

# Scaling Deeptech with Governments

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# Governments as Deeptech Startups' Co-Builders

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→ European deeptech investment reached \$20.3 billion in 2025, a record 32 percent of all venture capital on the continent, more than double its share a decade ago. There is no doubt that across deep tech in Europe, the science is genuinely competitive and the founding teams are serious. The question is whether the continent can keep what it is building.

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The structural pressure is at the growth stage. European deep tech companies raise smaller late-stage rounds than their US counterparts; 70% of that capital still comes from non-European investors; and the annual funding gap sits at \$4 and \$24 billion, depending on the growth stage.\*

For a founder building a capital-intensive business, this is what shapes where they choose to scale and ultimately where European sovereignty in technology is decided. The consequence shows up at exit, where most European deep tech value ends up captured outside Europe. According to a report from JPMorgan Insights, over 85 percent of venture-backed startup exits in recent years across EMEA have come through mergers and acquisitions, with most acquiring companies headquartered in the United States. Keeping more of that value within Europe will in parts depend on strong partnerships between growing companies and governments that have both the means and interest to provide support. Governments operate as investors, as anchor customers, and as architects of the market environment in which these companies will compete. Founders who treat the three roles as one strategy give their companies the best chance of succeeding in what comes next.

\* The 2026 European Deep Tech Report, Lakestar, Walden Catalyst & Dealroom, March 2026, [deeptech.report/2026](https://deeptech.report/2026)

# 1. Capital That Does Not Dilute

For certain categories of European companies, the financing architecture cannot be built solely on private venture capital, in part because of the size of the market. These are businesses where the distance between laboratory validation and commercial deployment is measured in years and hundreds of millions of euros.

Public funding instruments exist precisely for this stage: grants, public equity from vehicles like the EIC Fund and the EIB, guarantees, and blended structures that combine them. The skill is in the timing and sequencing relative to private rounds. Non-dilutive capital deployed at the right moment extends the runway for a technology to mature, reduces the risk profile for the next private investor, and preserves founder and early investor equity at the points in a company's life when dilution is most costly.

In all candor, the architecture is not frictionless. According to the European Innovation Council, the EIC Accelerator application process involves several steps, including submitting a short proposal and a full proposal, each with distinct requirements, which can increase the time and administrative workload for founders. Some grant structures align poorly with venture-paced milestone planning, and a public funding round timed against the wrong private round can complicate rather than enable the next raise. None of these is a reason to disengage from the system. There are reasons to engage selectively and smartly: to identify the two or three instruments that fit a specific company at a specific stage, as well as being smart about using AI to leverage applications and reporting processes.

Marvel Fusion, developing laser fusion energy in Munich, operates at the most capital-intensive end of this spectrum. The scale of investment required to advance fusion from scientific demonstration to grid-connected power generation is beyond what private venture markets alone are intended to provide, and their capital structure conveys that reality. Marvel Fusion has attracted €215 million in publicly funded projects alongside €170 million in private investment, making public capital a structural element of its financing rather than a supplement to it.

