

# THE 2026 EUROPEAN DEEP TECH REPORT

March 2026

LAKE  
STAR

(w)<sup>C</sup>  
Walden Catalyst

dealroom.co

# Executive Summary

## 1. DEEP TECH DEFINED

Deep Tech is defined as novel scientific or engineering breakthroughs making their way into products and companies for the first time. Scientific and engineering breakthroughs have changed our lives immeasurably over the last century and even within the last 30 years as advances in telecoms, robotics and AI make their way from labs into our homes and workplaces. Looking forward, we need disruptive innovations more than ever to solve global challenges like climate change, resource scarcity or looming demographic and productivity crises.

## 2. THE EUROPEAN DEEP TECH OPPORTUNITY

Europe has the raw ingredients to build the next generational Deep Tech companies: Talent, Market Opportunity and Capital.

- *Technical & Entrepreneurial Talent:* Europe is home to 30% of the world's top Deep Tech universities and produces twice as many science and engineering graduates as the US. A talent flywheel is now turning, with successful companies recycling founders, operators, and capital back into the European ecosystem.
- *Market Opportunity:* Geopolitical tailwinds are driving demand for sovereign technology and local supply chains. Governments recognize the opportunity to drive economic growth through investment in innovation and are using policy and public capital to target AI infrastructure, semiconductors, space, and defence as instruments of GDP growth.
- *Capital:* VC funding in Deep Tech continues to accelerate and is explored in detail in its own section.

## 3. FUNDING LANDSCAPE

- *State of the Market:* The value of VC backed European Deep Tech continues to grow, reaching a new high at \$690bn with companies like Helsing and Synthesia driving recent growth.
- *Funding Landscape:* VC funding for Deep Tech continues its growth on last year, rising to \$20.3bn and making up an all time high of 32% of all VC investment, more than double the 15% of 2015. Deep Tech funding has proven its resilience and is only 4% down from the 2021 peak compared to Regular Tech which remains 54% down from 2021.

# Executive Summary

## 3. FUNDING LANDSCAPE (CONT.)








- *Countries:* The UK attracted the most funding (\$5.2bn), followed by France (\$3.9bn) and Germany (\$3.2bn). Finland, Sweden and Switzerland have the highest proportion of funding that went into Deep Tech.
- *Cities:* Paris is the top European hub for Deep Tech VC funding in 2025 (\$3.0bn), followed by London (\$2.2bn) and Munich (\$1.8bn). London is the top hub in most Novel Deep Tech segments, while Munich leads in Defence and Space, and Zurich in Novel Robotics.
- *Funding Gap:* 70% of late-stage funding for European Deep Tech startups comes from non-European investors. They raise smaller rounds and are less likely to progress from one round to the next compared to US counterparts. European Deep Tech startups face a yearly funding gap between \$4-24bn.
- *Exit:* Exits for European Deep Tech companies are broadly flat in 2024 and mostly (>80%) driven by M&A. By value, the majority of this M&A is acquired by US companies. Public market listings showed signs of recovery in the US and China for Deep Tech companies, while European public markets remained quiet in 2025.

## 4. ORIGINS OF DEEP TECH

Research spinouts account for 33% of new Deep Tech startups since 2015 with the highest portion in the fields of photonics and quantum technology. The typical European Deep Tech founder has a technical background, at least a master's degree and is 35 years old. Just under a quarter have work experience in startups, while a further 21% have experience in blue chip: industrial corporates, consulting firms or tech firms.

# Executive Summary

## 5. SEGMENT DEEP DIVES 2025 funding (YoY growth)

 <b>NOVEL AI</b>	 <b>FUTURE OF COMPUTE</b>	 <b>NOVEL ROBOTICS</b>	 <b>COMPBIO &amp; CHEMISTRY</b>	 <b>NOVEL ENERGY</b>	 <b>SPACE TECH</b>	 <b>DEFENCE</b>
<b>\$3.4bn (+27%)</b>	<b>\$2.5bn (+115%)</b>	<b>\$468m (+64%)</b>	<b>\$1.1bn (+88%)</b>	<b>\$700m (-41%)</b>	<b>\$1.3bn (+22%)</b>	<b>\$1.8bn (+125%)</b>
<p><b>Foundational Models:</b> Mistral €1.7bn</p> <p><b>AI Models for vision and voice generation:</b> Black Forest Labs \$300m, Synthesia \$193m, ElevenLabs \$180m</p> <p><b>AI-driven Engineering:</b> PhysicsX \$155m, Neural Concept \$100m</p> <p><b>World Models:</b> General Intuition \$134m</p> <p><b>Growth areas:</b> Enhancing AI's understanding of the physical world &amp; science, developing European sovereign AI models, capitalizing on AI Agent orchestration.</p>	<p><b>Quantum computing hardware &amp; software:</b> Quantinuum \$800m, IQM \$320m, Multiverse Computing €189m, Alice &amp; Bob €100m</p> <p><b>Novel memory:</b> Ferroelectric Memory Company €77m</p> <p><b>Photonic chips:</b> Q.ANT \$80m</p> <p><b>Growth Areas:</b> New compute hardware for a post Moore's Law era like quantum or photonic, more efficient data centre infrastructure especially for AI workloads, quantum-safe cryptography, brain-computer interfaces.</p>	<p><b>Cognitive robotics:</b> Neura Robotics €120m</p> <p><b>General purpose robotic intelligence:</b> Genesis AI \$105m, Flexion Robotics \$50m, NoMagic \$35m, Sereact €25m</p> <p><b>Humanoids:</b> Generative Bionics €70m</p> <p><b>Growth Areas:</b> Robotic intelligence leading to generalization and flexibility across applications, expansion of robotic companies becoming full-stack providers including integration services, general purpose Humanoids as the holy grail.</p>	<p><b>AI-driven drug discovery:</b> Isomorphic Labs \$600m, Charm Therapeutics \$80m, Relation Therapeutics \$55m</p> <p><b>AI-driven material discovery:</b> CuspAI \$100m</p> <p><b>AI-driven protein design:</b> Latent Labs \$50m, Chemify \$50m</p> <p><b>Foundational model for biology:</b> Bioptimus \$41m</p> <p><b>Growth Areas:</b> Shift further towards 'in silico' design using AI in areas like pharma, materials, biology, chemistry. Supported by foundational biology models, agentic AI and novel algorithms. Additionally, hybrid systems that conduct physical experiments will lead to further step changes.</p>	<p><b>Nuclear Fusion:</b> Proxima Fusion €145m, Marvel Fusion €50m, Renaissance Fusion €32m</p> <p><b>Small nuclear reactors:</b> Blykalla \$50m, Steady Energy €32m</p> <p><b>Growth Areas:</b> Novel approaches for generating clean energy in large volume, grid-scale energy storage and distribution systems to satisfy rising energy needs and geopolitical tensions.</p>	<p><b>Earth observation:</b> ICEYE €150m, Overstory \$43m</p> <p><b>Launch vehicles:</b> Isar Aerospace €150m</p> <p><b>Small satellite manufacturing:</b> EnduroSat \$153m, Aerospacelab €56m, Reflex Aerospace €50m, ReOrbit €45m</p> <p><b>Growth Areas:</b> Enable European sovereign launch capacity and expand space activity around earth observation, satellite manufacturing and in-space manufacturing. More activity in space creates needs for space debris removal and in-orbit satellite servicing.</p>	<p><b>AI for Defence:</b> Helsing €600m</p> <p><b>Drones:</b> Quantum Systems €340m, STARK \$62m</p> <p><b>Air defence systems:</b> Destinus €140m, Cambridge Aerospace \$100m</p> <p><b>Unmanned ground systems:</b> ARX Robotics €42m</p> <p><b>Growth Areas:</b> Commercializing sovereign European solutions that leverage AI, drones and robotics driven by rising European defence budgets and geopolitical conflicts.</p>

# Executive Summary

## 6. FOUNDER RESOURCES

Deep Tech founders have a broad range of financing options spanning VC equity investments, grants and private credit offerings. Deep Tech investor criteria shift with each funding round, from technical validation at Seed to commercial traction and scale at Series B. To support early-stage technical founders, several online resources exist like our Data Room template or pitch deck checklist.

## 7. CHALLENGES & RECOMMENDATIONS

To build a thriving European Deep Tech ecosystem, we identify four main challenges:

- *The growth-stage funding gap:* Beyond Series A there is not enough capital in Europe to fund businesses locally. As a result, companies raise smaller rounds, sell, or take capital from overseas that often results in a shift in the ‘geographic centre of mass’ of the business away from Europe.
- *Fragmentation:* Europe suffers from high-friction, fragmented regulation across countries while lacking the power of concentrated talent clusters.
- *Researcher to Founder:* More needs to be done to turn European research excellence into high quality startups.
- *Risk appetite:* European corporates and governments need to work more closely with startups and embrace risk to drive success.

## 8. DEEP TECH (MIS)CONCEPTIONS

Deep Tech is often misunderstood. It is the origin of venture capital and has historically shaped regional sovereignty by catalysing transformative technology trends and creating generation defining companies. Although more capital is typically required than for ‘shallow tech’, most of it is invested in building defensible IP and products that can’t be recreated overnight using generative AI tools. Longer development timelines delay initial revenue, but once a technology matures, revenue growth often accelerates. While companies like Liliium have made headlines, Deep Tech companies fail at rates comparable to others, albeit with a distinct risk profile that investors must understand. The exit landscape remains too immature but overall returns suggest that Deep Tech portfolios outperform conventional tech.

# About this report

The report aims to align Europe's definition of Deep Tech, examine the characteristics of the European ecosystem, dive deep into key areas of Deep Tech, and lay out ways Europe can enhance its global competitiveness.

Deep Tech is no longer a niche curiosity. As the marginal costs to create software plummet and traditional moats erode, driven by generative AI tools, the hunt for true defensibility has shifted toward the physical and fundamental. Founders and investors are looking beyond iterative digital applications to solve the world's hardest problems.

Yet, as capital pours in, so does noise. The sector continues to suffer from fragmented definitions, conflicting data, and a lack of shared vision. This linguistic friction slows down founders and complicates the investment thesis. We cannot scale global champions if we aren't even speaking the same language.

This report exists to cut through that static. We aim to provide the European ecosystem with the definitions, data, and perspectives designed to accelerate growth. Our goal is simple: to provide the clarity needed to build, fund, and scale world-leading Deep Tech companies from within Europe.

In the following pages, we endeavour to align Europe's definition of Deep Tech, examine the characteristics of the ecosystem, and determine the blockers to its global competitiveness.

## Methodology

### Deep Tech is constantly evolving

Some technologies that were once considered novel or 'Deep' have now become mainstream and widely adopted. LLMs are going through this transition currently. This is why certain companies are included in previous reports but not in this year's report. As a result, funding numbers may vary from year to year.

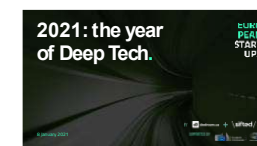
### Data cut-off dates

Cut-off dates for data is February 2026 unless stated otherwise on the chart.

### Data sources

Dealroom is the primary data provider for this report. References to additional data sources and reports can be found on each slide.

## Previous editions of the European Deep Tech Report



2021



2022



2023



2024/25

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## European, multi-stage venture capital firm

Lakestar is a mission-driven investment firm focused on building the next generation of sector-defining companies. We are increasingly focused on European sovereignty and resilience, backing the critical technologies and engineering breakthroughs that ensure the continent's future leadership.

Moving beyond generalist venture capital, we provide intensive, patient partnership to founders. With a global mindset and deep roots in Europe's regulatory and political landscapes, we empower visionary entrepreneurs to solve complex challenges and build enduring companies that transcend market cycles.



## Global venture capital firm dedicated to Deep Tech investments

Walden Catalyst Ventures is helping early-stage companies in the US, Europe, and Israel build the next generation of category-defining businesses in Deep Tech. We back the bold and the daring—trailblazers who are changing the world and making life better for all of us.

Walden Catalyst invests in innovators and entrepreneurs passionate about disruptive technologies and committed to excellence. For startups, this translates into unparalleled access to operational expertise, global reach, and a network of industry captains eager to help build and scale the companies of the future.



## Global startup & venture capital intelligence platform

Dealroom is the source of record on startups, innovation, high-growth companies, venture capital and tech ecosystems globally. Dealroom is a trusted source of innovation data and predictive analytics, used by leading venture capitalists, corporates and governments, to discover the world's most promising companies.

Clients include many of the world's foremost organisations such as Sequoia, Accel, Index Ventures, McKinsey, BCG, Deloitte, Google, AWS, Microsoft, Stripe, and over 100 governments worldwide.



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The background features a complex network of white lines and squares on a dark green background. The lines are a mix of solid and dashed, forming a grid-like structure with rounded corners and various paths. Small squares are placed at various points along these lines, creating a sense of connectivity and data flow.

# 1. DEEP TECH DEFINED

Deep Tech is defined as  
*novel scientific or engineering breakthroughs*

making their way into  
products and companies  
*for the first time*

*Why Deep Tech matters:*  
Scientific and engineering breakthroughs have altered our lives immeasurably over the last century and even within the last 30 years

### Case 1: Cost of data transmission

Over the last 30 years, the cost of data transmission has decreased by over 1000x driven by enabling technologies like Broadband, WiFi, optical fibre, or 5G, resulting in a democratization of information.<sup>1, 2</sup>



### Case 2: Manufacturing hours per vehicle

Commercialization of robotic automation in automotive manufacturing has brought down the time to produce a vehicle drastically and increased overall productivity.



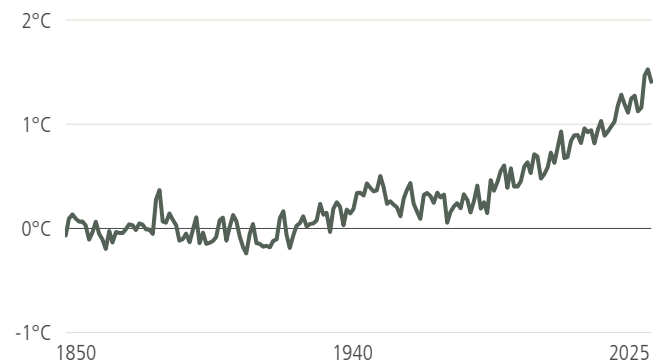
# Why Deep Tech still matters: Solving today's biggest problems will continue to require solutions that demand new technologies

## Climate change

2025 was the 3rd hottest year on record with the top 3 years being: 2024, 2023, 2025.<sup>1</sup>

Addressing this trend requires the development of technologies such as long-duration energy storage and Direct Air Capture. These innovations are essential for decarbonizing energy systems, removing atmospheric CO<sub>2</sub>, and strengthening resilience against climate change.

Global mean temperature difference from 1850-1900 average, 1850-2024<sup>2</sup>

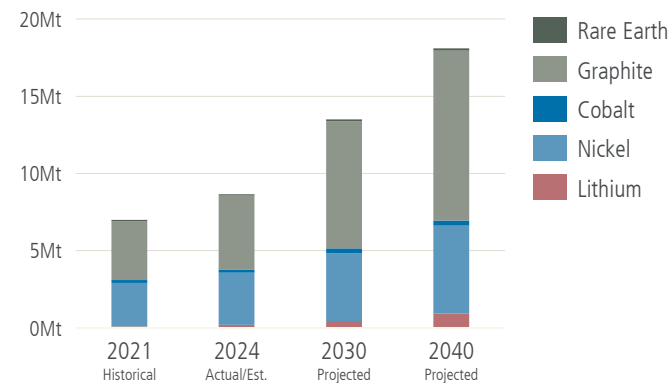


## Resource demand and scarcity

Electrification is driving new resource requirements for hard to access or extract elements.<sup>3</sup>

To meet this demand, technologies are needed that optimize the entire resource lifecycle, from advanced sensors that streamline mineral discovery to innovative battery chemistries and motor technologies that reduce our dependence on scarce elements.

### Demand

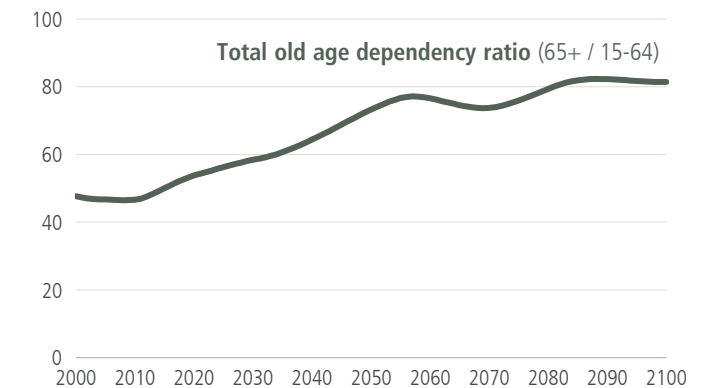


## Demographic and productivity crises

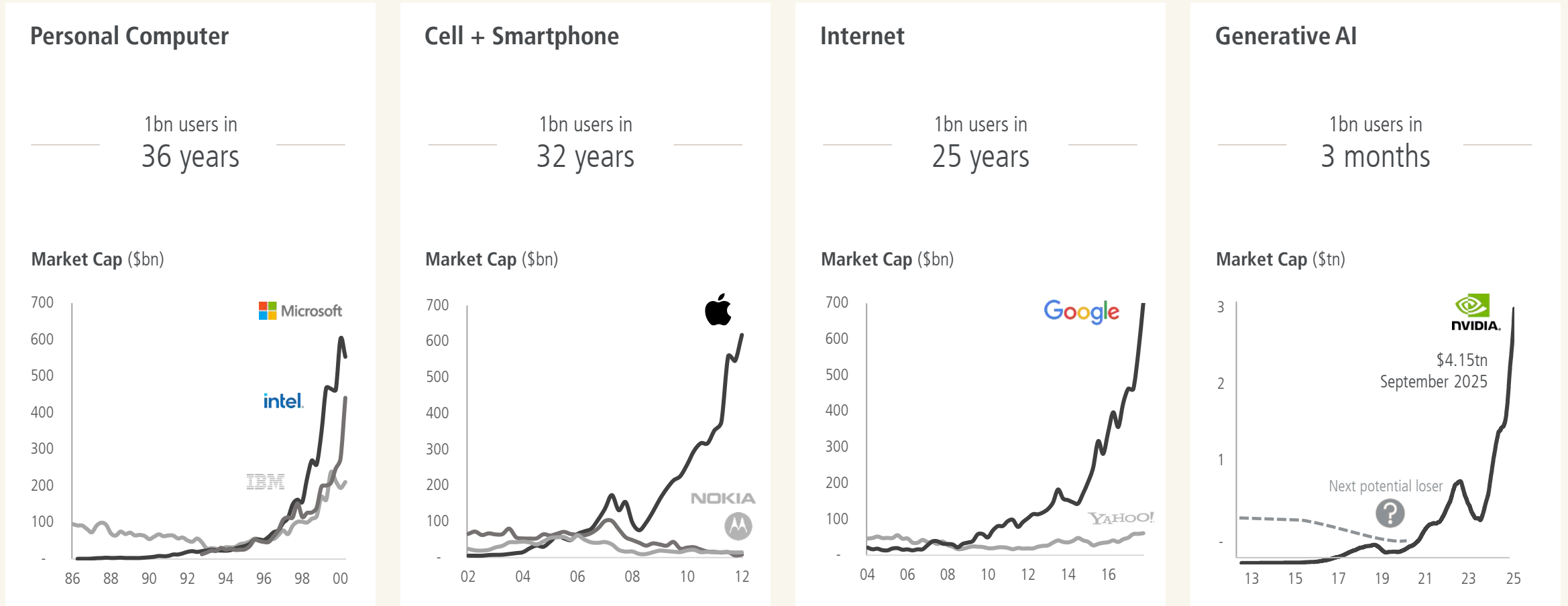
Declining birth rates means fewer workers must support the population.<sup>4</sup>

To maintain and improve our quality of life, more advanced automation and robotic solutions are needed in verticals like manufacturing and health care.

### Dependants per 100 working-age people, %



# Deep Tech progresses in waves driven by scientific and engineering breakthroughs that define their eras, creating (and destroying) generational companies in the process



# The journey of Deep Tech, from the lab to mainstream adoption

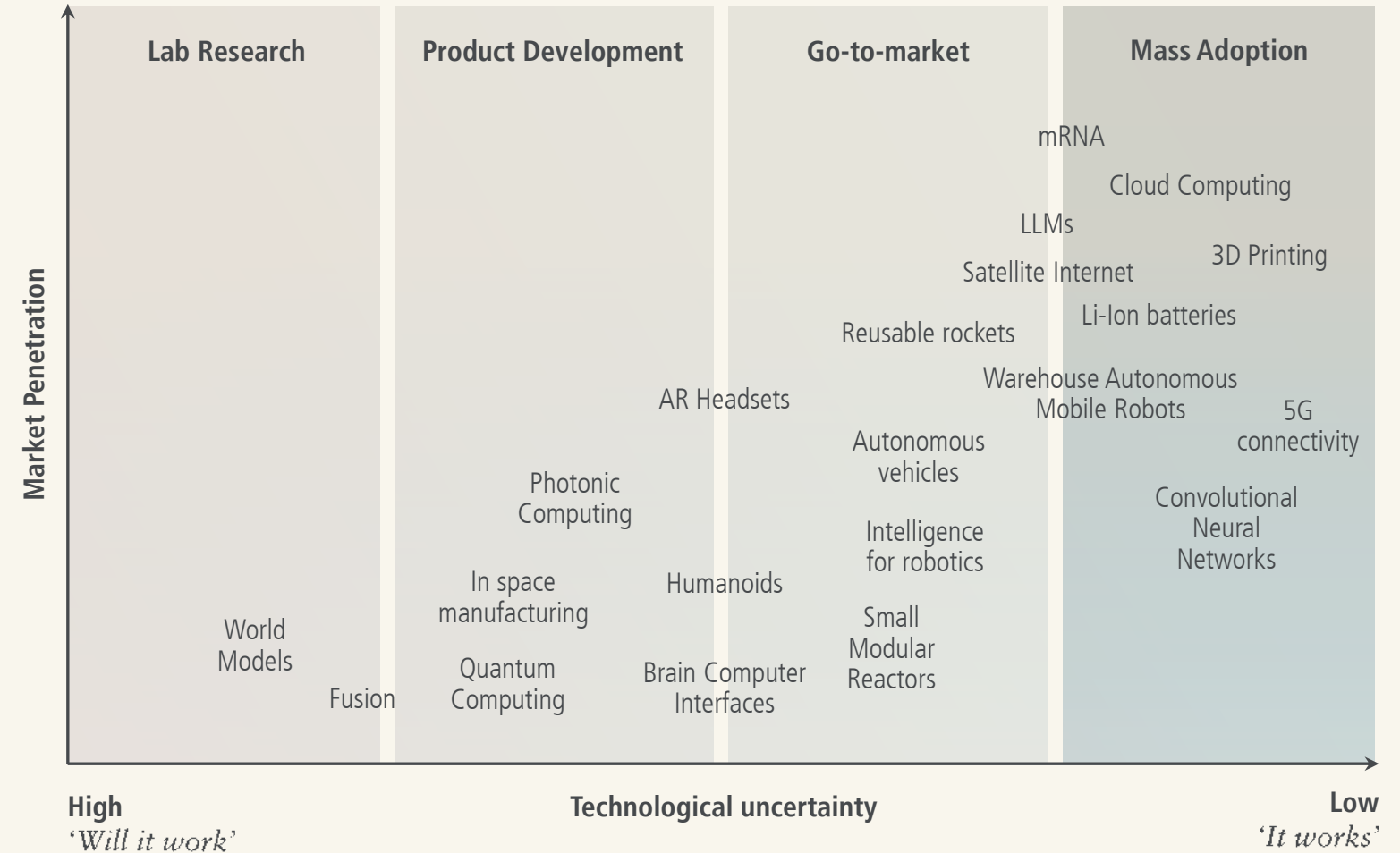
Deep Tech is constantly evolving.

New Deep Tech areas emerge from fundamental research and the convergence of disciplines.

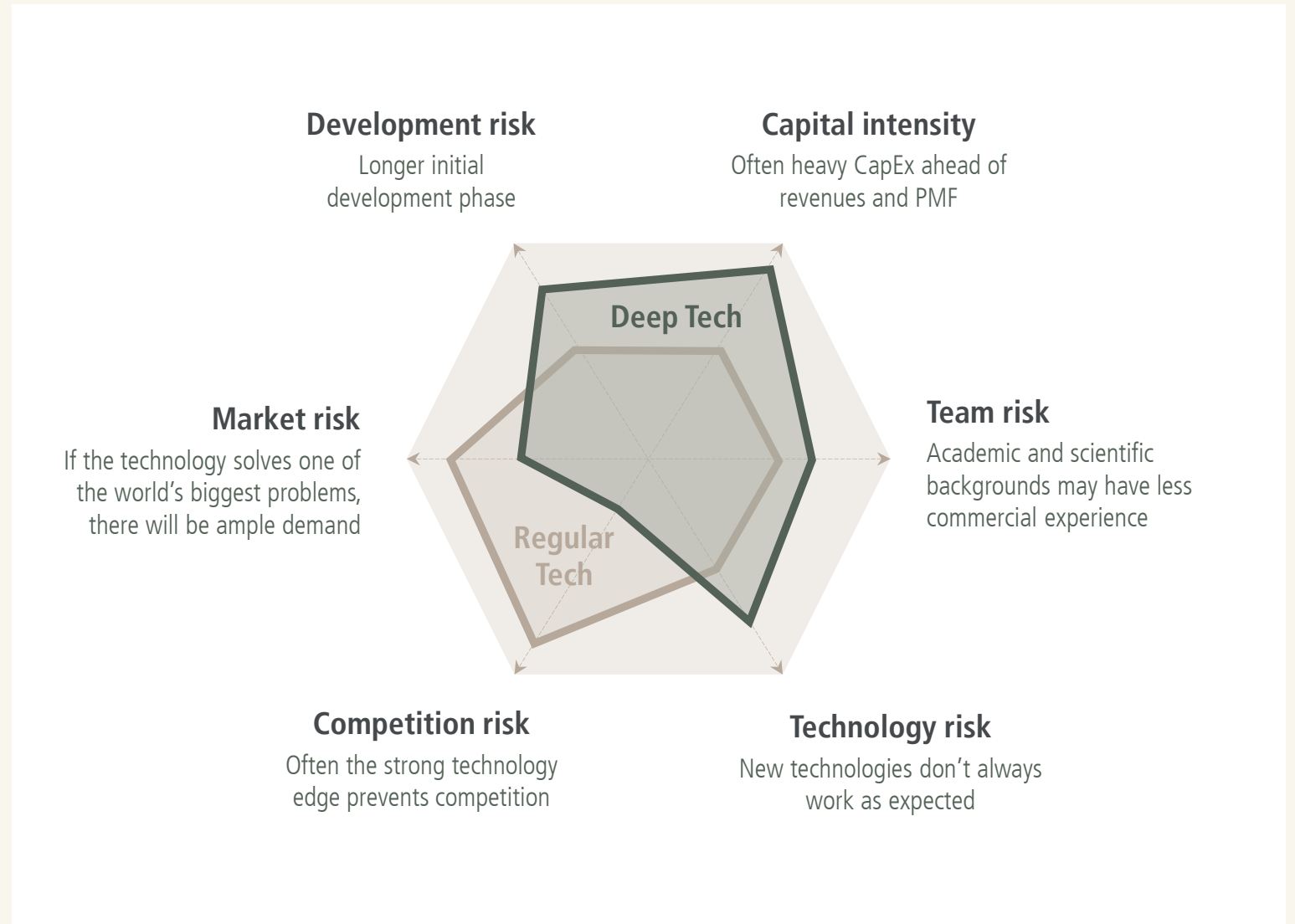
A challenge with the earliest stage of Deep Tech is that categories often remain nameless until they move beyond the laboratory stage.

Over time, technologies that were once considered Deep Tech become mainstream and widely adopted. LLMs are going through this transition currently.

Current state of the Deep Tech journey along phases from Lab Research to Mass Adoption



# Deep Tech companies have different risk profiles that investors need to understand

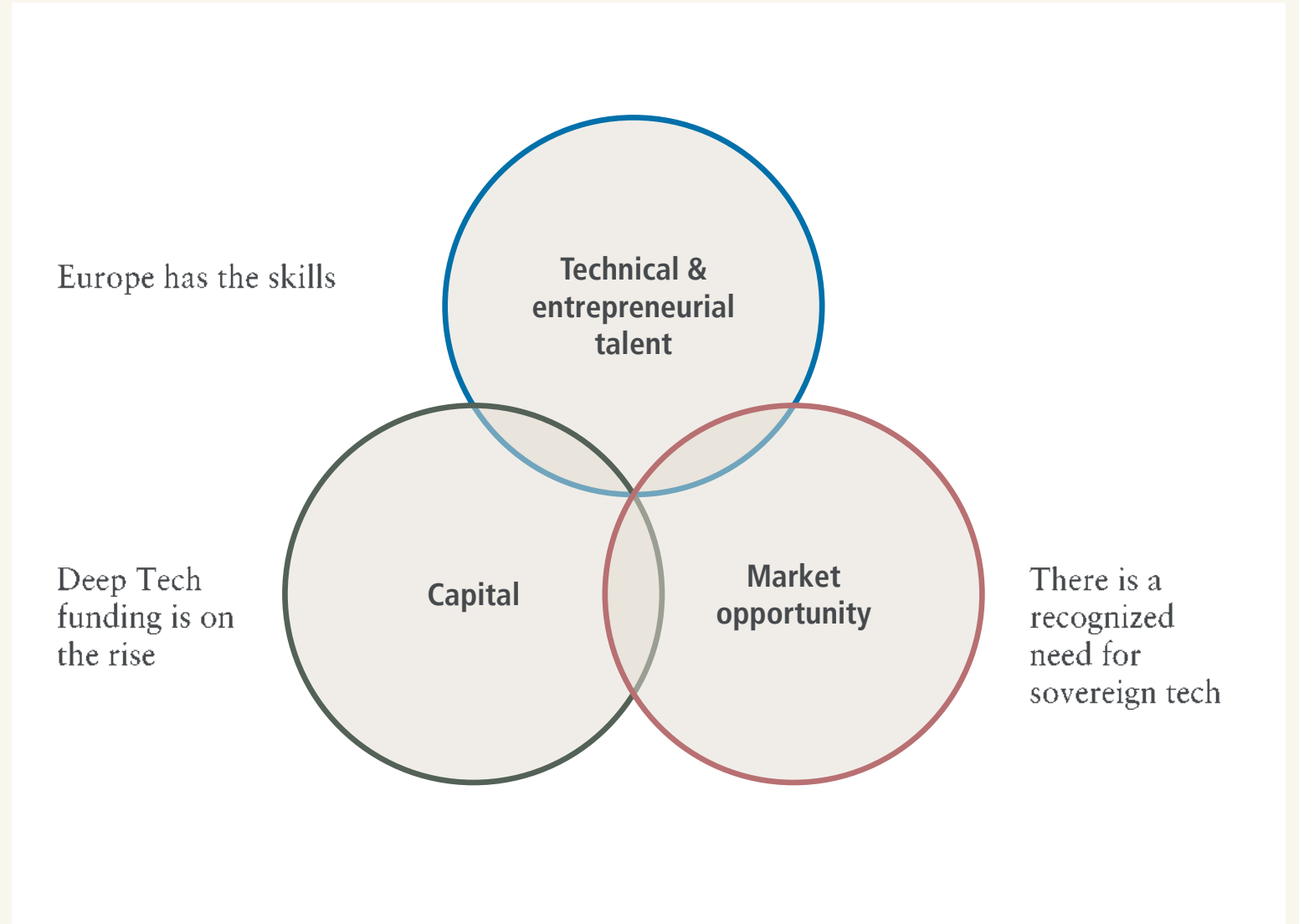


The background features a complex network of white lines and small squares on a dark green background. The lines are a mix of solid and dashed, forming a grid-like structure with rounded corners and various paths. The squares are small and scattered throughout the network, acting as nodes or junctions.

2.

# THE EUROPEAN DEEP TECH OPPORTUNITY





















# Europe has the raw ingredients to build the next generational Deep Tech companies























# Europe hosts 30% of the top universities in Deep Tech subjects

## European university ranking in key Deep Tech domains (THE ranking 2026)





















### Engineering

 1. Harvard University
 <b>2. University of Oxford</b>
 3. Massachusetts Institute of Technology
 3. Stanford University
 <b>5. University of Cambridge</b>
 6. University of California, Berkeley
 7. California Institute of Technology
 8. Peking University
 9. Princeton University
 10. National University of Singapore
 <b>11. ETH Zurich</b>
 <b>12. Imperial College London</b>
 13. Tsinghua University
 14. Nanyang Technological University, Singapore
 15. Georgia Institute of Technology
 <b>16. Delft University of Technology</b>
 17. Yale University
 18. University of California, Los Angeles
 <b>19. Technical University of Munich</b>
 20. Carnegie Mellon University

### Computer Sciences

 <b>1. University of Oxford</b>
 <b>2. University of Cambridge</b>
 <b>3. ETH Zurich</b>
 4. Massachusetts Institute of Technology
 5. Princeton University
 6. Stanford University
 7. Carnegie Mellon University
 8. Harvard University
 <b>9. Imperial College London</b>
 10. Peking University
 11. California Institute of Technology
 12. Tsinghua University
 13. National University of Singapore
 13. University of California, Berkeley
 <b>15. Technical University of Munich</b>
 16. Nanyang Technological University, Singapore
 17. Cornell University
 18. University of California, Los Angeles
 19. University of Illinois at Urbana-Champaign
 20. University of Washington

### Physical Sciences<sup>1</sup>

 1. California Institute of Technology
 2. Harvard University
 2. Stanford University
 4. Massachusetts Institute of Technology
 5. Princeton University
 <b>5. University of Cambridge</b>
 7. University of California, Berkeley
 <b>8. University of Oxford</b>
 <b>9. ETH Zurich</b>
 10. Tsinghua University
 11. National University of Singapore
 <b>12. Imperial College London</b>
 12. Peking University
 14. Yale University
 15. The University of Chicago
 16. Columbia University
 17. University of California, Los Angeles
 18. Cornell University
 <b>19. Technical University of Munich</b>
 <b>20. École Polytechnique Fédérale de Lausanne</b>

# Europe has deep pools of technical talent and world leading research

## Strong talent pool



### 1.5 million STEM graduates per year

Europe produces 1.5m STEM graduates per year, more than double the US, with rising STEM graduation rates



### 2.15 million researchers (FTE)

Europe has a huge pool of 2.15m researchers (FTE) and ~40% of EU doctoral students are in science & tech fields

## Leading publication and IP



### 19.2% world's top-10% most-cited papers

The EU accounts for 19.2% of the world's top-10% most-cited papers, almost on par with the US



### 21.8% international patent applications

Europe generated 21.8% of international patent applications, second only to Asia

“The quality of European talent, both technical and commercial, is world-class, full stop. At Lightspeed we back companies globally, and the best founders we meet in London, Paris, or Munich are operating at exactly the same level as their counterparts in San Francisco or New York.

The honest constraint isn't quality, it's quantity: we simply don't have enough of it yet. But that's changing fast. We're seeing a new generation of European founders and operators who've built or scaled the continent's breakout companies and are now ready to go bigger and more ambitious. And alongside them, a growing wave of experienced Europeans are returning from the US, bringing that knowledge back home. That flywheel is just getting started, and it's one of the most exciting structural shifts happening in European tech right now.”

PAUL MURPHY  
PARTNER AT LIGHTSPEED  
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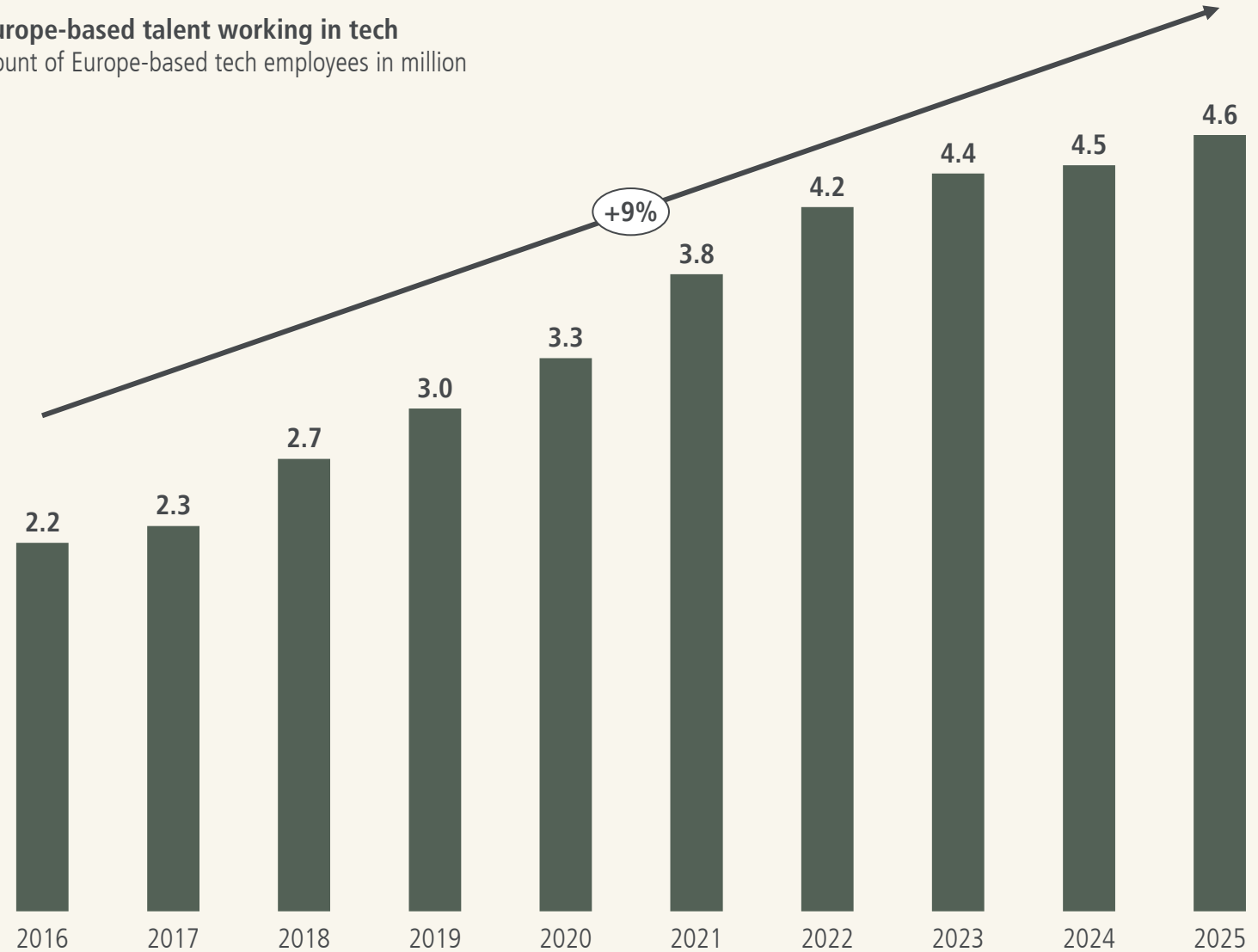
# Europe has a growing pool of entrepreneurial and commercial talent

Beyond technical talent, Deep Tech startups need to build scalable businesses like any other startup. This means building functions in areas such as product, sales, marketing, finance, HR, etc.

While these can be Deep Tech specific in some cases, much of this talent is fungible between Deep Tech and non-Deep Tech startups and in this respect, Europe benefits from a rapidly growing tech ecosystem generally.

Over the past decade talent working in tech in Europe has grown at a compounded annual rate of 9.1% to reach 4.6 million.

Europe-based talent working in tech  
Count of Europe-based tech employees in million

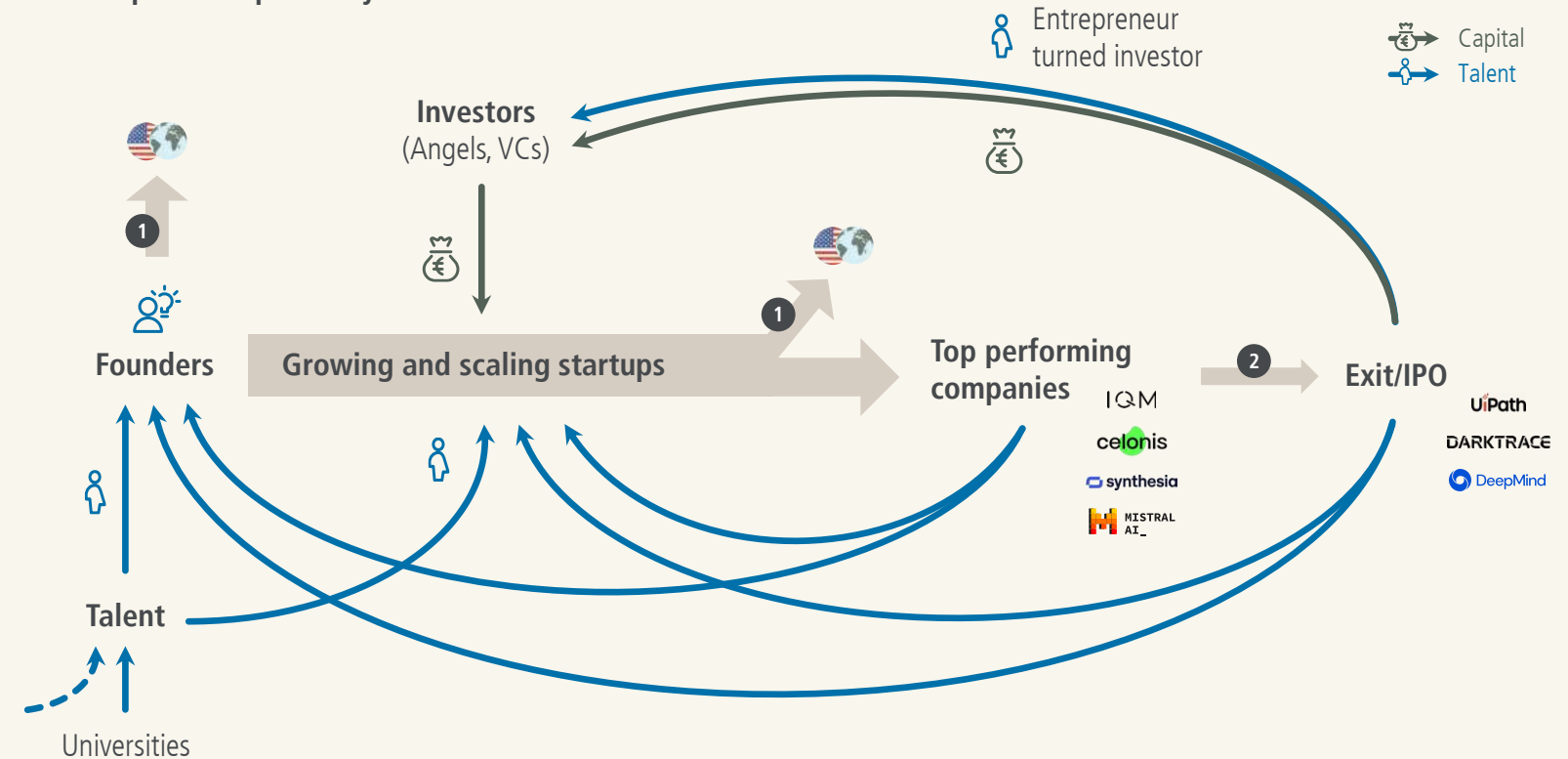


# The European Deep Tech flywheel

Venture ecosystems scale through feedback cycles. Successful companies feed founders, talent and capital back into the system to help it grow such that each successive cycle can be bigger than the last.

