

EU Start-up and Scale-up Strategy CurrENT response to the call for evidence

1. Do you agree that startups and/or scaleups face the hurdles identified in this document (access to finance, regulatory and bureaucratic burdens and fragmentation, access to markets, access to talent, and access to infrastructure, knowledge and services)?

Yes

2. Are there any additional hurdles faced by startups and/or scaleups?

In addition to the identified hurdles, **startups in the grid technology sector face an underdeveloped market for innovation adoption by grid operators**. The slow pace of regulatory adaptation and procurement structures that favor incumbent solutions over innovative, software-driven technologies create a significant barrier to market entry. Grid operators are often incentivized to invest in traditional infrastructure upgrades rather than cost-effective digital solutions, further slowing the deployment of nextgeneration grid technologies.

Moreover, **the fragmentation of national regulations and technical standards** across Member States makes scaling difficult for grid technology startups. Unlike the telecom sector, where interoperability and standardization have enabled rapid innovation, grid technology startups face a patchwork of national regulations that require case-by-case adaptation, increasing costs and slowing market entry.

3. What actions do you think the EU and/or its Member States should take to address these hurdles?

Electricity grids have become a top priority for the EU, yet the funding and regulatory support for grid innovation remain insufficient to match the scale of the challenge.



While the most recent Horizon Europe programme has started to acknowledge the importance of research and innovation in grids—particularly in areas such as MVDC, HVDC, and high-power superconducting cable systems—this progress is still far from meeting the actual needs of a modern, decarbonized, and resilient European power infrastructure.

To address these hurdles, European institutions and Member States should take immediate action in the following areas:

1. Establish regulatory sandboxes for testing innovative grid technologies

Regulatory sandboxes for innovative net-zero technologies should be rigorously applied to grid technology innovation. These controlled real-world environments would allow for the development, testing, and validation of cutting-edge grid technologies, accelerating their deployment and integration into the energy system.

2.Streamline access to funding for innovative grid technologies

The European Commission must prioritize funding access for enabling technologies such as innovative grid solutions. This includes making the **Innovation Fund** accessible for grid innovation and demonstration by introducing **sector-specific calls** for electricity grid technologies. Despite the ETS Innovation Fund allocating €3.1 billion since 2020, grid innovation has received no support, while hydrogen and CCUS projects have dominated funding due to the hardware requirement of the fund. Expanding this scope to include grid enhancing technologies is crucial to sustain Europe's competitive grid edge. This imbalance must be corrected to reflect the critical role of grids in achieving decarbonization and energy independence.

While the **CEF programme** offers substantial funding opportunities, its administrative complexity and lengthy procedures make it ill-suited for disruptive grid technologies, which can be deployed in months rather than years. The programme should introduce **more agile and flexible funding mechanisms**, tailored to the needs of fast-deploying, high-impact grid technologies. Reducing administrative burdens and accelerating approval timelines will be crucial in ensuring that Europe remains competitive in grid innovation.

3. Incentivize Market Adoption of Innovative Grid Technologies



EU and Member States should align regulatory incentives to promote the deployment of digital grid solutions. This can be achieved by:

- Shifting regulatory incentives for grid operators from CAPEX-heavy infrastructure projects to OPEX-based flexibility services and digital optimization tools.
- Introducing mandatory flexibility procurement obligations for DSOs, requiring them to consider innovative solutions before investing in grid reinforcements.
- Standardizing grid data access rules across Member States, allowing startups to integrate with existing grid management systems more seamlessly.

4. Foster Cross-Border Standardization and Market Access

To eliminate fragmentation and facilitate scaling, the EU should:

- Accelerate the development of unified grid operation standards, similar to how interoperability was achieved in the telecom sector.
- Support a pan-European grid sandboxing initiative to enable cross-border testing and deployment of innovative grid solutions.
- Create an EU-wide marketplace for digital grid services, ensuring that startups have a platform to offer solutions to DSOs and TSOs across multiple Member States.

5. Simplify Administrative Processes for Grid Innovation Startups

Startups in the energy sector face disproportionate administrative burdens due to lengthy approval processes, complex compliance requirements, and differing national grid regulations. The EU should:

- Introduce and incentivize a "Fast Track" approval process for disruptive energy technology companies to receive regulatory clearances more efficiently.
- Encourage a centralized, one-stop regulatory access point for grid technology startups, similar to the European Digital Innovation Hubs for AI and other sectors.