-orbiting solutions and inspace recycling of space debris.

The EIC has thus launched challenge competitions in 2023 and 2024 to support early-stage breakthrough ideas that address these dimensions. The more established of these portfolios focuses on in-space solar energy harvesting and supports the development of a range of technology blocks with common research activities focused on these areas: the development of solar cells, wireless power transmission and in-space green propulsion.





## **STELLA TKATCHOVA** EIC Programme Manager for Space systems & technologies



Another strand of my work surrounds the collaboration with the Directorate-General for Defence, Industry and Space (DG DEFIS), to facilitate access for flight qualification activities of space hardware with several launches taking place in 2024 and new EIC space companies being pre-selected for future In Orbit Demonstration (IOD)/In Orbit Validation (IOV) launches in early 2025.

The EIC's space portfolio has continued to grow and given the rapid pace of development, a core element of the portfolio activity I have initiated surrounds the early commercialisation of the emerging ideas.

## E.T. PACK



## Pr. GONZALO SÁNCHEZ-**ARRIAGA**

### Universidad Carlos III de Madrid, E.T. Pack Project coordinator

The EIC and Programme Manager Stela Tkatchova have provided the funding, support and stability to develop electrodynamic tether (EDT) technology. Thanks to the support received through

several space projects, including E.T. PACK, we have had a stable team of young and enthusiastic engineers working for six years in a continuous manner to achieve our goal: to prepare an autonomous deorbit device based on EDT technology.

Thanks to the EIC Pathfinder, the E.T. PACK project reached TRL4. Now, in the framework of the EIC Transition E.T. PACK project, we are preparing a flightready deorbit device that will be in-orbit demonstrated next year. And we founded PERSE Space, a new company dedicated to the preparation and commercialisation of in-space propulsion systems based on electrodynamic tether technology.

Stela supported our work over the years by providing advice, including on technical aspects. She has given high visibility to our projects and their results, which has been very useful in bringing us into contact with customers and investors.

# Green

### 4.2.1 Agriculture and Food

The EU's Farm to Fork Strategy is at the heart of the European Green Deal and looks to improve our food systems. Numerous deep tech solutions are being developed by EIC beneficiaries aiming to improve resource efficiency in agriculture and food processing, reduce greenhouse gas emissions, prevent biodiversity loss and negative health impacts caused by inappropriate nutrition. These disruptive technologies will allow fair economic returns and livelihoods for all actors, in particular for primary producers, on a sustainable path.

The EIC has in this context launched several targeted initiatives, spanning early-stage research, to better clarify the role of diet into human health through to the development of technologies to increase resilience in agriculture. The result is a portfolio of nearly 80 projects spanning all TRLs.





## **SPOTLIGHT ON NOVEL TECHNOLOGIES** FOR RESILIENT AND SUSTAINABLE **FOOD SUPPLY CHAINS**

This portfolio seeks sustainable solutions to help agriculture cope with external factors such as global warming, biodiversity loss, pollution, loss of fertile soils, foreign dependencies and even inappropriate agricultural practices.

To address this, breakthrough innovations are needed, such as, for example, new environmentally friendly technologies in fertilisation, innovative crop protection strategies including through plant microbiomes, diversification of crops and varieties in agricultural use and diversification of land use system locally, as well as innovative technologies for tillage and irrigation.

Much of the activity relates to food production linked to the soil, but the portfolio also features approaches that could decouple food production from the soil and wider environmental conditions.





**IVAN STEFANIC** EIC Programme Manager for food chain technologies, novel & sustainable food



The **3P-TEC** project, is a more mature part of the portfolio of projects, exploring novel routes to agricultural resilience. Here, I worked closely with the consortium to explore opportunities beyond the scope of the original proposal, by investigating possible application of the new technology in additional crops and in redefining the business model.

The University of Bremen, and the Humboldt Foundation provided additional financial support, totalling over EUR 1 million, which enabled the team to drive forward scientific innovation, and business development. Several international partnerships were established and new opportunities for 3P-Tec's application across a wide range of crops were opened, including wheat, cassava, yams, and brassicaceae.



### **RITA GROSS-HARDT**

Pr. for Molecular Genetics at University of Bremen, 3P-Tec EIC Transition project coordinator

At **3P-TEC** we capitalise on our game changing discovery that plant egg cells can fuse two sperm-producing offspring with three parents, one mother and two fathers.