The European venture ecosystem is less mature than Silicon Valley which has seen many more cycles. The European Deep Tech venture ecosystem is even less mature than the wider European venture ecosystem.

## The European Deep Tech flywheel



### Set-backs

- 1 **Founders and companies leave Europe**, typically for the US, for better market and capital access.
- 2 **Exits/IPOs have stalled in Europe** in the last few years, leading to
  - Less capital flowing back to funds, which can then fund fewer businesses or write smaller cheques.
  - Fewer founders exiting and starting their next thing.

# European flywheel case study



## Academic Excellence

- Founded in London in 2010
- Published 1,000+ papers
- Acquired by Google in 2014
- Nobel Prize in chemistry in 2024



## Economic Impact

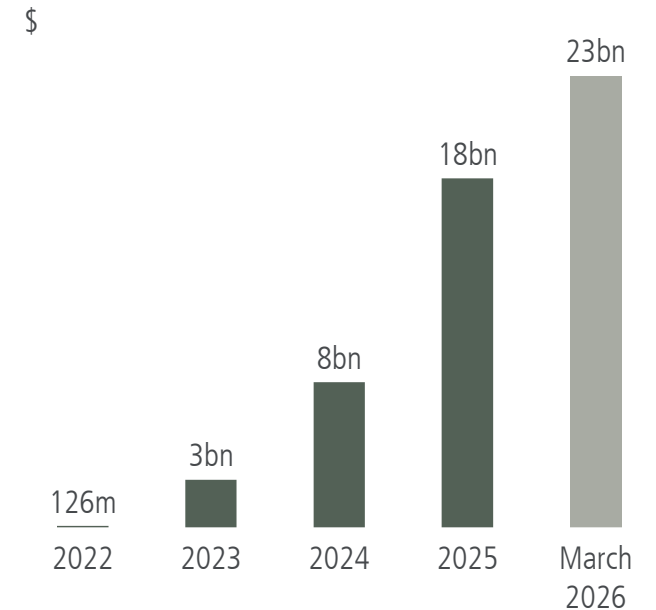
DeepMind alumni have founded companies that raised over \$5bn in funding, created \$23bn in enterprise value, and employ 2,000+ people.

## Notable Successes

High-profile spin-offs like Mistral, Isomorphic Labs, and Advanced Machine Intelligence are each now worth more than DeepMind's original acquisition price.



## Enterprise value of DeepMind spin-offs



Further examples of notable DeepMind spin-offs can be found [here](#)



## Long-Term Growth

The "Deep Tech flywheel" typically takes a decade to gain momentum; Europe is currently in the early stages of this compounding process.

# To further mature, the European ecosystem needs to retain founders tempted to build outside of Europe

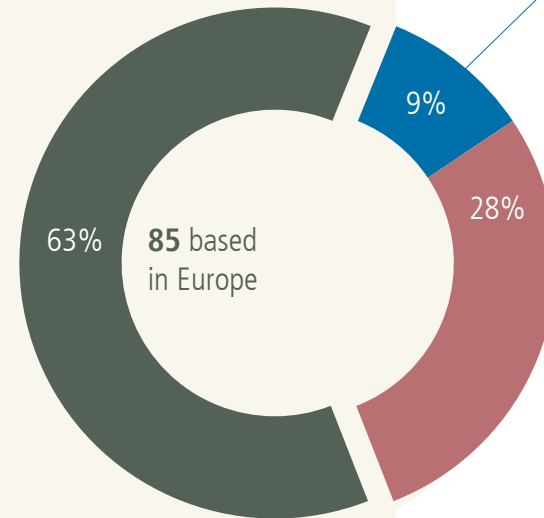
While we have the talent, more work must be done to keep it in Europe.

We see 40% of the European Deep Tech unicorn founders have either relocated to the US post founding (relocation) or moved there prior to founding (diaspora founders).

Efforts are underway to resolve with EU Inc<sup>1</sup> pushing for a common legal framework for startups, and public-private partnerships to improve funding options for later stage scale-ups<sup>2</sup>.

## Deep Tech unicorns with European founders

100% = 137 unicorns



## Nearly 40% of these unicorns are based in the US

13 relocated, including:



39 diaspora founders, including:



## European founders leave Europe for the US for several reasons:

### Capital Depth

US investors provide larger, faster, and more risk-tolerant funding.

### Market Scale

One regulatory environment, one language, and one large customer base.

### Reduced Friction

Fewer bureaucratic hurdles (visas, regulations) compared to Europe.

EU-INC is standard legal infrastructure to reduce hurdles induced by our fragmented system



ANDREAS KLINGER  
GP AT PROTOTYPE CAPITAL AND INITIATOR EU-INC

“ In today’s Realpolitik world, tech sovereignty is geopolitical sovereignty. Europe needs new, massive, innovative tech companies to prevail. Yet, our fragmented system makes it twice as hard for European founders to raise capital across Europe and accelerate quickly. This is why we’ve seen so many European founders braindrain to the US and build billion-euro-companies abroad.

EU-INC is a concrete solution by and for the entire European startup ecosystem that helps Europe leapfrog everyone else. It’s essentially standard legal infrastructure built around a digital, API-first central EU registry that enables seamless cross border investment, governance, talent retention (ESOP) and scaling.”

**PROTOTYPE** EU-INC



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# Munich ecosystem deep dive

Munich is in the top-3 European cities measured by attracted funding in 2025 (\$1.8bn) – with an explicit dominance within Deep Tech topics like Space, Defence and Robotics.

While Germany has a distribution of Deep Tech companies, Munich is the epicentre. It benefits from a dense concentration of technical talent, startup support, customers and investment capital.

## Technical talent



## Customers



## Startup support



## Venture firms



“What makes Munich truly unique is the deep integration between TUM as a world-wide top-ranked technical university, UnternehmerTUM as Europe’s largest startup factory, and the strong industrial base with global players and innovative Mittelstand companies.

The collaborative ecosystem culture translates world-class research into scalable Deep Tech ventures – producing over 100 new tech startups annually.”

PROFESSOR HELMUT  
SCHÖNENBERGER  
FOUNDER UNTERNEHMERTUM  
VICE PRESIDENT TUM



UNTERNEHMERTUM  
TUM

# A macroeconomic view on Europe

## Macroeconomic shocks

Recent macroeconomic shocks (Covid pandemic, Russian invasion in Ukraine, Chinese imports and US tariffs) have demonstrated an urgent need for Europe to build homegrown technologies and supply chains.

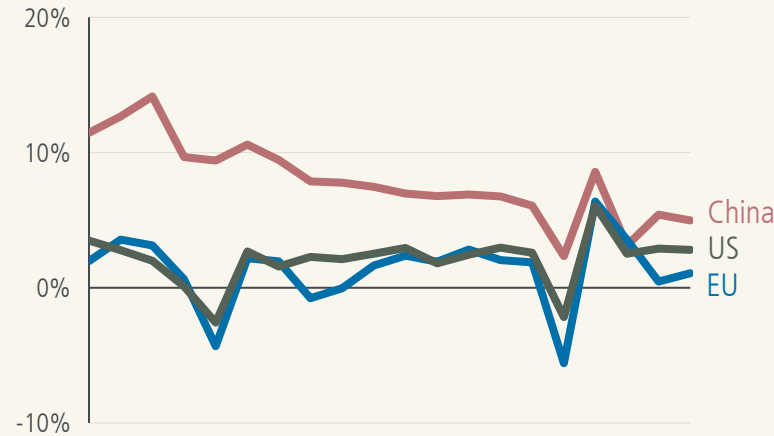
## Big markets

European markets are big and both governments and corporates increasingly want to buy from European suppliers first where they can.

## Historic years of low GDP growth

GDP growth of Europe as a whole lags China and remains behind the US. Innovation driven creative destruction can accelerate this growth<sup>2</sup>. Getting this right could spur a \$1tn economic growth opportunity by 2030<sup>3</sup>.

## Annual GDP growth<sup>1</sup>



## Public capital

Public capital is increasingly going to help support these goals

- EuroHPC joint undertaking of €7bn to 2027<sup>4</sup>
- France announced €109bn over five years investment in AI + data centres<sup>5</sup>
- EU Chips Act €43bn by 2030 for semiconductor production + innovation in Europe<sup>6</sup>
- Germany announces €35bn of space investment by 2030<sup>7</sup>
- Expected €20bn+ per year on European Deep Tech through increased defence spend (3.5% GDP NATO defence spend targets)<sup>8,9</sup>

“Europe’s Deep Tech challenge is often framed as a lack of capital. And the funding gap is massive, especially at later stages. It is increasingly recognized, and momentum to address it is building.

But capital alone will not be enough. What money cannot buy is experience. And while we are building momentum to unleash the entrepreneurial spirits in our societies, one of Europe’s distinctive strengths is its industrial base, with deep expertise in industrialization, in scaling complex technologies, and in operating under real world constraints across highly regulated markets.

The real opportunity is to combine these strengths with smarter capital allocation and systematic collaboration between corporates, startups, investors, and the public sector. Some European countries already show what works. The next step is to learn deliberately from these best practices and scale them across the region.”

TOBIAS HENZ  
PARTNER AT  
MCKINSEY & COMPANY

McKinsey  
& Company



Sources: 1) Worldbank, 2026; 2) Nobel Prize, 2025; 3) McKinsey, 2025; 4) European Commission, 2026; 5) Le Monde, 2025; 6) European Council, 2023; 7) DW, 2025; 8) NATO, 2025; 9) Deep Tech spending based on NATO targets, current % GDP spend and current GDP. Assumes 10% of incremental spend goes to deep tech per year.

# Europe has a unique opportunity in the Deep Tech era – driven by four I’s: Ideas, Innovation, Investment, and Independence



(w)<sup>C</sup>  
Walden Catalyst

**YOUNG SOHN**

FOUNDING MANAGING PARTNER AT WALDEN CATALYST  
CHAIRMAN AT HARMAN INTERNATIONAL  
CHAIRMAN ADVISORY BOARD AT SAMSUNG SEMICONDUCTOR

“ Europe has a unique opportunity in the emerging Deep Tech era. I often think about this through what I call the four I’s: Ideas, Innovation, Investment, and Independence. Europe is rich in ideas, supported by world-class research institutions and exceptional engineering talent. The next step is accelerating innovation, enabling entrepreneurs to translate breakthrough science into real-world technologies across AI infrastructure, advanced computing, robotics, energy, and defence and security technologies. To build global leaders, Europe must also mobilize global investment to scale companies rapidly and compete on the world stage. At Walden Catalyst, we see this momentum firsthand through companies such as Nearfield Instruments, enabling next-generation semiconductor manufacturing, and ANYbotics, bringing autonomous robotics into industrial environments worldwide. But this is not only about growth. It is also about independence, ensuring that Europe can build, own, and sustain critical technologies and industrial capabilities in the areas that will shape its future competitiveness and resilience. Ultimately, aligning these four forces: ideas, innovation, investment, and independence will determine Europe’s ability to build the next generation of globally significant Deep Tech companies.”



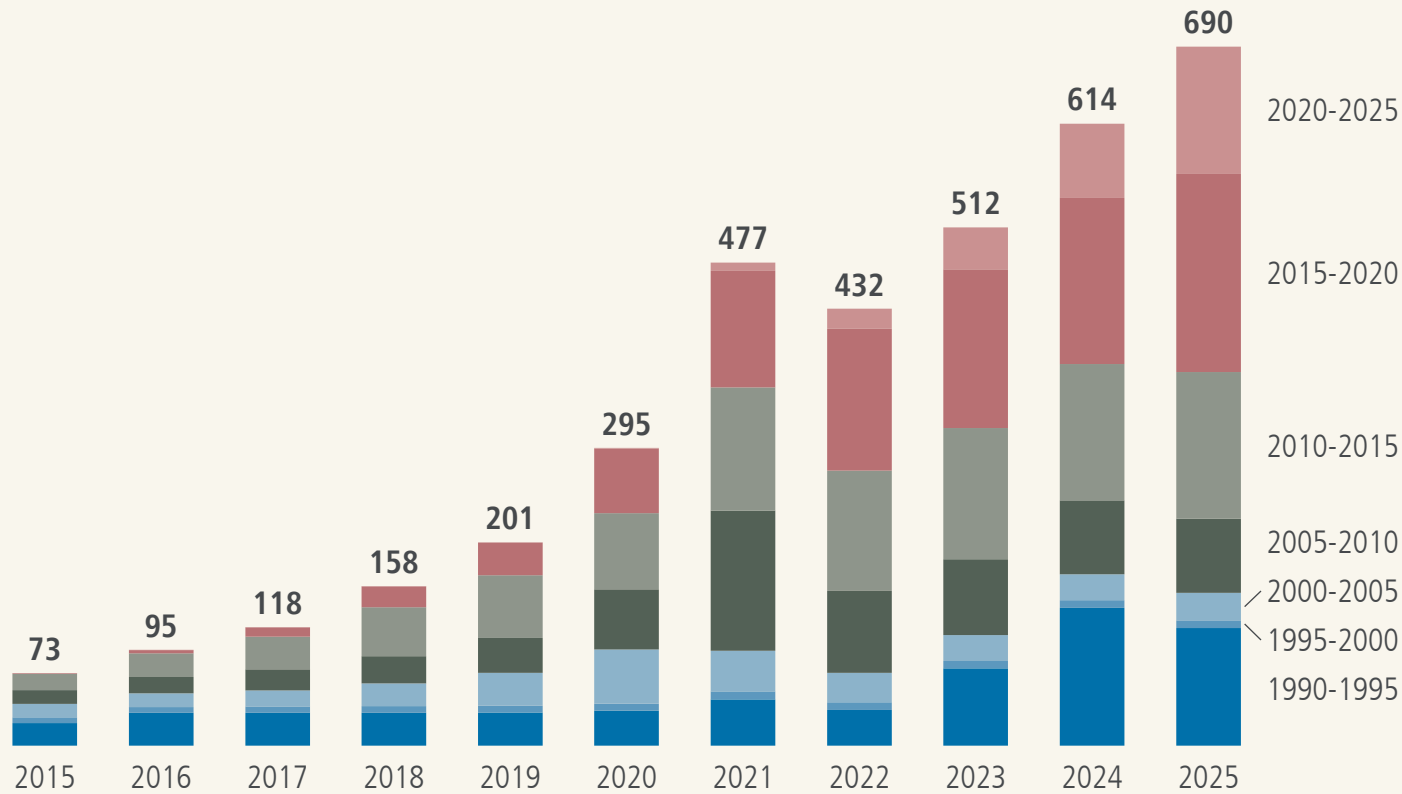
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# 3. FUNDING LANDSCAPE

The background features a complex network of white lines and squares on a dark green background. The lines are a mix of solid and dashed, forming a grid-like structure with rounded corners. Small squares are placed at various points along these lines, creating a sense of connectivity and flow. The overall aesthetic is clean, modern, and technical.

# European Deep Tech is now worth \$690bn, 60% of this are private, non-acquired companies

Combined enterprise value of European Deep Tech VC-backed startups  
\$ bn

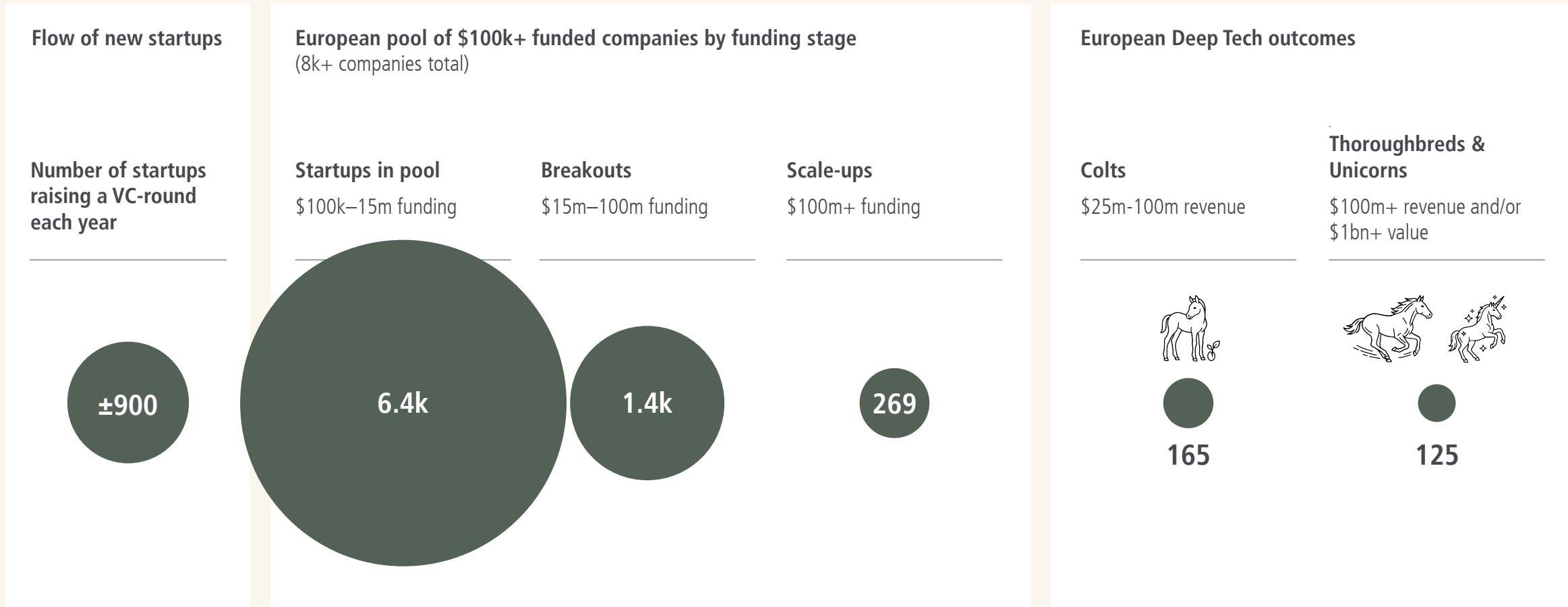


Selected key successes

Company	Cohort	Valuation
Helsing	2020-2025	\$13.2bn
synthesia	2015-2020	\$4bn
celonis	2010-2015	\$13bn
BIONTECH	2005-2010	\$29bn (public)
ocado GROUP	2000-2005	\$2.5bn (public)
CSR	1995-2000	\$2.4bn (acquired)
arm	1990-1995	\$115bn (public)

# 125 unicorns, \$1bn+ exits or \$100m+ revenue outcomes have emerged in European Deep Tech, with a fast growing pool of earlier stage companies

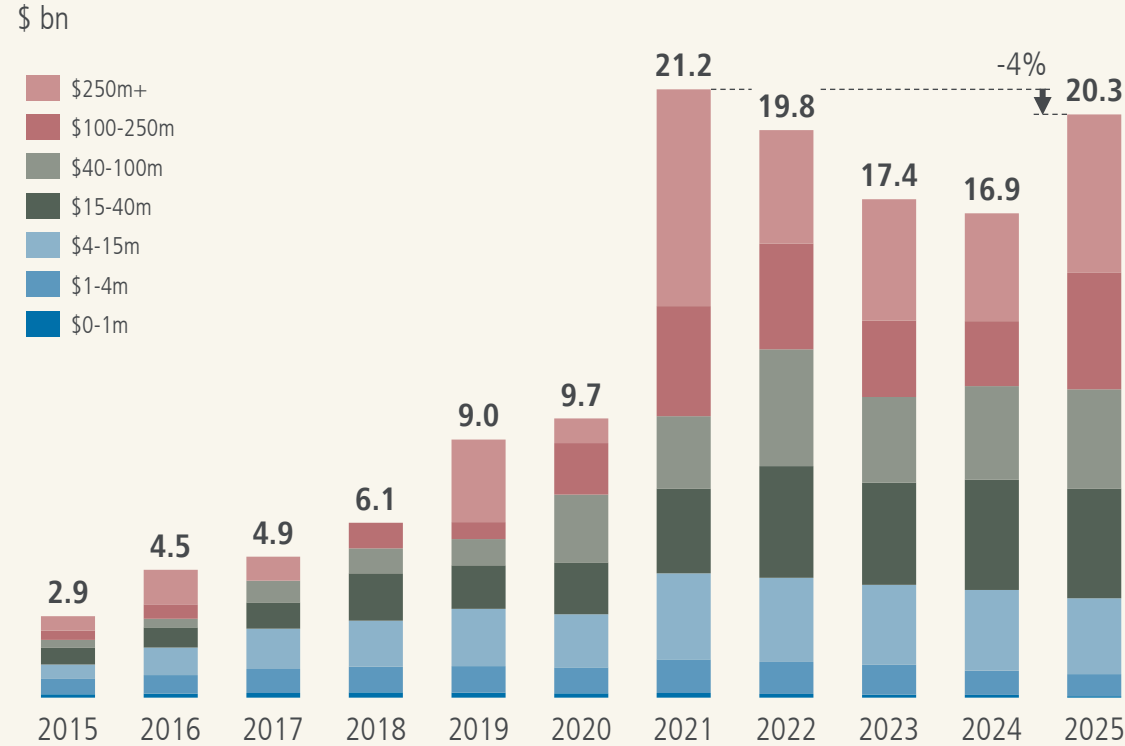
[» Explore online](#)



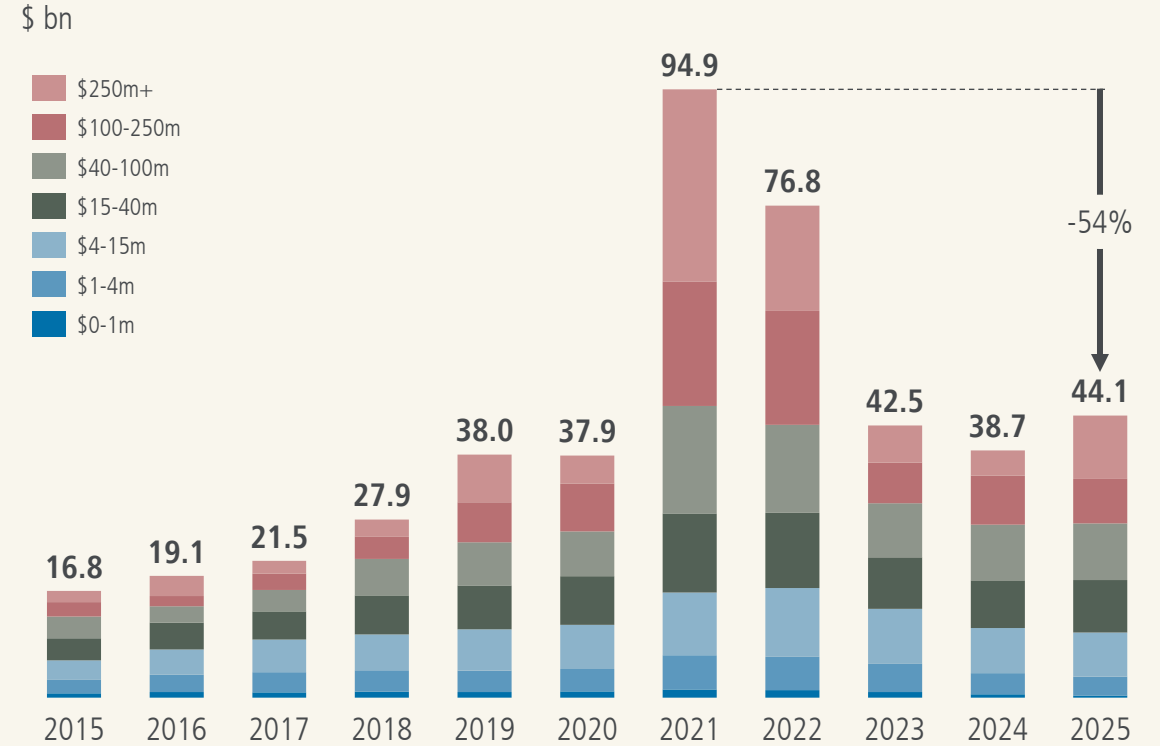
# Deep Tech is growing again and has proven its resilience

Both Deep Tech and Regular Tech are growing again year over year, with Deep Tech registering a stronger +20% growth. Looking back, Deep Tech is just 4% shy of its 2021 peak, while Regular Tech is still down 54%.

VC funding in European DEEP TECH startups by stage



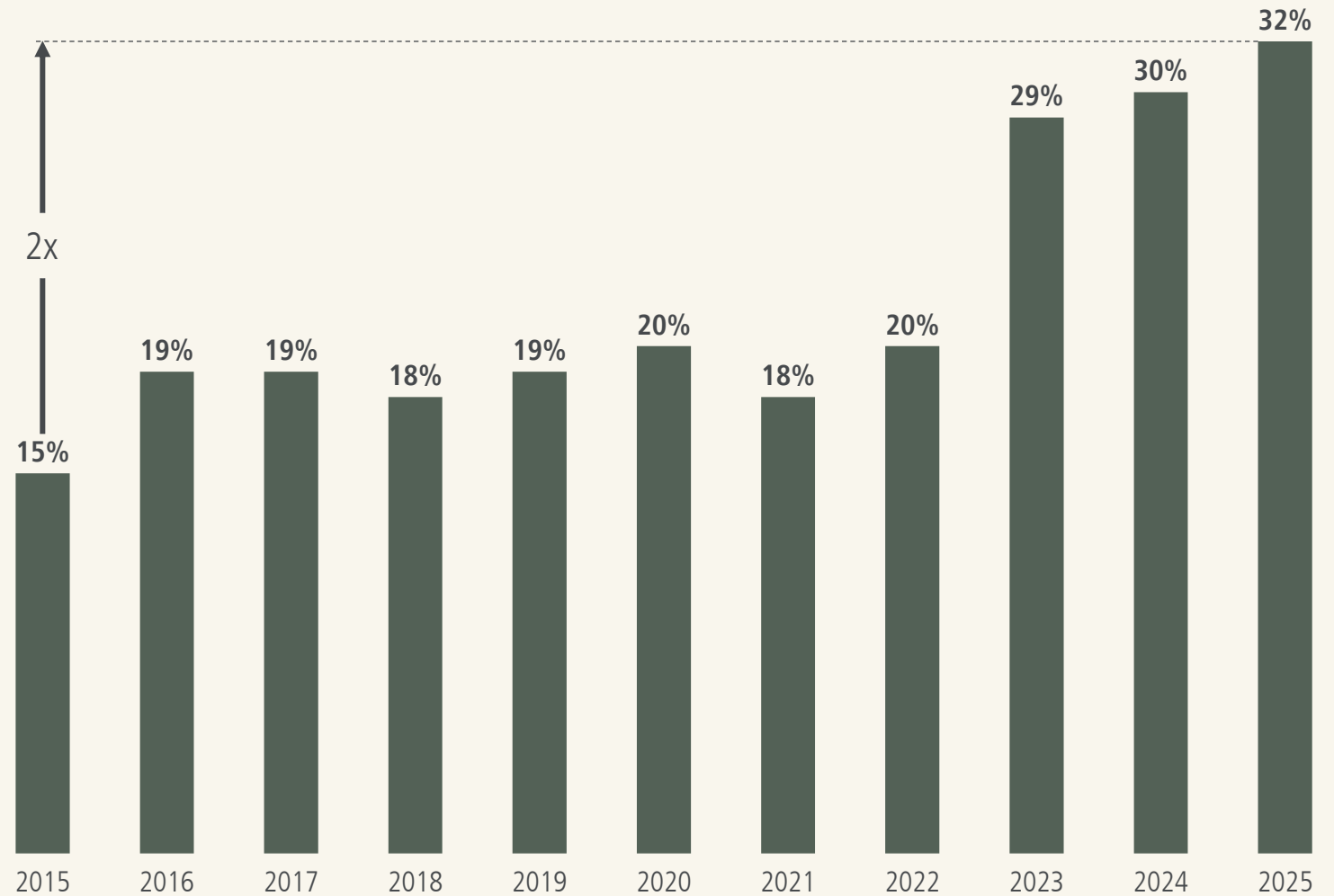
VC funding in European REGULAR TECH startups by stage



# Deep Tech now captures nearly one-third of all VC funding in Europe

This share has increased more than 2x over the last 10 years.

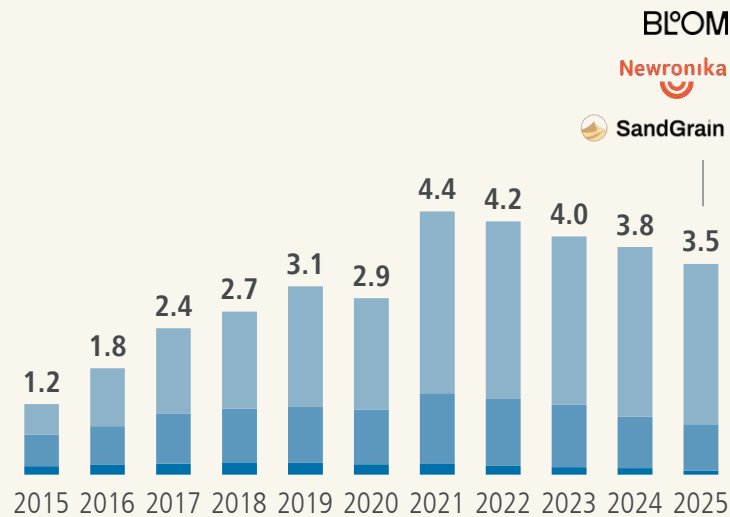
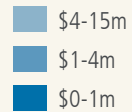
Deep Tech share of total VC funding in Europe  
%



# Late-stage financing made the most relevant step up compared to last year – indicating growing attractiveness of European scale-ups for investors

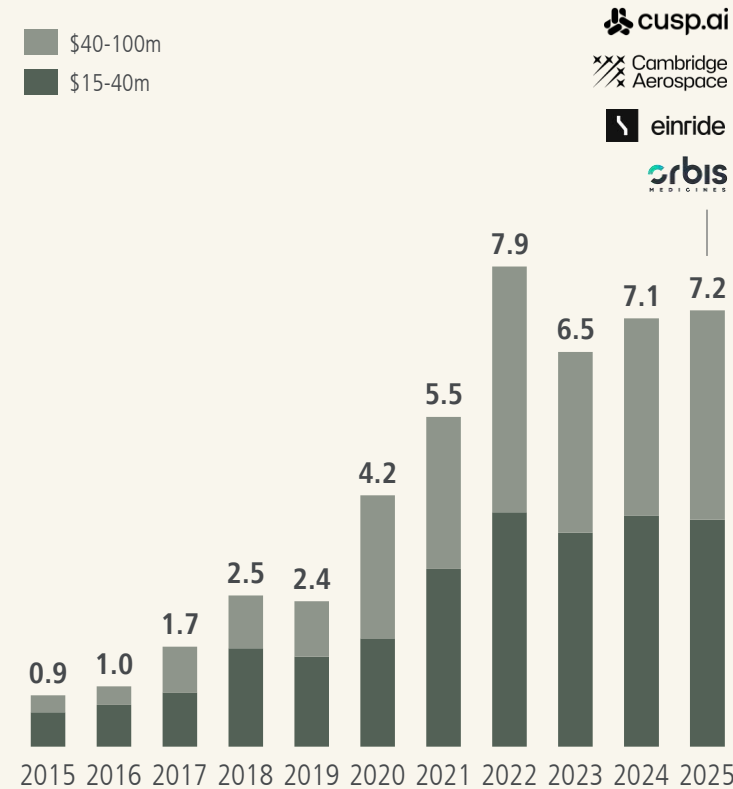
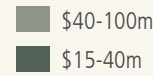
## Small Deep Tech rounds

\$ bn



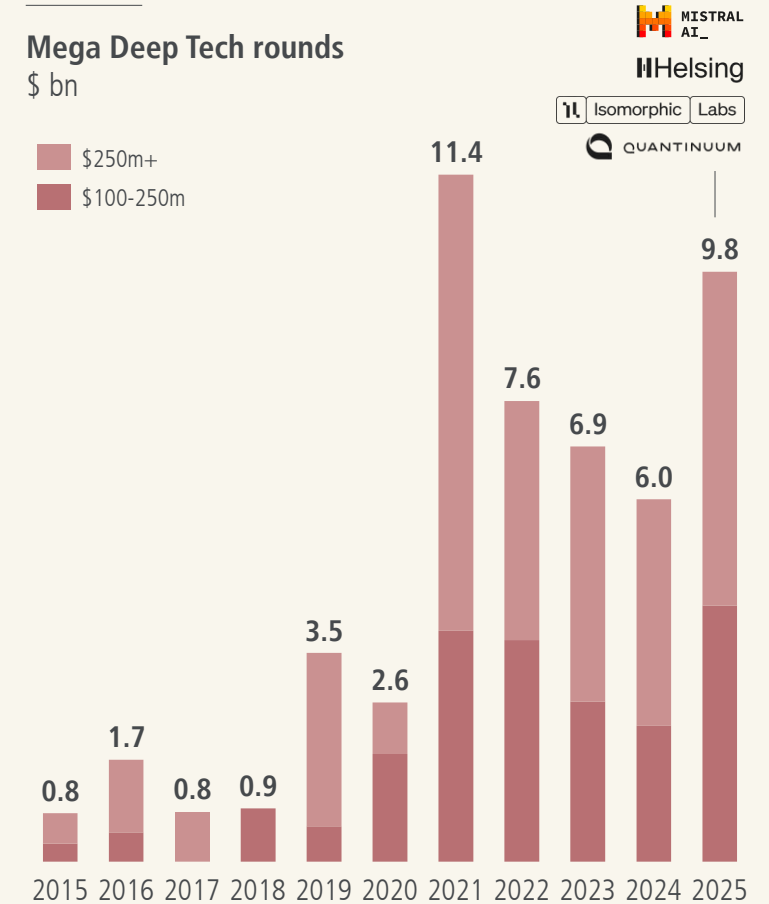
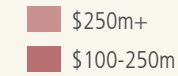
## Large Deep Tech rounds

\$ bn



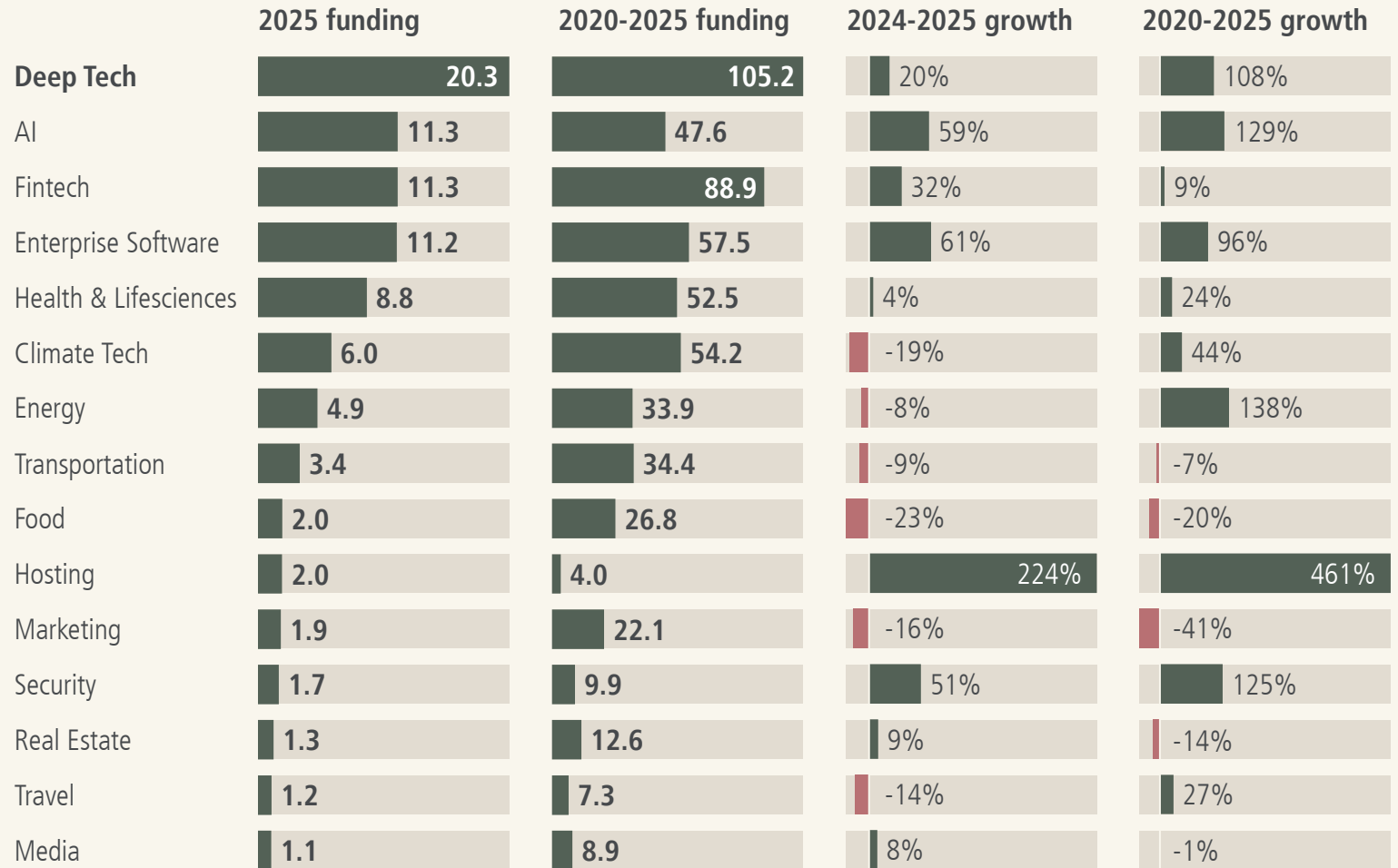
## Mega Deep Tech rounds

\$ bn



# Deep Tech attracted significantly more funding than any other sector in 2025

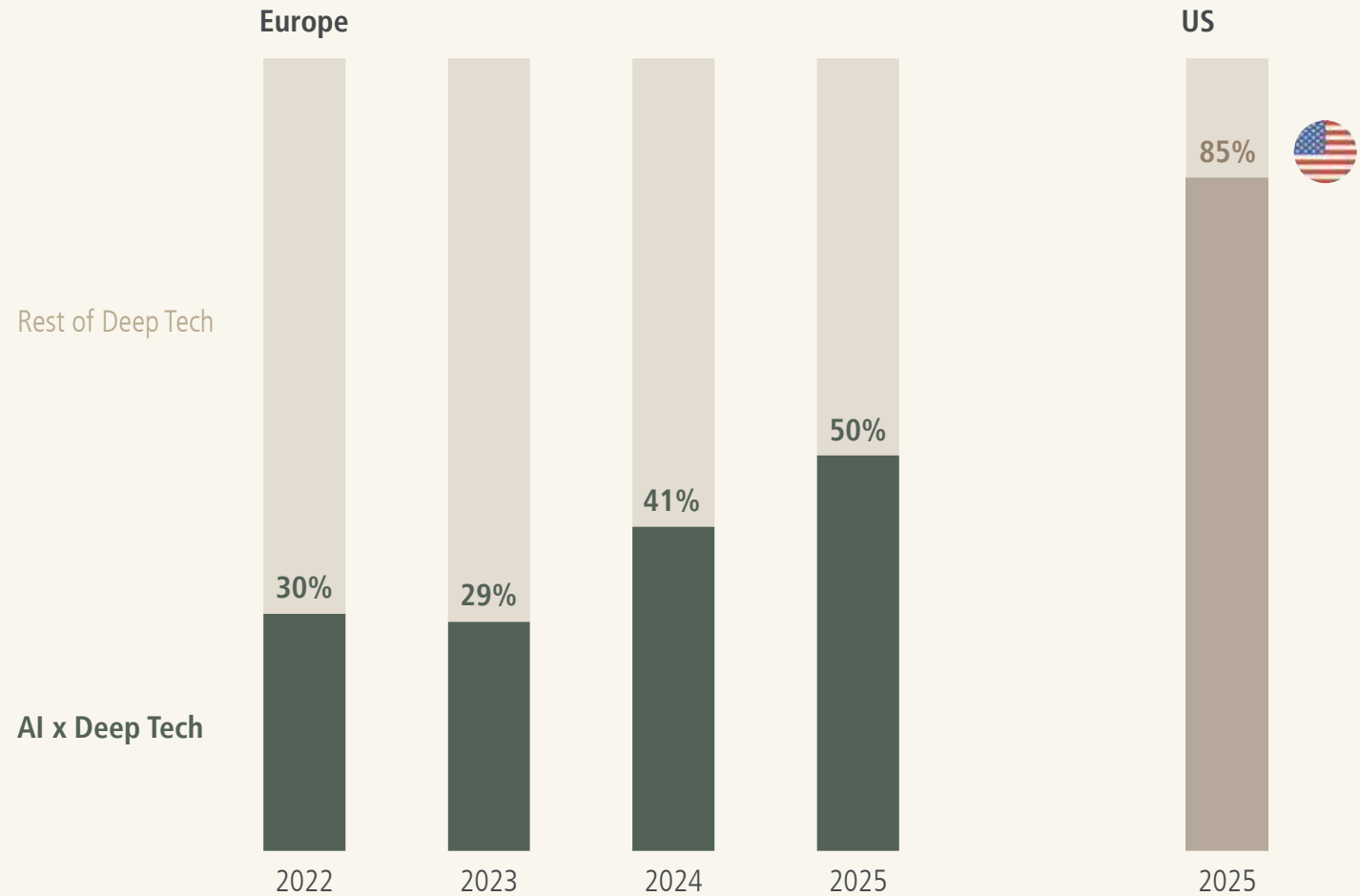
Deep Tech funding vs. other sectors in Europe  
\$ bn



Segments shown exclude overlaps with Deep Tech, so Climate Tech is to be understood as non-Deep Tech Climate Tech (excluding nuclear, next gen batteries etc)

AI x Deep Tech makes up a rising share of Deep Tech funding in Europe, but still significantly less than in the US

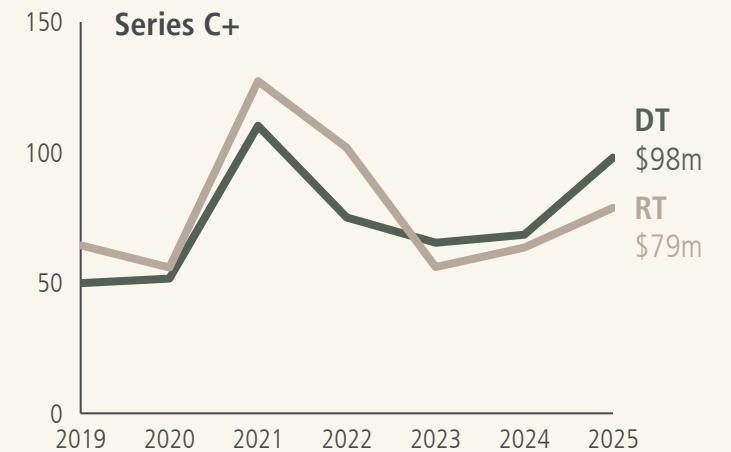
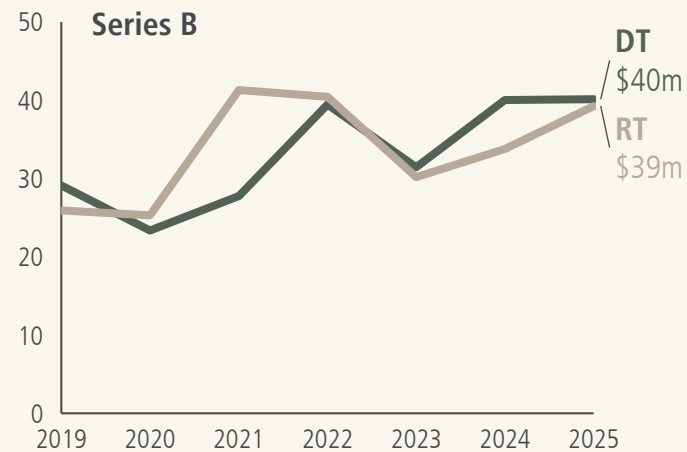
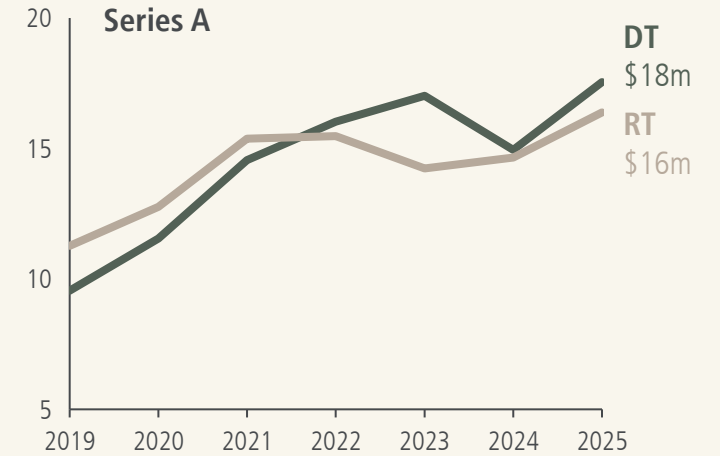
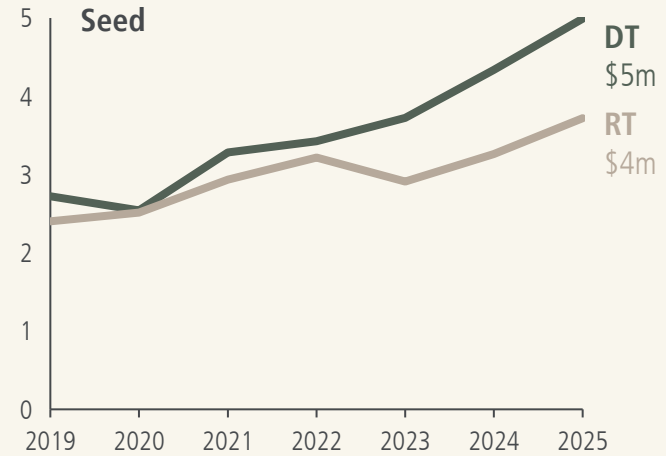
AI x Deep Tech share of Deep Tech VC funding %



# Seed rounds are larger in Deep Tech and at an all time-high












Round sizes at Series A onwards have jumped back to previous peak levels.