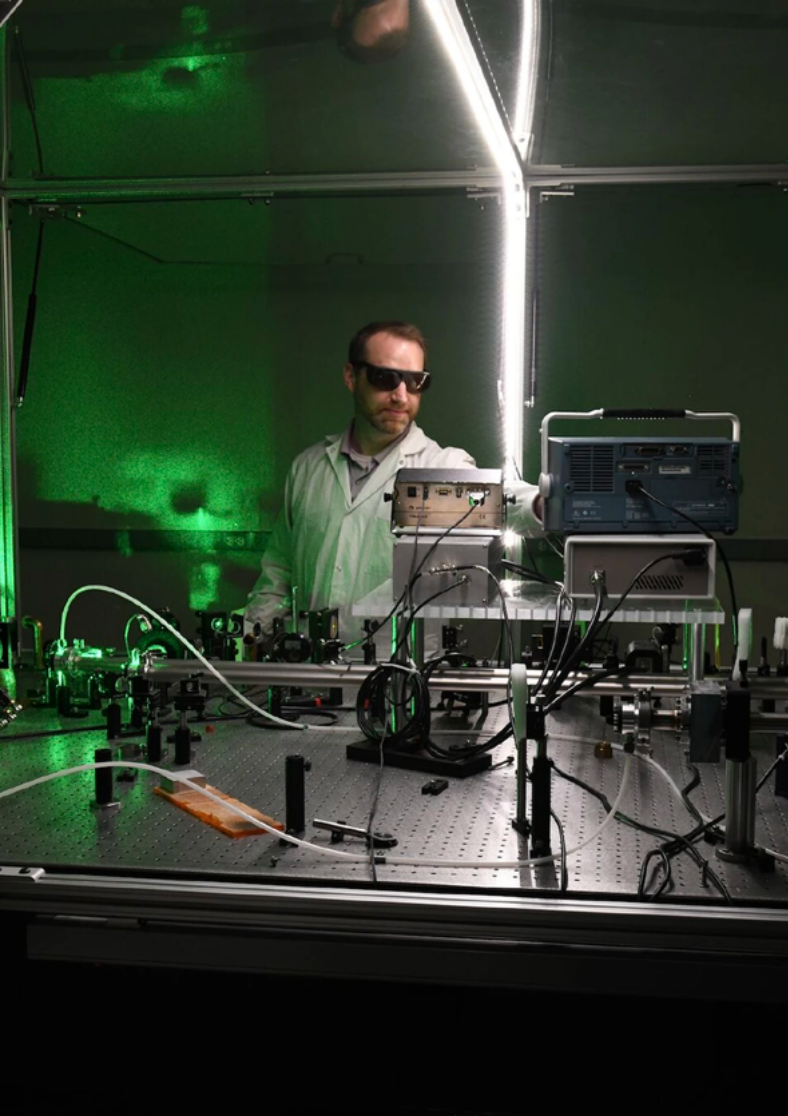
Yet it is building its demonstration facility in Colorado as part of a \$150M public-private partnership with Colorado State University. Asked why the US, CEO Moritz von der Linden told the Financial Times it was the "fastest, most capital-efficient way" to move on the facility, and



**"At the early stage, the founding teams that understand which public instruments apply to their company, and when, preserve equity at the moments when dilution is most costly"**

**Jan Miczaika**

Senior Partner | HV



that there was “more funding and appetite for this kind of technology across the pond.” He has left the door open to a commercial plant in Europe, and the company’s headquarters, CALA experiments in Munich, and ELI-NP work in Romania continue. But the moment that mattered most for demonstration at scale went to the US.

Having said that, the architecture available to a European deep tech founder in 2026 is materially different from the one available just three years ago. The EIC STEP Scale Up program, EIB equity in €50–150 million rounds, did not exist three years ago. The infrastructure layer of large-scale public co-financing for first-of-a-kind demonstration plants exists in Europe through the EU Innovation Fund, the IPCEI framework or later-stage companies, and key national-level programs. Again, building cost-competitive chemicals from CO<sub>2</sub> using engineered microbes, partnered with the EU’s Horizon 2020 program to unlock €43 million in financing for PYROCO<sub>2</sub>, a project designed to scale-up its technology to demonstration scale in tandem with a consortium of industrial partners. On the equity level, Again have also been selected by the EIC STEP Scale Up program as a strategically important technology, unlocking up to €10m in financing alongside private investors. The sequencing is deliberate: grants derisk the science, equity and debt commercialize it. European founders did not have access to that second layer until very recently. And yet, Again built its first plant in Texas because of faster permitting, available infrastructure, lower energy and input costs, and talent. The financing was there, but the industrial conditions were not. The story of the next three years is whether that gap closes, too.



## 2. The Customer That Changes Everything



The funding architecture in the prior section finances the work. What converts that work into a business is the customer relationship. Governments are significant customers across deep tech, but the relationship takes its most consequential form in defense, where what governments provide goes well beyond revenue. Procurement contracts sit inside a wider set of dependencies that shape what a company can build and whether it can reach industrial scale. Access to operational test environments, security clearances, allied interoperability, and the institutional relationships that precede any procurement conversation are all in the hands of governments. The European startups that have made the transition from prototype to deployed supplier have worked through all these dependencies.