This technology has the potential to bypass a hybridisation barrier which acts as a major limitation for conventional plant breeding approaches. 3P-Tec aims to revolutionise the ability of breeders to develop improved crops, by providing a tool to mine beneficial gene variants of currently incompatible species, and to substantially shorten time-to-market of climate-adapted seed varieties. It provides a novel breeding strategy, with economic benefits expected to positively affect the social welfare of farmers as well as upstream and downstream industries related to the agricultural value chain.

EIC Programme Manager Ivan Stefanic and the EIC's Tech to Market Entrepreneurship and Venture Building Programme has been instrumental in guiding our journey from scientific innovation to market readiness.

Ivan's profound expertise in agriculture, business development, and legal affairs, combined with constant availability and tailored advice, has provided invaluable strategic direction. His support has helped us refine our approach, navigate challenges, and accelerate the transition of 3P-Tec towards commercialisation.

Thanks to the EIC and Ivan's support, we are now actively collaborating with national and international partners across academia and industry, working to translate our scientific innovations into practical applications that support the future of sustainable agriculture.

#### **4.2.2** Built Environment

Achieving the ambitious goal of reducing net greenhouse gas (GHG) emissions by at least 55% by 2030, defined in the European Commission's "Fit for 55", will require a radical transformation of the built environment, which currently represents 5-12% of CO2 emissions in the FU.

The EIC has thus launched ambitious initiatives since 2023 to leverage the use of novel material, digital technologies and design practices to incentivise the development of radical solutions that can contribute to this ambition.



Number of EIC projects developing technologies related to the Bulit Environment

## **SPOTLIGHT ON LOW CARBON** CONSTRUCTION

The built environment is responsible for approximately 40% of global CO2 emissions, stemming from both embodied carbon - emissions from the production of materials like cement and steel - and operational carbon - emissions from energy consumption for heating, ventilation, and air conditioning. In order to tackle these challenges, the EIC invested in establishing two Pathfinder portfolios.

The first targeted efficient construction, using less and novel materials, powered by digital design. This is illustrated by projects like FlexiForm (case study below). A subsequent challenge focused on developing low to carbon-negative cement.





FRANC MOUWEN EIC Programme Manager for architecture engineering construction technologies



One of the major barriers for innovators and start-ups in the construction sector is navigating strict regulations (building codes, norms, and standards), while securing finance for prototyping and scaling hardware equipment and materials.

As a Programme Manager, I have therefore played a key role in helping start-ups overcome these challenges, ensuring that

groundbreaking solutions could reach the market and drive meaningful impact. This has been achieved by, for example, facilitating connections between start-ups and SMEs, such as Materrup, and industry leaders, both through direct interactions and EIC Corporate Days.

Corporate partnerships are critical for providing access to testing facilities, technical expertise, and ultimately, the pathways to scaling solutions in global markets.

In addition, I have leveraged my network within the European Commission to drive policy dialogue, promoting regulatory alignment and unlocking funding opportunities across the broader European innovation ecosystem. This includes securing support for First-of-a-Kind (FOAK) plants and project financing needed to scale breakthrough technologies.

## FLEXIFORM

### MATERRUP



### **MARIANA POPESCU**

Assistant Pr. Digital Fabrication, Flexiform project coordinator

**FlexiForm** is an EIC Pathfinder-supported project aiming to reduce material usage and embodied carbon in construction by developing sustainable and costeffective solutions using 3D knitted textile formworks. EIC Programme Manager

Franc Mouwen's dedication to advancing sector digitalisation and engagement with the topic and the community has been very impressive.

What I particularly appreciate is his proactive networking, which has connected us with valuable industry partners and researchers, creating opportunities for feedback, collaboration, and market implementation. His genuine commitment to fostering collaboration within the EIC community stands out, particularly in bringing the EIC Pathfinder portfolio projects together, constantly seeking to create meaningful synergies between teams and identifying areas where the portfolio members may benefit from external input. His guidance has made the path to entrepreneurship feel more accessible than we initially thought possible.



Franc Mouwen guided us throughout our project, advising and supporting on technical, business, strategic, operational and organisational matters. His role has been decisive in establishing relationships, supporting targeted exhibitions with industry leaders, such as the HOLCIM Corporate Day.

MATERRUP went from starting to build one factory and growing to deploying 10 factories in Europe. Franc has always been available to discuss and support the project at key moments on all aspects of development, from financing strategies to direct connections.