Average round size in Europe, Deep Tech (DT) vs. Regular Tech (RT)  
\$ m



# The US extends its lead over Europe in Deep Tech funding, driven by AI model makers

## Deep Tech funding by region

	% growth last 12 months	% growth since 2020	2025	2024	2023	2023	2022	2021
US	 92%	 286%	\$144bn	\$75bn	\$46bn	\$50bn	\$74bn	\$37bn
China	-8%	 40%	\$16bn	\$18bn	\$19bn	\$20bn	\$20bn	\$12bn
<b>Europe</b>	 21%	 118%	<b>\$20bn</b>	<b>\$17bn</b>	<b>\$17bn</b>	<b>\$19bn</b>	<b>\$21bn</b>	<b>\$9bn</b>
EU 27	 26%	 142%	\$13bn	\$11bn	\$12bn	\$12bn	\$13bn	\$6bn
Rest of world	 53%	 189%	\$9bn	\$11bn	\$7bn	\$12bn	\$14bn	\$4bn
World	 58%	 202%	\$189bn	\$120bn	\$90bn	\$101bn	\$128bn	\$63bn

It should be noted that US AI model makers account for >50% of US Deep Tech funding and a significant portion of this is allocated to infrastructure, such as chips and memory, rather than directly advancing Deep Tech innovation. The more limited AI model investments in the rest of the world imply a lower spend on AI-dedicated infrastructure and a higher proportion of funding going to other Deep Tech areas.

# The US had the strongest increase in Deep Tech funding of the last 3 years

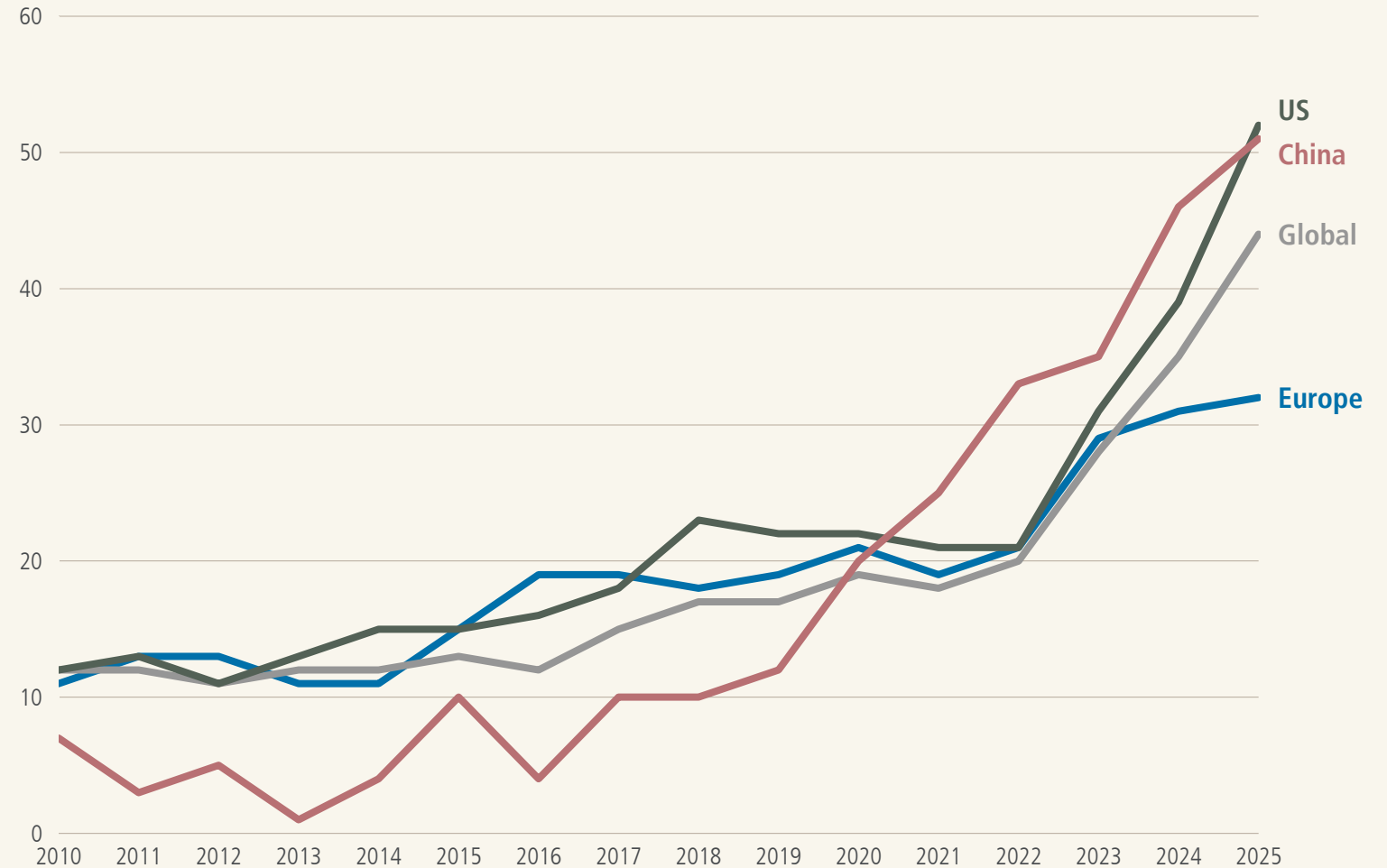
## Foundational AI Models:

The surge of Deep Tech funding in the US since 2022 is mostly driven by investment in foundational AI models. Companies like OpenAI, Anthropic and xAI all had funding rounds in double-digit billions in 2025.

## China:

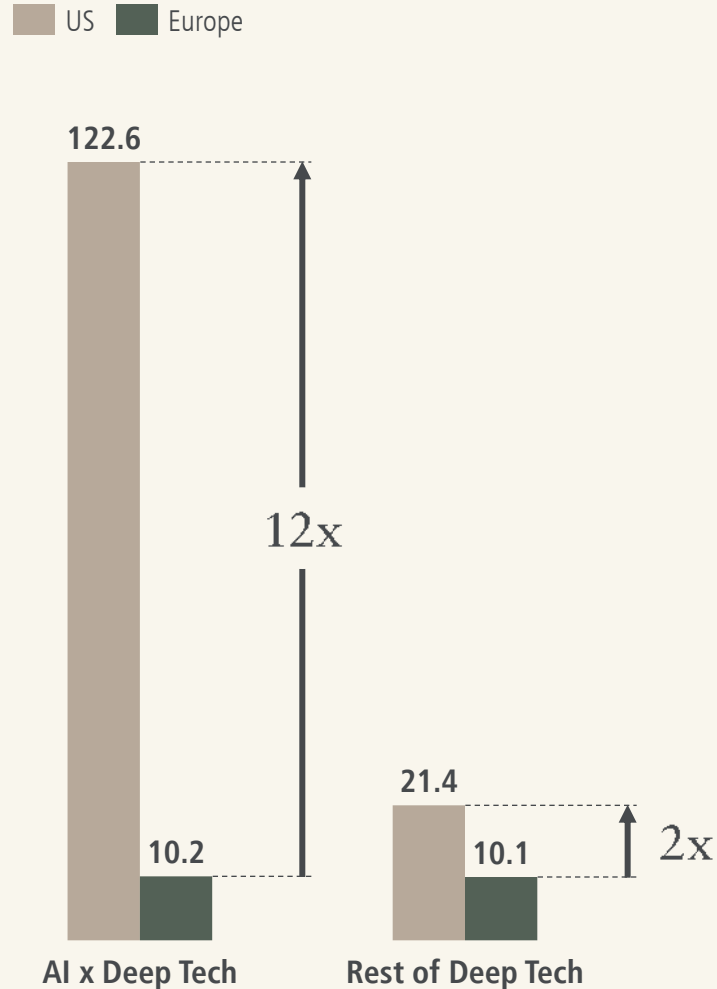
Very striking is the continued increase of relevance of Deep Tech in the Chinese economy since 2016. Today, Chinese Deep Tech companies are receiving a higher share of VC funding than their European counterparts. The largest chunk, 46% of it, goes into semiconductors.

Share of VC funding going to Deep Tech by region  
%



The funding gap between Europe and the US is massive at the intersection of AI x Deep Tech, but less in the rest of Deep Tech

AI x Deep Tech vs. Rest of Deep Tech VC funding  
\$ bn



“ The 12x funding gap between Europe and the US in AI Deep Tech is massive, but is dominated by foundational models with \$81bn going to three companies: xAI, OpenAI and Anthropic.

Given this level of funding, it will be impossible for others to compete on Large Language Models. But as the scaling laws that fuelled model improvements reach their limits, breakthrough performance will be driven by creativity and truly novel architectural approaches. When companies championing these approaches emerge, Europe will need to do more to mobilise capital. The seeds are there with companies like AMI Labs and Ineffable Intelligence raising \$1bn+ seed rounds.

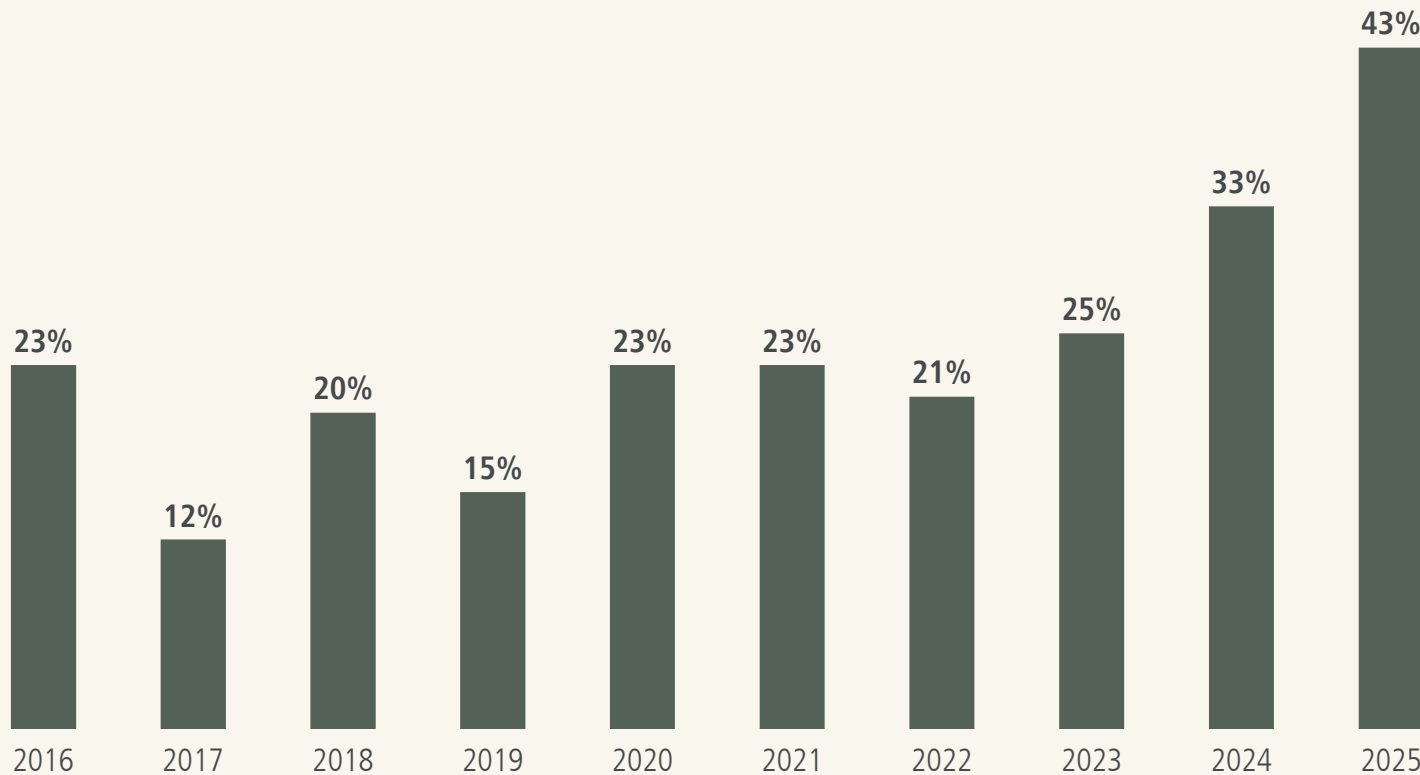
Now, Europe must ensure that this next generation of high-conviction founders has the local growth capital to scale their breakthroughs here, rather than being forced to relocate for the final mile of commercialization.”

SIMON KING  
PARTNER AT LAKESTAR



# Defence, Security and Resilience accounted for 43% of Deep Tech funding in 2025, up from 20% in 2022

Share of European Deep Tech VC funding going to Defence, Security and Resilience startups<sup>1</sup>



Source: "Defence, Security and Resilience in Europe Report 2026" by Dealroom, and Nato Innovation Fund (NIF)  
1) Defence, security, and resilience includes defence, space, quantum, nuclear energy, critical materials, biodefence, and other technologies keep for security and resilience

LAKE  
STAR

(w)<sup>C</sup>  
Walden Catalyst

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“Defence, Security and Resilience (DSR) has become a cornerstone of Europe’s Deep Tech ecosystem. Its rapid growth across the continent reflects not only strong venture backing and expanding commercial markets, but also a broader strategic shift: Europe increasingly recognizes that technological sovereignty and industrial capability are inseparable from long-term security.

As DSR companies mature, we need to help them build the scale required for industrialisation. Many already demonstrate robust revenues and credible growth trajectories, signalling that the sector is ready for a wider base of capital. The next phase will depend on banks, private equity and other institutional investors stepping in to finance manufacturing, deployment and international expansion.

Supporting this transition is critical to ensuring that Europe can build and sustain the advanced industrial base required for its resilience and economic competitiveness today and in the decades ahead.”

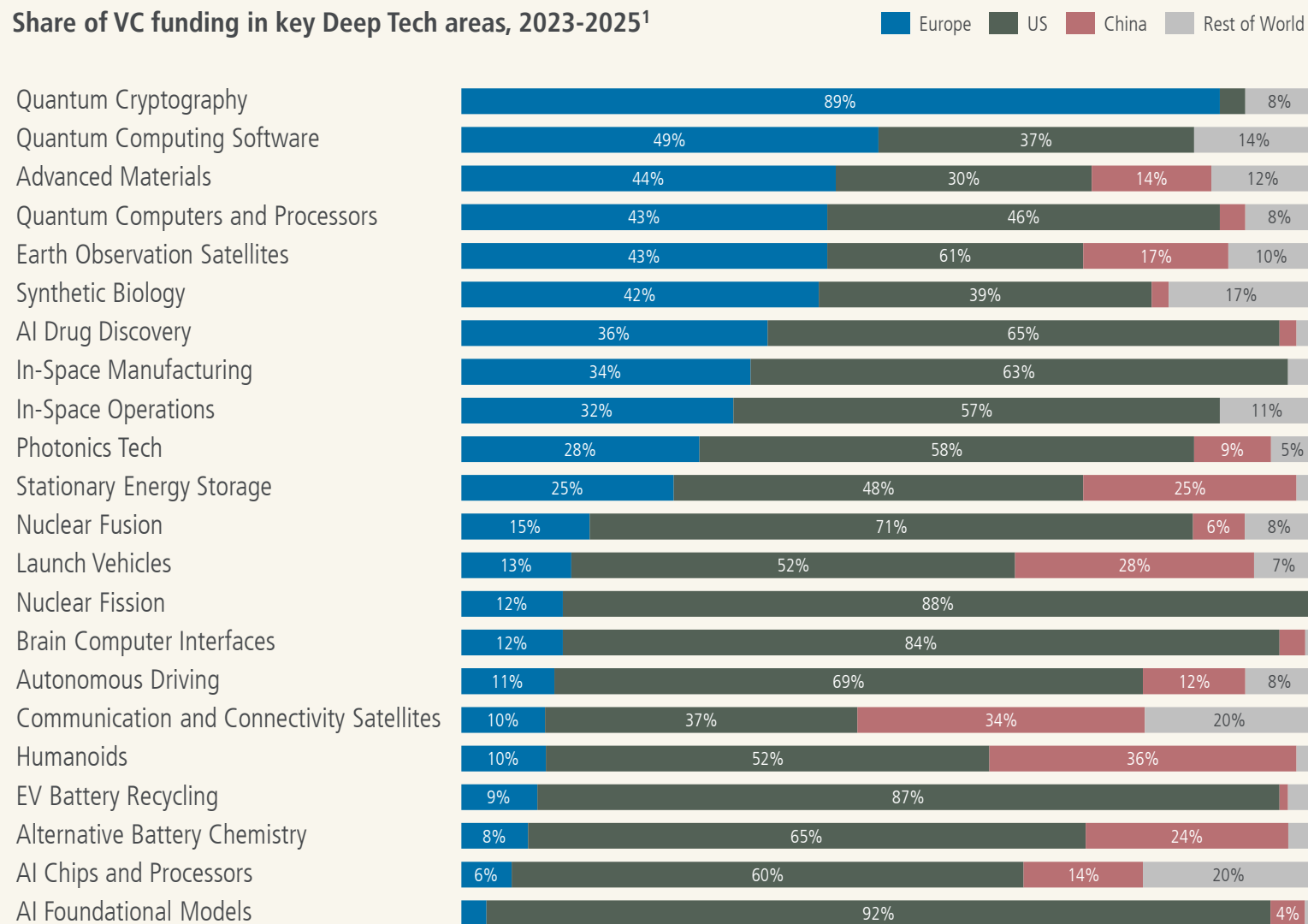
SANDER VERBRUGGE  
PARTNER, NIF



# Quantum technology in Europe is a strong capital magnet compared to the rest of the world

Europe is lacking capital attraction in other disruptive fields like AI foundational models, AI chips, alternative battery chemistry, brain-computer interfaces, and nuclear, among others.

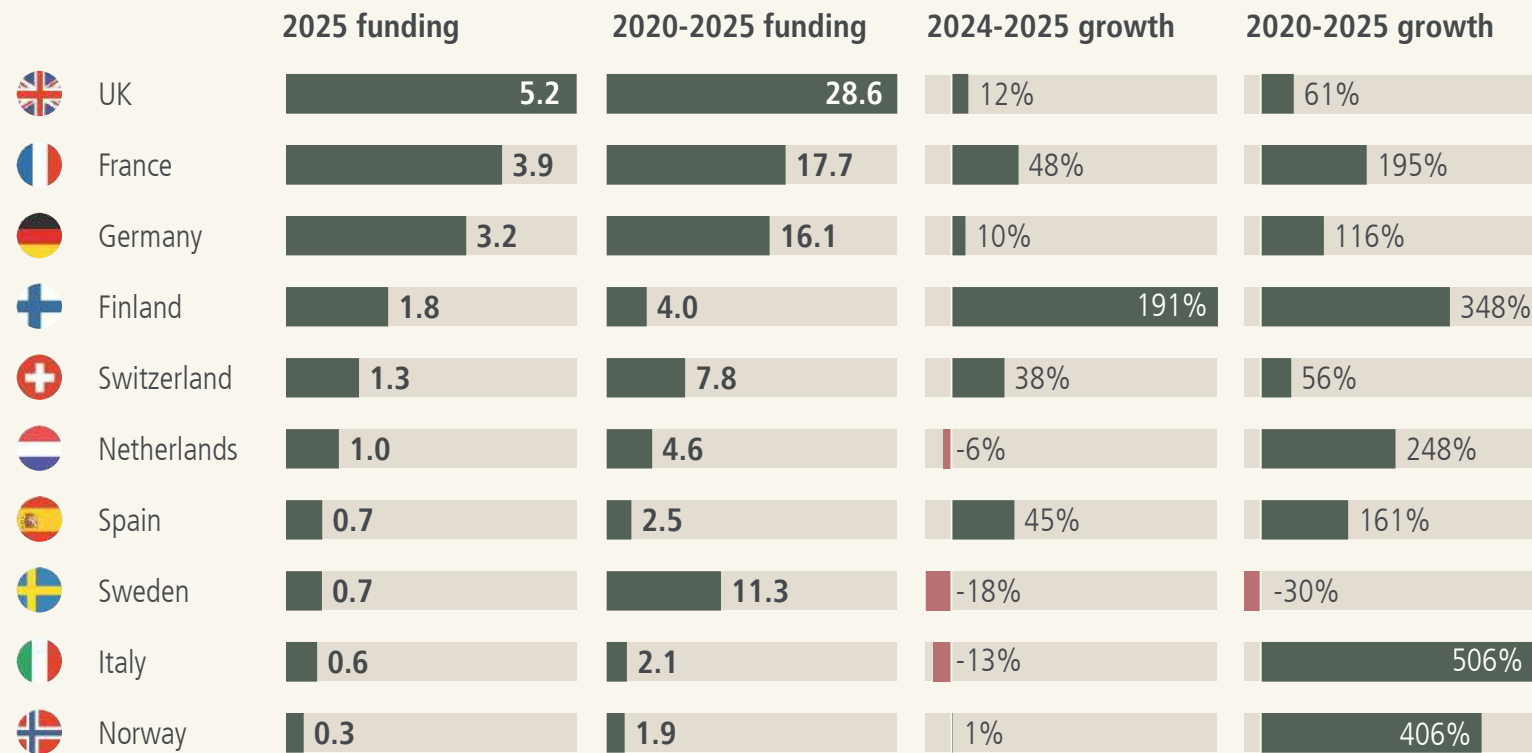
Share of VC funding in key Deep Tech areas, 2023-2025<sup>1</sup>



Some startups might be included in more than one category; 1) China is a leader in some of these segments but not in the lens of VC funding, such as Quantum and Batteries.

# The UK attracted the most funding, followed by France and Germany

Top European countries by Deep Tech VC funding  
\$ bn



“The French ecosystem, with €3.9bn, stands second behind the UK, driven by AI and defence sectors. This is excellent news, yet challenges remain for founders – like access to public procurement, lack of late-stage capital, regulatory complexities, ... – and for investors – fragmented financial markets, access to long-term savings, legal disparities between European states, among others.

Work still needs to be done to enable Europe to fully embrace the technological revolution we are experiencing.”

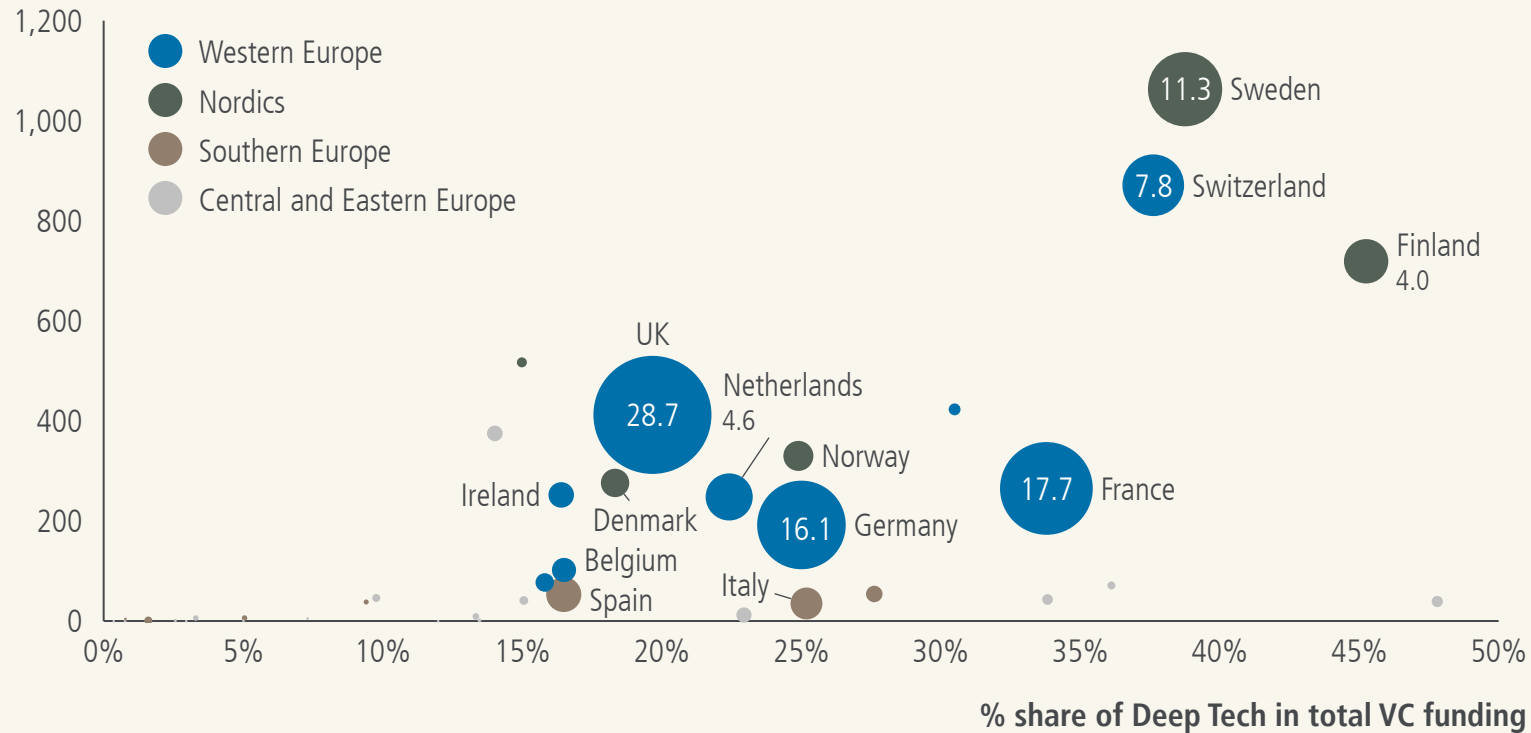
ROMAIN ROULLOIS  
GENERAL MANAGER  
FRANCE DEEPTECH



# Finland, Sweden and Switzerland have the highest proportion of funding going to Deep Tech

Deep Tech VC funding per country, 2020–2025

Per capita (\$)



“Switzerland scores amongst the highest in the world in R&D as percentage of GDP, and consequently, it is no surprise that a significant part of venture capital funding is reaching Deep Tech startups.

Switzerland’s strength comes from its world class universities and research institutes like ETH, EPFL, and CERN, which continuously spin out disruptive technologies, attracting investors from Switzerland and abroad. Combined with Switzerland’s central location and high quality of life, these organizations draw top scientists and academics from around the world making Switzerland very diverse and talent-rich.

Often, we find that these individuals later become part of the startup ecosystem. For example, in many companies within our Swiss Deep Tech portfolio at least one co-founder comes from abroad. This ability to attract international Deep Tech talent makes Switzerland similar to how the US has built its strength in this field.”

VICTORIA LIETHA  
INVESTMENT DIRECTOR AT  
SWISSCOMM VENTURES



# The Nordics are a true Deep Tech powerhouse



SANDRA MALMBERG  
PARTNER AT EQT VENTURES

EQT  
VENTURES

“ Sweden and Finland topping the charts confirms that the Nordics are a true Deep Tech powerhouse. But the real story sits beneath the aggregate data. A significant share of Sweden’s funding in recent years has concentrated around a formidable energy transition cluster, while Finland is broadening its Deep Tech base across quantum, space and biotech.

This momentum is underpinned by world-class technical talent, deep university-industry collaboration, access to non-dilutive capital and public funding alongside venture, and ecosystems that are now getting more mature to support capital-intensive company building in Europe. Although we can and should do more to accelerate the global scaling of European Deep Tech and critical infrastructure.

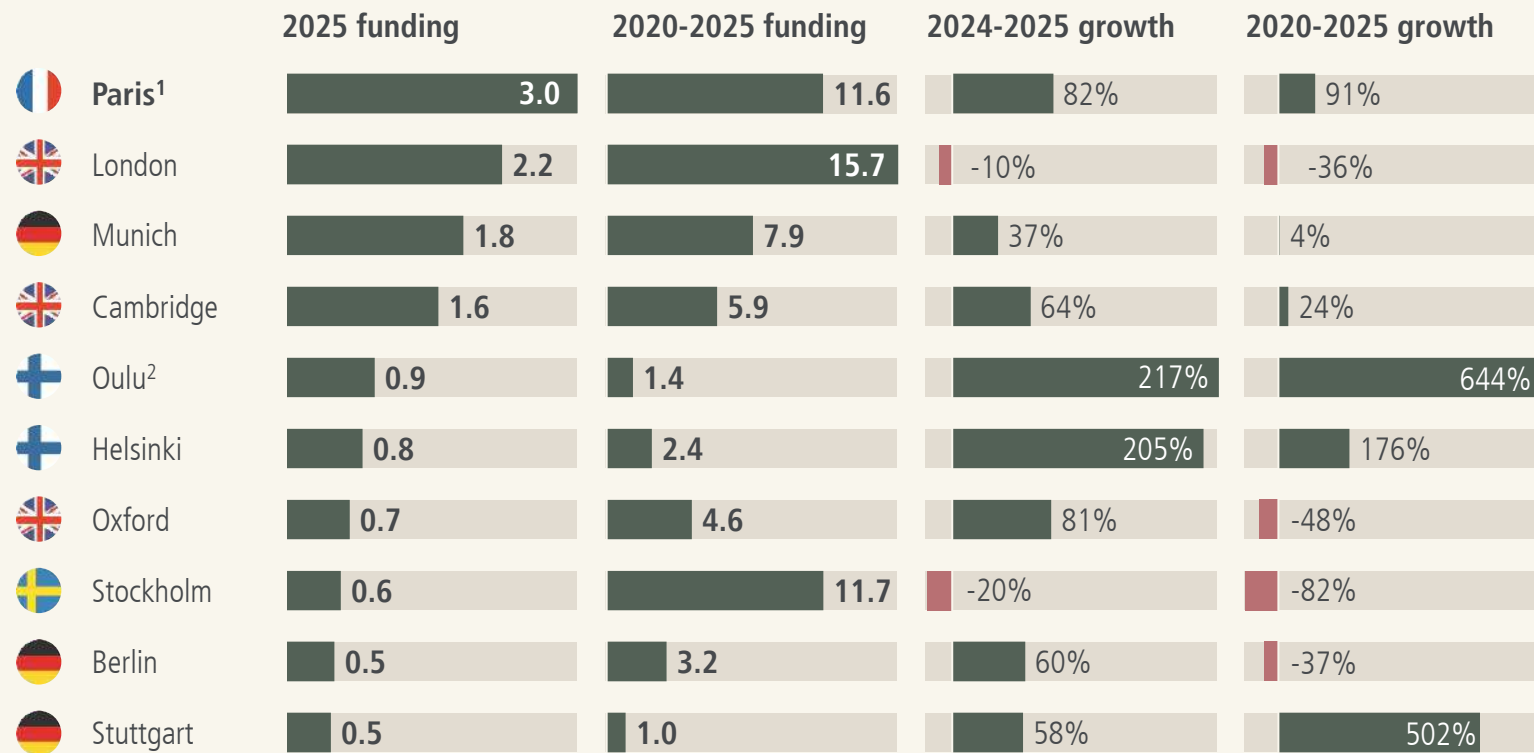
Beyond seeing these companies reach scale, what truly excites us is the next wave: nuclear, fusion, semiconductors and advanced materials companies emerging at Seed and Series A across the region in 2025 and early 2026. The momentum is clearly compounding.”



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# Paris is the top European hub for Deep Tech VC funding in 2025, followed by London and Munich

Top European hubs by Deep Tech VC funding  
\$ bn



“Paris combines world-class research institutions, a mature startup ecosystem, and a strong network of Deep Tech investors.

The city is increasingly where Europe’s most ambitious science-based companies are founded and funded.”



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1) Mistral AI accounted for 62% of Deep Tech funding in Paris in 2025  
2) 98% of Oulu 2025 funding came from Oura

NICOLAS AUTRET  
PARTNER AT WALDEN  
CATALYST VENTURES




















# Paris, Cambridge, London, Munich, Stockholm, and Zurich are among the top 20 Deep Tech hubs globally

## Top 20 of world's largest and most successful Deep Tech ecosystems

Hubs are identified by a combination of VC investment, enterprise value, ecosystem momentum, unicorns, university linkages and patents.



» Access full report

#1		Bay Area	#11		Los Angeles
#2		Boston	#12		Munich
#3		Paris	#13		Stockholm
#4		Cambridge	#14		San Diego
#5		New York City	#15		Shanghai
#6		Beijing	#16		Seoul
#7		London	#17		Seattle
#8		Tel Aviv	#18		Singapore
#9		Austin	#19		Tokyo
#10		Toronto-Waterloo	#20		Zurich

“ Deep Tech does not emerge randomly. It is disproportionately seeded in environments where technical human capital is concentrated: leading universities, elite engineering schools, and top-tier research institutes. Across Europe, the geography of Deep Tech closely mirrors the geography of scientific excellence, reflecting the cumulative and path-dependent nature of frontier innovation. Founders with elite academic backgrounds benefit not only from technical training, but also from access to dense knowledge networks, institutional credibility, and early signalling advantages in capital markets.”

MARTIN KUPP  
PROFESSOR FOR  
ENTREPRENEURSHIP AND  
STRATEGY AT ESCP  
CO-FOUNDER AT  
RENAISSANCE FUSION



LAKE  
STAR

(w)<sup>C</sup>  
Walden Catalyst

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ESCP  
BUSINESS SCHOOL  
RENAISSANCE  
FUSION

# The European Deep Tech ecosystem is structured around two super clusters: the *New Palo Alto* and the *Alpine Tech Cluster*

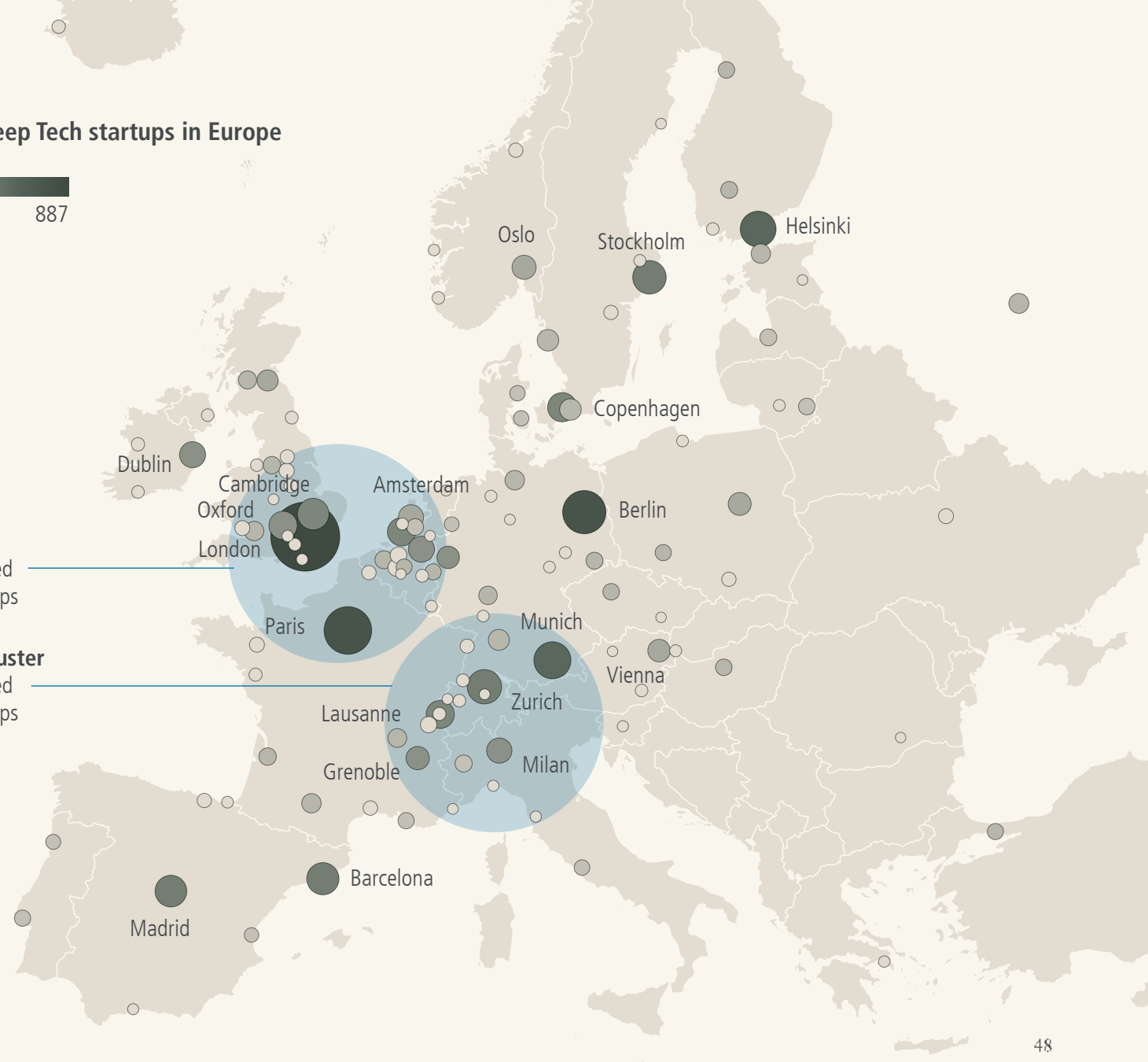
They concentrate respectively 30% and 13% of all European VC-backed Deep Tech startups.

