Leading the new wave of deep tech innovation

Projects under the European Innovation Ecosystems Work Programme in support of the New European Innovation Agenda

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FOREWORD

We stand in front of a defining moment for Europe. The challenges we are facing as a society, from energy and food security crisis to the shortage of critical raw materials, are calling us to act. In this context, innovation becomes essential for Europe to thrive, to boost its competitiveness and to ensure the health and well-being of its citizens.

Great challenges call for a comprehensive innovation strategy, which will articulate the way forward by enhancing the existing competences and facilitating the creation of new. Besides, innovation shapes markets, transforms economies, stimulates changes in the quality of public services and is indispensable in creating solutions to the most pressing global challenges.

This report brings together people who have something in common, a big passion for innovation and acknowledge through their actions the need for European innovation to thrive, for the benefit of everyone. These 44 project coordinators identified the European Innovation Ecosystems Work Programme as the vehicle to deliver on our innovation objectives, which have been articulated in the New European Innovation Agenda, adopted on 5 July 2022.

With the New European Innovation Agenda, we will leverage the talents and skills Europe already possesses and focus on the importance of harnessing a new wave of innovation that is on its way: deep tech innovations. Deep tech innovations are called 'deep' because they address our deepest societal challenges. In addition, deep tech innovation is rooted in cutting edge science, technology and engineering, often combining advances in the physical, biological and digital spheres. The deep tech innovations that are emerging from a growing cohort of innovative startups in the EU have the potential to drive innovation across the economy and society.

Through a package of five flagships, which contain twenty-five concrete actions, the new European Innovation Agenda aims to leverage substantial investments in innovation and collective action to strategically direct these investments in the development and uptake of key emerging technologies to address our deepest societal challenges. Our ambition is to support our innovators, startups and scale-ups to become global innovation leaders.

The findings of this report indicate 44 projects implemented under the European Innovation Ecosystems Work Programme, which could substantially support the objectives of the New European Innovation Agenda in funding for deep tech scale-ups, unlocking the potential of innovation procurement and foster strong and interconnecting European innovation ecosystems. The new European Innovation Agenda was co-created with the community, and will be co-implemented with the ecosystems' players like these 44 projects. In fact it constitutes a call for action with which these projects supported under the European Innovation Ecosystems demonstrate their ambition and plan to deploy a fertile, conducive and interconnected European innovation landscape. These project coordinators and their 170 partners are the response to the existing challenges and will help Europe to spearhead the 4th wave of innovation.

Mariya Gabriel

European Commissioner for Innovation,
Research, Culture, Education and Youth
February 2023

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EUROPEAN INNOVATION ECOSYSTEMS AND THE NEW EUROPEAN INNOVATION AGENDA

As part of Horizon Europe, the European Innovation Ecosystems (EIE) programme aims to create more connected, inclusive, and efficient innovation ecosystems and support the scaling of companies, as laid out in the New European Innovation Agenda. The objective of the programme is bring together people or organisations whose goal is innovation, and to include the links between resources (such as funds, equipment, and facilities), organisations (such as higher education institutions, research and technology organisations, companies, venture capitalists and financial intermediaries), investors and policymakers.

The New European Innovation Agenda (NEIA), adopted on 5 July 2022, aims to position Europe at the forefront of the new wave of deep tech innovation and start-ups. Building on Europeans' entrepreneurial mindset, scientific excellence, the strength of the single market and democratic societies, NEIA will improve access to finance and framework conditions for innovation, it will strengthen and better connect innovation players across Europe, attract and retain talent in Europe and develop policy making tools.

This document presents the projects funded under the European Innovation Ecosystems work programme, which contribute to the implementation of the new European Innovation Agenda objectives and more specifically, support its Flagship actions related to "Funding for deep-tech scale-ups"; "Enabling deep tech innovation through experimentation spaces and public procurement" and "Accelerating and strengthening innovation in European Innovation Ecosystems across the EU and addressing the innovation divide".

1.1.   Introduction

The New European Innovation Agenda will help Europe to develop new technologies, to address the most pressing societal challenges and bring them on the market. Europe wants to be the place where the best talent work hand in hand with the best companies and where deep tech innovation thrives and creates breakthrough inspiring solutions across the continent. Europe's leadership on innovation, in particular its new wave of deep tech innovation, will benefit all sectors from renewable energy to agri-tech, from construction to mobility and health.

