European Innovation Council

EIC Board Statement on Transforming the European Energy System by Accelerating the Deployment of Deep Tech

Energy is foundational to societal wellbeing, economic competitiveness, and Europe's strategic autonomy. It is also an underpinning infrastructure for all sectors of the economy. Successive geopolitical shocks have however exposed the same vulnerability: over half the EU's energy consumption comes from imported fossil fuels[1] with volatile global markets, and its energy system is unable to fully absorb, store and deploy renewable conversion and decarbonisation at scale.

Estimates by the European Commission suggest that to achieve our energy transition objectives, investment levels in the energy sector must reach approximately EUR 660 billion annually between 2026 and 2030, rising to EUR 695 billion annually from 2031 to 2040[2].

Recent geopolitical tensions and energy market disruptions must therefore become a catalyst for structural change - one that prioritises greater speed, scale, and simplicity. Innovations must be brought out of the shadows, scaled, and placed at the very core of our response to deliver a true transition to sustainable long-term solutions that balance economic resilience, environmental responsibility and societal well-being.

The EIC Board considers that the pipeline of promising European deep tech innovations can deliver both short-term relief, medium-term transition and long-term resilience.

In particular, the whole EIC's portfolio includes immediately deployable technologies that can improve energy efficiency, strengthen system resilience and contribute to long-term affordability and the strategic autonomy of Europe's energy system. It also includes a longer-term portfolio of frontier technologies that may prove essential to Europe's future economic security and strategic autonomy (see Annex).

It covers all essential aspects of the future energy system, with the objective of:

- **Generating firm clean power** through renewable and nuclear technologies alongside renewable fuels and chemicals, to provide homegrown, affordable solutions that limit price volatility, reduce fossil fuel dependence and ensure sufficient production to meet European needs and thus contribute to our economic security. The industrial competitiveness of

[1] AccelerateEU
[2] Clean Energy Investment Strategy

Europe depends on access to stable and affordable energy, whether for our energy-intensive historical industries or for the emerging infrastructures of artificial intelligence.

- **Storing energy and heat intelligently** encompassing short-term to seasonal storage and associated management solutions that are for example, essential to allow Europe's electricity grids to handle excess renewable electricity generation, at the time when it is needed
- **Transmitting energy and heat efficiently** though the grid alongside associated components such as power electronics, and
- **Avoiding future supply chain dependencies** including through the development of components and enabling technologies such as advanced materials, recycling Critical Raw Materials and digital technologies. The strategic autonomy of Europe also depends on our ability to avoid turning our dependence on fossil fuels into a dependence on suppliers of critical materials.

Over the past five years, the EIC has successfully identified and invested in a portfolio of disruptive technologies and brought them to market by helping them reach maturity. And we also believe that Europe is now well positioned to deploy these at scale - since the last energy crisis, Europe has built new facilities and infrastructures, and industrial players today are better positioned to support first industrial deployment.

It is therefore now imperative to ensure alignment between policy planning and execution to build a full industrial ecosystem, including the supply chains and production capacity, that is needed for European deep tech innovations to scale and reach industrial commercialisation.

We therefore call for:

- **Funding continuity** across the innovation journey ensuring, especially under the next EU budget 2028-34, clearer bridges between EU-level instruments such as the EIC, the new Scaleup Europe Fund, the Innovation Fund, EU collaborative projects, the European Competitiveness Fund and relevant national and regional programmes, so that promising technologies can move from early-stage support to demonstration, industrial deployment and market uptake. This will ensure that promising technologies do not fall between grant, equity and project-finance gaps and reward performance by ensuring that successful projects have easier access to follow-on funding.
- **Simplified regulatory frameworks** to facilitate and incentivise the large-scale deployment of breakthrough energy technologies, such as the integration of long duration energy storage technologies into the grid or the production of renewable fuels and chemicals with surplus renewable energy.
- **Accelerated planning and permitting** at national and regional level in keeping with the proposed Directive regarding acceleration of permit-granting procedures[3], to enable infrastructure and deployment as extended timelines and processes are detrimental to the scaling of breakthrough innovations of innovative startups and SMEs
- **Industrial and public demand mobilisation** to create demand for competitive European solutions including through first industrial deployment, corporate offtakes, large energy

[3] eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52025PC1007

users and public procurement including pre-commercial procurement. This must deliver resilience, sovereignty and industrial capacity in the long-term, rather than focusing solely on short-term cost considerations during periods of market stress

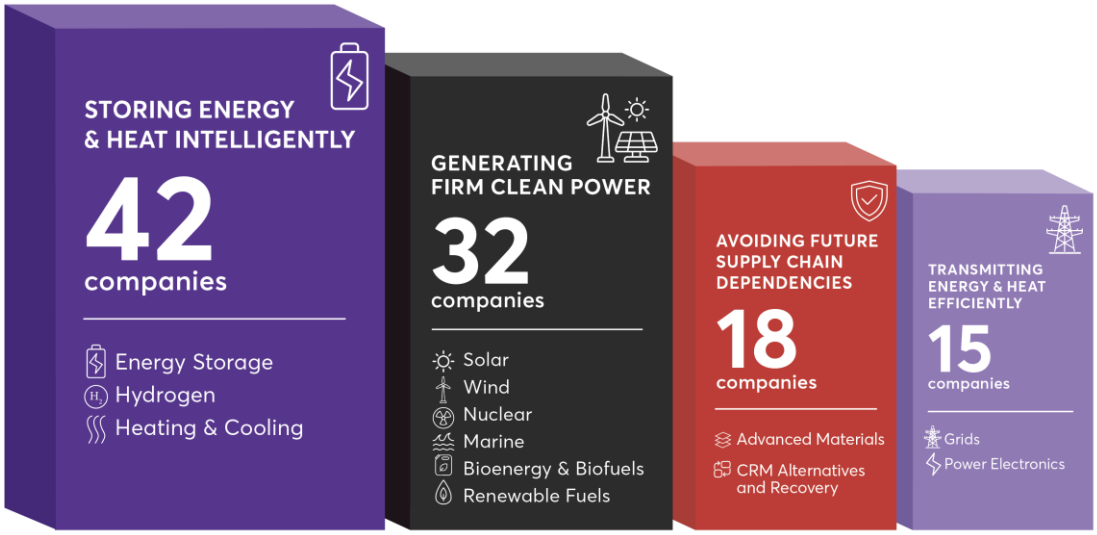
- **Investor dialogue** to bring together startups and SMEs, public, private and institutional investors, and key EU innovation stakeholders to facilitate timely and patient (where necessary), investments.

These measures, when combined with wider developments such as EU Inc. and the Savings and Investments Union will create the conditions necessary for Europe to transform and future-proof its energy system. The proposals also echo, to a large extent, the orientations that are being taken by our competitors as exemplified by the discussions at the last Mission Innovation Annual Gathering and the Clean Energy Ministerial Senior Official Meeting that took place in Brussels on 3-5 June 2026. It is therefore important that Europe acts swiftly to allow its companies to regain a competitive edge.

Annex – EIC portfolio companies building Europe's future energy system[4]

Over100 EIC-backed companies are developing solutions across the energy system, covering key areas from energy generation and storage to grids, enabling technologies and supply chain resilience.

Discover now the companies behind these building blocks and explore the full mapping of European energy innovations.



[4] The mapping is based on companies funded under the EIC since the October 2019 cut-off, and includes the most recent results of the EIC Accelerator 2026 - 1st and 2nd Batch, published on 15 June 2026