## **JULIE NEUVILLE**

Chairwomen of MATTERUP

**MATERRUP** manufactures and commercialises a low-carbon cement based on uncalcined clay sourced exclusively from waste.

## CO2BIOCLEAN

### **4.2.3** Climate & Environmental Tech

The European Green Deal aims to make Europe the world's first climate-neutral continent and policy measures taken to date focus on efforts to protects the environment and minimise risks to climate, human health and biodiversity.

The EIC has to date supported over 75 projects spanning approaches to reduce greenhouse gas emissions, enhance resource use and efficiencies, and reduce the use of critical raw materials.



**FIGURE 26** Number of EIC projects developing technologies related to the Climate and Environment



The concept of our project is simple: to use CO<sub>2</sub> emissions to make biodegradable polymers. Emissions from industries contribute to climate change whereas they can be used as a feedstock to make a biodegradable polymer. This polymer, PHA, is naturally biodegradable and can substitute traditional plastics in many uses, without leaving microplastic in the environment.

We started with the concept in 2019 and in August 2024 we opened a pilot plant to take the technology to its next level - proof of concept. The plant has been working continually producing a PHA polymer, which we are testing the use of in various sectors, including agriculture, cosmetics, packaging, where plastic pollution is a major threat to both the businesses and to the environment.. The materials have been validated by major EU corporates and tests are ongoing.

The fact that EIC has validated our project by investing in it gives confidence to others to, at the very least, have a conversation with us. The EIC has not only supported us with finance, but the extraordinary number of events organised by and with the programme has helped us meet a vast investor community, which would never have occurred otherwise.



## **FABIANA FANTINEL**

#### CEO and co-founder CO2Bioclean

### 4.2.4 Energy

The European Green Deal is a comprehensive strategy aimed at transforming the European Union into a sustainable and climate-neutral economy by 2050. It focuses on securing a reliable and affordable energy supply while developing a fully integrated, interconnected, and digitalised energy market. The Deal emphasises energy efficiency, particularly in improving the energy performance of buildings, and supports the transition to a power sector predominantly reliant on renewable energy sources.

In line with these goals, the EIC is advancing novel approaches to address key energy challenges. By launching a series of Challenge competitions, the EIC is driving innovation in areas such as heating and cooling technologies, energy storage solutions, and the development of renewable molecules technologies, including hydrogen and approaches that valorise CO<sub>2</sub> and other pollutants in combination with renewable energy conversion.

The result sees a portfolio of over 100 projects including nearly EUR 200 million for batteries and supercapacitors, and a further EUR 150 million of support for Hydrogen related technologies.



**FIGURE 27** Number of EIC projects developing Energy technologies

## SPOTLIGHT ON RENEWABLE HYDROGEN, FUELS AND CHEMICALS

An important climate change mitigation pathway involves the production of fuels and chemicals from abundant material resources, such as water and carbon dioxide, and renewable energy. This approach aims at replacing the need for fossil resources and facilitates the storage of renewable energy in the long-term, in the form of chemical bonds. Waste streams and pollutants, such as  $CO_2$  or nitrates, are turned from a problem into valuable feedstock, which supports a circular economy approach.

The products that can be achieved through these technologies are diverse and impactful, ranging from hydrogen and methanol to proteins for feed and food applications. This wide scope of products also facilitates sector coupling, connecting energy, transport, and industrial sectors, enabling integrated solutions for defossilisation and promoting sustainability across various industries.

The key technologies enabling this transformation include electricity-based approaches such as power-to-X, which converts renewable electricity into chemical products; and solar-to-X technologies, which directly store sunlight in the form of chemical bonds. These technologies span all maturity levels, with a diverse portfolio of EIC projects across Pathfinder, Transition, and Accelerator stages.



### CARINA FABER

EIC Programme Manager for renewable energy conversion and alternative resource exploitation



A core element of my work on this portfolio is to single out the added value of the developed technologies in a future decentralised energy and production system, beyond pure cost benefits. It focuses on the development of a holistic assessment methodology for these emerging technologies. This framework technical, integrates economic. environmental, and social factors, providing a standardised, transparent tool for

innovators, policymakers, and industry decision-makers.

By offering a harmonised template with clear system boundaries, assumptions, and methodological choices, it facilitates a deep understanding of how different parameters contribute to sustainability outcomes and aids in identifying the most promising technological configurations. This initiative not only accelerates innovation by providing a common language for diverse stakeholders, but also ensures that new technologies contribute to a sustainable, competitive, and socially acceptable energy transition.