"Today's event gives confidence that we have a critical mass of projects working towards the implementation of the objectives of the New European Innovation Agenda"

Mariya Gabriel, Commissioner for Innovation, Research, Culture, Education and Youth

On 26th January 2023, 44 project coordinators and their partners joined their voices in the workshop for "*Projects under the European Innovation Ecosystems Work Programme in support of the New European Innovation Agenda*", presenting their initiatives to Mariya Gabriel, the Commissioner for Innovation, Research, Culture, Education and Youth.
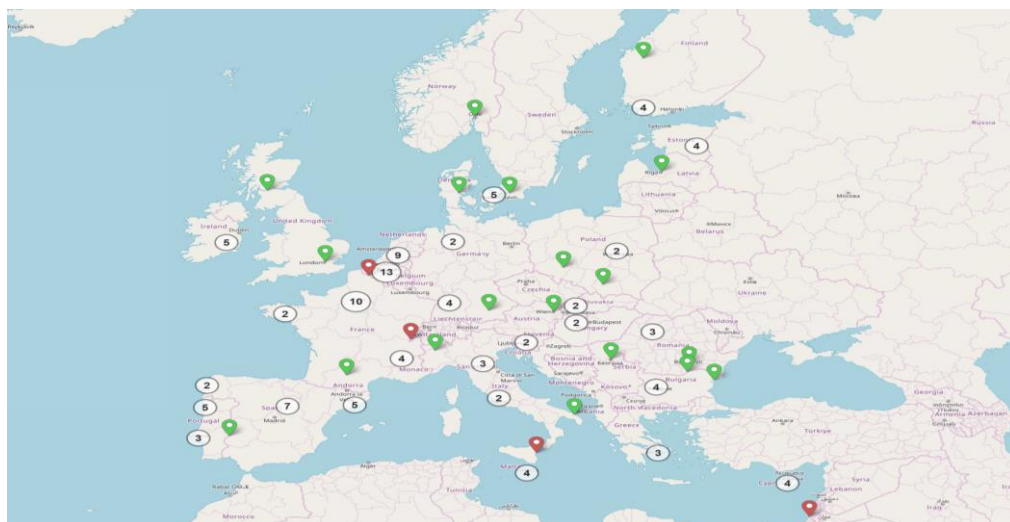
Figure 1: European Innovation Ecosystems 2021-2022 Projects to support the implementation of the New European Innovation Agenda

The project coordinators provided an overview of their activities and connected them to the objectives of the relevant New European Innovation Agenda flagships, namely Flagship 1 on "Funding for deep-tech scale-ups"; Flagship 2 on "Enabling deep tech innovation through experimentation spaces and public procurement" and Flagship 3 on "Accelerating

and strengthening innovation in European Innovation Ecosystems across the EU and addressing the innovation divide".

Figure 2: Mariya Gabriel, Commissioner for Innovation, Research, Culture, Education and Youth together with European Innovatino Ecosystems Programme Project Coordinators

1.2. European Innovation Ecosystems projects - Funding for deep-tech scale-ups

The New European Innovation Agenda Flagship 1 aims to improve access to finance for European startups and scale-ups, for example, by mobilising untapped sources of private capital and simplifying listing rules. The European Innovation Ecosystems Work Programme of Horizon Europe and the Startup Europe initiative, supported by the European Innovation Council (EIC), contribute to the Agenda by facilitating uptake of deep tech innovations and supporting the next generation of innovative companies whose solutions will lead towards a more competitive EU and a more sustainable, inclusive and resilient world.

Get to know the projects arising from the first calls of the European Innovation Ecosystems Work Programme 2021-2022 and the Startup Europe initiative in support of Flagship 1 and their coordinators.
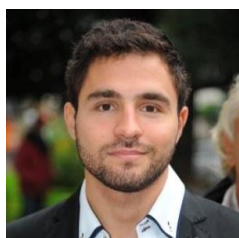
Mr Aleksandar Zobec presented the *"X2.0 – Driving deeptech growth"* project, a legacy project of X-Europe, which aims to leverage its predecessors' established ecosystem, network, proven innovation action/Startup Europe methodology and learnings in order to generate a next-gen coordination action mechanism.

Ms Ioana Rusu presented the *"SynergistEIC: Boosting Synergies between EIC and Startup Europe"* project whose long-term strategic objective is to help European technology startups scale, contributing towards the competitiveness.

Mr. Antti Heikkilä presented the "*VENTURES THRIVE*" project, one of the first pan-European deeptech venture builders committed to help startups quickly scale their development. The project provides equity-free funding and a curated growth programme, which will connect startups with investors and corporations to test their solutions in real-world scenarios.

Dr Pablo Garcia Tello presented the "*ATTRACT Phase-1B*" initiative, which delivers a new angle to the already established ATTRACT Model which created an European eco-system for breakthrough detection & imaging (D&I) technology development based on co-innovation.