Two of those dependencies shape the European picture today, and each one's current state shapes what is possible for companies coming through now. The first is access to requirements. Defense requirements are not discoverable through commercial customer research. The operational necessities, threat assessments, and

doctrinal shifts that determine which capabilities matter live inside ministries and operational commands. The European data on this is clear: an analysis of procurement data published by Bruegel earlier this year found that the lists of defense contractors in the United Kingdom, Germany, and Poland contained only two start-ups through 2024. According to the Council of the EU, the European Defence Industry Programme (EDIP) is designed to improve the EU's readiness for defense by strengthening the competitiveness and responsiveness of the European Defence Technology Industrial Base. How quickly these initiatives lead to procurement outcomes will depend on how they are implemented by individual member states.

Quantum Systems built something more durable than a contract pipeline. Early deployment with defense customers, including the supply of autonomous systems to Ukraine, established the company as a prime contractor for autonomous systems capability rather than a component supplier within someone else's consortium. A subcontractor depends on the prime's roadmap. A prime



shapes requirements, owns the customer relationship, and controls what gets specified in the next procurement cycle. By the time Balderton led the Series C, with Hensoldt and Airbus Defense and Space as strategic co-investors, Quantum Systems held tier-1 supplier status with the UK Ministry of Defense and was contracted by European defense agencies in that position. The valuation reflected the role, not just the revenue.

The second issue is the demand signal at an industrial scale. A multi-year framework agreement between allied buyers is what justifies the capex to industrialize, the hiring to deliver, and the pricing to compete with incumbents. Europe's structural condition here is fragmentation: 27 member states operate as separate procurement authorities with distinct certification regimes, force-planning cycles, and industrial preferences. According to the European Defence Agency, defense planning among EU member states mostly occurs in isolation, as many governments remain unconvinced by European cooperation projects. Coordinated multi-year demand signals across allied buyers are the condition under which a European defense supplier base can build to an industrial scale.

Arx Robotics shows what happens when all three government roles converge in a single institutional relationship. The company builds autonomous ground vehicles and the AI operating system that integrates them with legacy military assets. The supply chain is fully European. The NATO Innovation Fund is a co-investor. The

European Defence Agency contracted Arx as part of the first EU-wide defense innovation initiative. The government participates here simultaneously as an investor, a customer, and the body setting procurement and sovereignty standards.

Meeting these requirements assumes operational maturity at a level most early-stage companies are still developing. Governance has to be defensible to procurement bodies that audit it. Supply chains have to be traceable and increasingly sovereign. Personnel security, information security, and accountability for how technology is used are entry conditions for the conversation. Those dependencies take time and deliberate effort to build.

Capital is now arriving for European defense startups at scale. The institutional architecture that converts capital into industrial capability is still under construction. Faster procurement access for new entrants and coordinated demand signals throughout member states are the conditions on which the current investment cycle delivers a generation of European defense suppliers operating at an industrial scale. The decisions that shape both are being made now.

# 3. The Environment Companies Will Operate Inside



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The funding architecture and the customer relationships described so far only hold if the regulatory and policy environment continues to support them. Regulations are written long before they are settled. The headline legislation passes, and then years of work follow: delegated acts, implementing acts, member-state transposition, technical working groups, and Commission consultations that turn general language into the specifications companies actually operate within. Both the drafting and implementation phases proceed with input from a smaller group of stakeholders than the legislative process suggests. Companies engaged at either stage shape what the framework does and how it works in practice. Frameworks themselves carry across political cycles only to the extent that the companies they apply to have built the institutional relationships that make discontinuation politically costly.

The European regulatory environment in 2026 has an unusually high number of consequential decisions in flight. The Critical Raw Materials Act's strategic project

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mechanism grants expedited permitting of 24 months for extraction and 12 months for processing, against industry baselines of 10 to 15 years from discovery to production. Hades Mining operates inside this system. Whether the company can deploy at scale in Europe is determined by the strategic project designation process, the RESourceEU Action Plan adopted in December 2025, and the national permitting infrastructure that turns the framework into an operational reality. That last part is not guaranteed. There are already open questions about how the regional mining authorities at the state (Länder) level will implement the permitting cap in practice. The regulation comes from the EU. The decision is made at the state level.

