

A vision for the European Innovation Council: from deep-tech research to visionary innovation and scale-ups

In the aftermath of the Coronavirus crisis, the world will be transformed by a wave of breakthrough innovations based on sustainability, digitalisation and deep tech. With its world-class science, creative start-ups and unequalled diversity, Europe is well positioned to lead this wave. We see this happening already: through increasing translation of research into innovative businesses, changing mind-sets in universities and research institutions, the emerging start-up hubs and incubators across Europe's regions, and global investors who look to Europe for technology and talent. Europe is also guiding the way with new ambitious political priorities set by the European Commission, such as "the Green Deal" and "Europe fit for the Digital Age".

For Europe to emerge stronger after the Coronavirus crisis, we need to direct our investments towards game-changing innovations that create a sustainable and human centric digital future. Consequently, now is the time to encourage visionary and game-changing innovators, researchers, entrepreneurs and investors; to direct resources into high-impact ideas, ventures and investments; and for our industries and new businesses to lead on major innovation opportunities emanating from deep-tech in the coming years. It is time to show talented young innovators (researchers and entrepreneurs) that Europe is the best place for them to develop their potential and realise their dreams and ambitions.

We therefore commend Europe's leaders who have called for the next EU budget to include a "European Innovation Council to identify and scale up breakthrough and disruptive innovation." We are honoured to have been invited by the European Commission to map out a strategy and vision for this new endeavour.

We, the members of the Advisory Board, come from many walks of life: the frontiers of science and technology, the board rooms of global corporates, the ups and downs of venture capital, founders of start-ups and scale-ups. Yet despite, or maybe because of, our diverse profiles we collectively decided upon three very clear conclusions as to what the fully-fledged EIC should achieve when launched in 2021.

1. European solutions to global challenges

The EIC will pioneer a distinctively European approach to support relevant innovations in a responsible and inclusive way that embraces European values, and ethical standards. The EIC will generate rapid impact through its integration of two highly successful existing programmes:, the Future and Emerging Technologies (now Pathfinder) and the SME Instrument (now

Accelerator). We can learn from others, such as the US Defence Advanced Research Projects Agency's experience with breakthrough technologies or how venture capitalists combine finance and mentorship. But it would be a mistake to just cut-and-paste. The EIC will be unique in combining an advanced science-and-technology research programme with an accelerator programme for start-ups and SMEs, and for integrating traditional grant support together with a dedicated fund for equity investment, building therefore ONE innovation community.

The EIC will become the hallmark of excellence for impact-oriented innovators in the same way that the European Research Council (ERC) is for researchers. It must provide equal opportunity, picking up high-risk/high-impact ideas, forging interdisciplinary collaborations to develop them, and investing in the best teams and companies to push these game-changing ideas forward to the market, based on a mainly bottom-up approach that is open to all. Where focus and critical mass are needed to progress, the EIC will take targeted initiatives, flexibly and rapidly. The EIC will challenge system biases, which tend to discriminate against unconventional thinking, women innovators, those who lack track record, and those based in regions away from the main innovation centres.

2. A €10 billion budget to crowd in €30-50 billion impact investments

The EIC needs a credible budget and will crowd in other investors. In its ongoing pilot, the EIC has received thousands of high-impact proposals for new game-changing technologies, only a fraction of which could be funded. It leaves many hidden gems unexplored, and many visionary innovators and potential future technology leaders without support. In the last nine months alone, over 7,500 start-ups and SMEs applied for more than €20 billion from the EIC Pilot. Half of this requested amount was for equity financing, showing the **huge market gap in early-stage, high risk, investments**. There have been similar levels of oversubscription for researchers applying to the "Pathfinder" grants to develop future technologies.

With a minimum budget of €10 billion in the period 2021-2027, we believe the EIC will boost opportunities for visionary ideas, breakthrough technologies and innovation in Europe, while at the same time crowding in between €30 and 50 billion from other investors. This will radically transform tech investments and company growth across Europe. The pilot already demonstrates the impact of EIC funding to crowd in other investors. So far, every euro of EIC support for a start-up or SME has triggered follow-on investments of €2.4.