1.3.   European Innovation Ecosystems projects - Enabling deep tech innovation through experimentation spaces and public procurement

The Flagship 2 will facilitate innovation through improved framework conditions including experimental approaches to regulation but also by utilising purchasing power of innovation procurement. Projects funded under the European Innovation Ecosystems Work Programme of Horizon Europe contribute to the Agenda by building capabilities in the area of innovation procurement. In particular, they provide dedicated training, guidance and exchange of best practices necessary to reveal innovation procurement potential.

Get to know the the projects arising from the first calls of the European Innovation Ecosystems Work Programme 2021-2022 in support of Flagship 2 and their coordinators.

Mr Robert Miskuf, presented the "*Build*" project, which aims to encourage cooperation and knowledge sharing between public buyers; to discover the most up-to-date innovative technological solutions and assist in their development and further acquisition by means of facilitating the enhancement of innovation knowledge and skills within buyers and finally, to link and establish synergies with research and innovation projects funded by the EU.

Ms Silvia Paolella presented the "InnoFacilitator" project, which aims to create a community by leveraging capabilities and promoting innovation procurement within healthcare. The objective is to increase the awareness, skills and knowledge about innovation procurement among the buyers and the solution providers (including SMEs and startups).

Prof. Dr. Louise Knight, presented the "*PROCEDIN*" project, which will accelerate Procurement of Innovation in a specific domain covering two critical areas of innovation – circular economy and green mobility – in the context of European cities' innovation for sustainability and resilience agendas.

1.4. European Innovation Ecosystems projects - Accelerating and strengthening innovation in European Innovation Ecosystems across the EU and addressing the innovation divide

The Flagship 3 will unlock excellence across the EU and connect regional innovation valleys involving regions with a lower innovation performance, in support of key EU priorities. Projects funded under the European Innovation Ecosystems Work Programme of Horizon Europe contribute to the Agenda by strengthening the connectivity within and between innovation ecosystems, supporting sustainable growth of businesses and promoting leadership of women in deep technology fields.

Get to know the projects arising from the first calls of the European Innovation Ecosystems Work Programme 2021-2022 in support of Flagship 3 and their coordinators.

Ms Emilie Kamuk Christiansen presented the "*3R-Connect*" project, which seeks to support the development of interconnected innovation ecosystems across the EU (focus regions: the Greater Copenhagen region, Flanders and Northern Portugal). The partners will apply the S3-Innovation Model for development of Transformational Actions towards a circular economy, specifically focusing on actions for Reducing, Reusing and Rethinking resources within three sectors; plastics, textiles and construction.

Mr Lorenzo Calabri presented the "*AD-ASTRA*" project, which aims to develop a connected interregional innovation ecosystems between 5 EU regions (i.e., Toulouse, South Holland, Madrid, Apulia, and Emilia-Romagna) with different innovation readiness levels but a shared interest in fostering aerospace innovations and sectors.

Mr Mihai Pop presented the "*BOOST*" project, which aims to increase the scope and efficiency of interregional collaboration among project partners and their regional innovation ecosystems, in Industry 4.0 Cleantech and Green Transition, Health & Well-being, and ICT & Digital Transformation

Ms Pauline Capus presented the "*CAFEIN*" project, which aims to help SMEs embrace greener technologies and processes to overcome climate change challenges by developing and implementing a joint action plan for funding agencies to bring about the green industrial transition of their SMEs.

Ms Anna Paar presented the "*CITIES 4.0*" project, which brings together the European regional innovation ecosystems from Brainport-Eindhoven, Leuven-Mindgate, Bologna and Turku, both at their individual regional levels and, jointly, at an EU level. The project partners support their public authorities (all of which have been selected as front runners within the EU Mission for climate neutral cities) in their ambition to become climate neutral by 2030.

Ms Karolina Mackiewicz is the coordinator of the "*CONNECTINGHEALTH*" project, which aims to promote interconnected, inclusive innovation ecosystems across Europe and maximise the value of innovation in the digital health sector. The project will map the digital health ecosystems, their initiatives, projects, resources and stakeholders and develop the future scenario for the digital health sector in Europe by 2030.

Dr Aurora Holgado presented the "*DIHsP4 Medicine*" project, which intends to identify key priority areas for application of advanced technologies in the field of P4 medicine and outline action plans to foster long-term collaboration among regional DIHs focused on these priorities. These objectives will help to enhance the competitiveness of European Health sector while improving the quality of life of its citizens.

Dr Montse Daban is the coordinator of the "*INNAXE*" project, which aims to increase the interconnection and encourage dialogue among European Life Sciences and Healthtech innovation ecosystems. The project will focus on the twin transformation that stakeholders are already experiencing to increase their efficiency and innovation capacities.