**“Hades is aware of this duality. For this reason, Hades engages in regular dialogue with political decision-makers at the European level, with representatives of the federal government, and with relevant stakeholders at the state level in order to take this multi-level regulatory framework into account. Only by harmonizing regulations across these three levels can Europe scale up raw material production in a way that enhances the security of supply for critical raw materials.”**

Dr. Stefan Steinicke | Head of Strategic Communications & Government Affairs | Hades Mining

The challenge for an early-stage company is doing this work without the public affairs capacity of incumbents with permanent Brussels offices. The question for founders is not whether to engage yet, but when engagement becomes business-critical, and how to build the function in proportion to the company. That point arrive when a specific drafting or implementation process will materially shape the company's commercial timeline, and the company can offer regulators operational expertise they cannot easily find elsewhere. Before that point, the work is monitoring and relationship-building. After it, the work amounts to direct participation in technical processes whose outcomes shape the operating environment for years. All in all, doing public affairs becomes part of the go-to-market strategy.

How companies build the function tends to follow a pattern. External advisors engaged for specific high-stakes processes can come first. The first internal hire can be considered when multiple processes are in flight simultaneously, and the work cannot be done episodically. That first hire is usually a senior public affairs lead with

existing institutional relationships. Grants management sometimes sits with this person, sometimes becomes a separate hire, depending on the volume and complexity of instruments in play. Both are distinct from regulatory affairs specialists focused on compliance with existing frameworks. The functions are often confused. Compliance is operationally urgent and gets hired first. Public affairs work, which shapes how frameworks get drafted and implemented, requires a different profile and is typically built later.

FMC, the Dresden-based semiconductor company developing next-generation memory chips, is at a stage where the function becomes structural: the company closed a €100 million Series C in November 2025 that included €23 million in public funding from the IPCEI ME/CT program and the European Innovation Council. IPCEI participation is one of the more institutionally complex public funding mechanisms in Europe, demanding coordinated engagement across the Commission, multiple member-state governments, and notified industrial partners. FMC's ability to operate at that level shows a sustained relationship with European and German semiconductor industrial policy that was in place well before the round closed.

# 4. Looking Forward

The companies in HV's portfolio that are scaling fastest in Europe recognized early that governments were active participants in their businesses across all three roles and engaged accordingly. Isar Aerospace illustrates the pattern at full development. The company has systematically built its position across the German government's micro launcher competition and the subsequent ESA Boost contract, the European Commission's EIC Horizon Prize, ESA launch service agreements under the Flight Ticket Initiative and IOV/IOD programs, and its selection as a European Launcher Challenge winner. This is reinforced by close working relationships with the Federal Government Coordinator for German Aerospace Policy and the establishment of a dedicated Vice President for Defense & Government Programs within the company. Financing, customer relationships, and engagement with European space policy are a single, coherent architecture, deliberately constructed over years.

What HV has been building toward reflects what the portfolio has learned. The remit of the ESG function has been expanded to include public affairs, with the goal of building a helpful network for founders: surfacing what is happening in policy circles, making it possible for companies to identify the public funding programs that fit their stage and sector, and flagging early signs of regulatory shifts that could be material to them. More specifically, the mapping of public funding instruments across the portfolio has deepened, with more granular guidance on timing, sequencing, and fit relative to private rounds. In 2026, a peer-to-peer public affairs gathering with Cleantech for Europe will bring portfolio companies together to share what they are learning from their engagements with public institutions.

Europe has the science, the talent, and a growing capital base. Engagement with the architecture available does not guarantee that companies remain European at scale, but disengagement makes the question moot. The founders who treat governments as active participants in their business, across all three roles, are the ones competing on the conditions that determine European retention.



**"Companies like Isar Aerospace cannot be financed by private capital alone. What changes the equation most is when government enters as a customer. That is a demand signal. It tells the next investor that the technology is needed and that the market isn't hypothetical."**

**Fabian Gruner**

Partner | HV