VC-backed Deep Tech startups in Europe



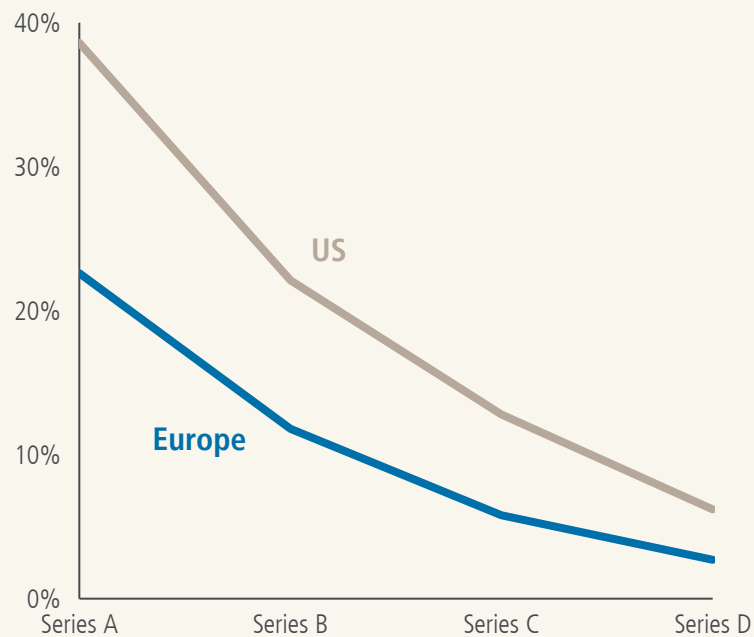
**New Palo Alto**  
2500+ VC-backed  
Deep Tech startups

**Alpine Tech Cluster**  
1100+ VC-backed  
Deep Tech startups

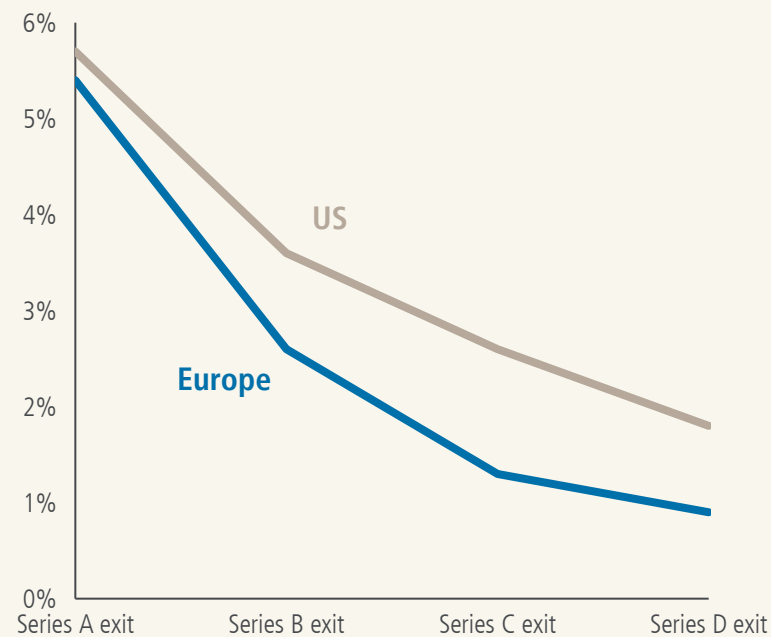


# There is a strong gap in conversion rates between the US and Europe. The gap is also seen in exit rates of Deep Tech companies

Deep Tech round conversion rates Europe vs. US  
2010-2020 seed rounds



Deep Tech exit rates Europe vs. US  
2010-2020 seed rounds



“In our view, the US-Europe gap in Deep Tech exits and follow-on round conversions does not reflect a shortage of innovation in Europe. Rather, it reflects the reality that successful Deep Tech companies require orders of magnitude more capital to reach scale – and that level of follow-on capital remains scarce in Europe relative to the US.”



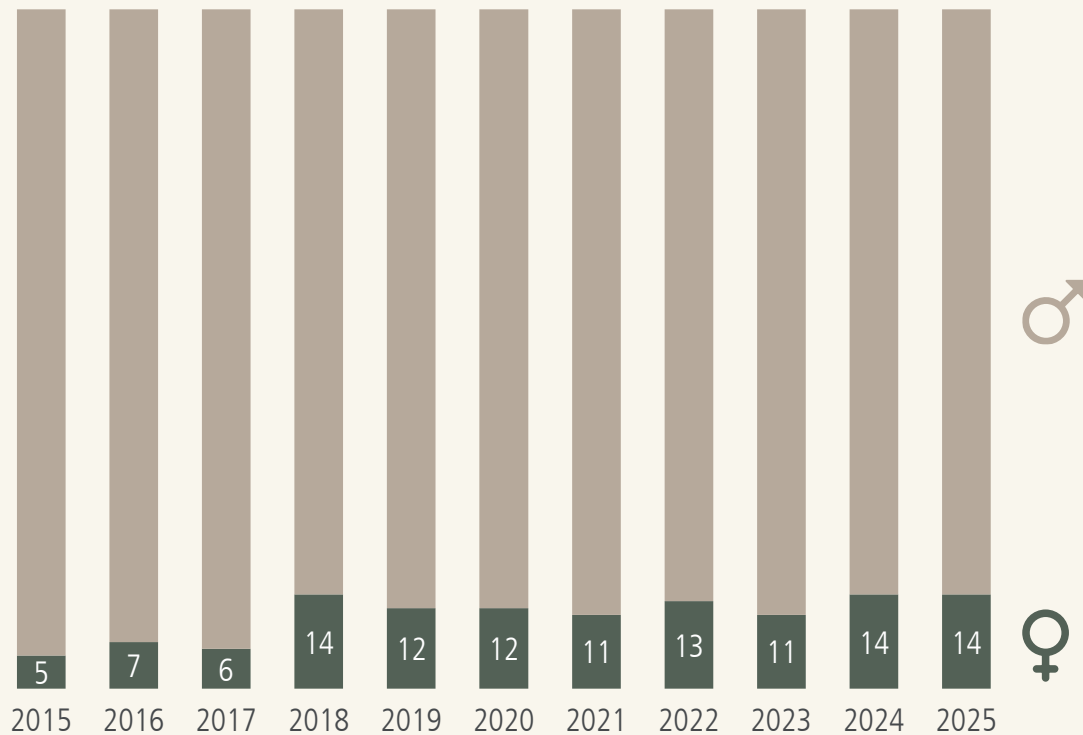
NELS NELSEN  
MANAGING DIRECTOR  
AND CEO AT MENALTO



# There is still a long way to achieve gender inclusion in European Deep Tech and no improvement over the last eight years

VC investment in European Deep Tech startups by share of founder gender

■ All male founders ■ At least one female founder



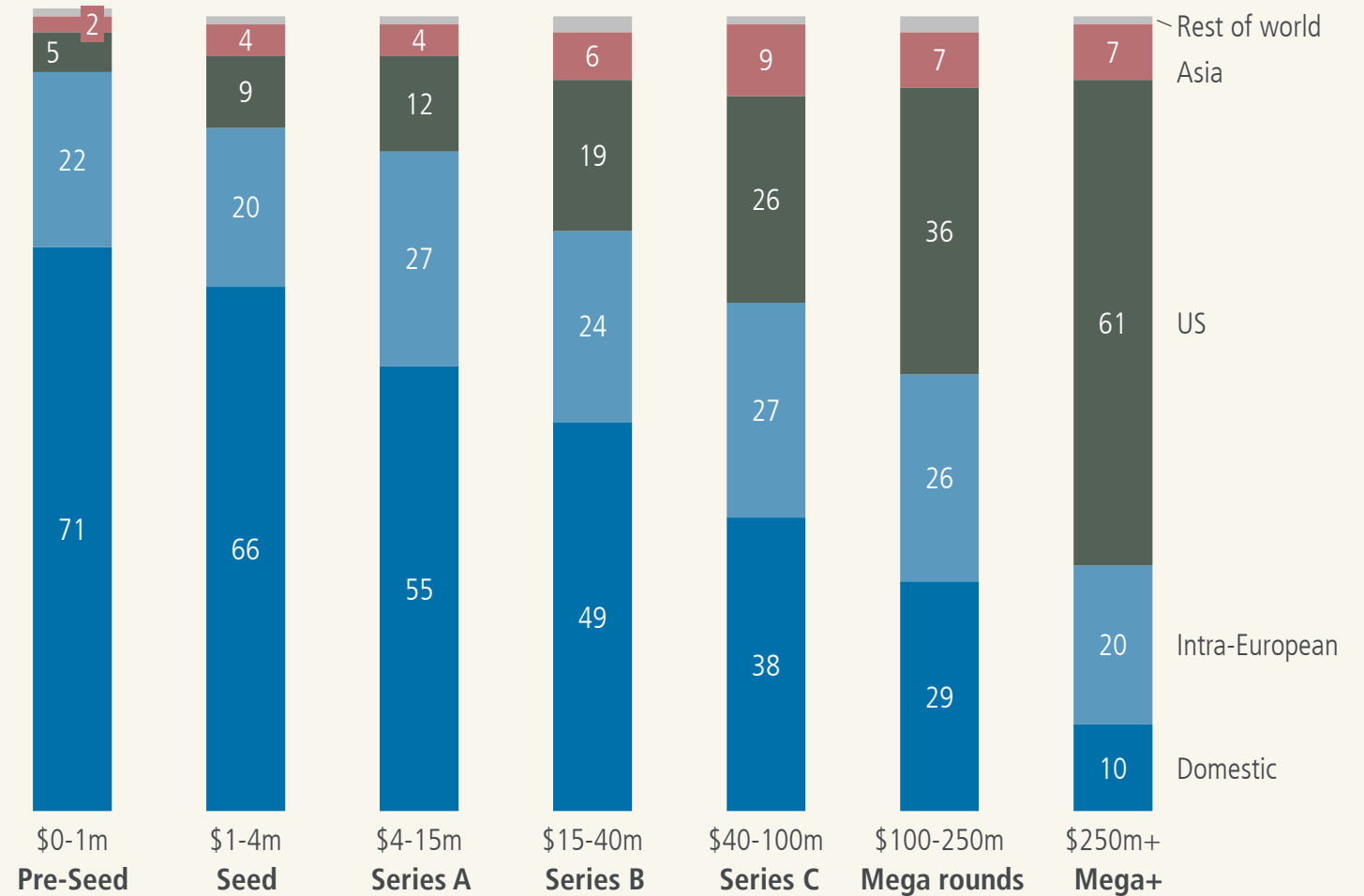
Selected VC rounds in European Deep Tech with at least one female founder in 2025

Startup	Funding round	Focus
<b>synthesia</b>	\$393m Series D + Late VC	AI video generation
<b>DEXORY</b>	\$100m Series C	Robotics and AI for warehouse automation
<b>einride</b>	\$151m Late VC + Convertible	Electric and autonomous road freight
<b>SCINTIL PHOTONICS</b>	€50m Series B	Integrated photonics for AI factories
<b>nyobolt</b>	\$30m Late VC	Battery technology for ultra-fast charging
<b>nu QUANTUM</b>	\$60m Series A	Quantum networking solutions

For late-stage mega rounds, the majority of funding is coming from non-European investors

This gap has widened in recent years.

VC investment in European Deep Tech by investor HQ and round size, 2024-2025

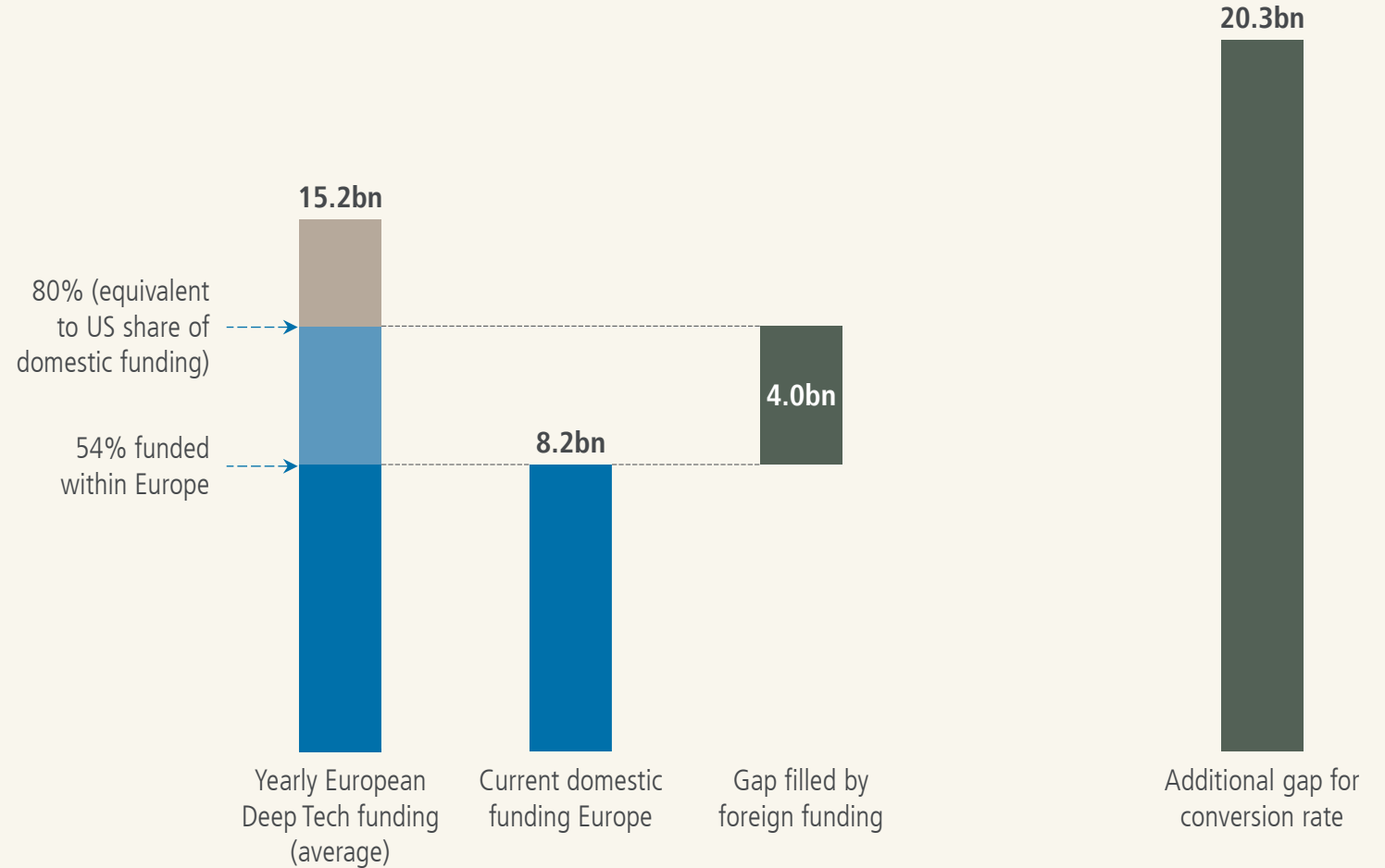


# European Deep Tech startups face a yearly funding gap between \$4.0bn and \$24.3bn

For European Deep Tech rounds of \$15m+ only 54% is funded from within Europe. In the US, the equivalent statistic is 80%. To bring Europe to 80% of domestically funded \$15m+ rounds would require another \$4.0bn per year.

Beyond this, there is a further funding gap because European startups convert at only 50% the rate of US startups to \$15m+ rounds, in part due to capital availability. Closing this conversion gap would require an additional \$20.3bn yearly.

Yearly funding gap for European Deep Tech for rounds \$15m+  
\$ bn



Europe is at a crossroads. For the first time in a long time, I think the direction is clear



**KLAUS HOMMELS**  
FOUNDER & CHAIRMAN LAKESTAR

LAKE  
STAR

“ For years, Deep Tech was treated as an intellectual exercise. Today it is a matter of survival. The prosperity Europe has built is only as durable as the technology it controls.

Europe has the science. What it has lacked is the industrial discipline to turn that science into enduring companies. That is changing. A new cohort of founders is building for structural necessity, not convenience. They are not chasing the next consumer app. They are building the systems that protect borders, secure infrastructure, and reduce strategic dependency on others.

Private capital has to move faster to meet them. The political will is there, arguably for the first time in a generation. The engineering talent has always been there. The gap that remains is capital that is willing to back complexity, long cycles, and genuine defensibility.

I am not optimistic because I am ignoring the risks. I am optimistic because I have seen what European founders can build when the conditions are right. Double down on Deep Tech, and Europe does not just protect itself – it builds the industrial foundation for the next decade of global relevance.”

LAKE  
STAR

(w)<sup>C</sup>  
Walden Catalyst

dealroom.co

# Most dedicated Deep Tech investors in Europe focus on early-stage. They don't have the firepower to lead at Series B+



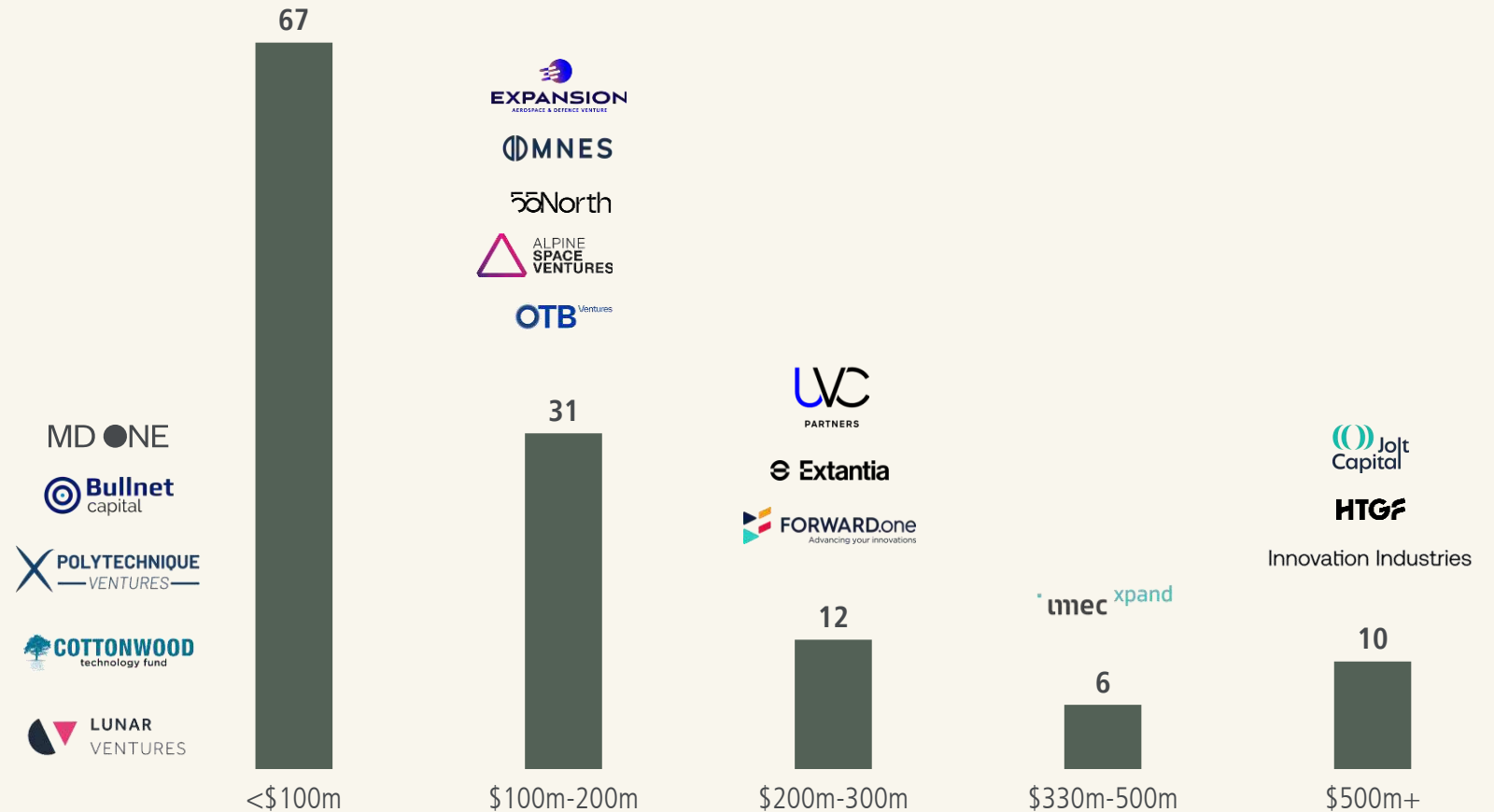
## The Math

Average Deep Tech Series B = \$40m  
 ~ Lead investor commitment = \$20m  
 \$20m x 15 fund investments = \$300m

87% of dedicated European Deep Tech investors have fund sizes below \$300m


→ **Dedicated Deep Tech funds in Europe largely cannot lead at Series B+**

European dedicated Deep Tech investors<sup>1</sup> by fund size (and example of new funds launched in 2024-2025)  
 Number of funds



1) Selection based of funds on % of rounds in DT in time, plus announced fund focus to include only direct funds with most allocation to Deep Tech. The list of dedicated Deep Tech funds in Europe can be found [here](#)

# Efforts are underway to address the gap in growth capital. Several €1bn+ Deep Tech funds are currently launching in Europe

Investor	Fund	Target fund size	Status
 Jolt Capital	Jolt Capital V	€1bn+	€600m first close (Sep 2025)
 mundi ventures	Kembara Fund I FCR	€1bn+	€750m first close (Feb 2026)
In selection by 	<b>EIC Scaleup Europe Fund</b>	€5bn	Selecting fund manager
 KfW CAPITAL	The Germany Fund	€1bn	Just launched in 2026

“ The gap between Europe and the US in growth capital for Deep Tech continues to widen. As a result, we see early exits to technology acquirers – primarily in the US and China – without generating meaningful short-term returns on equity investments and subsidies, nor long-term benefits for the ecosystem. This trend also leads to a persistent loss of technological sovereignty opportunities.

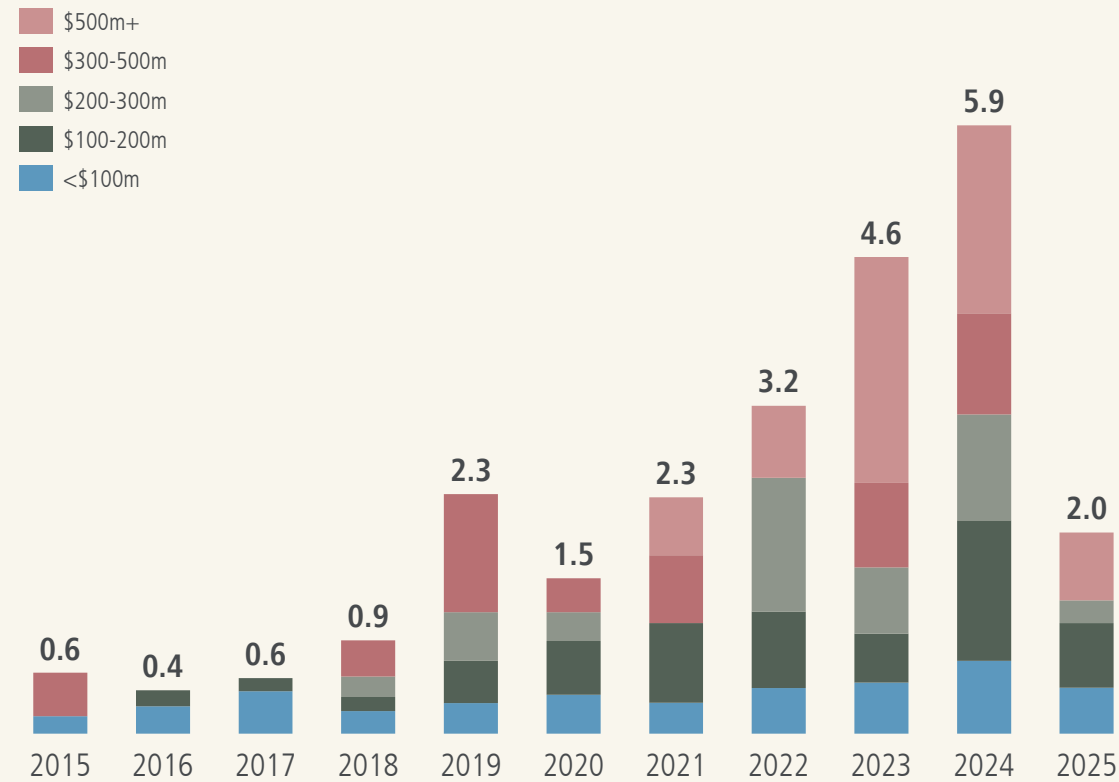
There is now broad consensus among governments, pension funds, and sovereign funds that this gap must be reduced quickly to ensure true technological sovereignty and to foster the emergence of scaled-up technology companies. Initiatives such as the ETCI reflects this shift, and we expect a significant reallocation of assets by European pension funds – from US technology exposure toward European technology growth. Similar trends are also emerging in Asia.”

**JEAN SCHMITT**  
PRESIDENT & MANAGING  
PARTNER JOLT CAPITAL

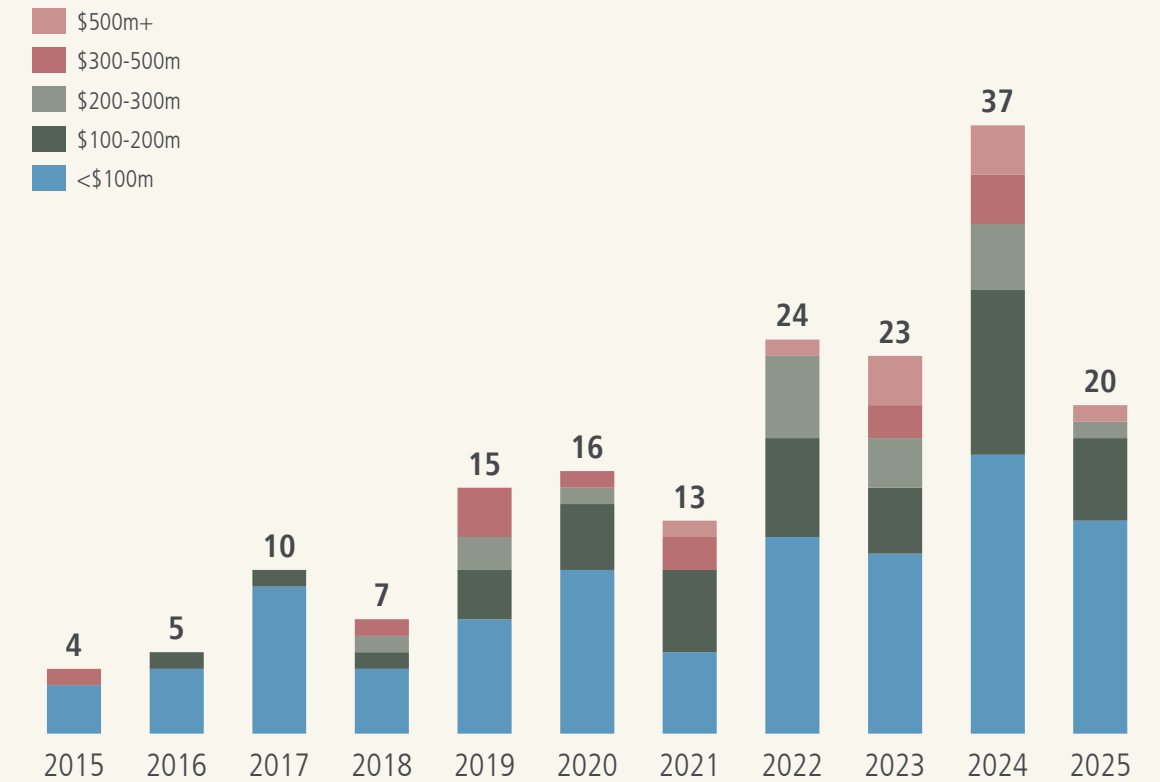


# European Deep Tech funds fundraising reached record-high in 2023-2024. 2025 saw less fundraising activity while these funds gets deployed

**Amount raised by European dedicated Deep Tech investors**  
\$ bn



**Number of funds raised by European dedicated Deep Tech investors**



# In Europe, a wide range of VC funds actively invest in Deep Tech

» Explore online



## Global investors active in Europe

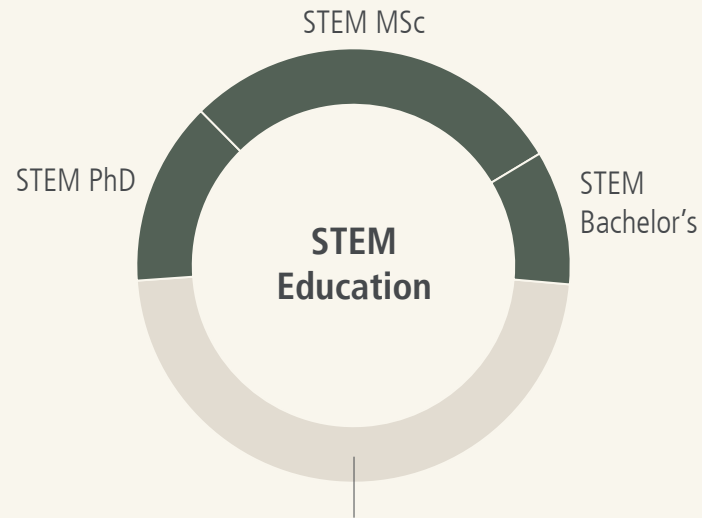
	Dedicated Deep Tech European funds	Sector agnostic European funds	Corporate investors	Global investors active in Europe
Series C+ (Growth)				
Series A/B (Early)				
(Pre-)Seed				



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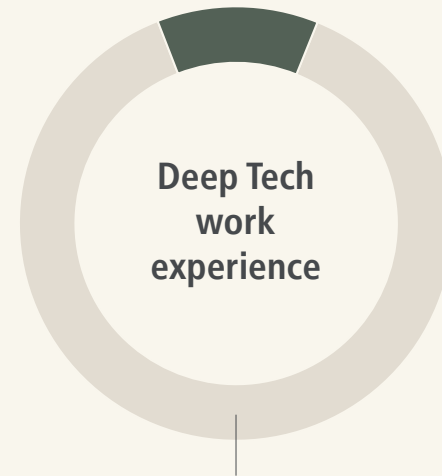
# Deep Tech investor experience and background

This analysis dives into the education and work experience of European Deep Tech investors, revealing that half of European Deep Tech investors have no STEM background and the majority have neither Deep Tech work nor research experience.



53%

of European Deep Tech investors have no educational STEM background



82%

of European Deep Tech investors have no prior Deep Tech company experience



74%

of European Deep Tech investors have no prior research experience

# Most Deep Tech investors can be clustered in two profiles

“ The data suggests that Deep Tech investing is led by two main profiles: investors with strong academic STEM foundations and investors with more commercially driven, execution-focused backgrounds.

Former operators from the sector remain relatively rare, in contrast to generalist venture, where firms have increasingly brought operators into investment teams.

As the ecosystem matures, we are starting to see some specialised funds prioritise operator experience. There are already examples such as Plural, whose partnership is built entirely around former tech operators, demonstrating the strength of an operator-led investment model.”



ELENA OBUKHOVA

PARTNER & HEAD OF DEEPTech PRACTICE AT THE BIG SEARCH

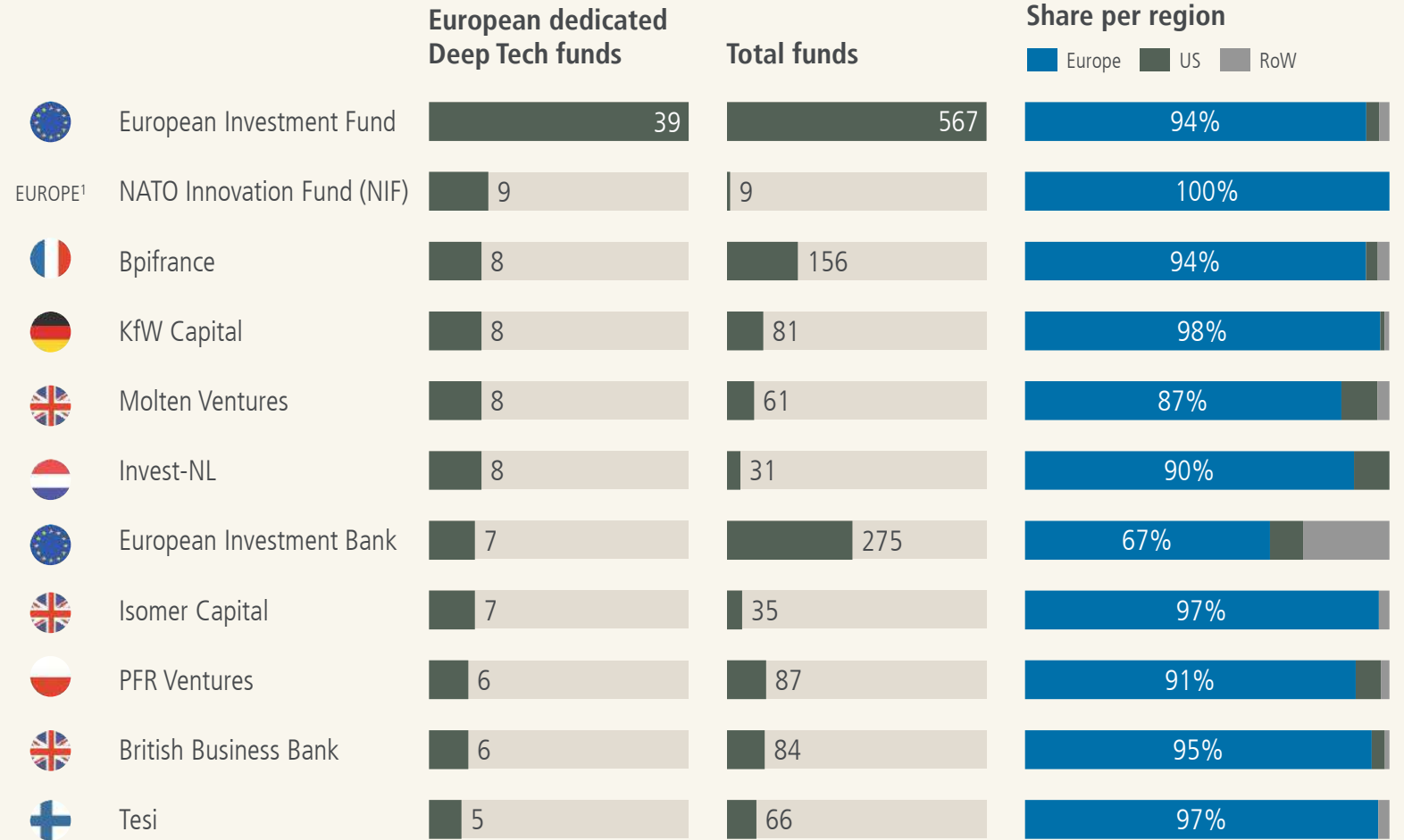
The Big  
Search



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European Deep Tech VC funds are backed by both public and private LPs of which the European Investment Fund is the most dominant

Top LPs in European dedicated Deep Tech funds  
\$ bn



# Europe's greatest asset in Deep Tech is its scientific and engineering depth built over decades



INTERVIEW WITH  
**JOHANNES VIRKKUNEN**  
HEAD OF TECHNOLOGY INVESTMENTS DIVISION,  
EQUITY INVESTMENTS EIF



What makes EIF excited about the European Deep Tech ecosystem?

European Deep Tech is at an inflection point. The combination of world-class research institutions, a growing pool of experienced founders, and increasing industrial demand as well as institutional funding for sovereign technology is creating conditions we have not seen before. EIF is proud to be backing the funds and teams that are turning this European potential into globally competitive companies.

What do you think are the key advantages Europe has on a global stage in Deep Tech?

Europe's greatest asset in Deep Tech is its scientific and engineering depth built over decades through its universities and public and private research base. Increasingly, this is being matched by a regulatory and policy environment that understands the importance of long-term, patient capital for hard technology in a fast moving and changing world. That combination gives European Deep Tech a durable competitive foundation.

How would you like to see the LP base for European Deep Tech funds evolve in the coming years?

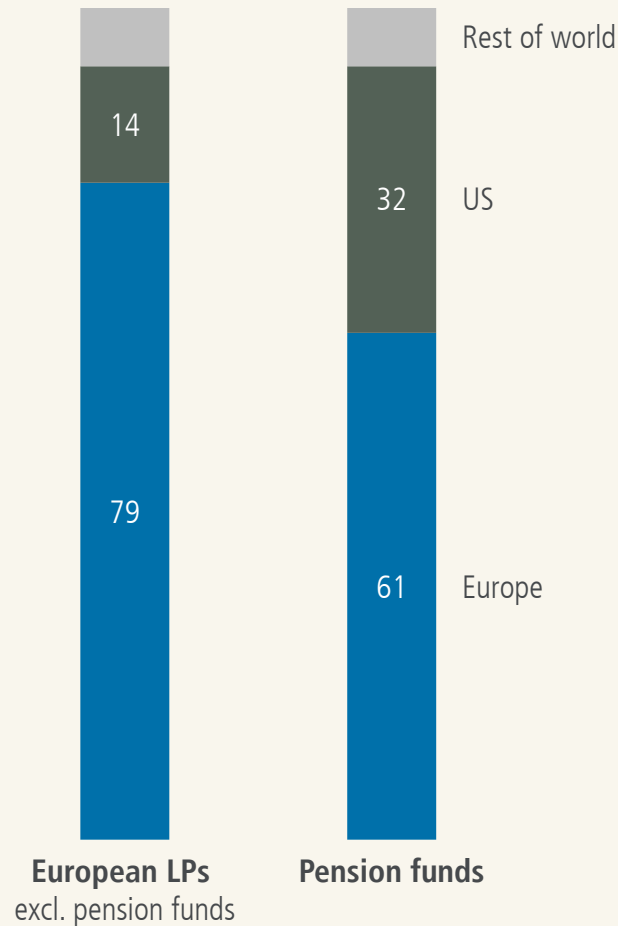
EIF was established to play a catalytic role in European venture, and in Deep Tech that mission has never been more relevant. But public capital alone cannot sustain the scale of ambition the ecosystem now demands we need domestic institutional investors, pension funds and insurers to recognize Deep Tech as a strategically valuable asset class with compelling returns. Building that broader LP base is one of the most important steps Europe can take to ensure its Deep Tech champions are funded all the way to global scale.



# European pension funds allocate 39% outside of Europe, 2x more than the rest of the LP ecosystem

Beyond allocating just <0.1% of their total capital into venture capital (compared to 3-5% of their US counterparts), European pension funds also allocate disproportionately to the US.

European LP allocation by region of funds backed  
Number of funds backed



## European pension funds invest in US funds for three primary reasons

- **Geographic Diversification**  
Spreading assets across different regions reduces risk.
- **Fund Size**  
Large pension funds must follow reporting rules that make small investments difficult to manage.
- **Expected Returns**  
Investors often anticipate higher profits from US market.



## General investment in VC remains low due to legal restrictions and different business customs

Denmark, Finland, and France have led the way in driving pension assets to VC funds with Dansk Vækstkapital in Denmark, Tesi / Finnish initiatives in Finland, and the Tibi Initiative in France.

## There are several initiatives to stimulate European Pension Fund investment in VC

This includes UK Mansion House Reforms, Netherlands Future Pensions Act, and the Bavarian resolution to enable public and private foundations to invest up to 5% of their assets into VC.

# For founders and venture funds, there are a number of public LP programmes in Europe

Public LP	Typical ticket size	Max contribution	Investment focus	Fund structure requirements	Investment requirements	Emerging managers programme	Direct investments in startups	Sources
 EUROPEAN INVESTMENT FUND	Up to ~€100m	≤25% (up to 50–75% in strategic cases)	EU-based Deep Tech SMEs; early to growth stage	EU-domiciled fund, independent GP team, market-standard terms, ≥30% from private LPs	Significant investment in EU member or associated countries	Open to first-time teams	Yes	<a href="#">EIF</a>
<b>INVEST.NL</b>	€5m–€25m	≤50% (≥50% from private LPs)	Dutch Deep Tech; early & growth	Dutch-focused investments, independent team, strong impact & ESG criteria	At least 2× Invest-NL's commitment invested in Dutch-active companies	Open to first-time teams	Yes	<a href="#">Invest-NL</a>
 British Patient Capital	£5m–£100m	Minority stake (<50%)	UK Deep Tech; primarily growth	UK presence, FCA-regulated, commercial basis, strong GP team	Significant investment in UK-based SMEs	Open to first-time teams	Yes	<a href="#">British Business Bank</a>
<b>bpifrance</b>	Flexible (€5m–€50m+)	~20–50% (alongside private LPs)	French Deep Tech; early & growth	French-linked investments, independent GP, ecosystem impact	Substantial portion in French companies or projects benefiting France	Open to first-time teams	Yes	<a href="#">Bpifrance</a>
<b>KfW</b>	€10m–€50m	<20% (25% for emerging managers & impact funds)	German Deep Tech; early & growth	EU-domiciled fund, German investment focus, GP experience required	At least KfW's commitment amount invested in German companies	Open to first-time teams with diverse teams	Yes	<a href="#">KfW Capital</a>

# Patient growth capital is starting to flow in Deep Tech startups

Notable recent Dutch Deep Tech financing with Invest-NL and pension funds direct involvement

	Round	Pension investors <sup>1</sup>	Sector
 AXELERA ARTIFICIAL INTELLIGENCE	\$250m Series C	PME & PMT	AI chips
 VITESTRO	€83m Series C	PGGM	Iron-fuel thermal energy storage
 RIFT	\$70m Series B	PGGM	Medical robotics

“Is the tide turning? For too long European scaleups have been heavily dependent on American and Asian investors for their later stage growth capital. Given the current geopolitical turmoil, this poses a risk of becoming dependent and losing autonomy, both as a continent and for individual companies. Yet, there are positive signs that more and more patient growth capital for bigger funding rounds comes available in Europe and the Netherlands.