Dr Alexandros Charalambides presented the "*MICIE*" project, which intends to strengthen the contribution of research and innovation in achieving the climate and energy targets of Cyprus and Malta as defined in their National Energy and Climate Plans.

Ms Ines Neves presented the "*RAISE*" project, which aims to develop a new and sustainable integrated support framework to foster start-up growth and scale-up across Europe in all its dimensions, from initial funding, research support to public incentives and internationalisation.

Ms Vanessa Kacherginsky presented the "*SDG-INOV-ECOS*" project, which will provide capacity-building activities to enable SDG-driven innovation ecosystems in EU Members Italy, France and Portugal, as well as Central and Eastern Europe and Israel. It will boost collaboration between the various sectors – private investors, startups and SMEs, public agencies and sources of capital, as well as research and social enterprises.

Ms Caroline Weste presented the "*Senior Eco-Nect*" project, where six partners representing innovation ecosystems and sectoral networks will join forces and strategies toward the strengthening of European innovation ecosystem in silver economy.

Mr Ricardo Greenfield presented the "*ACCELERO*" project, which aims to reduce the unbalanced business activity in Europe through the development of quality support services to SMEs in more than 10 emerging and moderate innovation regions in Europe.

Mr Sanyu Karani presented the "*BEYOND*" project, which aims to advance investment flows from net contributor regions towards 'modest' and 'moderate' ones.

Ms Claudia Barbosa presented the "*S3E*" project, which intends to improve the market connectedness & efficiency of research teams, startups & SMEs working on Deep Tech.

Ms Ana Felgueiras presented the "*Food-scaleUp*" project, which focuses on emerging and moderate innovator regions helping them to become better connected, effective, impactful, resilient and recognised around the globe in order to expand the European agri-food digital innovation ecosystem's capacity.

Dr Montse Daban presented the "*EDAH*" project, which seeks to encourage dialogue and development towards more inclusive, dynamic, diverse and interconnected European innovation ecosystems to achieve the European Health Data Space (EHDS).

Ms Antonietta Cucinella presented the "*AccelerAction*" project, which aims to create more connected and efficient innovation ecosystems in the sector of advanced technologies, supporting the scaling of companies, encouraging innovation and stimulating cooperation among national, regional and local innovation actors through a pan-European Networked Acceleration Programme.

1.5.   Concluding remarks

In the European Innovation Ecosystems Work Programme 2021-2022, **EUR 24 million have been allocated to the initiatives in support of funding for scale ups, innovation procurement and the European innovation ecosystems** in line with the New European Innovation Agenda bringing together 138 partners across Europe from Member States and associated to Horizon Europe countries.

The words of the project coordinators could summarise the level of ambition.

"Our investments will strengthen the innovation ecosystem, develop talents & facilitate scale up"
Mr. Antti Heikkilä, *VENTURES THRIVE*

"We want to leave a legacy by contributing to innovation ecosystems and deep tech"
Ms Claudia Barbosa, *S3E*

"We need to connect innovation players in Europe and connect regional innovation initiatives"
Ms Pauline Capus, *CAFEIN*

"We want to increase the awareness of educators and students too on the potential of public procurement in order to contribute to the New European Innovation Agenda"
Prof. Dr. Louise Knight, *PROCEDIN*

The Commissioner expressed her confidence that a critical mass of projects presented at the workshopcan reaffirm the EU leadership in innovation and explained that innovation could flourish through creating synergies for best use, promoting best practices and aligning with existing needs. In this context, the Commissioner

Emphasised the significance of the recently launched, **new [European Innovation Ecosystems Data Hub](#)** ([European Innovation Ecosystems datahub (easme-web.eu)](#)) which will include all the relevant information on the projects under the European Innovation Ecosystems Work Programme.

Invited all the projects to participate in the **Coalition of the Willing** ([Initiatives – Coalition of the Willing – New European Innovation Agenda](#)) which will help them to connect and build the networks beyond the limits of their own projects, contributing simultaneously to the implementation of the New European Innovation Agenda objectives.

Set as an important target the better cooperation with **universities** and **researchers** but also the identification of synergies with the missions and the clusters.

The implementation of the projects is in the active stage and the collaboration, networking and new synergies are ongoing. In just one-month time the project coordinators will meet again to discuss the avenues of collaboration, synergies and guidance provided by the Commissioner. Stay tuned on @EUScienceInnov and @A_Panagopoulou for more news and developments.

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The document looks each of the actions funded under the European Innovation Ecosystems work programme and contribute to the implementation of the new European Innovation Agenda objectives in relation to "Funding for deep-tech scale-ups"; "Enabling deep tech innovation through experimentation spaces and public procurement" and "Accelerating and strengthening innovation in European Innovation Ecosystems across the EU and addressing the innovation divide".

Studies and reports