## **eCHEMICLES**



Co-founder and CEO, eChemicles **eCHEMICLES** is a deep tech company, the chemical industry to reduce its

dedicated to developing and commercialising innovative sustainable CO<sub>2</sub> electrolyser solutions to enable environmental impact in a profitable way. During the past two years, we have performed the lab-to-tech transition of the currently best performing low temperature CO<sub>2</sub> electrolyser technology, with the support of the EIC Transition Programme.

EIC Programme Manager Carina Faber followed our progress closely, inviting us to participate and present at relevant events, and connecting us with relevant actors of the European carbon capture and utilisation (CCU) space via workshops, symposia, and online discussions. Furthermore, she has connected us directly to stakeholders and relevant partners for our growth journey.



## **CSABA JANAKY**

#### 4.2.5 Mobility

The transport sector, including road transport, aviation, waterborne and rail, have been steadily increasing its emissions at an average yearly rate of 1.7% since 1990. The Sustainable and Smart Mobility Strategy therefore includes measures to deliver a 90% cut in mobility emissions by 2050, delivered by a smart, competitive, safe, accessible, and affordable transport system.

The EIC launched its first mobility-focused Challenge competition in 2025, which will build on the current portfolio of 25 projects, mostly under the Accelerator and concentrated on transport electrification and autonomy.



**FIGURE 28** Number of EIC projects developing Mobility technologies

## HEART AEROSPACE



CEO and co-founder, Heart Aerospace Heart Aerospace is developing the ES-30, a hybrid-electric 30-seat airplane designed to revolutionize regional air travel with unmatched sustainability and efficiency. The ES-30 is set to deliver significant environmental benefits by reducing CO<sub>2</sub> emissions and operating

costs on short-haul routes, enabling airlines to expand regional connectivity and serve underserved communities. This aircraft is a crucial step toward decarbonizing the aviation industry, aligning with the sector's goal of achieving net-zero emissions by 2050.

Our journey towards revolutionizing regional aviation with electric propulsion has been marked by several key milestones. In 2020, we started by proving the cost efficiency of electric propulsion, laying the foundation for the development of a sustainable aircraft. This led to the next phase in 2021, where we successfully conducted subscale flight tests to validate the flight characteristics and performance profile of electric aircraft. In 2022, we advanced further with the establishment of our "Iron Bird" integrated test facility, a full-scale test bench designed to validate and integrate critical aircraft systems. This step was crucial in ensuring the performance, safety, and reliability of our aircraft systems.

The culmination of these efforts was the launch of the Heart X1 full-scale airplane demonstrator in 2024. This demonstrator is planned to fly in 2025 in a first fully electric experimental flight and when it takes to the skies it will become the largest electric airplane ever to fly. Each phase of development has been critical in refining our technology and demonstrating the viability of electric propulsion for commercial aviation.

The EIC has played a vital role in supporting Heart Aerospace's journey, providing not only critical funding but also access to a network of expertise that has accelerated our development. The recognition from the EIC has not only validated our technology but also demonstrated to potential investors that our project has strong growth potential and aligns with key sustainability goals in the aviation industry.

## **Anders FORSLUND**



EU policies and actions in public health aim to protect and improve the health of EU citizens, support the modernisation and digitalisation of health systems and infrastructure, improve the resilience of Europe's health systems; and equip EU countries to better prevent and address future pandemics.

Support under the EIC have spanned these elements, with support for breakthrough biotechnology driven solutions and medical technologies that address a range of conditions, the largest of which sees ca. EUR 500 million of funding for novel approaches to detect and treat cancer.



**FIGURE 29** Number of Health projects based on disease type

### 4.3.1 Health Biotechnology

The Health Biotechnology portfolio has featured several targeted initiatives, particularly focused on the development of cell and gene therapies with over 150 projects at all stages of technology maturity.