At Invest-NL, being the single most active direct investor and LP in the Netherlands for Deep Tech companies, we see a growing interest from pension funds in a more active role. This makes me rather optimistic that the tide is indeed turning.”

RINKE ZONNEVELD  
CEO INVEST-NL



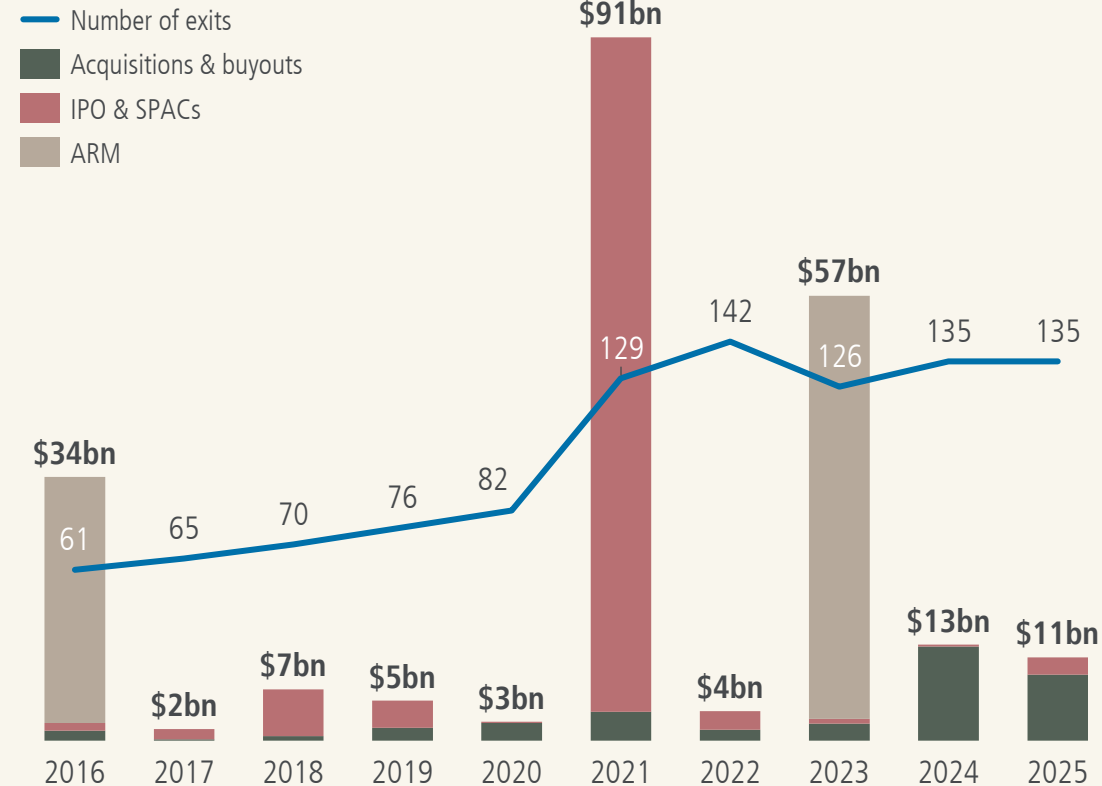
**INVESTNL**

1) Pension funds are also major LPs in Invest NL, Innovation Industries and other funds supporting these companies

# European Deep Tech exits remain M&A-driven, with limited IPO activity

## Exits of European Deep Tech startups in value

\$ bn



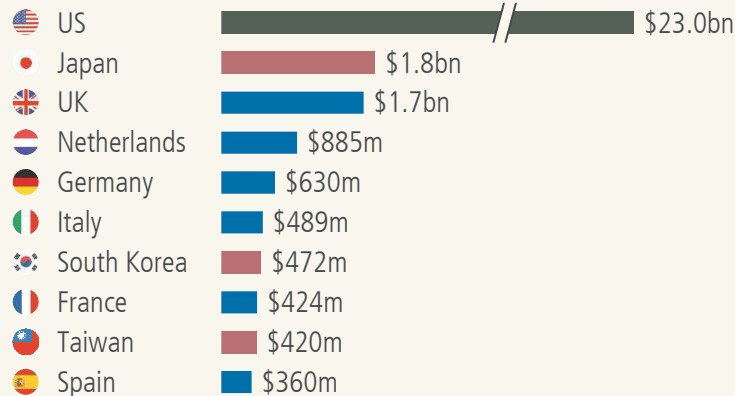
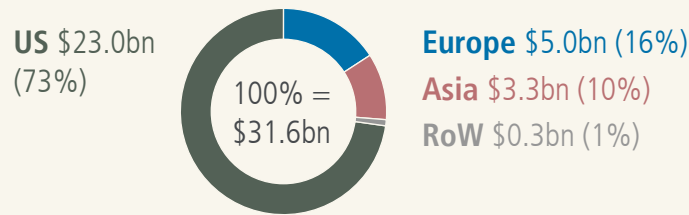
## Selected M&A of European Deep Tech startups in 2025

Startup	Focus	Acquisition type	Acquiror	Value at exit
OrganOx	Organ preservation technology	Acquisition	Terumo Corporation	\$1.5bn
einride	Electric and autonomous freight solutions	SPAC IPO		\$1.4bn
oxford ionics	Trapped-ion quantum computers	Acquisition	IonQ	\$1.1bn
tttech auto <small>part of NXP</small>	System, safety and security for software-defined vehicles	Acquisition	NXP Semi-conductors	\$625m
LAKERA	Security platform for AI applications	Acquisition	Check Point	\$300m
TeraView	Terahertz light for industrial applications	IPO		\$300m
BAEDALEAN <small>APPLIED INTELLIGENCE</small>	Safety-critical AI software for aviation	Acquisition	Destinus	\$225m
Convergence	Long-term memory AI agents	Acquisition	Salesforce	£120m

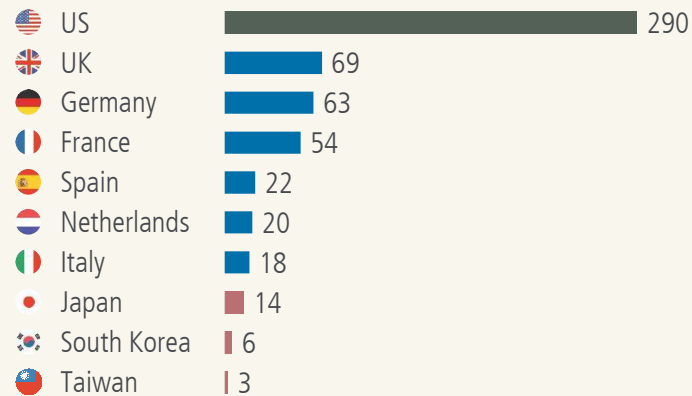
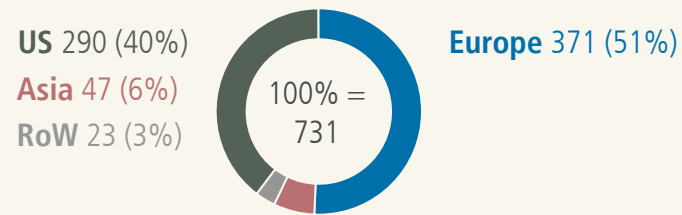
# US buyers are driving \$1bn+ exits

The US accounts for 73% of European Deep Tech acquisition value, but only 40% of deal count. US financial buyers are scaling up proven assets, while US strategic acquirers pay a premium for transformative technologies – a gap European strategics have yet to close.

Value of acquisitions of top acquirers of European Deep Tech startups, 2019-2025



Number of acquisitions of top acquirers of European Deep Tech startups, 2019-2025



“Europe’s best Deep Tech founders aspire to build globally dominant companies. To compete with top US and international peers, they need seamless access to world-class resources on both sides of the Atlantic, pairing Europe’s technical talent, industrial depth, and public-private partnerships with America’s customers, risk capital, and exit markets.”








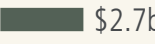








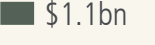


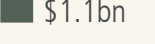


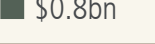


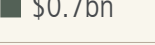


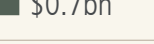

We believe they deserve a true Transatlantic Bridge that provides the connective tissue required to build global champions – which is what we’ve built at Drumbeat.”

STEVEN JACOBS  
FOUNDING PARTNER AT  
DRUMBEAT CAPITAL






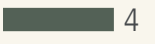



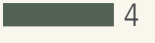

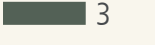










# US corporates and private equity firms dominate the acquisition of European Deep Tech companies

Top acquirer companies of European Deep Tech startups by value, 2019-2025

Acquirors	Acquirors type	Value of acquisitions	Number of acquisitions	Main focus of acquisitions
 Thoma Bravo	Private equity	 \$5.3bn	 1	AI cybersecurity
 Vista Equity Partners	Private equity	 \$3.0bn	 1	Technical enterprise software
 MasterCard	Corporate	 \$2.7bn	 2	AI cybersecurity
 SS&C Technologies	Corporate	 \$1.7bn	 1	Technical enterprise software
 Terumo Corporation	Corporate	 \$1.5bn	 1	Medical devices
 Workday	Corporate	 \$1.1bn	 1	AI
 IonQ	Corporate	 \$1.1bn	 2	Quantum technologies
 Insight Partners	Private equity	 \$0.8bn	 1	AI cybersecurity
 Recursion Pharma	Corporate	 \$0.7bn	 1	AI drug discovery
 AMD	Corporate	 \$0.7bn	 2	AI

Top acquirer companies of European Deep Tech startups by number, 2019-2025

Acquirors	Acquirors type	Number of acquisitions	Main focus of acquisitions
 Meta	Corporate	 5	Augmented reality
 STMicroelectronics	Corporate	 5	Semiconductors
 Siemens	Corporate	 4	Robotics
 Bruker	Corporate	 4	Biotechnology
 Apple	Corporate	 4	Machine learning
 Snap	Corporate	 3	Semiconductors
 Hologic	Corporate	 3	Health
 LexisNexis	Corporate	 3	AI
 Accenture	Corporate	 3	Cybersecurity
 Intel Corporation	Corporate	 3	Semiconductors

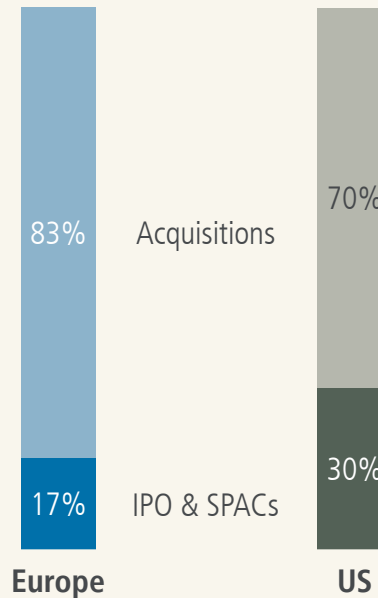
# Public markets are critical for European Deep Tech companies

Startups are remaining private longer, but public markets remain incredibly important to provide liquidity for shareholders and as a source of growth capital for companies wanting to stay independent.

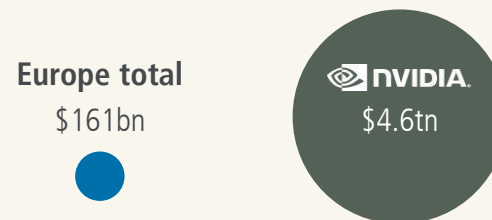
The success of the US model demonstrates that public listings are a primary driver of economy defining, long-term value, allowing VC-backed startups to evolve into global titans.

IPO remains a minor part of the exit market for European Deep Tech accounting for only 17% of exit value since 2022 (excluding ARM re-listing) vs. 30% in the US.

Deep Tech exit value<sup>1</sup> 2022+



Value comparison of listed VC-backed Deep Tech companies<sup>2</sup>



1) Excludes ARM; 2) Market Capitalisation of NVIDIA as at 31st Dec 2025

“Europe’s Deep Tech is world-class, but value has leaked overseas for too long. In the UK, with major reforms delivered and the Private Securities Market – the world’s first regulated crossover market – launched, liquidity and scale are aligned. Significant barriers have been removed to give institutional and sophisticated retail investors access to these companies.

The UK has everything it needs – the companies, the operators, the investors. Our job now is to fix the plumbing: to ensure more patient capital flows into these companies to support their long-term growth.”



# Public markets for Deep Tech show recovery in the US and Asia, but remain muted in Europe

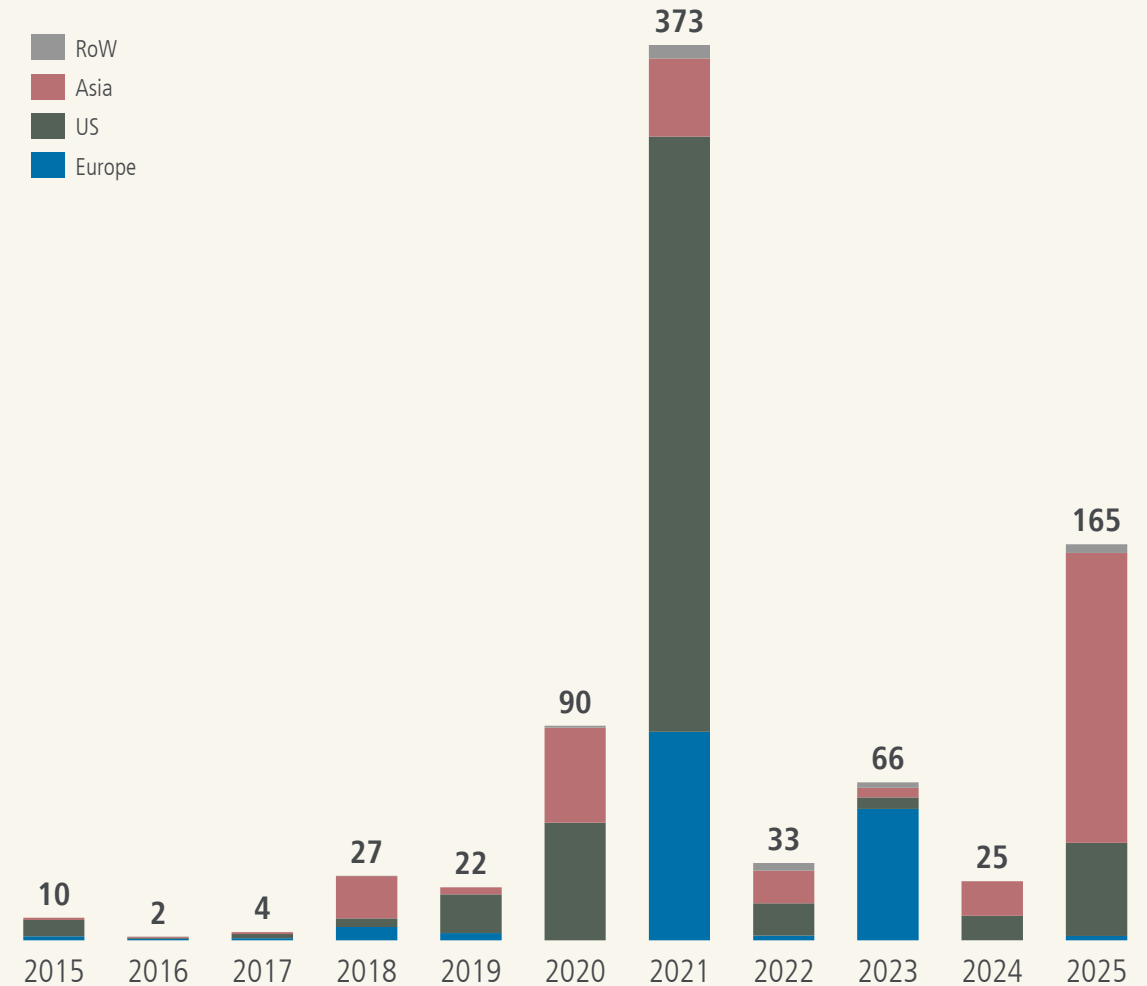
The global IPO market showed signs of recovery in 2024 and 2025 that looks to continue in 2026, including for Deep Tech. While the US and China in particular have seen successful IPOs, the only European VC-backed Deep Tech listing with a valuation above \$500m in 2025 was Einride which merged with a SPAC to list on NYSE.

Europe still has a challenge to encourage its most successful Deep Tech companies to list on domestic exchanges.

Of the 22 VC-backed European Deep Tech companies that had an IPO or SPAC merger at above \$500m valuation since 2015:

- 18 listed on US exchanges and four on European exchanges
- Of the four that listed on European exchanges, two (Darktrace and BenevolentAI) were acquired and subsequently taken private
- Only Oxford Nanopore (LSE:ONT) and Medartis (SWX:MED) remain listed

Combined value of VC-backed Deep Tech IPO value by founding region  
\$ bn



# European Public markets for European Deep Tech – the Turning Point?

European public markets have many strengths<sup>1</sup>. However, similar to the scale-up gap in private markets, there remains a lack of specialized and patient capital (institutional and retail) in Europe that is equipped to understand the value and long-term, high-risk, high-reward nature of Deep Tech.

Reforms in European markets are aiming to address this, including:

- Pension and Insurance reforms like *Mansion House Accord* in the UK, *Tibi Initiative* in France and *WIN* in Germany
- The French & German Financing Investments for Ventures in Europe (FIVE) initiative
- The EU Savings and Investment Union (SIU)<sup>2</sup>
- The LSE PISCES market, allowing private, high-growth companies to offer periodic liquidity to shareholders

These are nascent and it will take time to see if this is having the desired impact.



Sources: 1) [NewFinancial](#), 2025; 2) [European Commission](#), 2025.

“ Europe is at a turning point to ensure its future competitiveness for Deep Tech. While global IPO activity has been restrained in the past years, recent European capital market reforms and initiatives with the goal to mobilize more private capital are very encouraging. There is a clear need to strengthen the European investment culture to finance new generations of global champions developing frontier technologies ‘Made in Europe’. In Europe we have all the ingredients to build more resilient private and public capital markets that are needed for Deep Tech innovators to scale and go public.

At Deutsche Börse, we partner with Europe’s Deep Tech ecosystem through tailored IPO-readiness support for companies and investors. We guide founders early in their capital-market journey and, as one of Europe’s most liquid exchanges with growing retail participation via initiatives like Xetra Retail, offer a strong home for Deep Techs to list.”

STEFAN MAASSEN  
HEAD OF CAPITAL  
MARKETS & CORPORATES  
DEUTSCHE BÖRSE AG



The background features a complex network of white lines and squares on a dark green background. The lines are a mix of solid and dashed, forming a grid-like structure with rounded corners and various paths. Small squares are placed at various points along these lines, creating a sense of connectivity and data flow.

4.

# ORIGINS OF DEEP TECH

# Spinouts make up a growing share of the Deep Tech ecosystem in Europe

Spinouts account for 37% of new Deep Tech startups since 2019, 85% more than in 2010-2018.

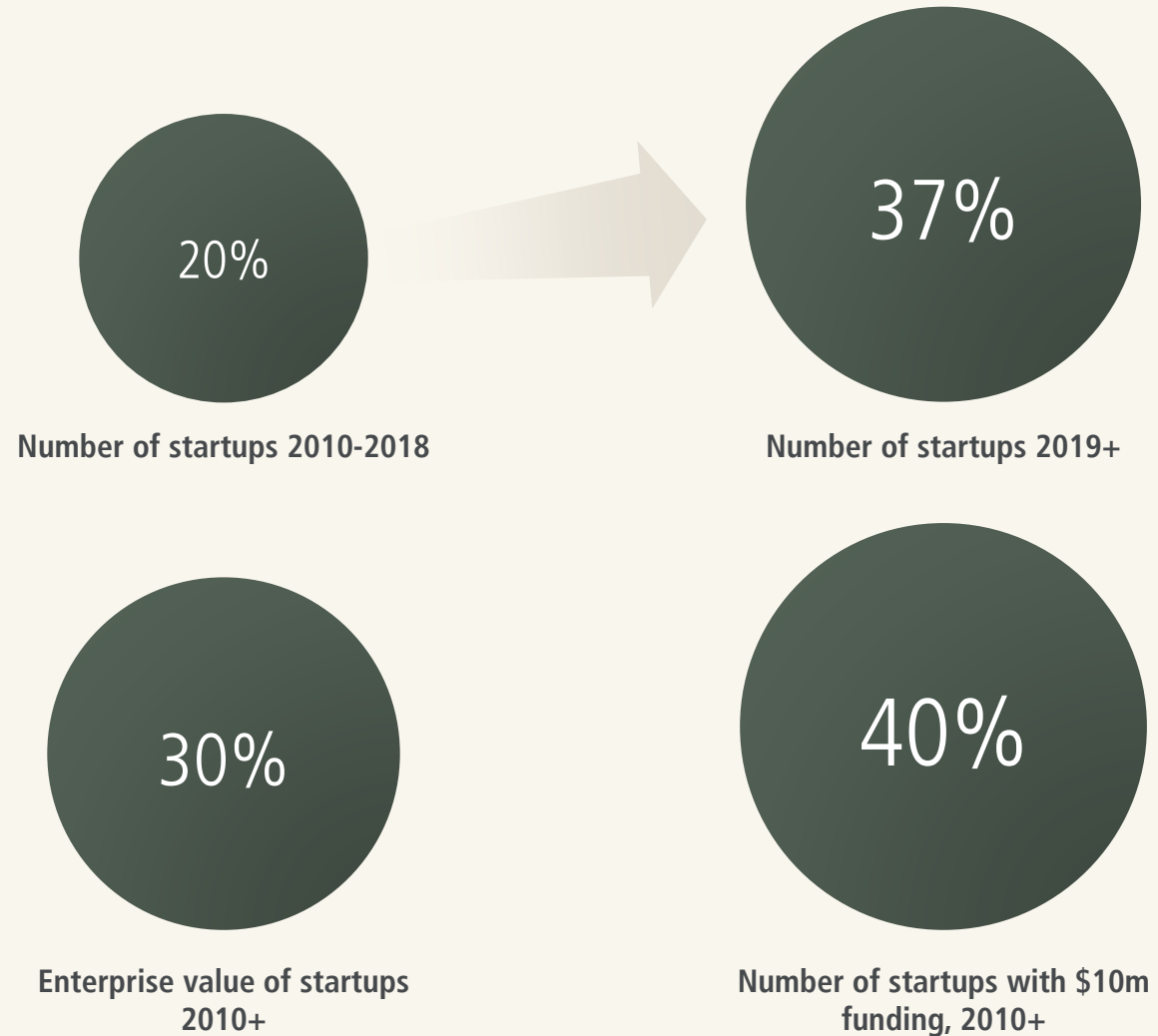
Since 2010, spinouts make up 26% of total startups by number, but a larger share of startups by value and of startups that have raised \$10m+ in funding (30% and 40%).



## Spinout definition

Spinouts are companies that originate from research carried out in a university or research centre.

Spinouts as % of Deep Tech startup ecosystem in Europe

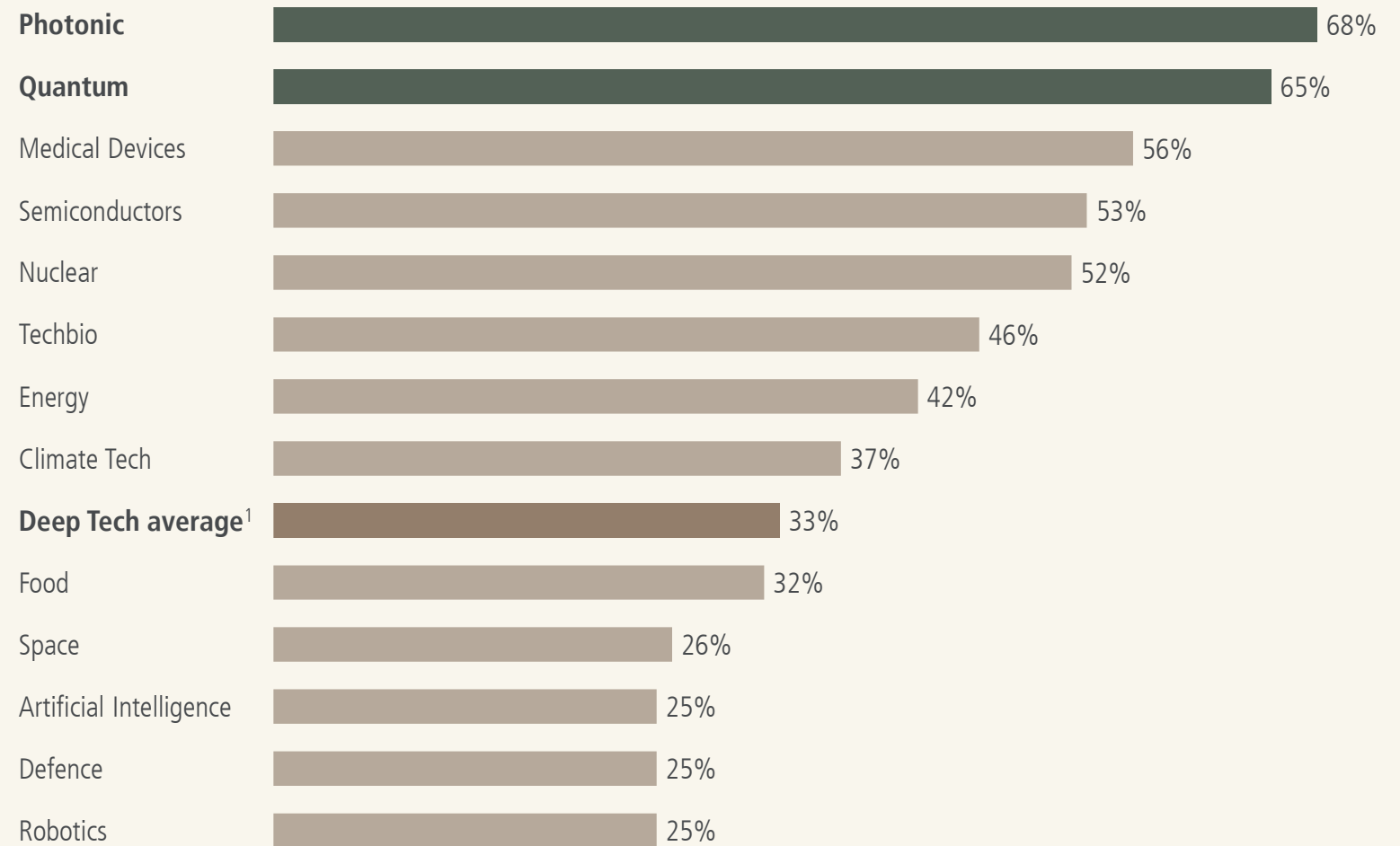


# Most Photonics and Quantum startups are research spinouts

In more health-related areas, Medical Devices and Techbio also stand out as very academically driven.

Artificial Intelligence, Defence, Space and Robotics startups are less driven by academic spinouts, with most companies started by founders with industry knowledge.











Spinouts as % of VC-backed Deep Tech startups by segment in Europe, since 2015



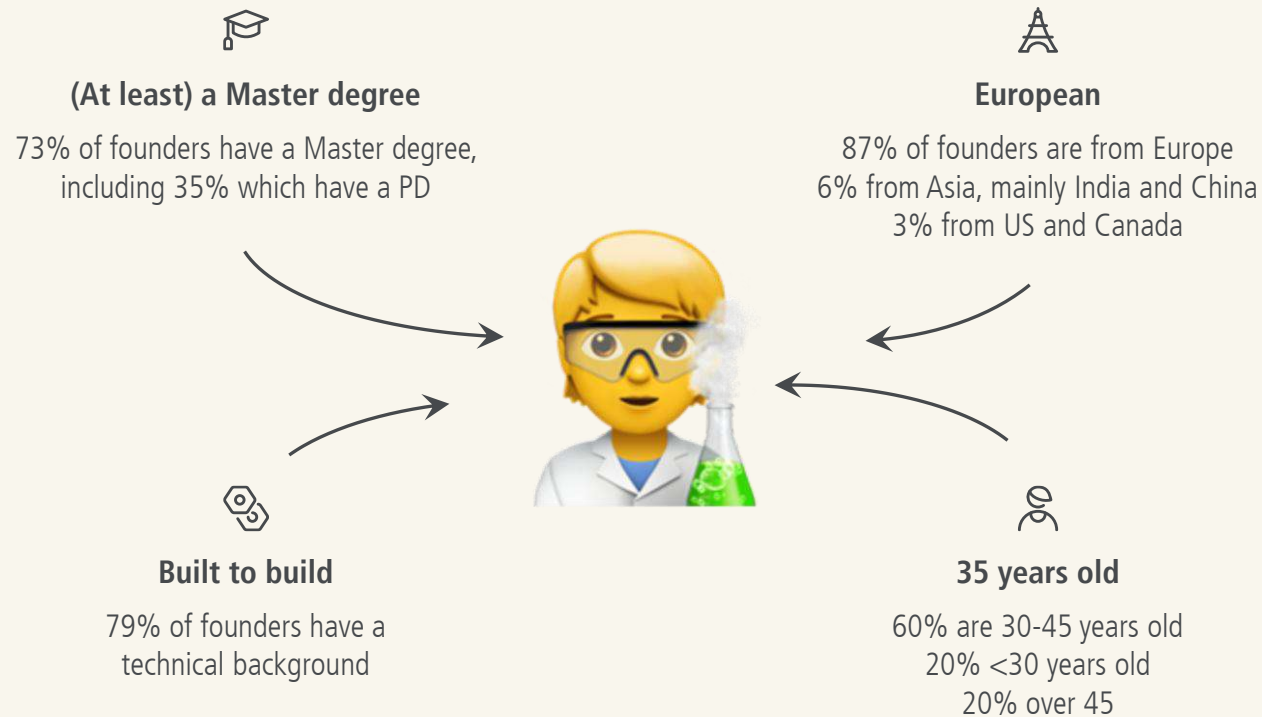
# Swiss and UK universities lead spinout creation in Europe by far

» Explore online

## Deep Tech spinout value creation by university in Europe

	Score <sup>1</sup>	Number of VC-backed spinouts	Number of spinouts since 2022	≥\$10m funding	Unicorns and \$1bn+ exits	Total funding raised \$ bn	Combined enterprise value \$ bn
 ETH Zurich	100	143	59	47	5	2.9	12.0
 University of Oxford	89	102	18	66	3	4.8	16.0
 EPFL Lausanne	89	146	38	52	3	3.5	12.2
 Technical University Munich	81	51	26	23	4	4.6	23.3
 University of Cambridge	72	107	21	58	1	3.2	14.3
 University of Bristol	40	28	3	15	1	4.1	9.6
 Technical University of Denmark	34	66	27	26	0	0.8	3.3
 Imperial College London	32	52	12	23	1	1.3	3.9
 University College London	25	34	7	12	1	1.0	6.0
 Aalto University	24	17	5	8	2	1.3	4.1

# The composite sketch of the European Deep Tech startup founder



**2.5k**  
Deep Tech startups created in Europe since 2020 that have been VC-backed...

**4.3k**  
founders coming from...

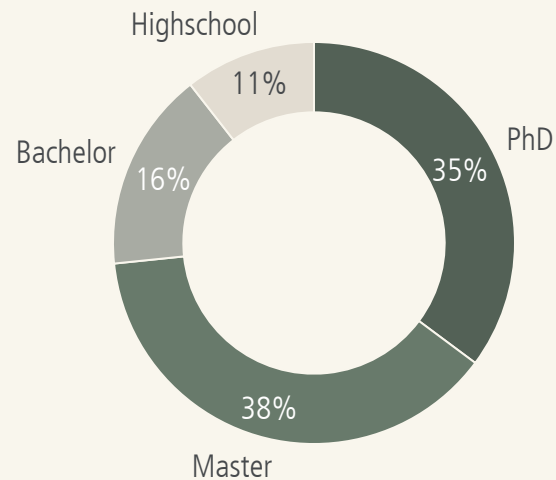
**98**  
different nationalities

# Built on Expertise – Deep Tech founders are technical and highly educated

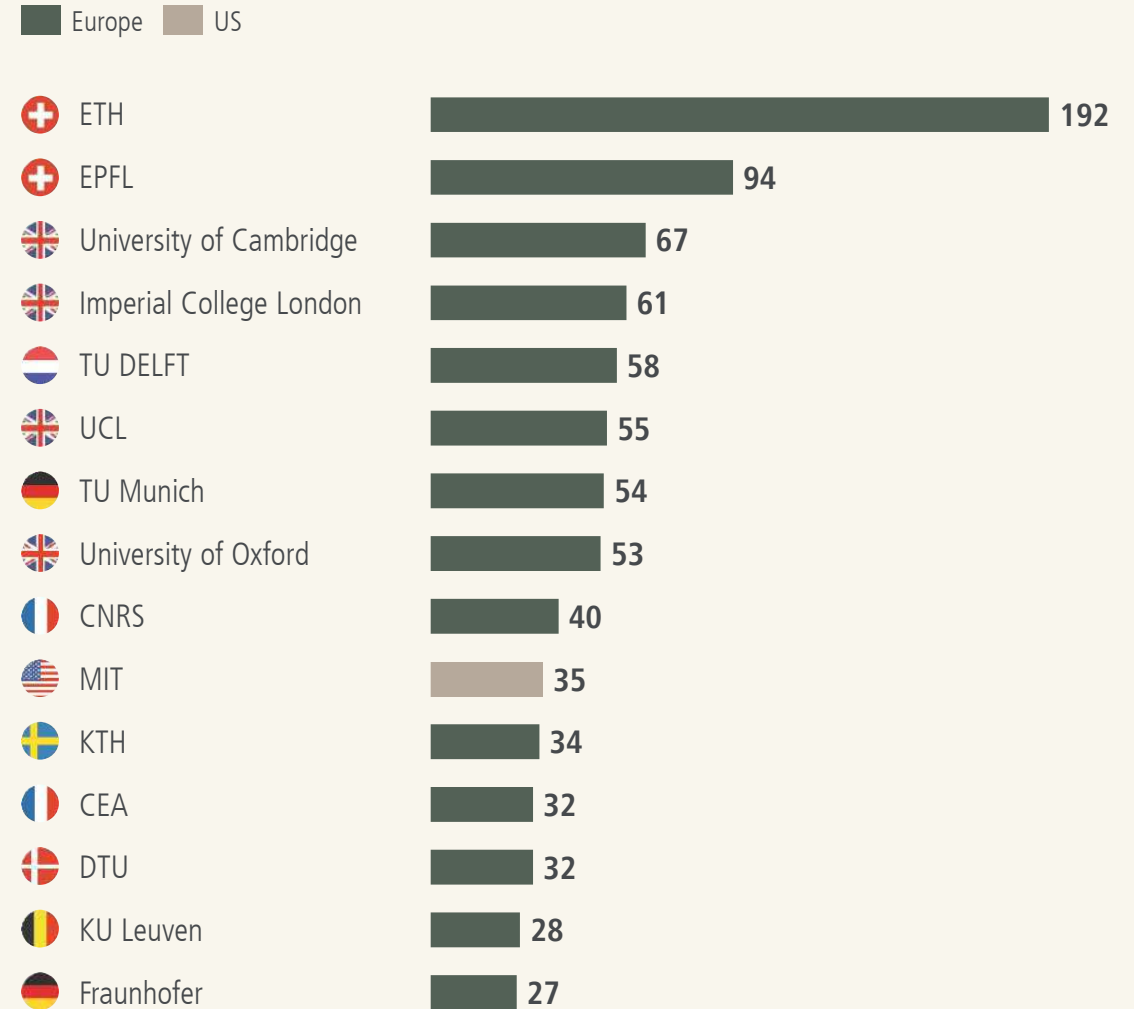
Nearly 80% of VC-backed Deep Tech founders since 2020 have a technical background, and 86% of the startups have at least one technical founder.

Deep Tech founders also tend to be highly ‘educated’ with over one third having a PhD (compared with 10% for non-Deep Tech startups), 73% a Master Degree, and nearly 90% a university degree.

Level of education of Deep Tech founders



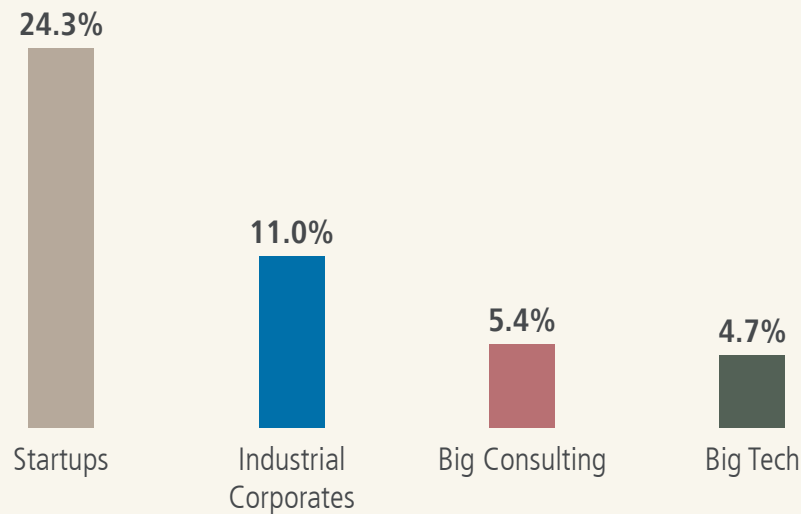
Top universities and research centres by number of alumni-founded startups



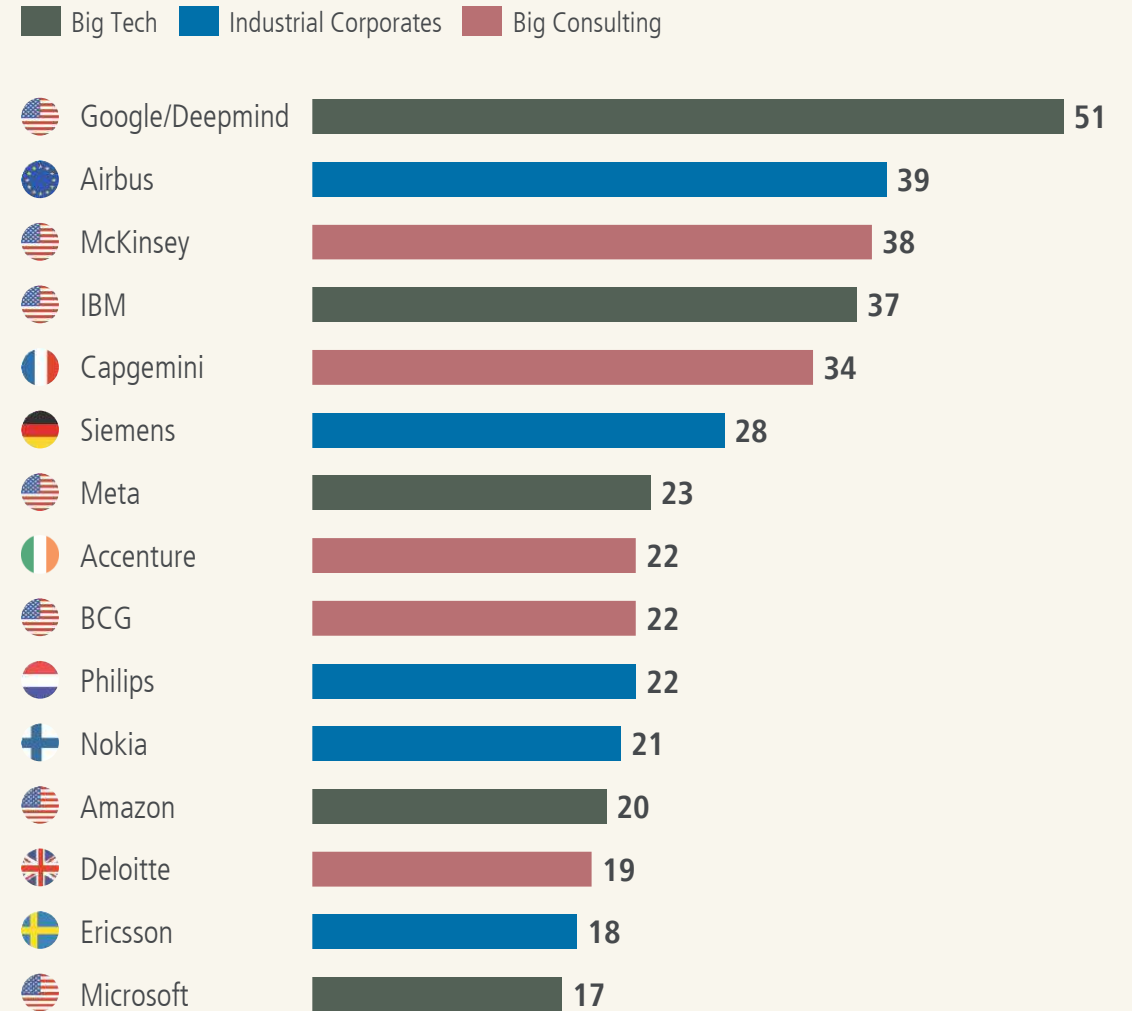
# More European Deep Tech founders have experience in startups than in industrial, tech or consulting giants

While Big Tech and Consulting represent a smaller aggregate share, their individual firms remain the top-ranked alma maters for Deep Tech founders.

## Work experience of European Deep Tech startups founders



## Top companies by number of alumni-founded European Deep Tech startups



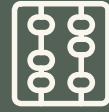
The background features a complex network of white lines and small squares on a dark green background. The lines are a mix of solid and dashed, forming a grid-like structure with rounded corners and various paths. The squares are small and scattered throughout the network, some appearing as nodes or endpoints. The overall aesthetic is clean, modern, and technical.