The EIC budget must also be maximised in order to realise the potential impact of other investments across EU and national research and innovation programmes. The EIC is vital to generate impacts from other programmes, such as the European Research Council, the European Institute of Innovation and Technology and its Knowledge and Innovation Communities (KICs), other parts of Horizon Europe, as well as from national and regional programmes. The outputs from these programmes are usually not mature enough to attract private investors and need the transition funding provided by the EIC. Joint or complementary activities between them and the EIC will further increase the level of impact.

Finally, The EIC must work closely with others to pull through high potential projects and companies, learning from existing successful national innovation programmes. This is of

particular importance for those regions eligible for the Structural Funds, where there is both an untapped potential for innovation, and new possibilities to award funding to projects and companies selected by the EIC through an improved "Seal of Excellence" model.

3. The investor of choice for those with visionary ideas

To be successful, the EIC must itself disrupt the way the EU supports breakthrough technology and innovation. Rather than playing it safe, EIC funding must accept high-impact ideas, which are usually considered too high arisk for common investments. The EIC must be ready to be patient and accept the failures that are inherent to breakthrough technological research, especially in science-driven deep-tech. This is not about taking "stupid" risks, but taking the investment risk that the market alone will not accept, especially in cases where novel technologies and business models have the long-term potential to bring enormous societal benefits. The EIC must bring together communities of science and entrepreneurship that have been disconnected, or only loosely linked, for too long.

EIC funding must support deep-tech interdisciplinary research and be entrepreneur centric with a relentless focus on simplicity and the needs of the innovator. Long and cumbersome application processes will be reinvented with a focus on agile, rapid, but thorough assessment of applicants and their ideas and plans, using online facilities, simple forms and face-to-face interviews. Financing decisions must be made fast in weeks, not months.

As well as public officials, the EIC needs entrepreneurial minds to broker links between projects, spot opportunities and advance important projects from other programmes. Drawing on venture capital practice, funding should be dynamically managed, with patience where needed, acceleration where possible, and re-orientation or discontinuation where relevance has been lost or success deemed unlikely.

More than a simple funding mechanism, the EIC should provide high class mentoring and advice to successful applicants, from the early research phase to demonstration and scale-up. It will provide access to the best knowledge and talent, leading corporates, investors and relevant networks. Business acceleration services should be expanded and strengthened, so that emerging opportunities can be built upon resources offered by key innovation ecosystem actors. In particular, the scale dimension that large corporates or investors (such as VC) can provide should be turned into concrete actions and services. As such, the EIC will rapidly become the innovation agency of choice for early-stage, game-changing and technology-intensive ("deep tech") entrepreneurs.

The report that will follow this statement sets out our views on how this vision for the EIC can be put quickly into reality, and how to measure success. We are much encouraged by the results achieved through the ongoing EIC pilot phase, where we have learned important lessons to be addressed in the full EIC from 2021. The unique two-strand structure of the EIC, bringing deeptech research together with entrepreneurial and scale-up funding, will **establish the EIC as a globally recognised innovation flagship for Europe.**

The EIC Pilot has already proven to be agile, responsive and prepared to intervene when a major threat appears in Europe, by mobilising intellectual and entrepreneurial capital. In a matter of

days, around 1,400 start-ups and innovators applied for EIC pilot funding to support the development of novel solutions to challenges caused by the Coronavirus crisis. The European Commission responded within weeks notably via the first "ERAvsCorona" Action Plan¹ by proposing to Member States to allocate an additional budget specifically for these start-ups under this EIC Accelerator call, as well as by reinforcing its support to loan finance for scaling up and working capital solutions. A pan-European hackathon² supported by the EIC took place on 24-26 April with innovators from across Europe coming together to find solutions fast.

This is a moment of real change for Europe, where we are not just catching up with our competitors, but forging ahead. In innovation, it is often said that "the winner takes it all". In the case of the EIC, all of Europe will win.

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¹ https://ec.europa.eu/info/sites/info/files/research and innovation/research by area/documents/ec rtd era-vs-corona 0.pdf

² https://euvsvirus.org/