<ul> <li>Accelerator Projects</li> </ul>
Drug Discover
Drug (API) & Pharma Processin
Drug Deliver
Biomarkers & Precision Medicin
Tissue Engineerin
Cryogenic
Genetic Engineering & Synthetic Biolog
Microbiom
Small molecule
Antibodies & Immunotherap
Vaccine
Aging & Longevit
Women's Healt
Cell & Gene Therapie
Toxicolog
Antibiotics & Anti-microboal Resistance (AMF
Pandemics and Health Emergency Preparednes



## **SPOTLIGHT ON ENGINEERED** LIVING MATERIALS

The mission of the portfolio is to support the development of new technologies and platforms that enable the controlled production of made-on-demand living materials with multiple predictable dynamic functionalities, shapes and scales, and to build a community of researchers and innovators in Engineered Living Materials.



## **ORSOLYA SYMMONS** EIC Programme Manager for Health and Biotechnology



When developing healthcare solutions, it is essential to consider regulatory requirements to bring safe and effective products to patients in a timely manner. This is particularly critical for novel, innovative technologies, where regulatory pathways may not be as clearly established, or innovators may not yet be familiar with the regulatory environment.

To this end there has been a close collaboration between the team at the EIC in the agency and the EMA, which included targeted interactions for both the Cell and Gene Therapy Portfolio and the Engineered Living Materials portfolio, as part of the hands-on portfolio management. By way of example, as a potentially new method for the in-situ production of therapeutics, Engineered Living Materials were included in 'horizon scanning' activities by EMA, informed by the work of relevant portfolio projects, with results discussed in a portfolio workshop with the EMA.



### EMA

## InSOCIETY



## **CONSTANTINOS ZIOGAS**

Head of Small and Medium sized enterprise (SME) Office of the European Medicines Agency

Our collaboration with the EIC has been instrumental in supporting biopharma and medtech startups and SMEs.

This partnership has not only provided

training and educational resources on the regulatory frameworks of pharmaceuticals and medical technologies, but has also highlighted the regulatory pathways available to innovators at the European Medicines Agency (EMA). By fostering early identification of challenges and enhancing the regulatory robustness of development programmes, we aim to accelerate the translation of cutting-edge research into impactful medical innovations that address public health needs.

A recent workshop on the Regulatory Framework of Engineered Living Materials (ELMs) exemplified this collaboration, offering a unique platform to explore the regulatory hurdles facing novel technologies. It reinforced the importance of regulatory dialogue in supporting the development of innovative products that can ultimately benefit patients across Europe.



**CEO at INSociety INSociety** enhances the societal impact of innovations, streamlines integration into healthcare their systems, and facilitates the transition of groundbreaking low TRL innovations into viable solutions, ultimately benefiting patients and advancing medical innovation.

The journey towards regulatory compliance for our PRISM-LT project was greatly supported by the guidance and expertise provided by EIC Programme Manager, Orsolya Symmons, who played a pivotal role facilitating a structured dialogue between the European Medicines Agency (EMA), innovators and regulators, streamlining the pathway for compliance, approvals, and market access of breakthrough medical solutions. This initiative had a profoundly positive impact on the internal competencies of the INSociety team, significantly enhancing their expertise in regulatory strategy, engagement with health authorities, and the overall management of advanced therapy development. This experience has further strengthened INSociety's ability to support future projects in navigating regulatory landscapes and accelerating innovation to market.



## LAURA MARTINELLI

### **4.3.2** Medical Technologies

This is the largest sub-sector in the EIC portfolio, accounting for nearly a third of the projects funded under Horizon Europe.



FIGURE 31 Number of EIC projects developing Medical Technologies

## **SPOTLIGHT ON AI AND MEDICAL IMAGING**

The EIC AI and Medical Imaging portfolio brings together a group of innovative SMEs developing advanced software solutions for radiology and surgery applications, spanning cardiac MRI, prostate imaging, cardiac ultrasound interpretation, chest CT analysis, and Al-driven biomarkers.

Portfolio efforts under this theme focus on supporting SMEs in tackling common challenges, leveraging opportunities to accelerate their growth, and implementing collaborative activities that facilitate their scale-up.

The first portfolio meeting identified the key hurdles and strategic opportunities including access to specialised investors, a network of early adopters for commercial validation, high-quality datasets for AI training and clinical validation, clarifying clinical pathways for technology integration, and navigating regulatory approval processes.

These focus areas form the foundation for subsequent collaboration and portfoliodriven activities, ensuring that the participating SMEs benefit from shared knowledge, strategic networking, and collective problem-solving in the fastevolving field of AI-powered medical imaging.



### FEDERICA ZANCA

#### EIC Programme Manager for Medical imaging and AI in healthcare



part of my thematic portfolio.