# 5. SEGMENT DEEP DIVES – BIGGEST TRENDS

# Deep Tech segments covered in the deep dives



NOVEL AI



FUTURE OF COMPUTE



NOVEL  
ROBOTICS



COMPUTATIONAL  
BIOLOGY & CHEMISTRY



NOVEL  
ENERGY



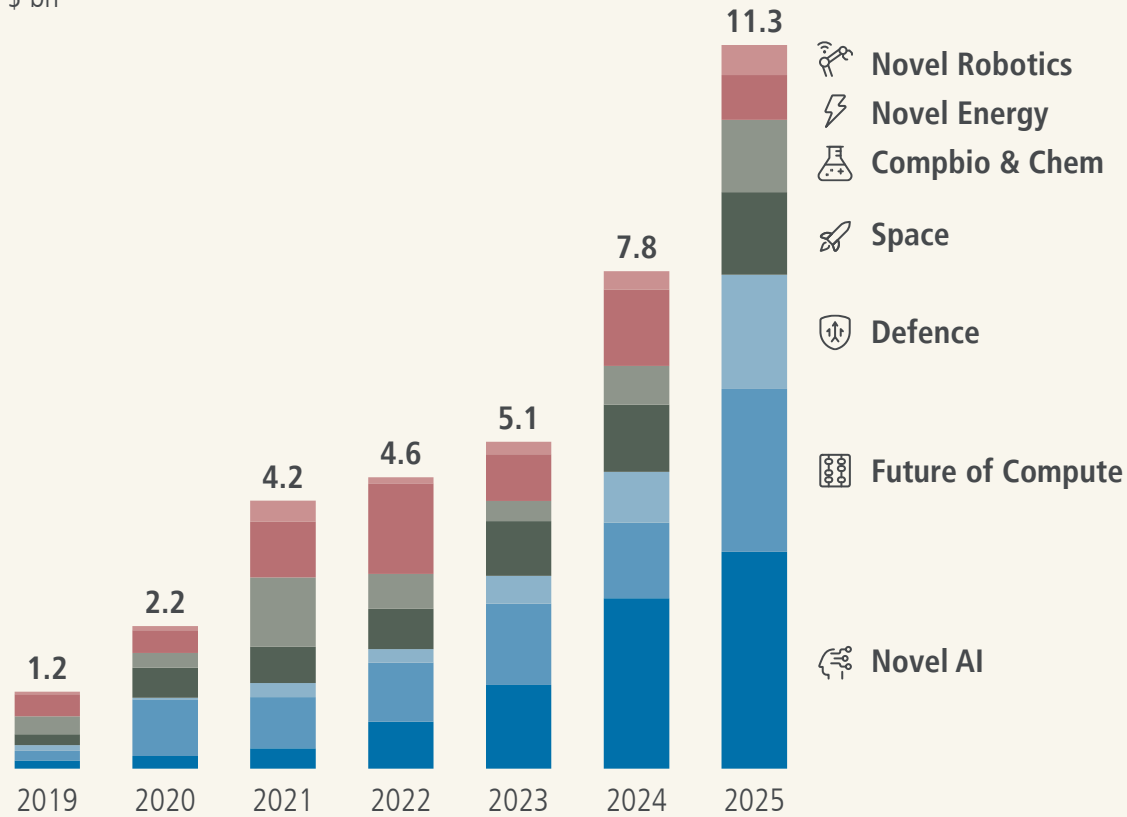
SPACE



DEFENCE

# VC funding at all-time high with \$11.3bn for Novel Deep Tech segments, surpassing last year and up 5x since 2020

VC funding in European Novel Deep Tech startups  
\$ bn



Selected Novel Deep Tech VC-rounds in 2025

Startup	Funding round	Focus	Country
MISTRAL AI	€1.7bn Series C	Novel AI: Foundational Models	
QUANTINUUM	\$800m Late VC	Future of Computing: Quantum computing	
Helsing	€600m Series D	Defence: AI x defence	
Isomorphic Labs	\$600m Late VC	Compbio: AI-driven drug discovery	
QUANTUM SYSTEMS	€340m Series C + Late VC	Defence: surveillance drones	
IQM	\$320m Series B	Future of Computing: Quantum computing	
Black Forest Labs	\$300m Series B	Novel AI: LLMs for image and video generation	
synthesia	\$193m Series D	Novel AI: LLMs for video generation	

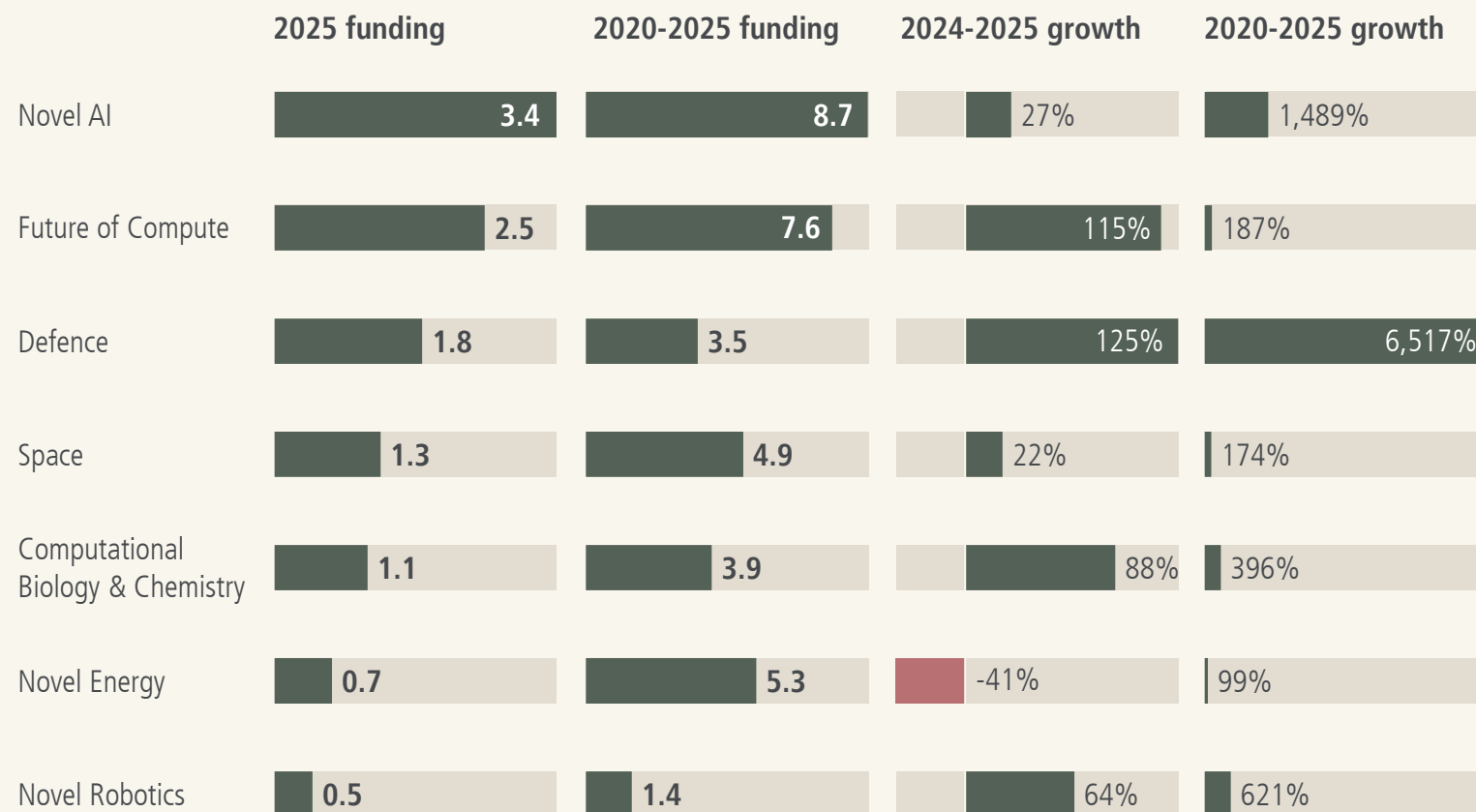
# Over the last year, a broad range of Deep Tech sectors experienced strong growth

Novel AI was again the most funded sector with \$3.4bn in 2025, followed by Future of Compute.

The sectors with most growth YoY have been Defence (125%), Future of Compute (115%), Computational Biology & Chemistry (88%), and Novel Robotics (64%).

Defence and Novel AI have grown the most since 2020.

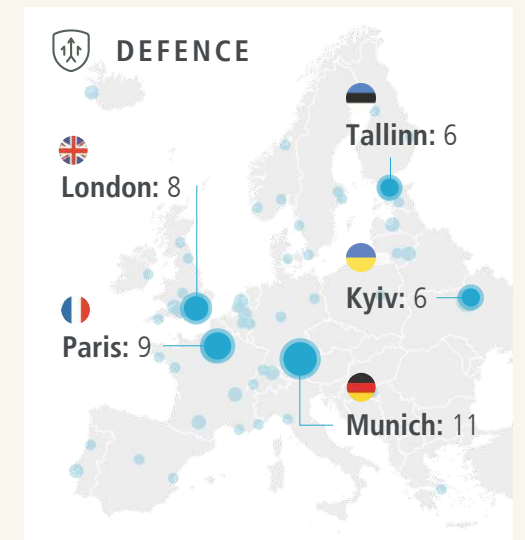
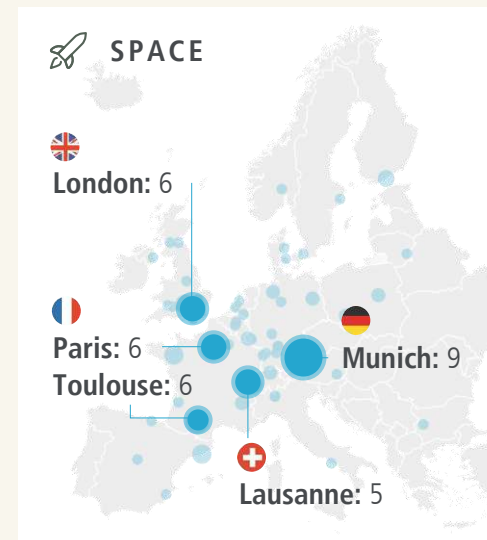
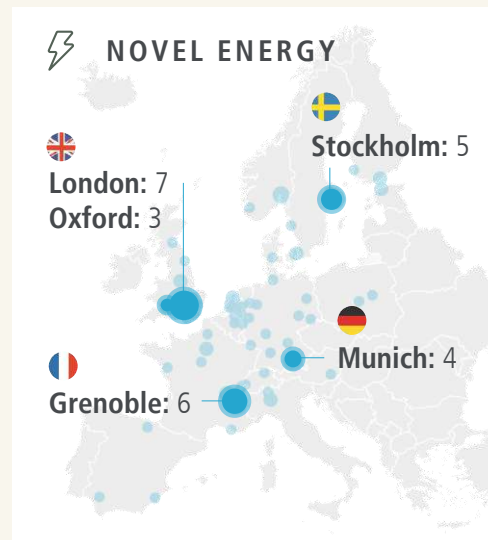
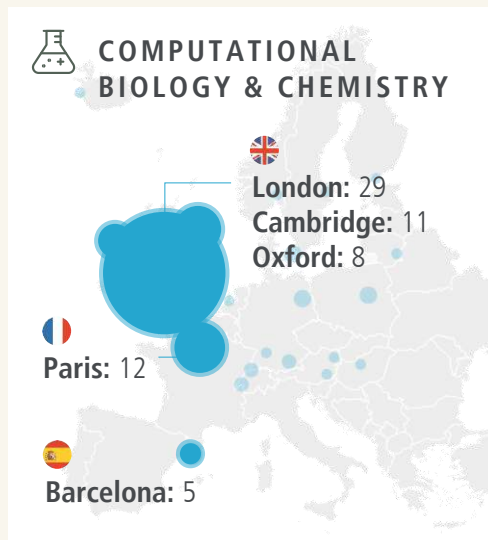
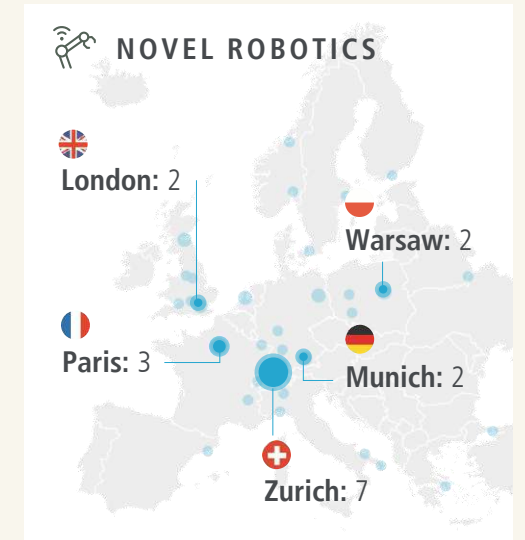
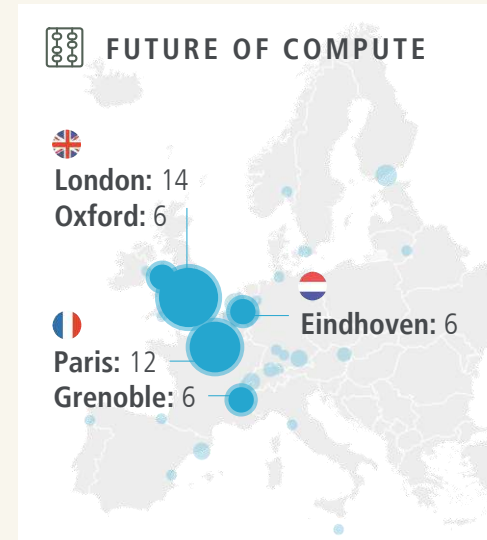
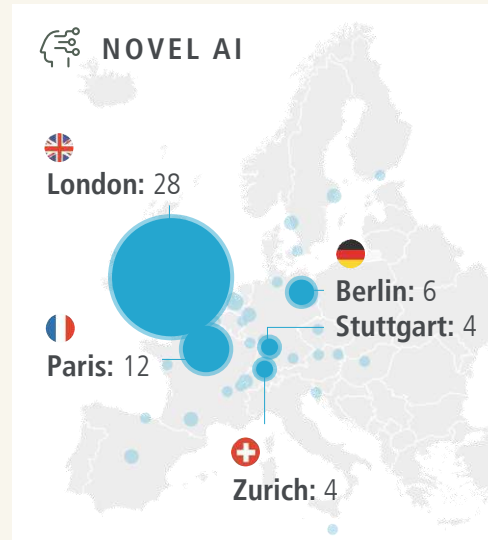
Novel Deep Tech segments evolution in time  
\$ bn



# London is the top hub in most novel segments, while Munich leads in Defence and Space, and Zurich is first in Novel Robotics

Top European hubs by number of startups represented in the Top 100 list for each novel segment

» Explore online





# NOVEL AI

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DEEP DIVE

## EXAMPLES

FOUNDATION MODELS

FLOW MATCHING & IMAGE GENERATION

VOICE SYNTHESIS

VIRTUAL AVATARS

AGENTIC AI

WORLD MODELS

FEDERATED LEARNING

ON-DEVICE AI

REASONING MODELS

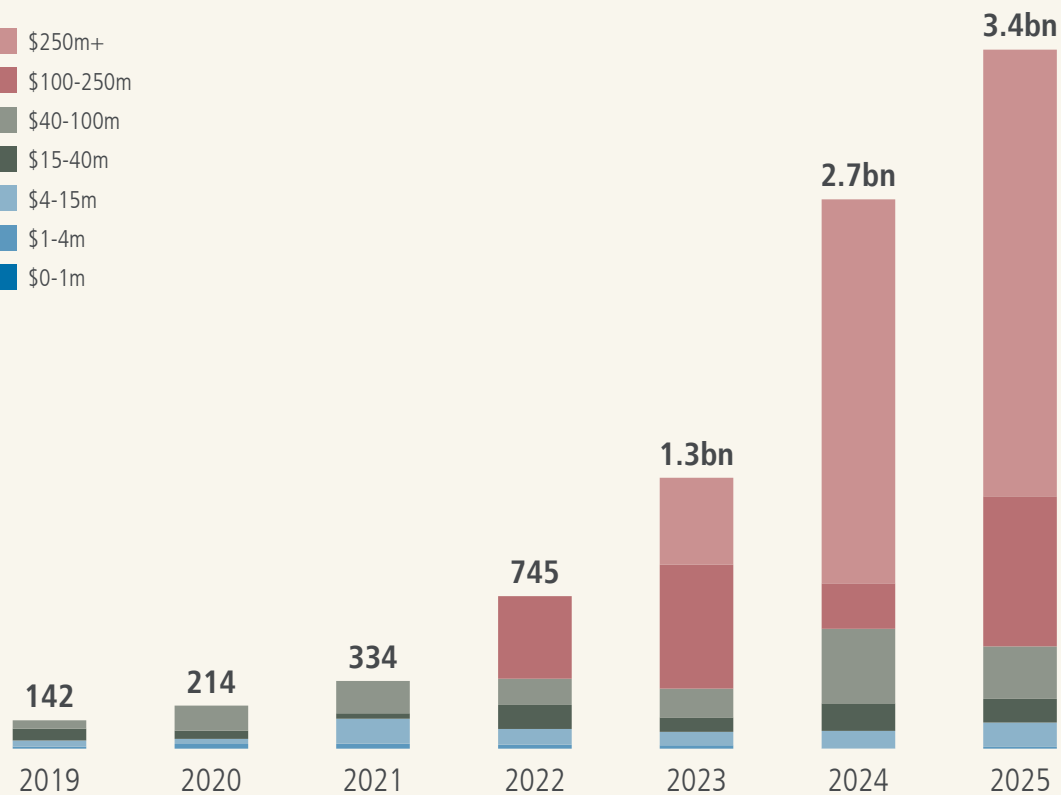
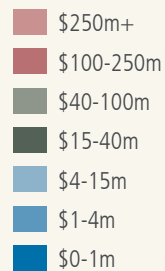
MIXTURE OF EXPERTS (MOE)

SYNTHETIC DATA GENERATION

# Novel AI attracted a record \$3.4bn in VC funding in 2025 driven by LLMs, but with strong activity in AI-driven engineering and world models

## VC funding in European Novel AI startups

Round size in \$ m

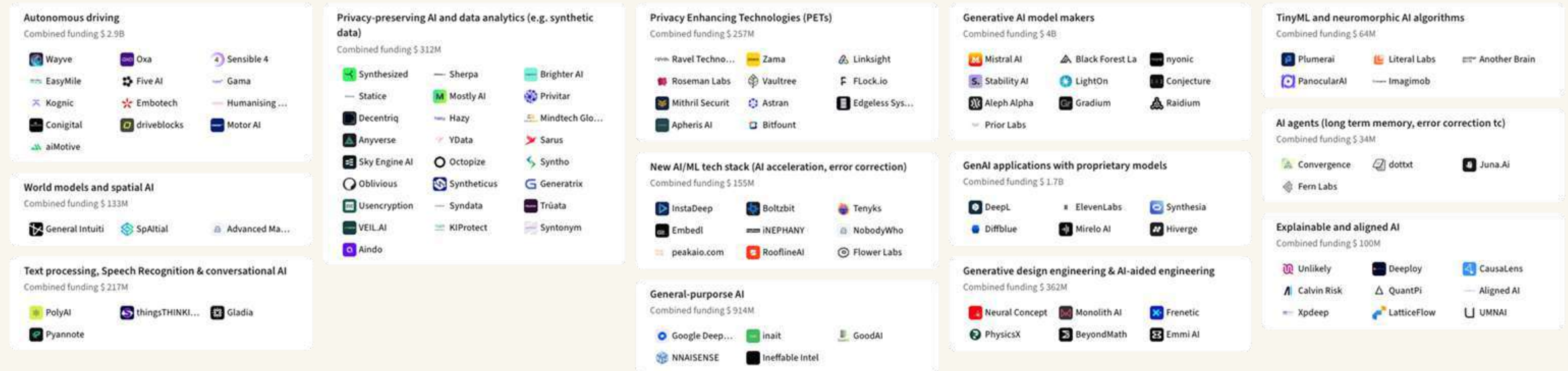


## Top rounds in 2025

Startup	Funding round	Focus	Country
MISTRAL AI	€1.7bn Series C	Foundational Models	
Black Forest Labs	\$300m Series B	LLMs for image and video generation	
synthesia	\$193m Series D	LLMs for video generation	
ElevenLabs	\$180m Series C	LLMs for voice generation	1
PHYSICS X	\$155m Series B	AI-driven engineering	
general intuition	\$134m Seed	World models	
NEURAL CONCEPT	\$100m Series C	AI-driven engineering	
PolyAI	\$86m Series D	AI voice agents	

# Novel AI startups in Europe

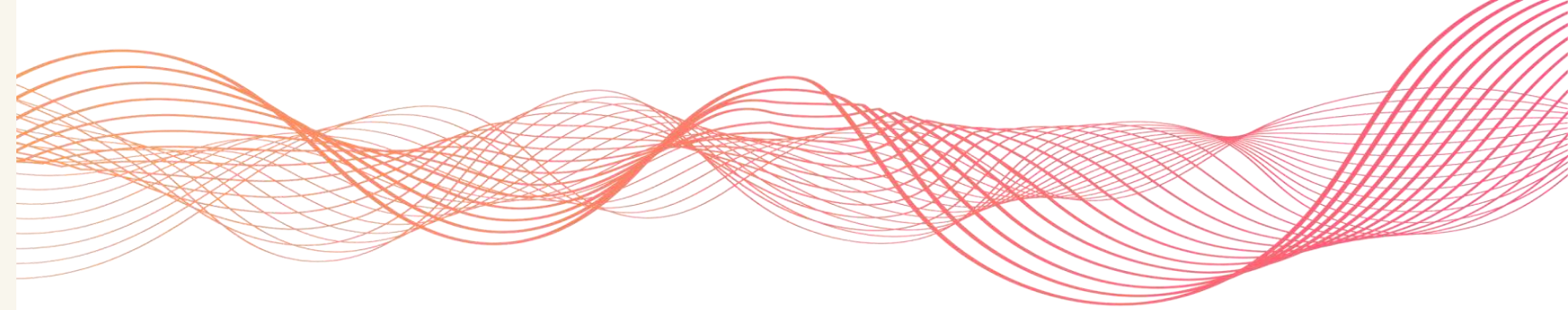
» Explore online



# Our thesis is to back the control-plane layer that makes voice reliable at scale



**ANDRE RETTERATH**  
GENERAL PARTNER AT EARLYBIRD



## Voice AI is emerging as the next breakout modality

Real-time, human, and increasingly mission-critical. Unlike text, voice workloads are latency-sensitive and multi-stage, chaining STT (Speech-to-text), reasoning, and TTS (Text-to-speech) in a tight loop. The stack is fragmented across vendors, models, languages, and regions, and production requirements are unforgiving – small delays break UX, outages kill trust, compliance mistakes carry real downside risk.

At the same time, voice is moving into production as real-time performance crosses the usability threshold and costs drop enough to justify rollout across use cases including: customer experience, healthcare, logistics, and operations. Model progress is outpacing tooling, so teams still duct-tape together providers, routing, fallbacks, observability, and policy controls themselves. The infrastructure pull is stronger than in text because voice needs orchestration and reliability from day one. That's why voice seems to be trailing text by just 2–3 years as a modality; capability is here, infrastructure is the bottleneck.

## The winning play

Our thesis is to back the control-plane layer that makes voice reliable at scale.

Winning platforms unify access to models, make evaluation and benchmarking repeatable, and enforce constraints around latency, cost, and compliance.

Over time, they become the system of record for voice workloads, embed through routing and policy logic, and compound as production usage improves decisioning and performance across the fleet.

## Selected Voice AI startups

IIElevenLabs

Gradium

S//

Parloa

PolyAI

Synthflow

“ In 2026, the product focus shifts from the perceived ‘magic’ of generative chat to the reliability of agentic workflows.

We will likely be moving beyond the experimental phase to deploy agents that function safely in production environments. Crucially, this is not a pivot to full automation, but to ‘human-in-the-loop’ design: building interfaces where human judgment guides and validates AI reasoning. To achieve this, we will need to upgrade our architecture from linear frameworks (like standard Chain-of-Thought or ReAct) to robust, multi-step reasoning systems capable of planning and self-correction. Engineers and Product Managers will be focused on delivering products where AI doesn’t just suggest answers but reliably executes complex tasks with the transparency and control users demand.”

MEHDI GHISSASSI  
CPO & CTO AT Ai71

Ai71



“ Europe’s opportunity in AI will be defined less by model size and more by efficiency, deployability, and real-world impact.

As AI moves beyond hyperscale data centres into regulated industries, sovereign infrastructure, and edge environments, the key challenge is making AI practical and efficient to deploy with existing systems.

At Multiverse Computing, we focus on compressed AI models that reduce the computational resources needed to run advanced AI systems. By cutting computational cost and energy use by up to half while maintaining performance, we help organizations deploy AI where traditional large models are too expensive or resource intensive. Europe has a real opportunity to lead in this next phase of AI by focusing on efficiency and scalable deployment, areas where many companies face their biggest AI adoption challenges today.”

ENRIQUE LIZASO  
CO-FOUNDER & CEO AT  
MULTIVERSE COMPUTING

MULTIVERSE  
COMPUTING



# No company will be built without AI at their core



**NATHAN BENAICH**  
GENERAL PARTNER AT AIR STREET CAPITAL

“ It is no surprise that Novel AI remains Europe’s largest Deep Tech investment category, now accounting for over half of all capital deployed. In the State of AI Report 2025, we found that companies like ElevenLabs and Synthesia are reaching hundreds of millions in revenue on timelines that rival Silicon Valley, demonstrating that Europe can build globally competitive AI businesses when talent, ambition, and capital align. As early implementation of the EU AI Act proves more pragmatic than feared, founders are regaining confidence to operate closer to the technological frontier.

Looking ahead, investor attention is expanding further into world models, AI for science, and opportunities that are unlocked by agents capable of reasoning over long horizons. In the fullness of time, no company will be built without AI at their core.”

# The clearest shortage is people in technical roles who also have a commercial or product mindset



**JONATHAN DURNFORD-SMITH**  
HEAD OF TECHNICAL TALENT  
ACQUISITION AT SYNTHESIA



## How have you seen the pool of technical talent change in Europe over the last five years?

The hiring cycle for AI talent has done a full loop. Teams moved from being made up of software engineers to fundamental AI researchers, and now they are moving back to software engineers. Frontier models are now built by much leaner teams, and the bottleneck has shifted to putting things into production. That takes skilled software engineers and high-velocity engineering practices.

There is also a widening gap inside tech teams between those who are embracing AI tooling and those who are not. That gap will grow, and over the next 12 to 24 months, the teams able to ship fastest will be the ones who hired on the right side of it.

On pay and equity, top European talent now knows its worth. Salaries are catching up with the US, and that trend is not slowing down.

## Are there key skills still missing?

The clearest shortage is people in technical roles who also have a commercial or product mindset. Tools like Claude Code have the potential to almost fully remove execution from day-to-day engineering work. That shifts the real value an engineer bring to those who can think about the product they're building and what the customer actually cares about. Tech teams have historically been set up to build and move on. That needs to change. The build stage now takes hours or days rather than weeks or months, so the time should go into scoping the problem properly.

There is also still a fundamental shortage of leaders who have scaled multi-billion-dollar companies to an exit. That experience is hard to build from scratch, and Europe still relies heavily on bringing senior leaders across from US companies that have been through the full cycle.

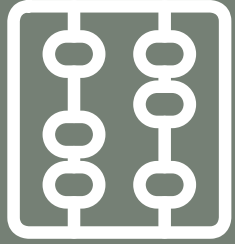
## What more could Europe do to close these gaps?

The biggest lever is making it much easier and more attractive to start a tech company here. Simpler visa processes for highly skilled workers would reduce up-front costs for companies directly. Tax incentives to bring tech executives from the US into the European ecosystem for a period of time would also help transfer experience that Europe is currently short on.

## What are the key differences between European and US (or Asian) talent?

Europe arguably rivals or beats the US in fundamental research. The gap is in product and commercialisation. The US still far surpasses Europe in experience of defining and capturing a market quickly, which is why the need for seasoned commercial leaders is so acute. And until recently, Europe lacked the belief that it could build multi-billion-dollar companies at all. That is changing, but it has not fully taken hold yet.





# FUTURE OF COMPUTE

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DEEP DIVE

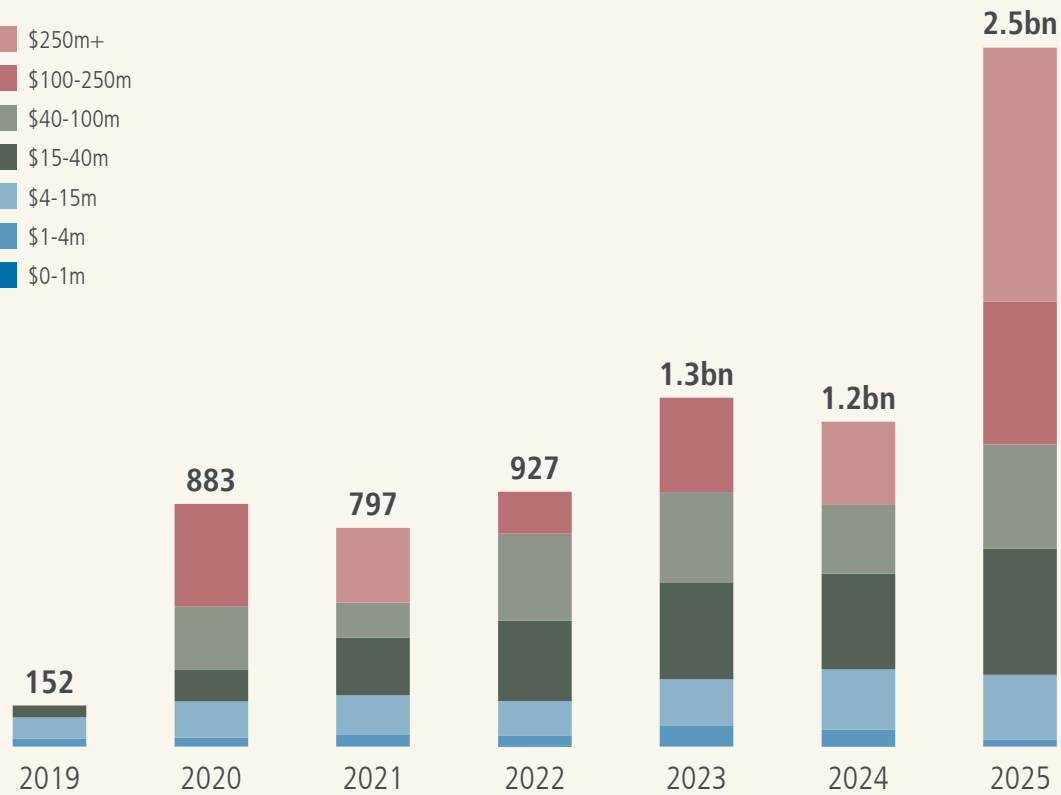
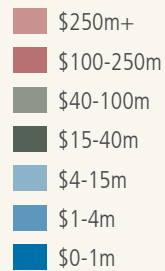
## EXAMPLES

QUANTUM COMPUTING HARDWARE  
QUANTUM COMPUTING SOFTWARE  
QUANTUM CRYPTOGRAPHY  
PHOTONIC CHIPS & INTERCONNECTS  
NEUROMORPHIC COMPUTING  
BRAIN-COMPUTER INTERFACES  
AI ACCELERATORS  
RISC-V ARCHITECTURE  
IN-MEMORY COMPUTING  
NON-VOLATILE MEMORY  
3D CHIP STACKING  
EDGE COMPUTING  
COOLING SOLUTIONS

# Future of Compute doubled from last year led by quantum computing

## VC funding in European Future of Compute startups

Round size in \$ m



## Top rounds in 2025

Startup	Funding round	Focus	Country
QUANTINUUM	\$800m Late VC	Full-stack quantum computing	
IQM	\$320m Series B	Quantum computing hardware	
MULTIVERSE COMPUTING	€189m Series B	Quantum computing software	
ALICE & BOB	€100m Series B	Quantum computing hardware	
FMC	€77m Series C	Non-volatile memory	
Q.ANT	\$80m Series A	Photonic chips	
CoMind	\$60m Series A	Brain-computer interfaces	
nu QUANTUM	\$60m Series A	Quantum cryptography	

# Future of Compute startups in Europe

» Explore online

The image displays a grid of 24 startup category cards, each listing companies and their combined funding. The categories include:

- Advanced AI and high-performance computing chips** (Combined funding \$ 1.5B): Graphcore, GrAI Matt..., Kalray, quv, Synthara, Axelera AI, VSORA, GreenWav..., SiPearl, Corintis, Semron, Arago, Flow-com..., Vaire Com..., RaiderChip, Fortaegis..., Belfort Labs, Euclid, VerticalCo..., Nellow, Hoursec.
- Quantum computing software** (Combined funding \$ 763M): Cambridg..., Multivers..., Beit, Riverlane, Nordic Qu..., Phasecraft, QuantrolDx, JoS Quan..., Qu & Co, Quantscient, ParityQC, Qantago..., QMWare, Equal1, Fermioniq, Kvantify, ColibrITD, Quanzia, Quantum..., QMill, PlanQK, MagiQware, Entangled..., firstQFM, Quantasp..., Qperfect.
- Quantum cascade lasers, laser tech for sensing & LIDAR** (Combined funding \$ 43M): PilotPhot..., Integrate..., Lytid, Eblana Ph..., Chromacity, Quantume..., MirSense.
- Quantum communication (Quantum key distribution, QKD)** (Combined funding \$ 39M): Qphox, Craft Pros..., Synergy Q..., Quantum..., Q'Bird, Qubitrium, nodeQ, Photarix, Quantangle, Quantum..., Cubiq Tec..., QDynamics.
- Next gen laser & photonics** (Combined funding \$ 96M): Vexlum, Vector Ph..., Fusion Bi..., Skylark La..., Spark Las..., Living Opt..., SuperLigh...
- Neuromorphic chips** (Combined funding \$ 165M): Innatera..., Prophesee, SynSense, Grayscale AI, Polyn AI, inVation, Gemesys, AAMV, Neuronova, SpinNcloud.
- Semiconductor materials** (Combined funding \$ 11M): DIAMFAB.
- Sensors for AI-based application** (Combined funding \$ 114M): Toposens, Novelda, Xavveo, Terabee.
- Quantum computers & processors** (Combined funding \$ 2.9B): IQM, Oxford Qu..., Quantum..., Qilimanja..., Alice & Bob, Kipu Qua..., ORCA Co..., Pasqal, NextGenQ, C12, Universal..., Quantware, Qdevil, Quix Qua..., Sparrow..., Alpine Qu..., eleqtron, Equal1, Delft Circ..., AeqQ, Oxford lo..., Weling, planq, Quandela, Arque, Quobby, Quantinu..., Orange Q..., Qblox, QC Design, SemiQon, XeedQ, Kelvin Na..., Peak Qua..., Quantopt..., Groove Q..., Arctic Inst..., Silent Wa..., ZuriQ, YQ Quantum, Quantum..., TreQ, Saxoq, Viqthor, Planckian.
- Photonic chips, integrated circuits & photonics IP** (Combined funding \$ 1.1B): LiGenTec, ActLight, Scintil Ph..., Iprionics, Sicoya, Photonpath, SMART Ph..., EFFECT P..., Salienc L..., Lumai, Enlightra, Akhnetics, Black Se..., Optalysys, 2D Photo..., Polariton..., Ephos, Oriole Net..., NcodIN, MantiSpe..., PHOTON IP, MicroAlign, Wave Pho..., Aithra, Lightium, Finchetto, Lumiphase, Alcyon Ph..., Astrape N..., Rapid Pho..., Light Trac..., FLOW Pho..., Amazec P..., Phix Syste..., Lionix Int..., Qant, Sabratha, OLIX, Ccraft, Iloominia, Phanofi, Senergetics, Delta Life..., ALUVIA, Sparc, QVersion, LightCode...
- Quantum cryptography** (Combined funding \$ 317M): Arqit, KETS Qua..., Crypta Labs, Crypto Qu..., CryptoNe..., Nu Quant..., Infiniquant, Terra Qua..., ID Quanti..., Keequant, ThinkQua..., LuxQuanta, QuSide, Quantum..., Quantum..., Qcrypto, VeriQcloud, SECQAI, Random P..., Alea Quan..., RANDAEM...
- Cryogen-free refrigeration systems for research** (Combined funding \$ 18M): Klutra, Bluefors, Leiden Cr...
- Post-quantum cryptography (PQC)** (Combined funding \$ 78M): CyberHive, Post-Qua..., PQShield, Resquant, QuantiCor..., Quantum..., Entropiq Inc, Caverro Qu...
- AI-driven electronic design automation (EDA)** (Combined funding \$ 18M): Circuit Mind, Machine D..., ChipFlow, AMSIMCEL, Chipmind.
- Others** (Combined funding \$ 34M): ZeroPoint..., NordAmps, FononTech, atheros, InfiniNod..., Ionic Wind, CoolSem...
- Lithography and other sem. manufacturing** (Combined funding \$ 82M): Qoniac, AlivLabs, LIDROTEC, Morpho..., Lace Litho..., SCIL Nano..., Chiral Nano, OpticsFou..., TracXon, NLOptics.
- AR/VR Hardware & Holography** (Combined funding \$ 835M): WaveOptics, Varjo, Dispelix, OQmented, LightSpac..., SeeReal T..., Miraex, VividQ, CREAL, Ultraleap, Aledia, VoxelSens..., AllFocal O..., XRF, Distance T..., Vrgineers, Goxel, MICLEDI..., Trilite Tec..., Swave Ph..., Mosaic SoC, Vitrealab.
- RISC V** (Combined funding \$ 43M): Codaip, Semidyna..., Keysum, VyperCore, Ubitium.
- In-memory computing** (Combined funding \$ 64M): SURECORE, Neureka C..., Upmem, Fractile, Doubtless...
- Memory and storage tech** (Combined funding \$ 149M): QuinAs Tech, Cerabyte, Ferroelect..., Intrinsic S...
- Brain-computer interfaces/neurostimulation** (Combined funding \$ 400M): Aleva Neu..., DNWARD..., IDUN Tech..., Sublimed, CorTec, Restorativ..., CoMind, NextMind, INBRAIN..., CereGate, BIOS, Brainpatch, Neuroelec..., MindRove, Ourobionics, Bitbrain, MBrainTrain, NeuroCO..., Gtec, Plato, MintNeuro, Cogitat, NeuroVLC, Infera Neuro, Neurosoft...
- Decentralized computing** (Combined funding \$ 318M): Gensyn, Hadean, Signaloid, Coinweb, MultiversX, Unweave, Holochain, Velas, DeepSquare, Zenith Ch..., NuNet, Hive, Namla, FlexAI.
- Biochips & biomemory** (Combined funding \$ 21M): Nanogami, Biomemory, DNA Asce...
- Photon detection & counting** (Combined funding \$ 16M): Quantum..., Photon Fo..., Single Qu..., Pixel Phot..., Elfys, NovoViz, Munich Q..., Singular P...
- Quantum sensing** (Combined funding \$ 146M): Qnami, QustomDot, Quantum..., Quantum..., Adamant..., NIQS Tech..., QLM Tech..., QDI-Syste..., NVision I..., MIRO Anal..., QuantaMap, InSpek, Aquark Te..., Quantum..., QUBIZ.team, DIASENSE, QT Sense, QuSine, QZabre.

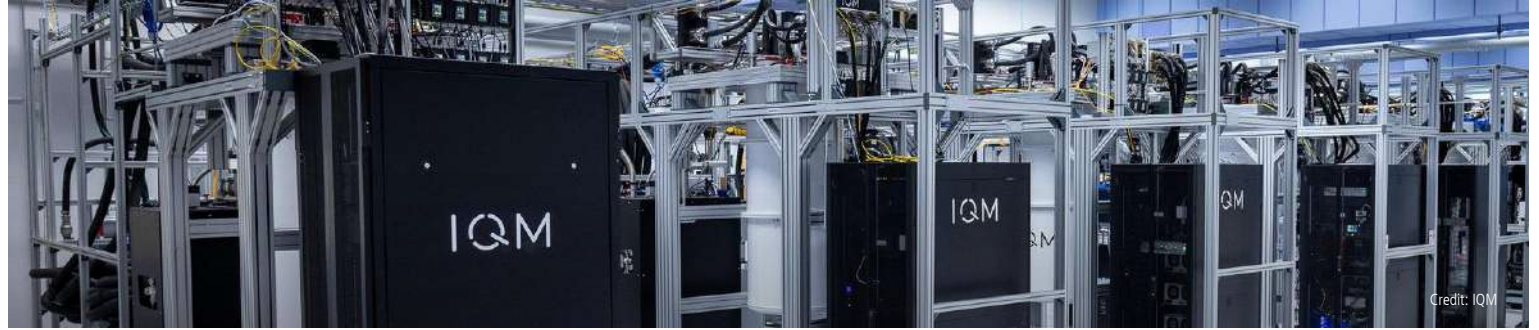
# Breakthroughs emerge through decades of layered innovation across hardware, control, scaling, and software



**HELMUT KATZGRABER**  
GP & CSO  
AT 55 NORTH



**MICHAEL JOBST**  
INVESTMENT PARTNER  
AT VSQUARED VENTURES  
AND VENTURE PARTNER AT  
55 NORTH



Credit: IQM

## Quantum computing to date

Early efforts focused on fundamental hardware – qubits and gates – followed by the challenge of scaling systems while preserving coherence.

In parallel, a critical infrastructure layer has emerged in cryogenics, electronics, and interconnects, which are essential for scalability.

As complexity increases, software for control, calibration, and programming the devices has become increasingly important.

Over the past year, the field reached a key milestone with progress in error correction and large-scale control.

As scale becomes a decisive advantage, the era in which new players could leapfrog incumbents with a single idea is ending, except in rare cases driven by truly novel innovation and technology.

Well-resourced players with integrated stacks are likely to dominate.

## The application-driven phase might emerge already in the 2030s

Looking ahead, software will be even more central.

Continued advances in control and error correction are expected to drive consolidation of the software stack and may lead to OS-like quantum platforms integrating control, error correction, and developer tools.

Further out, once robust software platforms are established, applications will mark the next major inflection point.

However, meaningful applications will require fault-tolerant systems with on the order of 100 or more error-corrected qubits.

This suggests that the next application-driven phase of quantum computing might likely emerge around 2030 to 2035 – closer than it may appear.

# A large part of the quantum supply chain is European



JAN GOETZ  
COFOUNDER & CEO OF IQM QUANTUM COMPUTERS

“ Quantum computing has enormous potential to solve problems that are unsolvable for transistor-based computers. To unlock such applications in pharma, finance, or cybersecurity, however, we need much more powerful quantum processors. The situation is like AI some years ago, when the algorithms were clear but the GPUs were not powerful enough. Quantum computing is now closer than ever to reach a breakthrough moment.