As part of my proactive portfolio management, I identified a public procurer (Lombardy Region, Italy) preparing tenders for prostate cancer screening, stroke management, and lung cancer screening.

Leveraging the EIC Business Acceleration Procurement Services' Innovation Programme, I facilitated the connection between this procurer and innovative AI solutions developed by EIC-backed SMEs,

These solutions enhance radiologists' capabilities in cancer detection and stroke care, directly addressing the critical healthcare needs identified by the public procurer. This strategic alignment has already resulted in the public procurer applying for tender support and planning pilot projects with our SMEs, setting the stage for transformative improvements in healthcare delivery.

Furthermore, a preliminary market consultation between the Lombardy Region and EIC awardees, facilitated through the Innovation Procurement Programme, has paved the way for the adoption of these groundbreaking solutions, demonstrating the EIC's pivotal role in driving innovation to societal impact.

## LOMBARDY REGION



Studi di Milano Lombardy Region has activated a at the evolution of the Network of across the territory and the governance

multidisciplinary working group aimed Diagnostic Imaging and Radiotherapy to ensure the homogeneity of treatment of healthcare pathways in line with appropriateness and quality of services.

The EIC, through Programme Manager Federica Zanca, assisted in identifying and assessing needs in the area of Artificial Intelligence solutions in healthcare, building a business case, conducting an open market consultation, identifying the best procurement strategy and eventual drafting of tender administrative documents, encouraging more effective adoption of innovation and reducing risks associated with procurement processes.



## **Dr. ALBERTO TORRESIN**

## Lombardy Region, Università degli

## NICOLAB



### **MEREL BOERS**

#### Founder and Director

Our company benefitted largely from the support of EIC Programme Manager, Federica Zanca, who helped with getting in contact with other AI parties in our domain and investors, understanding how we can leverage EIC tools and communities to overcome common

pitfalls and strategically plan for growth, and facilitating introductions, meetings and materials, and she drove procurement of our innovation with Lombardia Region.

Since joining the EIC programme, our company has experienced remarkable growth. Over this period, we have doubled our revenue and significantly expanded our impact in healthcare. Last year alone, we supported 57,000 patients, and real-world clinical data shows that 12% more patients - a total of 6,860 individuals - are now free from severe disability and long-term extensive care and are able to live independently. We are incredibly grateful for this support and look forward to continuing our journey with the EIC.

Quibim transforms medical imaging data into actionable predictions. We develop pioneering AI tools that unlock imaging data to improve patient outcomes and maximise drug programmes, to transform imaging into a catalyser of precision health. The next step is achieving high performance in predictive / prognostic

models.

The EIC and Programme Manager Federica Zanca have been fundamental for the growth of Quibim and its consolidation in the market, acting as the main driver to convert our research into a product, catalysing our first CE mark and FDA clearance and closing a Series A for USD 50 million.



## **ANGEL ALBERICH-BAYARRI**

### Founder and CEO



# EIC IN THE ECOSYSTEM

To maximise its impact, the EIC must build close partnerships and leverage investments in key initiatives at EU, national and regional level.

The EIC has continued to work with the full set of relevant European funding schemes and initiatives, including the European Research Council (ERC), European Institute of Innovation and Technology (EIT), Invest EU, Horizon Europe, and the Enterprise Europe Network (EEN), to build a better European innovation ecosystem, and has also strengthened its partnership with national innovation agencies across Europe.

## Working with member states and national innovation agencies

The EIC has continued to strengthen its links to national initiatives and 2024 saw Lithuania taking advantage of a mechanism that allows money from EU regional funds to be transferred to support Horizon Europe projects, thereby expanding the scale of funding on offer under the Accelerator.

The collaboration with Member States extends to partnerships with national innovation agencies and regional authorities, under which those managing certified national/regional programmes can use the EIC Plug-In scheme to submit projects from their portfolio directly to the full application stage of the EIC Accelerator. It has also resulted in partnership under the EIC Business Acceleration Services such as in the area of innovation procurement.

## NATIONAL CENTRE FOR RESEARCH AND DEVELOPMENT [NCBR]



The National Centre for Research and Development (NCBR) of Poland has tested and implemented an innovation

procurement formula to develop innovative zero-emission buildings, heating plant based on renewable energy sources, and effective HVAC systems for school buildings.

Through this strategic collaboration with the EIC, NCBR aims to mainstream innovation procurement in Poland, opening at the same time important business opportunities to innovative SMEs and start-ups, including, of course, the top innovators of the EIC.

Spectacular results have encouraged us to continue this model of support, implementing now a EUR 113 million programme, which aims at conducting at least 15 pre-commercial procurements, as well as the enhancement of the capacity of the Polish public sector to carry out innovation procurements.



## **STATEMENT**

## Marius **STASIUKAITIS**

Vice-Minister of Economy and Innovation, Lithuania

The Ministry of Economy and Innovation of Lithuania allocated EUR 12.5 million to the Horizon Europe Pillar III Innovative Europe, for the 2024-2025 period.

Transferring funds to the EIC enabled Lithuania to fund high-quality innovation projects that would have otherwise remained unfunded due to limited budgets. The EIC performs the selection of companies for investment through a rigorous, multi-stage evaluation process that identifies high-potential, high-risk start-ups and SMEs developing breakthrough innovations.

The Ministry appreciates that projects funded from transferred resources are selected following the same robust evaluation procedure and therefore does not intervene. The option to transfer funds to the EIC enhances global competitiveness of Lithuanian researchers and businesses and strengthens our position in the European innovation ecosystem, not least because support from the EIC results in extensive networking opportunities with top-tier researchers, investors, and corporate leaders.

## **Pr. JERZY** MAŁACHOWSKI

Director of the National Centre for **Research and Development** 

## Leveraging breakthrough research

The European Research Council (ERC) is the leading European funding organisation for excellent frontier research. The partnership with the EIC has continued, with beneficiaries of ERC Proof of Concept projects continuing to perform strongly, representing nearly 50% of the projects commercialising the outputs of previously funded research through the EIC Transition scheme.



### MARIA LEPTIN, PRESIDENT OF THE ERC

The ERC and EIC play complementary roles in advancing research and innovation in Europe and we recognize the strategic importance of our connection. Our well-aligned systems and continuous collaboration have fostered smooth project transitions, scaling groundbreaking ideas into successful innovations. Increased funding, independence in decision-making and implementation, and clear mandates are crucial to maintain this momentum and ensure Europe's competitiveness through scientific excellence and technological advances.

## **Networking for impact**

The European Institute of Innovation and Technology (EIT) is Europe's largest innovation network, and under the Fast Track scheme, a number of the Knowledge and Innovation Communities (KICs) of the EIT are able to submit projects from their portfolio directly to the full application stage of the EIC Accelerator.

## **MIMARK DIAGNOSTICS**



**MiMARK** is a women's health-focused. women-founded. and women-led company revolutionising gynecological diagnostics. We envision gynecological fluid as the next step in liquid biopsy for gynecology, unlocking new possibilities for non-invasive and precise diagnostics. Founded in 2021 after receiving the prestigious Wild Card grant from EIT Health, the company has gained strong backing from investors, securing EUR 1.7 million in funding, and gaining support of the EIC Accelerator via the Fast Track

The EIC Accelerator has been a game-changer for MiMARK, not only in terms of funding but also in growing, professionalising, and structuring our company for scale-up. The EUR 2.5 million in funding has been truly transformative. First, it allowed us to double our team and redirect resources that would have otherwise been allocated to continuous fundraising efforts, giving us financial stability to focus on product execution. With the funding secured, we were able to implement an ambitious development plan for our IVD, making decisions based on scientific progress rather than immediate financial constraints.

Beyond funding, the EIC community has provided ongoing mentorship, networking opportunities, and industry connections, making it easier to solve problems, access strategic partnerships, and feel more integrated into the broader ecosystem.