Europe is very well positioned when it comes to quantum computing, even with respect to the US or China. A large part of the quantum supply chain is European and we have top researchers. Going forward, it is now important to scale the most successful European efforts to enable them to compete on a global scale. This requires growth investments and industrial adoption of industry.”



# Photonics has historically been a European strength, setting Europe's startups on a global stage



**CYRIL VANCURA**  
PARTNER AT IMEC.XPAND



Holst Centre Photonics Lab, Credit: imec.xpand

## What is Photonics used for?

Photonics, the science and engineering on the intersection of semiconductor technology and optics, is today widely used in the field of data communications to transmit vast amounts of data over long distances via fibre optic cables.

In data centres and AI clusters the technology is being used to connect racks. Advances in optical interconnects are making networking via optical fibre viable at progressively shorter distances, gradually displacing copper cables that have historically dominated short-range connections.

But photonics not only addresses critical bottlenecks in datacentre interconnects, it is also expected that the technology will become a fundamental building block in technology fields, such as autonomous navigation and sensing, quantum computing, novel displays, and medical devices to name just a few.

## The impact of AI

The rapid adoption of AI and the corresponding build-out of AI infrastructure have created a pivotal moment for the photonics industry. Electrical interconnects are increasingly becoming a fundamental bottleneck to further scaling, as bandwidth, power efficiency, and latency requirements in advanced data centres continue to rise sharply.

It is likely that 2025 will be viewed in hindsight as a key inflection point for the photonics interconnect market. The year was marked not only by critical industry announcements, such as NVIDIA unveiling co-packaged optics switch architectures for next-generation networking, but also by high-profile acquisitions, including Marvell's acquisition of Celestial AI and Ciena's acquisition of Nubis Communications. Together, these developments signal a clear shift toward photonics as a core enabling technology for future compute and networking architectures.

## Looking ahead

Following the industry roadmap from today's 1.6 Tbps (Terabits per second) photonic modules toward 3.2 Tbps and beyond will require substantial Deep Tech innovation. Progress will depend on advances in photonic integrated circuit design, novel laser technologies, packaging and assembly innovations, and the integration of new materials into silicon photonics platforms. Photonics has historically been a European strength, and we expect European startups to be well positioned to play a significant role in this next phase of market development.

Looking further ahead, these technologies will not only reshape datacentre infrastructure but may ultimately enable computation itself to be performed directly using photonics. In this emerging area, core technologies and architectures are being developed by German startups such as Q.ANT and Akhetonics, as well as UK-based Optalysys.

# Photonic interconnects will enable further scale in AI workloads



CHRISTIAN DUPONT  
CEO OF IPRONICS

iPrionics

“ As AI becomes a part of everyday life, the sheer amount of data we need to process is pushing traditional data centre hardware to its breaking point. The bottlenecks in compute capacity are increasingly in the speed at which data can be moved, NOT the speed of a single computation. For years, we’ve relied on copper wiring and rigid electronic switching that simply generates too much heat and delay. We need a new approach, and this is where silicon photonic based Optical Circuit Switching (OCS) comes in.

Unlike traditional networks that have to constantly stop and ‘read’ data packets as they travel, OCS creates a direct, unobstructed path of light between computers. Europe has a strong pedigree in photonics and at iPrionics, we work alongside data centre architects to deploy this technology, creating a more flexible ‘interconnect’ that acts as the brain of the facility.”



dealroom.co

# Silicon makes a great integration platform because its processing is mature



**JAMES REGAN**  
CEO AT ORIOLE  
NETWORKS



**INTERVIEWED  
BY WILL WELLS**  
PARTNER AT SPEEDINVEST



## How has the photonics landscape changed in the last year?

The magnitude of interest in the photonics sector is unprecedented. 2025 saw both major trade shows (OFC in the US and ECOC in Europe) gain their biggest attendance and a number of bluechip companies waking up to the opportunity. This has created enormous customer and investor demand.

## How has the photonics technology stack matured?

Photonic connections alone are not enough – you also need to remove the delay caused by electronic switches. Replacing those with photonic switches lets you build high-bandwidth, low-latency systems across larger numbers of processors. But switching speed matters enormously here: a switch that operates in milliseconds or microseconds will be many orders of magnitude slower than one operating in nanoseconds, and that gap has an even bigger impact on AI inference workloads.

## What innovations are you seeing in materials beyond silicon for photonics?

Silicon is a mature, low-cost platform for integration, but it cannot generate or amplify light so any photonic system built on it runs into fundamental signal loss limits. You need other materials to add light amplification to the chip. One material in development is lithium niobate, however it comes with challenges: it can build up charge (and explode!), often requires high voltages to drive, and needs long device lengths that take up space in a device. The thin-film version (Thin Film Lithium Niobate, TFLN) solves some of these challenges, but historically lithium niobate has been used at the leading edge of each generation and then replaced by something else once volumes scale.

## What are the main bottlenecks you see in adoption of photonics for networking?

Telecom networks went through the same transition: first copper, then optical cables between electronic switches, then the switches themselves became optical. The same shift, driven by rising data transfer rates and data volume, is now playing out inside data centre clusters. The barriers are cost, reliability, and mindset. You have to work with existing software tools to reduce friction: at Oriole, we ship software plugins so that AI workloads can use the optical network without any changes to their code. Being a photonics company is not enough, you need to be a full compute system provider.

## And how about in using photonics for compute?

This will come. Photonics excels at specific types of computation rather than general processing, pointing toward hybrid architectures where photonic and electronic processors each handle what they do best. The main challenge is the control electronics: if not designed carefully, the electronic overhead can consume more power than the photonic chip saves. Progress is being made.



# Customer focus changed from solving compute bottlenecks to solving network infrastructure challenges



VAYSH KEWADA  
CEO AND FOUNDER  
AT SALIENCE LABS



INTERVIEWED  
BY WILL WELLS  
PARTNER AT SPEEDINVEST



How has the photonics landscape evolved from when you launched vs. today?

The landscape has shifted a lot in the last few years. Before we spun out of the University of Oxford in 2021, customer focus was on solving compute bottlenecks using photonics. Then it moved to solving network infrastructure challenges. Today the focus is on AI model demands which is driving innovation in connectivity in all parts of the data centre.

What have been the specific unlocks for Salience?

Customer demand has shifted toward Optical Circuit Switching for the network. The driver is AI workloads and particularly lower latency, which directly improves AI model performance and the end-user experience. Different customers are approaching this in different ways: some are looking to scale out across many servers, others are scaling up within tighter clusters.

Heavy investment in Co-Packaged Optics (where the component that converts electrical signals into light is built directly into the chip, rather than sitting separately at the end of a cable) has brought optical connectivity directly into the GPU layer. Once data is moving optically, Optical Circuit Switching becomes essential, directing light through the network without ever converting it back into electricity therefore introducing delay.

How does photonics help when processors start outpacing memory, the 'memory wall'?

The memory wall is a system-level constraint: processor speed is scaling faster than memory bandwidth, so performance increasingly depends on how efficiently data is moved.

This is pushing compute, memory, and networking closer together. Data will need to move across servers and racks to reach available memory. In this more distributed architecture, low-latency, flexible interconnects become critical, which is where optical connections and optical switching fit in.





# NOVEL ROBOTICS

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DEEP DIVE

## EXAMPLES

COGNITIVE ROBOTICS

HUMANOID ROBOTS

GENERAL-PURPOSE ROBOTIC  
INTELLIGENCE

VISION-LANGUAGE-ACTION MODELS

REINFORCEMENT LEARNING FOR  
ROBOTICS

PICKING & MANIPULATION  
INTELLIGENCE

SOFT ROBOTICS

CONSTRUCTION ROBOTICS

MARITIME ROBOTICS

AUTONOMOUS MOBILE ROBOTS (AMRS)

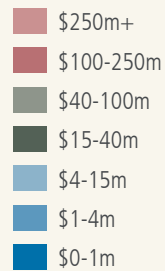
SWARM ROBOTICS

DRONE AUTONOMY

# Novel Robotics reached all-time-high in 2025 driven by mega rounds. Strong activity in humanoids, and general-purpose robotic intelligence

## VC funding in European Novel Robotics startups

Round size in \$ m

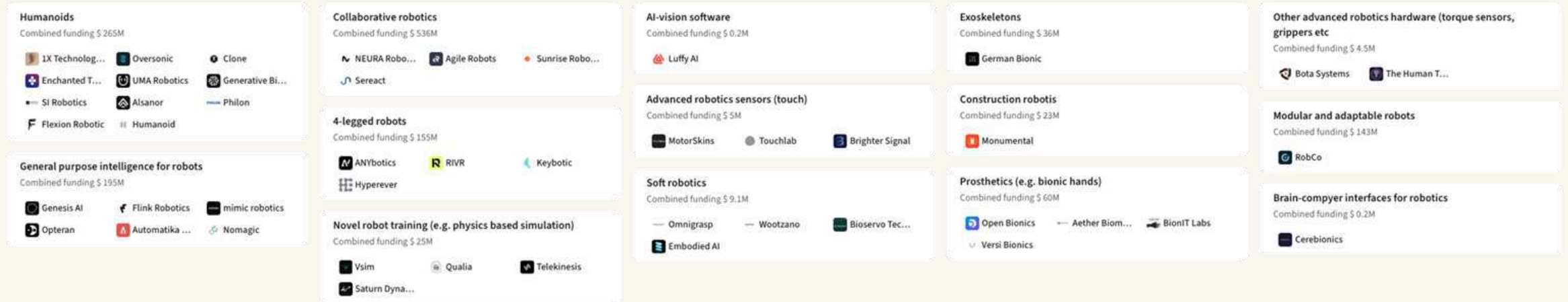


## Top rounds in 2025

Startup	Funding round	Focus	Country
NEURA ROBOTICS	€120m Series B	Cognitive robotics and humanoids	
Genesis AI	\$105m Seed	General purpose robotic intelligence	<sup>1</sup>
GENERATIVE BIONICS	€70m Seed	Humanoids	
Flexion	\$50m Series A	Intelligence for humanoids	
nomagic	\$35m Series B	General purpose robotic picking intelligence	
sereact	€25m Series A	General purpose robotic picking intelligence	
MIMIC ROBOTIC	\$16m Seed	General purpose robotic intelligence	

# Novel Robotics startups in Europe

» Explore online



# Why the Generalist form factor will win on ROI and a *Full-Stack Platform* is the industry's challenge to solve



**FABIAN GRUNER**  
GROWTH PARTNER  
AT HV CAPITAL



**JAN MICZAIKA**  
EARLY PARTNER  
AT HV CAPITAL



**While the humanoid form factor will likely win, hardware or software alone is not enough. Customers demand an integrated working solution.**

A robot is essentially a smartphone with arms & legs. The true value lies in building a full stack platform that enables this form factor to do everything a human can do. Only this level of integration turns a machine into a universal agent capable of solving the labour crisis.

## Types of Robots

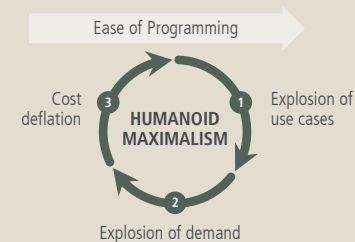
### Industrial Robots

- **Single application** (e.g. welding)
- High precision & speed
- Rigid environment

Remains niche, essential for high volume factories but continue to be unadaptable for real world

### The Humanoid or "Generalist"

**Not optimized to one use case – adaptable to all**



Generalized multi-purpose robots ensure 24/7 utilization and economies of scale in production will beat more efficient form factors

### Service Robots

- **Single task** (e.g. cleaning)
- Run all day
- Cheap BoM (<\$5k)
- Standardized tasks in different environments

Just as the smartphone absorbed camera, calculator, GPS & MP3 player, humanoids will absorb 90%+ of specialized service robots

### Core Barrier to Adoption

Customers want working end-to-end solutions, but the current robotics tech stack is fragmented & complex.

System Integrators are the main bottleneck as they are needed to adapt generalist technology to each specific context and use case.

### Full-Stack Platforms have massive scaling & GTM advantage

We believe only one or very few platforms will win.

“ If we are honest, the ‘humanoid revolution’ is still largely theoretical. As of 2026, there are virtually no humanoids providing net-positive economic value. We have built incredible bodies that remain trapped in the ‘demo phase’, relying on brittle scripts or teleoperation that cannot scale.

However, the physical infrastructure for a massive shift is now in place. We are witnessing an unprecedented explosion of capable hardware from the US, Europe, and especially China, all waiting for the intelligence to match it. While it won’t happen as a single overnight breakthrough, or a ChatGPT moment, the impact will be rapid and massive. We will see widespread industrial unlock in the next 2-3 years driven by a horizontal software platform. By injecting generalizable, reinforcement-learning-based intelligence into this growing fleet of diverse machines, we will finally bridge the gap between impressive robotics and actual productivity.”

NIKITA RUDIN  
CO-FOUNDER AND CEO AT FLEXION ROBOTICS



“ We have reached a point where humanoid hardware is effectively a commodity, yet ‘physical’ generalization remains fundamentally more difficult than in language. While the market is flooded with almost identical form factors, true robotic intelligence is still far off. We must critically question the current obsession with the humanoid form: while scientifically very interesting, the pursuit of ‘general’ intelligence can distract from solving high-value commercial applications. In contrast to vision and language, data from robots for training is not abundant in the first place. Instead of costly, human-labour-intensive real-world data collection, data scaling for true generalization should be achieved through simulation-to-real pipelines. While we have shown that this works for locomotion to commercial readiness, complex manipulation still lacks the dexterity and robustness required for value creation beyond simple pick and place tasks. For Europe to compete with the US and China, we must move past ‘simple’ human-like motion imitation and focus on bridging the gap between simulation and the messy, physical reality of industrial deployment.”

PROFESSOR MARCO HUTTER  
PROFESSOR FOR ROBOTIC SYSTEMS  
AT ETH ZURICH



“ Robotics is entering its software-defined era. Advances in vision-language-action models, diffusion-based control, and scalable data pipelines are accelerating the shift from rigid automation to adaptable, autonomous systems operating in complex real-world environments.

The next frontier is not just intelligence, but reliable execution at scale – powered by proprietary data loops, rapid field deployment, and continuous model improvement. As autonomy matures, hardware will increasingly commoditize, while value concentrates in foundation models, training infrastructure, and vertical-specific fine-tuning.

The leaders of this cycle will treat robots not as machines to be programmed, but as systems to be trained, updated, and scaled like software, simulation will also take a more important role. With world-class robotics research, strong industrial depth, and strong AI ecosystems, European hubs have a unique opportunity to shape this next generation of physical AI platforms.”

CLEMENT VANDEN DRIESSCHE  
PARTNER AT ELAIA



“ Five years ago, robotics was framed as a hardware problem enhanced by software. Today, the winning systems are architected end-to-end – modular hardware, real-world data, and AI tightly integrated from day one. Pure software alone doesn’t close the gap to production; physical intelligence is built on deployment at scale.

The leaders will be those who industrialize robotics end-to-end and scale faster than incumbents can adapt. Europe has the depth to win, and speed is now the deciding factor.”

ROMAN HÖLZL  
CEO & FOUNDER OF ROBICO





# COMPUTATIONAL BIOLOGY & CHEMISTRY

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DEEP DIVE

## EXAMPLES

AI-DRIVEN DRUG DISCOVERY

AI-DRIVEN MATERIAL DISCOVERY

AI-DRIVEN PROTEIN DESIGN

FOUNDATION MODELS FOR BIOLOGY

CELLULAR STATE MODELING

BIOMEDICAL VISION ANALYSIS

ENZYME ENGINEERING

MOLECULAR SIMULATION

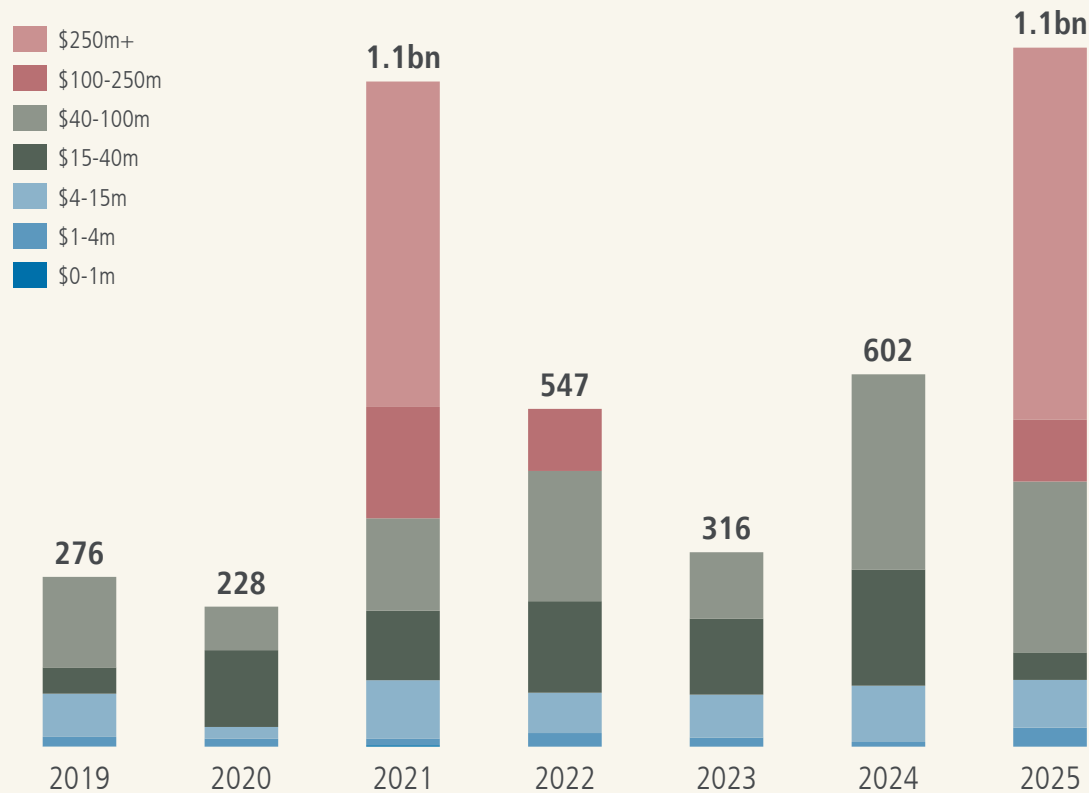
QUANTUM CHEMISTRY SIMULATION

DIGITAL TWINS FOR BIOLOGY

# Computational Biology & Chemistry came back strongly in 2025 driven by AI x drug discovery, biology, and material discovery. The UK dominates

## VC funding in European Computational Biology & Chemistry startups

Round size in \$ m



## Top rounds in 2025

Startup	Funding round	Focus	Country
Isomorphic Labs	\$600m Late VC	AI-driven drug discovery	UK
cusp.ai	\$100m Series A	AI-driven material discovery	UK
CHARM+X	\$80m Series A	AI-driven drug discovery	UK
RELATION	\$55m Late VC	AI-driven drug discovery	UK
Latent Labs	\$50m Series A	AI-driven protein design	UK
Chemify	\$50m Series B	AI-driven protein design	UK
BIOP TIMUS	\$41m Series A	Foundational model for biology	France
Arctic Therapeutics	€27m Series A	AI-driven protein design	Norway

# Computational Biology & Chemistry startups in Europe

» Explore online

**AI-drug discovery**  
Combined funding \$ 3.6B

- Isomorphic L...
- Aqemia
- Molecule.one
- MABSilico
- Molomics
- Peptone - Th...
- Ardigen
- Exscientia
- BenevolentAI
- CRISPR Ther...
- LabGenius
- Nuritas
- Healx
- Alphanosos
- Iktos
- Antiverse
- Celeris Therape
- Omniscope
- Arctic Therap...
- Chemify
- CHARM Ther...
- Oxford Drug ...
- Relation The...
- PharmEnable
- Multimomic He...
- Baseimmune
- CardiaTec
- Sixfold Bioscie
- Arctoris
- Exogene
- Ignota Labs
- Turbine AI
- AMPLY Disco...
- Nucleome Th...
- ANYO Labs
- Kantify
- Silica Corpora
- Scailyte
- Evaxion Biot...
- Allcyte
- Cradle
- Acellera Therap
- Biotx.ai
- Biomatter
- GlamorousAI
- Turing Biosyste
- CellVoyant
- Basecamp R...
- BioSimulytics
- Owkin
- coding.bio
- Epsilico
- Whitelab Gen...
- molab.ai
- Adaptyv Bios...
- CoSyne Ther...
- Innophore
- Deepflare
- Atinary Tech...
- Bioptimus
- Latent Labs
- Pentabind
- Phenaros Ph...
- Scripta Thera...
- Unlock Biology
- HotHouse Th...
- Axiom Thera...
- SOM Biotech
- Sable Bio
- DeltaWave
- Boltz
- Daltonx
- RECEPTOR.AI

**Datasets/Research analysis and molecular modelling**  
Combined funding \$ 121M

- Causaly
- iLoF
- Iris.ai
- Meta-flux
- Kiin Bio
- Ingenix.ai
- Biorelate
- Nexomic

**Compio in food and industrial**  
Combined funding \$ 29M

- Protera
- Eden Bio
- Imperagen
- Scindo
- Bindbridge

**Other high-throughput drug discovery (not AI, but chemistry based, spectrometry etc)**  
Combined funding \$ 273M

- OMass Thera...
- PhoreMost
- Micrographia...
- pear bio
- Zymvol
- PAGE Therap...
- Invitris
- Generare Biosci
- Avenue Biosc...
- Sortera Bio

**AI material discovery**  
Combined funding \$ 178M

- Entalpic
- CuspAI
- Altrove
- ExoMatter
- Mater-AI
- Pegasus Mat...
- Polaron
- Osium AI
- Solena mater...
- Dunia
- PhaseTree

**Quantum chemistry and AI for chemical and biotech fields**  
Combined funding \$ 81M

- Algorithmiq
- Rahko
- Quantistry
- Kuano
- Hafnium Labs
- Pharmacelera
- HQS Quantu...
- Qubit Pharm...
- Materials Ne...
- Molecular Qu...

**Genomics for drug discovery**  
Combined funding \$ 201M

- GenomeKey
- Genegoggle
- Evonetix
- Outsee limited
- ALLOX
- Lucid Genom...
- Genomics

# The most profound shift in Computational Biology is the move from observation to generative design



**PIERRE SOCHA**  
PARTNER AT AMADEUS CAPITAL PARTNERS



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## The Convergence of Silico and Bio

Computational biology and chemistry is rapidly transitioning from a supportive role to the primary engine of discovery. As of early 2026, the global computational biology market is valued at approximately \$10.5 billion, maintaining a robust compound annual growth rate (CAGR) of over 19%.<sup>1</sup> This growth is driven by the need for cost-effective drug discovery and the rising volume of complex "omics" data (genomics, proteomics, and metabolomics).

The space is segmented into Software Platforms (holding roughly half of the market share), Infrastructure & Hardware, and Databases. From an application perspective, Drug Discovery and Disease Modelling remains the dominant sub-segment, accounting for a third of activity.

Geographically, North America leads in total revenue due to concentrated pharma R&D, while the Asia-Pacific region is the fastest-growing market, fuelled by massive government investments in precision medicine and national genomics programmes.

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## Why Now? The Convergence of Three Pillars

The momentum in 2026 is driven by the simultaneous maturation of three technologies:

### 1. Agentic AI

AI systems no longer just suggest molecules; they autonomously design experiments, orchestrate robotic cloud labs, and refine their own codebases, reducing R&D capacity overhead by up to 40%.

### 2. Quantum-Classical Hybrids

While full-scale quantum supremacy is still approaching, 2025 saw the first commercial use of quantum-inspired algorithms to solve complex protein-folding and ligand-binding problems that were previously computationally NP-hard.

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## The Era of Programmable Bio

The most profound shift in this field is the move from observation to design. For decades, we used computers to describe what nature had already built; today, we use them to architect what nature never intended. With the emergence of foundational models for biology, trained on the language of proteins and chemicals, we have functional molecules with materially higher success rates in wet-lab validation than traditional methods. We are witnessing the birth of generative biology, where our ability to imagine new hypotheses and test them expands dramatically.

1) [360iResearch](#)

# Evidence is emerging that different scientific foundation models are converging toward shared latent representations of matter



INTERVIEW WITH ALEXANDER HAMMER  
CO-FOUNDER & CEO AT DUNIA INNOVATION



What has changed most in computational chemistry and materials discovery in the last 12 months?

One of the most exciting developments in the past year is that we are seeing AI models that simulate atomic interaction begin to work across molecules, surfaces, and bulk materials, and their performance is improving rapidly. Early evidence suggests that different scientific AI models are independently learning the same underlying patterns of how matter behaves. This hints that some of the scaling dynamics we saw in language models may also hold true in chemistry and materials science.

Where does Dunia's approach differ from the rest of the field?

Historically, materials discovery has largely been framed as a virtual screening funnel: generate large numbers of candidates computationally, filter them down, and hope that one eventually works experimentally. In practice, this approach has often disappointed. At Dunia we instead built a self-reinforcing discovery system. From day one we believed the company would stand or fall with the latency of real-world feedback and the quality of experimental data itself that assesses manufacturability and device-level performance. So we focused first on closing that loop: models, simulations, and experiments continuously improving one another through fast physical validation.

What are investors still missing in this space?

Three things. First, the upside. If we close the sim-to-real gap, we could unlock a new golden age of materials innovation, something we have not seen in the last 100 years. A billion incremental improvements, dramatically accelerated by AI and automation, can compound into breakthroughs that reshape entire industries.

Second, the capital intensity. Commercializing new materials has historically required hundreds of millions of dollars when accounting for the many failures along the way. Building a meaningful advantage that makes incumbent industry players want to partner requires investment on a similar scale. In many ways, this space is closer to quantum computing or fusion than to SaaS, even though real commercial breakthroughs may arrive much sooner.

Third, the technology stack. Many now believe physical validation is the bottleneck, but how to solve it remains uncertain. The open questions remain: whether autonomous laboratories are the answer, what scale is required, and how defensible such systems will be.



## “ The impact of AI for drug discovery

AI is reshaping both drug discovery and materials science very quickly with current AI developments. Many areas will see substantial progress across catalysts, battery materials, polymers, semiconductors, protein-based therapeutics and small molecules. One particularly exciting application is generative AI for de novo molecular design, where we move from prediction of which known molecules might work to the invention of entirely new ones that humanity has never previously conceived. This would mean us being able to ask: ‘I want a molecule with these properties – now design it for me.’

The longer-term vision would be to develop foundation models that can reason across chemistry, biology, and physics to design any functional molecule or material on demand. We’re not there yet, but the trajectory is unmistakable. Until then, there will be the combination of AI applications and human intervention.”

**PATRIK SOBOCKI**

DEEP TECH LEAD AND SENIOR INVESTMENT  
DIRECTOR AT INDUSTRIFONDEN

**!Industrifonden**



## “ Virtual cell modelling as the next frontier for commercialization

Virtual cell modelling – or more generally – AI for modelling cellular state and predicting effects of genetic or chemical perturbations has been taking off with lots of interest both on academic as well as startup side with example companies like Genbio, Bioptimus and Isomorphic. For this, data is still lacking at scale but is now emerging with the upbringing of big scale assays.

The way on how to use LLMs in the domain is not yet determined. That being said, the impact is there: examples are agentic orchestration (e.g., Future House, Biomni) or using LLMs to glue direct embeddings together (e.g., CellWhisperer, Cell2Sentence, and our CellHermes).”

**PROFESSOR FABIAN THEIS**

HEAD OF COMPUTATIONAL HEALTH CENTER  
AT HELMHOLTZ MUNICH

**HELMHOLTZ  
MUNICH**





# NOVEL ENERGY

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DEEP DIVE

## EXAMPLES

NUCLEAR FUSION

SMALL MODULAR REACTORS (SMRS)

ELECTROLYSERS

GREEN HYDROGEN

BATTERIES

LONG-DURATION ENERGY STORAGE  
(LDES)

FUEL CELL POWER PLANTS

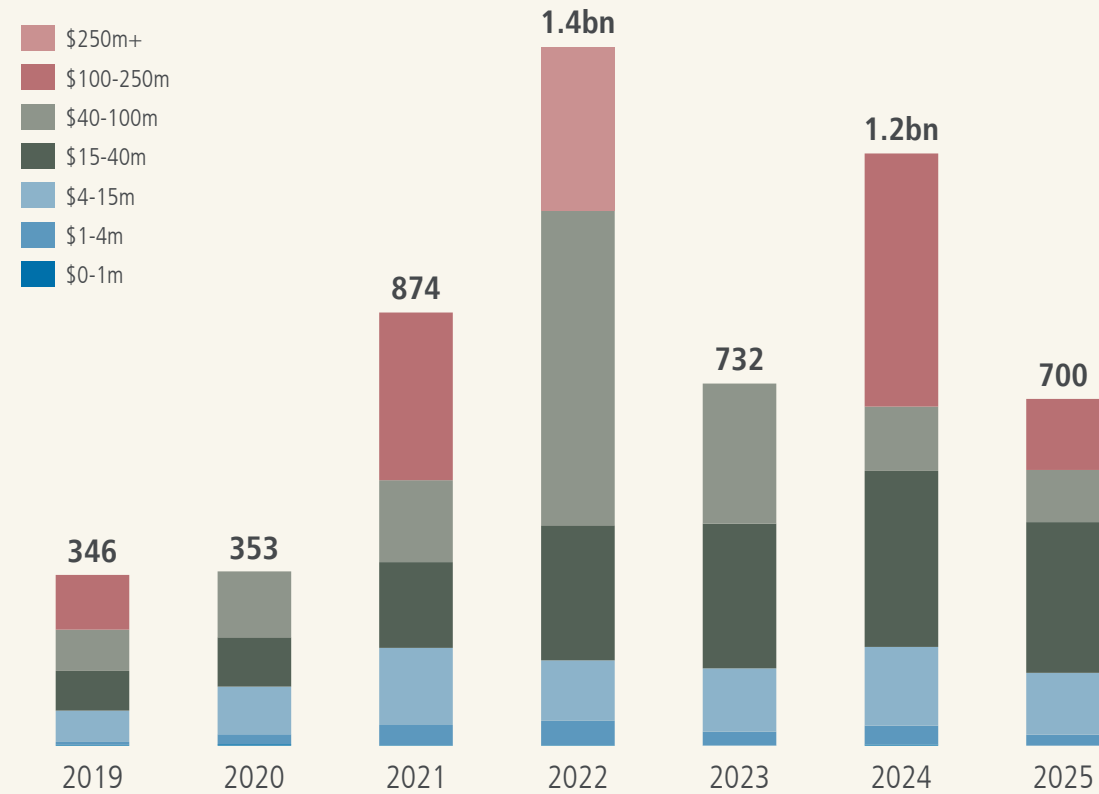
GEOTHERMAL ENERGY

GRID-SCALE ENERGY MANAGEMENT

# Novel Energy funding came down significantly from last year due to limited mega rounds. Nuclear energy, fusion, and SMRs accounted for six of the top eight deals

## VC funding in European Novel Energy startups

Round size in \$ m



## Top rounds in 2025

Startup	Funding round	Focus	Country
Proxima Fusion	€145m Series A	Nuclear fusion	
Marvel Fusion	€50m Series B extension	Nuclear fusion	
BLYKALLA	\$50m Late VC	Small nuclear reactors (SMRs)	
hystar	\$36m Series C	PEM electrolyzers	
Steady Energy	€32m Late VC	Small nuclear reactors (SMRs)	
RENAISSANCE FUSION	€32m Series A	Nuclear fusion	
nyobolt	\$30m Late VC	Ultra-fast charging batteries	
STELLARIA	€23m Series A	Novel nuclear fission reactors w/ fuel recycling	

# Novel Energy startups in Europe

» Explore online

**Nuclear fusion**  
Combined funding \$ 869M

- Focused E...
- Tokamak E...
- First Light...
- Marvel Fus...
- Pulsar Fusi...
- Renaissan...
- Crossfield...
- Deutelio
- Novatron F...
- Proxima F...
- Gauss Fusion
- Next Step...
- Astral Syst...
- Otrera
- Suprema
- Firefly Fusi...
- Blue Caps...
- Thunderch...
- Jurlina Co...
- MuWave

**Next-gen lithium batteries**  
Combined funding \$ 473M

- LionVolt
- Addionics
- LithiumWe...
- E-magy
- LeydenJar...
- Echion Tec...
- Cenate
- Anaphite
- Basquevolt
- The Batteries
- CustomCells
- Gouach
- OXLID
- aka Ilika
- Floatech
- SOLITHOR
- ENWIRES
- Molyon
- Ampoxe
- BTRY
- NorcSi Gm...

**Innovative large scale energy storage (flow batteries, salt storage, kinetic etc)**  
Combined funding \$ 672M

- Energy Vault
- VoltStorage
- Elestor
- SaltX Tech...
- Kemiwatt
- Volterion
- Energy Do...
- Sinergy Flow
- Enerpoly
- Cellifion
- Zelestium...
- Battery
- UP Unbound...
- HalloGen P...
- Ore Energy
- Silbat
- Flow-nano
- Redox One
- VANEVO
- AquaBattery
- Invinity En...
- Kodiaq Tec...

**Hydrogen & ammonia**  
Combined funding \$ 2.2B

- Enapter
- Supercritical
- IC Technol...
- Sunfire
- HSL Techn...
- Hymeth
- PowerCell...
- Hiiroc
- HyET Hydr...
- Lhyfe
- Mahytec
- Cyrus PC
- Bramble E...
- Green Hyd...
- HydrogenPro
- Hydrogeni...
- Elcogen
- EH Group
- HPNow
- Rouge H2
- GRZ Techn...
- H2B2
- Inergio
- Battolyser...
- Intelligent...
- McPhy Ene...
- NHOA
- Convion
- Symbio
- zepp.solut...
- Ceres
- SCW Systems
- Hystar
- DENS
- Cella Energy
- NPROXX
- ZEG Power
- Nium
- ITM Power
- Oort Energy
- Ki Hydrogen
- NovaMea
- Vema Hydr...
- Jolt Activa...

**Novel wind energy (Bladeless, innovative materials)**  
Combined funding \$ 1.35M

- X1 Wind
- Vortex Bla...
- SeaTwirl
- Hydro Win...
- TwingTec
- Skypull
- Norsepower
- Kitemill
- kiteKRAFT

**Battery Management Systems (BMS) & battery analytics**  
Combined funding \$ 57M

- Breathe Ba...
- PowerUp
- Gaussion

**Nuclear fission**  
Combined funding \$ 1.2B

- Newcleo
- Moltex Ene...
- CORE-POW...
- Seaborg Te...
- Blykalla
- Thorizon
- Transmutex
- Stellaria
- Naarea
- Jimmy
- Steady Ene...
- Kärnfull Next
- Emerald H...
- HEXANA
- Copenhag...

**Other battery chemistries & supercapacitors (mobile applications)**  
Combined funding \$ 665M

- Skeleton T...
- Geysier Bat...
- theon
- Beyonder
- Faradion
- Nanom
- Nyobolt
- BroadBit B...
- Tiamat En...
- ITEN
- LiNa Energy
- Altris
- NDB
- Rivus
- C2C NewCap
- Swistor
- Binks
- Easyt
- Ligna Energy
- Volta Struc...
- BeFC
- Pioniq Tec...

**Novel solar tech (curve, transparent, materials, solar cars)**  
Combined funding \$ 395M

- Exeger
- Oxford Ph...
- Saule Tech...
- Heliup
- GraphEner...
- Perovskia
- Power Roll
- Evolar
- NexWafe

**Wave & tidal energy**  
Combined funding \$ 150M

- CorPower...
- Minesto
- Mocean En...
- SeaCurrent

**Thermal energy storage**  
Combined funding \$ 167M

- Sunamp
- Kraftblock
- Energy3
- RIFT

**Battery recycling**  
Combined funding \$ 202M

- cylib
- Altium M...
- tozero
- Librec
- Mecaware

**Waste heat recovery & energy harvesting**  
Combined funding \$ 5.7M

- Efenco

# The case for magnetic confinement fusion



**BENJAMIN ERHART**  
GENERAL PARTNER AT UVC PARTNERS



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**The convergence of European academic excellence and industrial scaling makes magnetic confinement fusion the most exciting frontier in Deep Tech today.**

Europe, and specifically Germany, holds a unique strategic advantage: while the US and China are aggressively pursuing tokamak designs, which have intrinsic challenges for continuous power plants due to their pulsed operation, Germany remains the only nation with the institutional knowledge and physical infrastructure, anchored by the Wendelstein 7-X, capable of building a steady-state device that operates continuously – and not pulsed.

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**Fusion – and specifically stellarators – hit an inflection point in the last few years because multiple independent breakthroughs converged:**

**2022 research showed optimized stellarators can confine high-energy alpha particles**

at power-plant relevant levels, removing a long-standing feasibility concern.

**Wendelstein 7-X,**

the world's most advanced stellarator, reached full operation and broke world records, validating stellarator performance at scale.

**Breakthroughs in High-Temperature Superconductors**

(HTS), demonstrated at fusion-scale in 2021, enable higher magnetic fields and more compact, economically viable devices.



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**Combined with today's compute-heavy 3D magnetic field optimization, this turns fusion from a research curiosity into an execution-driven engineering programme – exactly the kind of shift that creates momentum for venture-scale company building.**

By 2027, it is likely that companies in the US will demonstrate net energy generation. By 2031, it is likely that European companies like Proxima Fusion will demonstrate both net energy generation as well as stability over a long period of time.

“ Fusion is no longer a science experiment; it’s an industrial race.

The challenge now is building and scaling. Europe’s technological lead in stellarators is real, but it won’t last forever. The next few years will decide who builds and owns the first commercial fusion power plants – and who controls the next generation of sovereign energy infrastructure. If we hesitate, others will scale what we pioneered. But if we act now, fusion can secure Europe’s energy independence and anchor its next great industrial era.”

FRANCESCO SCIORTINO  
CEO & CO-FOUNDER PROXIMA FUSION



“ Every industrial era has a dominant enabling infrastructure; for the 21st century, it is reliable and competitive energy.

Fusion represents the only credible pathway toward long-term, sovereign energy supply – one that can enable economic resilience, industrial competitiveness, and societal prosperity.

Europe enters this transition with meaningful structural advantages: world-class scientific institutions, deep engineering talent, and the opportunity to build critical fusion supply chains locally. Converting that potential into leadership will require sustained capital, long-term ambition, and close coordination between public institutions and private industry.”

MORITZ VON DER LINDEN  
CO-FOUNDER AND CEO OF MARVEL FUSION



# Overcoming the limitations of batteries for solving the *Dunkelflaute*



**STEPHAN HERRMANN**  
CO-FOUNDER & CEO OF REVERION



The worldwide energy transition is inevitable. There is only one remaining, critical unresolved challenge – the *Dunkelflaute*.

Batteries cannot solve this, as they are structurally unable to shift renewable energy availability over long time horizons.

Dispatchable, highly efficient power plants therefore remain essentially the only solution to cover these extended periods.



## **Dunkelflaute**

In the renewable energy sector, a *dunkelflaute* is a period of time in which little or no energy can be generated with wind and solar power, because there is neither wind nor sunlight. In meteorology, this is known as anticyclonic gloom.



## **Reversible fuel cell power uniquely addresses the challenge of *Dunkelflaute***

At Reverion, we have brought a reversible fuel cell power plant to market that uniquely addresses this challenge by dynamically switching between power-to-gas and gas-to-power, but with unlimited capacity for both.

This allows renewable energy to be stored for days, weeks, or months and delivered precisely when needed and as long as needed, with a world-record 74.2% electrical efficiency and a clear path to 80%.

## **More than capital needed to scale**

To scale technologies like ours, capital availability in general is not the bottleneck – subscribing to a bold global vision is.

We need growth investors willing to think beyond short term hypes and instead underwrite large scale roll-out of key infrastructure technology with competitive financing conditions, to enable truly transformative growth and secure long-term industrial leadership.

# Europe must double down on local production, recycling, and refining



CRAIG DOUGLAS  
FOUNDING PARTNER, WORLD FUND

**WORLD  
FUND**

“ The most exciting Deep Tech areas in energy focus on three main topics: *new primary supply* (such as geologic hydrogen and ocean energy), *the grid layer* (including grid upgrades and advanced power electronics), and *storage* (next-generation batteries without critical material dependencies, power-to-X, and flexibility orchestration), which are all underpinned by innovation in critical minerals and ultra-efficient computing.

Given Europe’s existing reliance on imported energy infrastructure, molecules, and critical minerals – and their strategic importance in the coming decades – there is a clear risk that failure to act will leave Europe dependent on US and Chinese actors for materials, molecules, and electrical infrastructure. To avoid this, Europe must double down on local production, recycling, and refining.”