## 5.3

## **MARINA RIGAU**

### **CEO** and Co-founder

## **ANNEX**

КРІ	LATEST PERFORMANCE DATA	PREVIOUS REPORT	
1. Investor of choice for innovators with visionary ideas	Accelerator: 30% women led companies (2024)	16% women led companies (2021-23)	
<ul><li>Including:</li><li>Increase in support to women-led start-ups and</li></ul>	Pathfinder: 22% of project coordinators and 23% of participants female (2024)	26% of project coordinators and 24% of participants female (2021-23)	
<ul><li>projects</li><li>Increase support to</li></ul>	Accelerator: 6 % of SMEs from widening countries (2024)	9% of SMEs from widening countries (2021-23)	
innovators from Horizon Europe widening countries	15% of Pathfinder participants from widening countries (2024)	12% of Pathfinder participants from widening countries (2021- 23)	
<ul> <li>2. Crowd-in investors to European deep tech</li> <li>Leverage of three to five in co-investments with</li> </ul>	Co-investment leverage of x3.1 to date under Horizon Europe	Co-investment leverage of x3.7 to date under Horizon Europe	
<ul> <li>EIC Fund</li> <li>Leverage of three to five in follow on investments after EIC support</li> </ul>	> €12 bn in follow-on funding	> €12 bn in follow-on funding³	
<b>3. Increase European</b> <b>scale-ups</b> In particular through EIC supported start-ups that reach centaur and unicorn valuations	>70 centaur+ valuations	>150 centaur+ valuations including 8 unicorns <sup>2</sup>	
<b>4. Improve pipeline from research to innovation</b> Including increase in follow	19 ERC Proof of Concept projects funded through EIC Transition (2024)	71 ERC Proof of Concept projects funded through EIC Transition (2021-2023)	
up support to ERC and EIT projects	0 funded 'fast-track projects from EIT KICs (2024)	5 funded 'fast track' from EIT KICs (2021-23)	
	10 funded 'plug-in projects through national programmes (2024)	7 funded 'plug-in' projects through national programmes (2023)	

EPORT	КРІ	LATEST PERFORMANCE DATA	PREVIOUS REPORT
companies coordinators icipants female n widening 23) er participants ountries (2021- everage of x3.7 orizon Europe w-on funding <sup>3</sup>	<section-header></section-header>	<ul> <li>€850 m for quantum and semiconductors</li> <li>€725 m for developing or applying Artificial Intelligence</li> <li>€700 m for energy generation and storage solutions;</li> <li>€625 m for biotechnology and biomanufacturing</li> <li>€500 m for advanced materials</li> <li>1,350 unique innovations from EIC Pathfinder (completed) and Transition projects, with &gt; 75% assessed as market creating or targeting an emerging market.</li> </ul>	<ul> <li>€500 m for projects and companies developing or applying Artificial Intelligence technologies;</li> <li>€500 m for Quantum Technologies and Semiconductors</li> <li>Over 150 projects developing Advanced Materials</li> <li>€350 m support and investments in Biotechnology.</li> <li>1686 unique innovations generated from EIC Pathfinder projects with &gt; 75% assessed as market creating or targeting an emerging market<sup>4</sup>.</li> </ul>
aluations orns² Concept through EIC	<b>6. Operational excellence</b> Including: time from application to grant for the Accelerator, six months for Transition, and eight months for Pathfinder	<ul> <li>261 days to grant Accelerator</li> <li>169 days to grant for Transition</li> <li>260 days to grant for Pathfinder (Open only)</li> </ul>	<ul> <li>242 days to grant Accelerator</li> <li>183 days to grant for Transition</li> <li>265 days to grant for Pathfinder</li> </ul>

The 2021-23 figures included companies funded in the period 2014-23, whereas this report excludes all companies, funded under the SME instrument phase 2, prior to the launch of the EIC Pilot in 2018 i.e. ~ 850 companies. It also does not include the valuations of the most recent cohort of EIC companies funded under the 2024 cut-offs

<sup>4</sup> The 2023 report covered all Pathfinder projects, both ongoing and completed, while the 2024 report only includes completed Pathfinder projects and also incorporates Transition projects.

## Methodology Note

The data about private investment and insights on EIC beneficiary companies has been collected in collaboration with the consortium led by Jolt Capital and supported by Winnovart as partner (service contract EISMEA/2024/OP/0013: Business and Investment Insights for EIC Strategic Intelligence). The approach uses AI and data analytics to scan publicly available data on beneficiary companies, and it monitors the progress of private companies by tracking indicators of innovation and growth, such as investments (especially venture funding) and IP filings. Valuations are broad estimates based on available data, and are subject to change.

The analysis of the EIC Fund portfolio and investors was provided by the European Commission's Joint Research Centre (administrative agreement EISMEA/AA/JRC/WP2023/01: Future-oriented Detection and Assessment of Emerging Technologies and Breakthrough Innovation), and the European Investment Bank who act as advisors to the EIC Fund.

The data about Pathfinder and Transition project outputs uses information from Innovation Radar experts' assessment. This is a tool providing insights about the innovations being created within the Pathfinder projects. The progress of all EIC Pathfinder projects is systematically monitored by an Innovation Radar expert.











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