[dealroom.co](https://dealroom.co)



# SPACE TECH

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DEEP DIVE

## EXAMPLES

LAUNCH VEHICLES

SMALL SATELLITE MANUFACTURING

EARTH OBSERVATION

SPACE DEBRIS REMOVAL

IN-ORBIT SATELLITE SERVICING

SPACE SITUATIONAL AWARENESS

PROPULSION SYSTEMS

RE-ENTRY & LANDING SYSTEMS

IN-SPACE MANUFACTURING

SPACE ROBOTICS

SPACE MINING

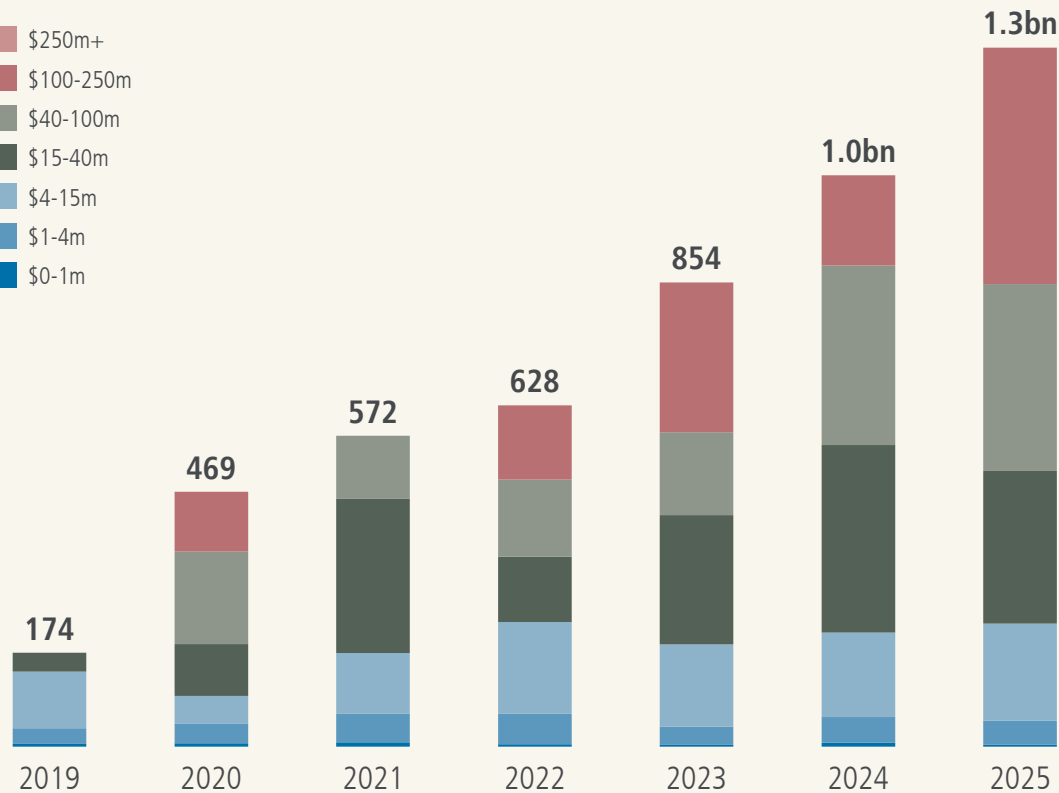
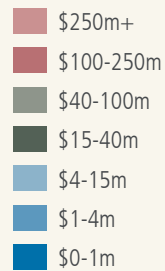
SPACE-BASED SOLAR POWER

HYPERSONIC SYSTEMS

# Space Tech funding in Europe grew 30% driven by strong activity in Earth observation, satellite manufacturing, and launch vehicles

## VC funding in European Space startups

Round size in \$ m

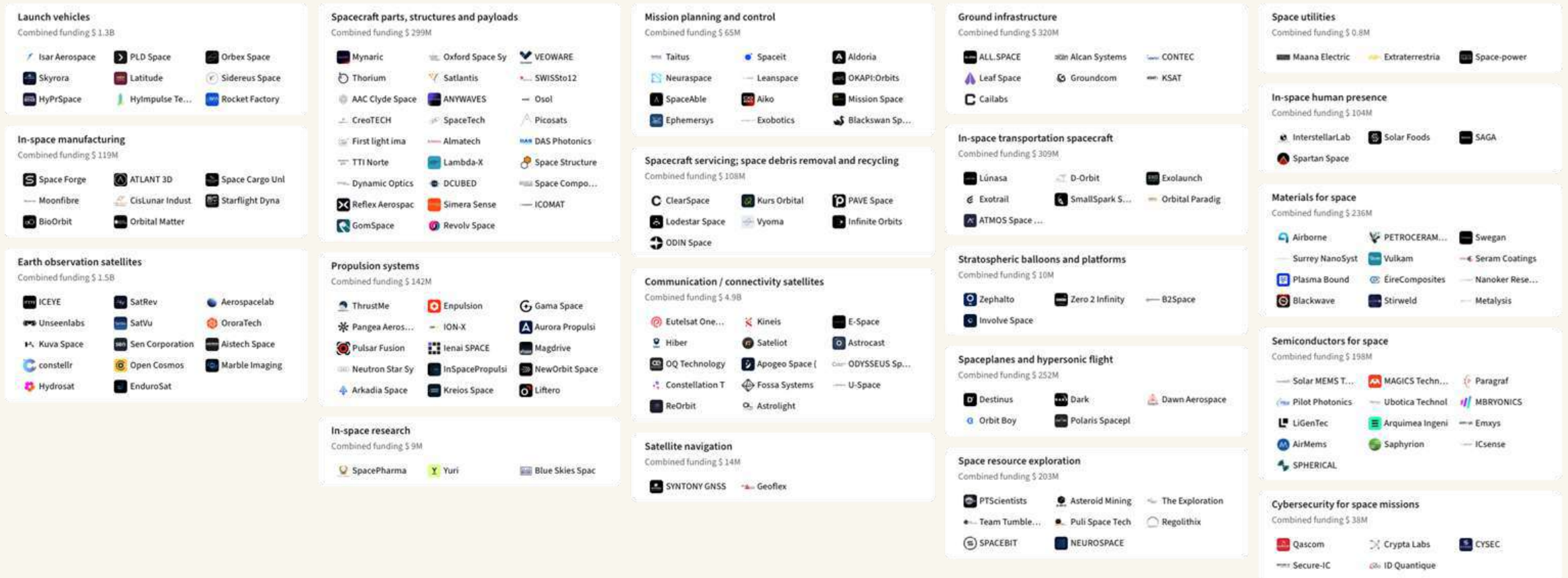


## Top rounds in 2025

Startup	Funding round	Focus	
<b>ICEYE</b>	€150m Series E	Earth Observation	+
<b>isar aerospace</b>	€150m Convertible	Launch vehicles	🇩🇪
<b>ENDUROSAT</b>	\$153m Late VC	Small satellite manufacturing	🇮🇪
<b>AERO SPACE LAB</b>	€56m Series E	Small satellite manufacturing	🇧🇪
<b>REFLEX AEROSPACE</b>	€50m Series A	Small satellite manufacturing & management	🇩🇪
<b>Reorbit</b>	€45m Series A	Small satellite manufacturing & management	+
<b>INFINITE ORBITS</b>	€40m Late VC	In-orbit satellite servicing	🇫🇷
<b>overstory</b>	\$43m Series B	Earth Observation for grid resilience	🇮🇪

# Space Tech startups in Europe

» Explore online



# European launcher startups are moving towards successes



## European Launcher Challenge commits €900m for European launch startups

ESA started the European Launcher Challenge as an initiative focused on expanding European launch service supply. In November 2025, a firm commitment of €900m was made. It aims for a first successful orbital launch as part of the programme by 2027 at the latest.

Additionally, ESA will commit to the procurement of launch services with expected launch by 2030 and co-fund capacity upgrades of up to 60%.

Four European companies have been selected for the challenge.



## Isar Aerospace completed their first launch attempt in March 2025

Founded in 2018 in Ottobrunn near Munich as a university spinout from the Technical University of Munich, the company has raised ca. €585m to date.

As the first private European launcher company, Isar Aerospace completed an experimental launch targeting orbit on 30 March 2025. With their rapiTd iteration model, the lift-off achieved 30 seconds of flight. As expected, the rocket did not make it into orbit. The company used the launch to collect important real-world data to enable further technical developments.

Their second launch is planned for 2026.

“Europe’s current challenges may well represent the greatest opportunity it has ever had to establish itself as a significant global space power.”

MAX GULDE  
FOUNDER & CEO  
CONSTELLR



# A triad of better performance, lower costs and higher demand results in an inflection point for earth observation companies



**MARC ALEXANDER KÜHN**  
LAKESTAR



dealroom.co

We observe three main drivers of change in Space Tech resulting in Earth Observation companies moving from selling 'raw pixels' to intelligent insights.

### European resilience

Geopolitical challenges impose the need for Europe to increase defence capabilities. Earth observation intelligence can deliver strategically important insights opening up governmental budgets for private companies – one example being the European Space Shield initiative.

### Launch costs

Average launch cost to LEO already came down from \$25k per kg in the early 2000s to \$2.5k per kg today. We expect launch costs to further decrease to \$100 per kg within 10 years – making it even more cost efficient to build satellite constellations.

### Edge AI

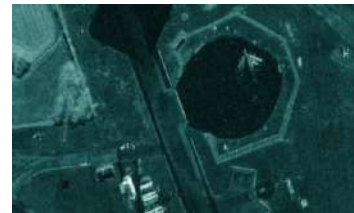
The combination of more efficient AI algorithms and more performant, compact compute chips leads to the ability to generate insights from data live on the satellite. As concise insights are more compact than high-resolution space data, this reduces data transmission costs and duration.



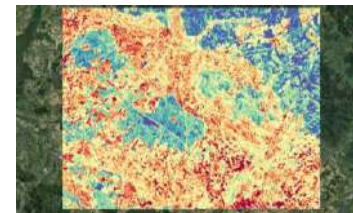
**Earth Observation** refers to remote sensing used to capture the planet's physical, chemical, and biological systems and to monitor land, water and the atmosphere.

Leading European companies focus on a variety of use cases:

### ICEYE



**SAR** data for governments and private industries



**Thermal** intelligence for agriculture, urban, infrastructure & defence



**Wildfire** intelligence



**Maritime** intelligence

# European Space Tech is transitioning from an early venture category toward a credible long-term asset class



AVANTIKA GUPTA  
PRINCIPAL AT TYPE ONE VENTURES



“ Sustained growth in the European space ecosystem, increasingly supported by European and US capital, indicates strong and growing international confidence in Europe’s technical talent, research base, and ability to produce globally relevant companies. This level of funding signals that European Space Tech is transitioning from an early venture category toward a credible long-term asset class capable of supporting large-scale companies and delivering institutional returns. This transition is particularly critical for Europe to build resilient capabilities in Sovereign launch and satellite manufacturing, which will be essential for continued sector growth.

As launch costs continue to decline, the economics of satellite constellations will fundamentally change, dramatically lowering the capital required to build global networks and making new business models - such as in-space manufacturing or real-time persistent sensing – more viable and scalable. Lower launch costs, especially when paired with a higher cadence of heavy launches, tend to increase the optimal size of satellite constellations which can favour operators already capable of manufacturing, launching, and managing large fleets at scale. We believe we’ll see a dual outcome: lowered barrier to entry for new commercial space applications and niche constellations, while the largest platforms with vertically integrated launch and satellite manufacturing capabilities may consolidate leadership in global infrastructure networks.”





# DEFENCE

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DEEP DIVE

## EXAMPLES

AI IN DEFENCE

SURVEILLANCE DRONES

STRIKE DRONES

COUNTER-DRONE SYSTEMS (C-UAS)

UNMANNED GROUND SYSTEMS

AIR DEFENCE SYSTEMS

MARITIME DEFENCE TECHNOLOGIES

HYPERSOUND SYSTEMS

ELECTRONIC WARFARE

CYBER SECURITY

COMMAND & CONTROL SYSTEMS

MILITARY COMMUNICATIONS (MILCOM)

LARGE-SCALE DEFENCE SIMULATION

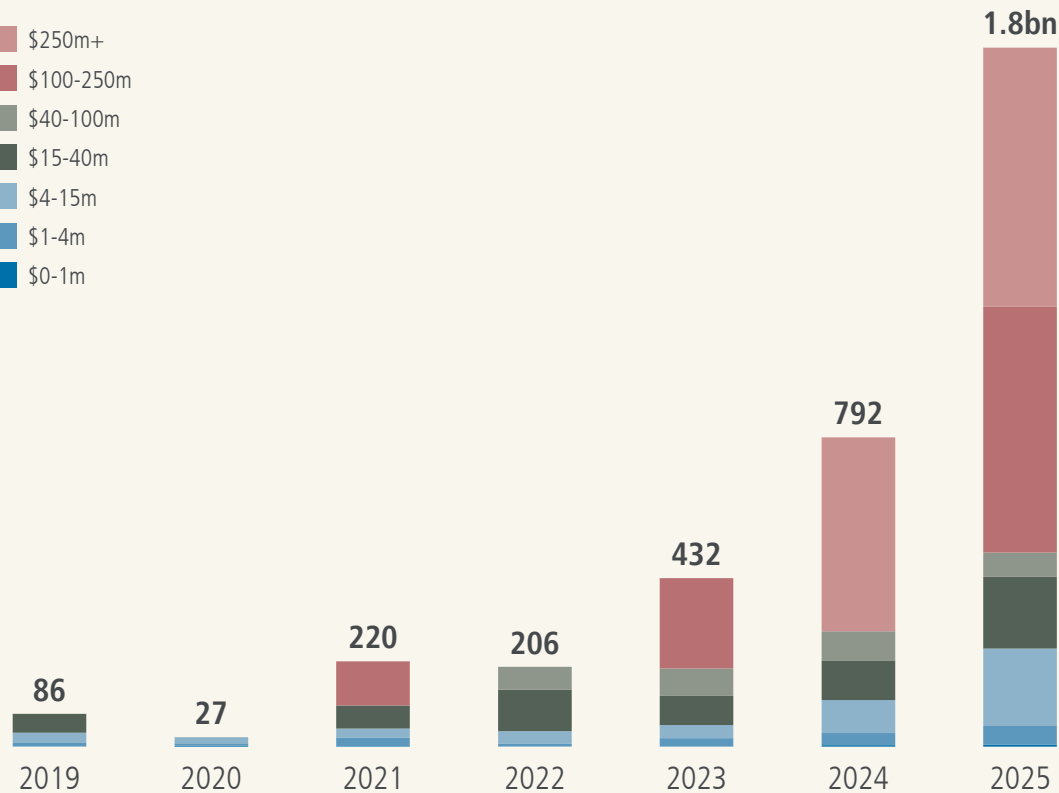
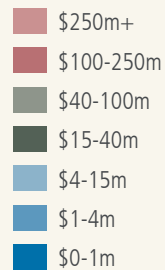
DEFENCE MANUFACTURING

BIO DEFENCE

# Defence funding in Europe reached a record \$1.8bn in 2025, with strong activity at the intersection of AI, drones, but also weapons and defence systems

## VC funding in European Defence startups

Round size in \$ m



## Top rounds in 2025

Startup	Funding round	Focus	Country
<b>Helsing</b>	€600m Series D	Multi-domain	Germany
<b>QUANTUM SYSTEMS</b>	€340m Late VC	Surveillance drones	Germany
<b>Destinus'</b>	€140m Convertible	Strike and air defence systems	Croatia
<b>Cambridge Aerospace</b>	\$100m Series A	Air and missile defence systems	United Kingdom
<b>STARK</b>	\$62m Series A	Strike drones	Germany
<b>ARX ROBOTICS</b>	€42m Series A	Unmanned ground systems	Germany
<b>Harmattan AI</b>	€30m Series A	ISR drones and anti-drone systems	France
<b>Skyral</b>	€20m Series A	Large scale simulations for defence	United Kingdom

# Defence / Resilience startups in Europe

» Explore online

**Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance - C4ISR**  
Combined funding \$ 372M

- SensusQ, Avoptics, Siren, Matrix.org, Silicon MicroGr, Watch Bird, RFence, Ajax Systems, Infozahst, Farsight Vision, Wayren
- Adarga, SECQAI, Living Optics, Labrys, SCALINX, KNL Networks, Focal Point Pos, Deniable, Falcons, StirlingX
- Inex Microte..., QuadSAT, Disruptive Indu, Element, Himera, Rcam, Evitado Tech..., Teletactica, Culver Aviation, Revobeam

**UAVs and UGVs**  
Combined funding \$ 1.3B

- Delian Alliance, Elistair, KrattWorks, Dronetag, Stark, Threod Syste..., Aurea Avionics, WARGdrones, Velos Rotors, DroneUA, Orqa, Nordic Unma..., Skycorp Tec..., Harmattan AI, Certo Aerop..., DEVIRO, Airlogix, NORDA Dyna..., Voltzac, Skydweller, Fixar
- Quantum Sy..., Alpine Eagle, Unmanned Life, TEKEVER, Novadem, Greenjets, Delair, Origin, Intelic, Skya, Broswarm, CERBAIR, The Fourth L..., Hules, Athlon Avia, Aidoptation, Twentyfour L..., DefendEye, H3 Dynamics, Daedalus Def...
- ARX Robotics, Arktis Radiatio, Zepher Flight L, Shark Robotics, Unmanned D..., SKAITECH, RSI Europe, Robot Aviation, HIGHCAT, Sky-Watch, Xplora Srl, Tencore, Labelfuse, Neurobus, Scaleout Sys..., Buntar Aeros..., Defsecintel, Faculty, Delfox, C2Grid, AI Verse

**Naval and Maritime Technologies**  
Combined funding \$ 163M

- Beam, Lobster Rob..., SEABER, Maritime Ro..., DEEPOCK, Vaarst, zelim
- dotOcean, Elwave, Hefring Marine, Optics11, Submergeba..., Uforce, ACUA Ocean
- Skarv Techn..., Sotiria Technol, Havguard, Kongsberg F..., Tethys Robot..., Forssea Rob...

**AI x defence**  
Combined funding \$ 1.7B

- Helsing, LatticeFlow, Blackshark.ai, Advai, GScan, Unbound Au..., GIGA Venture, Sky Engine AI, Swarmer, Dropla Tech, HATtec, WIZGARD
- Stanhope AI, Preligens, Arondite, Materials Ne..., Mission Decisio, TYTAN Techn..., Ask for the m..., Archangel Im..., Orbotix, Alta Ares, Cron AI
- Comand AI, Hala Systems, Labelfuse, Neurobus, Scaleout Sys..., Buntar Aeros..., Defsecintel, Faculty, Delfox, C2Grid, AI Verse

**Space and Satellite**  
Combined funding \$ 1.9B

- ALL SPACE, The Explorati..., Callabs, Dark, Fossa Systems, FAST Aerop..., Orbion Tech...
- ICEYE, Reflex Aeros..., Astrolight, Planetek Hel..., SatVu, Remos, Lodestar Space, Magdrive
- Unseenlabs, Isar Aerospace, Space Forge, Tyvak Internati, GomSpace, MBRYNONICS, RobNav

**Supersonic/ hypersonic planes and propulsion systems**  
Combined funding \$ 231M

- Destinus, AERIALIS, Axter, Hypersonica

**Quantum computing, cryptography and sensing**  
Combined funding \$ 835M

- Terra Quantum, KETS Quantu..., CryptoNext S..., g2-Zero, Q\*Bird, QuantumDia...
- Quandela, QuSide, Qubitrium, Ephos, IQM
- Nu Quantum, Quantum Dice, levelQuantum, AegiQ, eleQtron

**Cybersecurity and critical digital infrastructure**  
Combined funding \$ 200M

- Countercraft, 42Crunch, Arqit, Runecast, DeNexus, Sensity AI
- Goldilock, EclecticiQ, JIPK, CyNation, Osavul, Stratis
- Anzen, Lab 1, DataFlowX, Modirum, LiveDrop

**Strategic semiconductors**  
Combined funding \$ 159M

- Kalray, Arceon, Nanoxplore...
- Aquark Tech..., Black Semic..., Swegan, Fractile

**Robotics**  
Combined funding \$ 402M

- ANYbotics, Vimotek, Oxford Dyna..., ExRobotics
- RobCo, Fernride, Temerland
- GIM Robotics, Circus, SWARM Biot...

**Energy (e.g. energy storage) and critical physical infrastructure**  
Combined funding \$ 139M

- LeydenJar T..., Advanced Ma..., Nordic Batterie, Solus Power
- Zelestium Te..., Kitepower, IceWind, Molyon
- Ore Energy, IONATE, GaltTec, ReFaMo

**Biodefence**  
Combined funding \$ 28M

- Ionitace, Fabentech
- Aquila Bioscienc, Delox, Untap

**Advanced materials and manufacturing**  
Combined funding \$ 140M

- ICOMAT, Isembard, Inleap Photo...
- DECEPT, FibreCoat, ATLANT 3D, Graphenest

**Wearables for Military**  
Combined funding \$ 24M

- Standard Fighti, Touchwaves
- Esper Bionics, Gravity

**Advanced Sensing Technology**  
Combined funding \$ 34M

- EIFys, Sensrad
- Luma Robotics, Defendec

**Service Providers**  
Combined funding \$ 15M

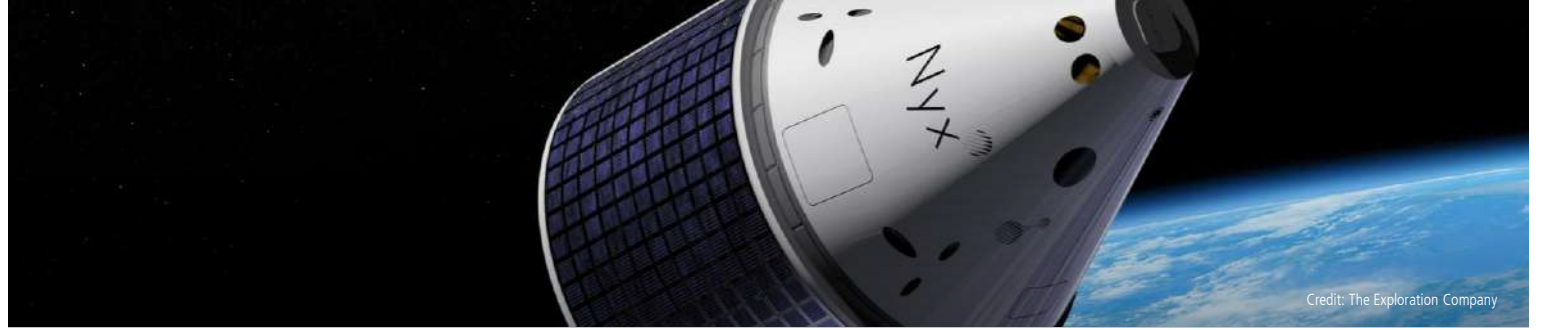
- Rowden Tec..., DigitalPlatform

## CONTRIBUTION

Defence technology is emerging as Europe's fastest-growing sector, driving a major re-architecture from hardware-heavy arsenals to software-defined capabilities



**ALEX FERRARA**  
PARTNER AT BESSEMER VENTURE PARTNERS



### Fast facts on 'European Resilience':

#### €970bn by 2030:

Europe's defence spending will surge 3.4x, making it the continent's largest sector

#### AI-enabled & software-defined warfare:

Agile startups with defence IQ now move faster than legacy primes

#### Dual-use advantage:

Technologies scale beyond defence, with today's companies defining European sovereignty for 50 years

### Five core areas of innovation

1. AI autonomy
2. Aerial defence
3. Autonomous command & control systems
4. Space sovereignty as a national security imperative
5. Advanced manufacturing & critical minerals

“ Guided by the values of supporting democracy and innovation, Bessemer is committed to backing mission-oriented founders in Europe who are building the technological capabilities required to secure European sovereignty.

This is not a passing trend – it is a generational commitment to ensuring sovereignty is protected through technological superiority.”

#### Roadmap: European resilience

An overview on our emerging investments aimed to protect democratic values and sovereignty in Europe through technology and innovation.



» Roadmap: European resilience

# Europe is in the process of defining its domain and dimension winners in Defence Tech



INTERVIEW WITH MARC WIETFELD  
CEO AND FOUNDER OF ARX ROBOTICS

TRANSLATED FROM GERMAN BY THE EDITORS



## How has your perspective on Defence Tech changed since you founded the company?

When today's leading Defence Tech startups were founded, they were creating individual technologies or isolated products. That has since evolved into a new and essential category of defence capability, one that generates military capacity not just through technology but through an entirely different model: funded by venture capital and private investment rather than debt and taxes.

## What need does ARX address that is currently unmet in Europe?

We are transforming European land forces into software-defined, data-centric fleets able to make better decisions faster and act on them through robotics, physical AI, and autonomous systems.

## How do you perceive AI as an enabler in your segment?

Europe is outmatched in personnel and material by its potential adversaries. Artificial Intelligence, combined with unmanned systems, has the potential to create a multiplier effect for our armed forces and critically, to compress decision cycles. Scaling this is the greatest opportunity for our deterrence and defence capability.

## How do you perceive the funding landscape?

We are in the process of beginning to define which European companies will emerge as winners across domains and dimensions in Defence Tech – and that clarity will give investors the confidence to back them. Capital will follow. But founders need to understand that taking on investment always means ceding control, and that has to be compatible with the goal of building European sovereignty.

## What are the core challenges for ARX and similar Deep Tech companies in Europe right now?

In Europe, we face a fragmented market across countries in terms of demand, funding, and supply chains. Companies like ours have to build their business, technology, and products around that reality from the start, not as an afterthought.



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6.

# FOUNDER RESOURCES

The background features a complex network of white lines and small squares on a dark green background. The lines are a mix of solid and dashed, forming a grid-like structure with rounded corners and various paths. The squares are small and scattered throughout the network, some appearing as nodes or endpoints of the lines.

# How to fund your Deep Tech startups

## What is your startup's immediate priority?

### Developing early-stage technology or prototypes

#### Grants and research partnerships

Ideal for startups in the research or prototype phase, especially those working with advanced technologies

### Validating market fit and scaling operations

#### Venture capital and corporate partnerships

Suitable for startups ready to scale or enter the market, with a working prototype or initial traction

### Securing flexible funding without equity dilution

#### Debt financing and alternative funding

Best for startups with predictable revenue or clear paths to profitability

## Key considerations

Grants provide resources without equity dilution but can slow progress. Consider faster funding options if needed

Selecting the right investors is critical. Deep Tech startups often require patient capital, expertise in technical domains, and alignment with long-term R&D cycles

Debt financing is risky for Deep Tech startups without steady income. Assess revenue projections carefully

#### If speed is not a priority:

Apply for grants and establish research partnerships

#### If speed is a priority:

Explore VC or corporate partnerships

#### If growth and resources are priorities:

Engage with Deep Tech venture capital firms

#### If strategic partnerships are beneficial:

Consider corporate partnerships or corporate VC

#### If you have predictable revenue:

Proceed with debt financing options

#### If revenue is uncertain:

Explore VC or corporate partnerships

# The Deep Tech Compass – What Deep Tech investors are looking for

	Seed	Series A	Series B
<b>Round Size</b>	€3-6m	€10-20m	€25-55m
<b>Valuation</b>	€10-25m	€40-80m	€100-220m
<b>Dilution</b>	15-25%	15-25%	10-25%
<b>Team</b>	Founders are technical experts who understand the market deeply and demonstrate a strong learning curve regarding company building	Team have demonstrated an ability to hire great technical and non-technical talent around them	Senior leadership core team in place (may include: Tech, Product, Revenue, Operations, Marketing)
<b>Market</b>	<ul style="list-style-type: none"> <li>- 1bn+ SAM (Serviceable Addressable Market)</li> <li>- Severe pain caused by intractable problem</li> <li>- Global scale</li> </ul>	<ul style="list-style-type: none"> <li>- 1bn+ SAM (Serviceable Addressable Market)</li> <li>- Severe pain caused by intractable problem</li> <li>- Global scale</li> </ul>	<ul style="list-style-type: none"> <li>- 1bn+ SAM (Serviceable Addressable Market)</li> <li>- Severe pain caused by intractable problem</li> <li>- Global scale</li> </ul>
<b>Technology</b>	<ul style="list-style-type: none"> <li>- TRL 5 minimum (Technology validated in relevant environment)</li> <li>- Technology is the best way for the product to solve the problem</li> <li>- Core technology is defensible</li> </ul>	<ul style="list-style-type: none"> <li>- TRL 6 minimum (System/Product validated in relevant environment)</li> <li>- Credible path to miniaturization and/or scaling production</li> </ul>	<ul style="list-style-type: none"> <li>- TRL 7 minimum (System/Product validated in production environment)</li> <li>- Focus on achieving higher scale</li> </ul>
<b>Product</b>	<ul style="list-style-type: none"> <li>- 10x improvement in key industry metrics</li> <li>- Validated/early signs of market demand/willingness to pay</li> </ul>	<ul style="list-style-type: none"> <li>- Strong experimental evidence of product-market fit, clear target user through a well-defined value prop</li> <li>- Favourable product metrics (e.g. CSAT, NPS, CRR, Sean Ellis test)</li> </ul>	<ul style="list-style-type: none"> <li>- Ideal Customer Profile identified with very clear product-market fit and a well-defined value prop</li> <li>- Strong growing pipeline, clear 3x growth rate, improving product metrics, etc.</li> </ul>
<b>Commercialization<sup>1</sup></b>	<ul style="list-style-type: none"> <li>- Clear wedge market with clear expansion potential</li> <li>- Well researched hypothesis for route to commercialization</li> <li>- Paid Pilot &gt;&gt; Unpaid proof of concept &gt;&gt; LOIs or JDAs signed</li> </ul>	<ul style="list-style-type: none"> <li>- Validated hypothesis for route to commercialization</li> <li>- Pilot/POC signed revenue (ideally 1m+)</li> <li>- Validated hypothesis on revenue streams, pricing, LTV and margin profiles</li> </ul>	<ul style="list-style-type: none"> <li>- Commercial revenue (ideally €10m+)</li> <li>- Strong penetration into wedge market with proven scaling strategy and clear plan for expansion into adjacent markets</li> <li>- Proven revenue streams, pricing, LTV and margin profiles with clear understanding of how they scale</li> </ul>

# Pitchdeck Storyline & Scientific Method

Have a clear narrative that is easy to follow

Structure is king

1.

We solve a **problem** that is severe...

2.

...with a **product** that is 10x better than existing solutions...

3.

...and clearly **differentiated** from our **competitors**...

4.

...in a **market** that is huge...

5.

...leveraging a **technology** that works with a clear roadmap to commercialization.

6.

We have significant **traction** – customer want our product and are willing to pay for it.

7.

Our **vision** is to build a multi-billion-dollar company within VC horizons...

8.

...for this, we assembled the triple-A **team** to pull it off.

9...

Therefore, we are **raising x€** to achieve the following **milestones**...

Test, collect data, refine/sharpen

Hypothesis-driven validation

+

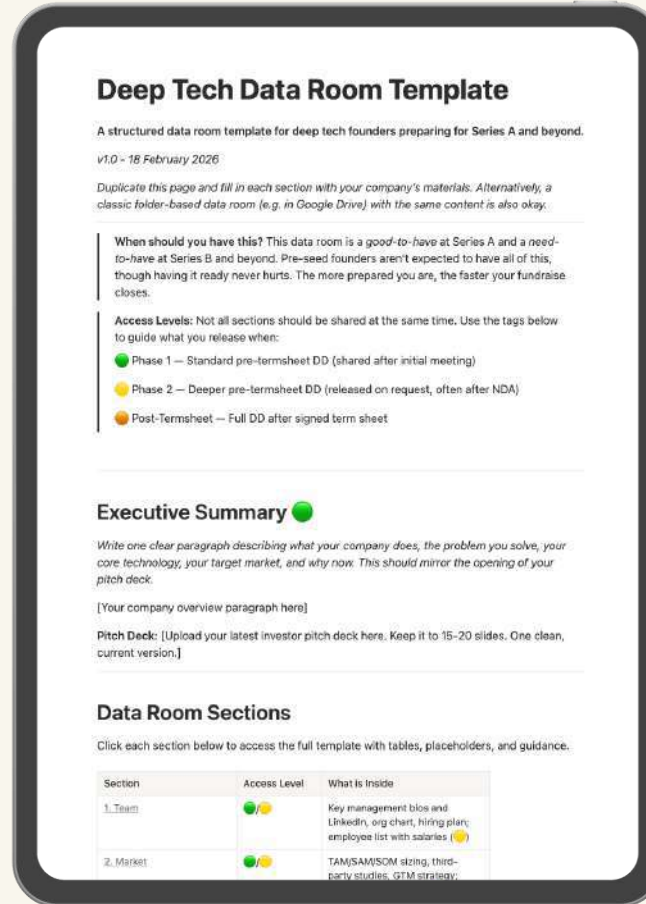
...

Here is the data to prove these hypotheses and/or the experiments we want to run to test them...

# Your Deep Tech Data Room – Ready to Use

A structured data room template has been built so you can focus on your fundraising, not on formatting folders.

A thorough data room is a good-to-have from Series A and a must-have from Series B onward.



**Deep Tech Data Room Template**

A structured data room template for deep tech founders preparing for Series A and beyond.

v1.0 - 18 February 2026

Duplicate this page and fill in each section with your company's materials. Alternatively, a classic folder-based data room (e.g. in Google Drive) with the same content is also okay.

**When should you have this?** This data room is a good-to-have at Series A and a need-to-have at Series B and beyond. Pre-seed founders aren't expected to have all of this, though having it ready never hurts. The more prepared you are, the faster your fundraising closes.

**Access Levels:** Not all sections should be shared at the same time. Use the tags below to guide what you release when:

- Phase 1 — Standard pre-termsheet DD (shared after initial meeting)
- Phase 2 — Deeper pre-termsheet DD (released on request, often after NDA)
- Post-Termsheet — Full DD after signed term sheet

**Executive Summary** ●

Write one clear paragraph describing what your company does, the problem you solve, your core technology, your target market, and why now. This should mirror the opening of your pitch deck.

[Your company overview paragraph here]

**Pitch Deck:** [Upload your latest investor pitch deck here. Keep it to 15-20 slides. One clean, current version.]

**Data Room Sections**

Click each section below to access the full template with tables, placeholders, and guidance.

Section	Access Level	What is Inside
1. Team	●●	Key management bios and LinkedIn, org chart, hiring plan, employee list with salaries (●)
2. Market	●●	TAM/SAM/SOM sizing, third-party studies, GTM strategy



Click here to get the [Template](#)



**Duplicate the Notion template**

You can also adapt the structure to Google Drive or any folder-based system.



**Tiered by access level** ●●●

Share standard diligence materials upfront, release sensitive content only after NDA or signed term sheet.

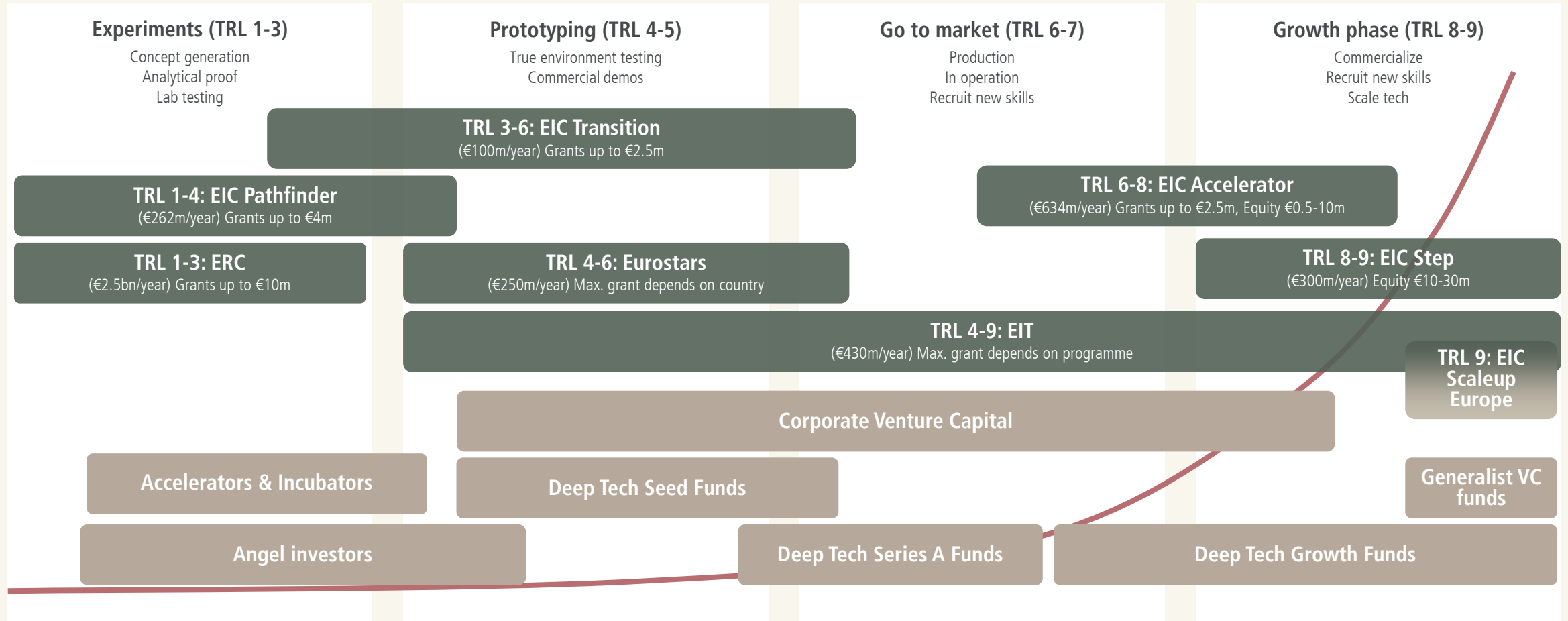


**Bonus Directory**

Includes a Deep Tech investor directory to help you find the right partners.

# Funding access – Within Horizon Europe, the EIC, ERC, and EIT play a critical role for (Deep) Tech startups

Public capital  
Private capital



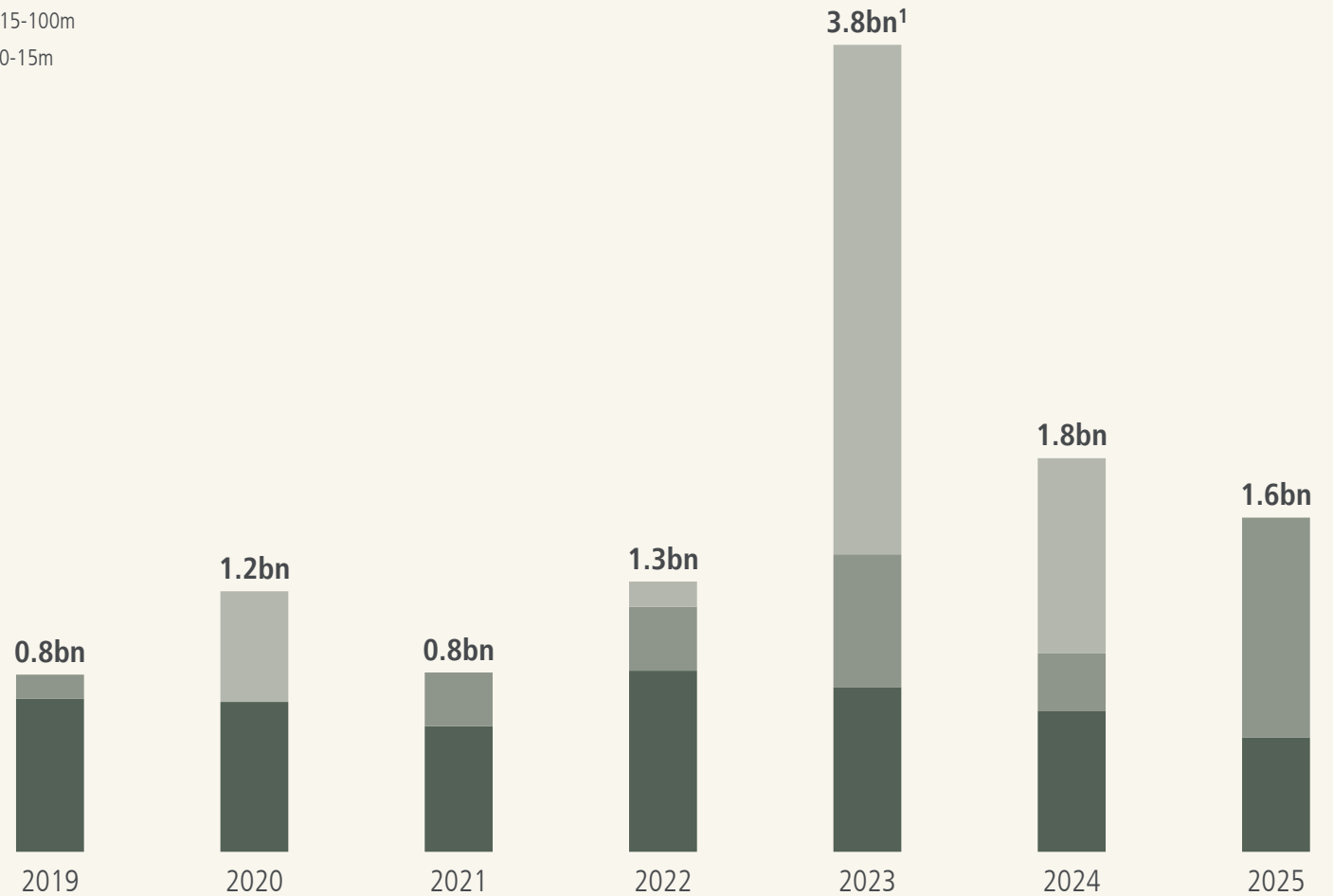
# European Deep Tech startups have raised over \$10.5bn across 3900+ grants since 2020

## Notable grants providers



**Grant funding awarded to European Deep Tech startups**  
Total awarded by grant size in \$ million

- \$100m+
- \$15-100m
- \$0-15m



1) 2023 outlier value is in large part due to large grants awarded to EV battery manufacturers such as Northvolt and Verkor

# Venture-focused financing tools within *Private Credit* can help to build and scale profitable Deep Tech companies

## Problem: The equity financing trap

European Deep Tech companies rely too heavily on equity financing for CapEx

- European venture funding relies strongly on equity financing
- For hardware-based startups, massive upfront cash is needed for production and assets
- Thus, they rely on equity financing to scale due to initial limited credit access
- Equity-driven growth prioritizes company valuation over profitability, creating unsustainable business models

## Solution: Venture-focused Private Credit financing tools

Venture debt, early credit, and growth debt are key to building profitable hardware-heavy companies

- Credit financing works differently, by focusing on profitability and unit economics
- Product quality and revenue take priority over company valuation
- Credit is a much healthier form to finance production for asset-heavy startups
- Aligns incentives with long-term business viability rather than short-term hype

## Case study example – Germany's WIN Initiative

The WIN Initiative ("Growth and Innovation Capital for Germany") is a collaboration between businesses, associations, policymakers, and KfW, aiming to invest around €12bn in Germany's venture capital ecosystem by 2030 to support startups and innovative companies. A key component of the 10-point action plan focuses on developing specialized credit financing tools for CleanTech scale-ups, particularly to support "first-of-a-kind" investments.

## Key Venture-focused Private Credit providers



Public / Development Finance Institution

**BlackRock**

Venture and Growth Lending (fka Kreos Capital)

Global Asset Manager Lending Platform



Specialized Venture / Growth Debt Fund



Specialized Venture / Growth Debt Fund



Public / Development Finance Institution



Global Innovation Bank

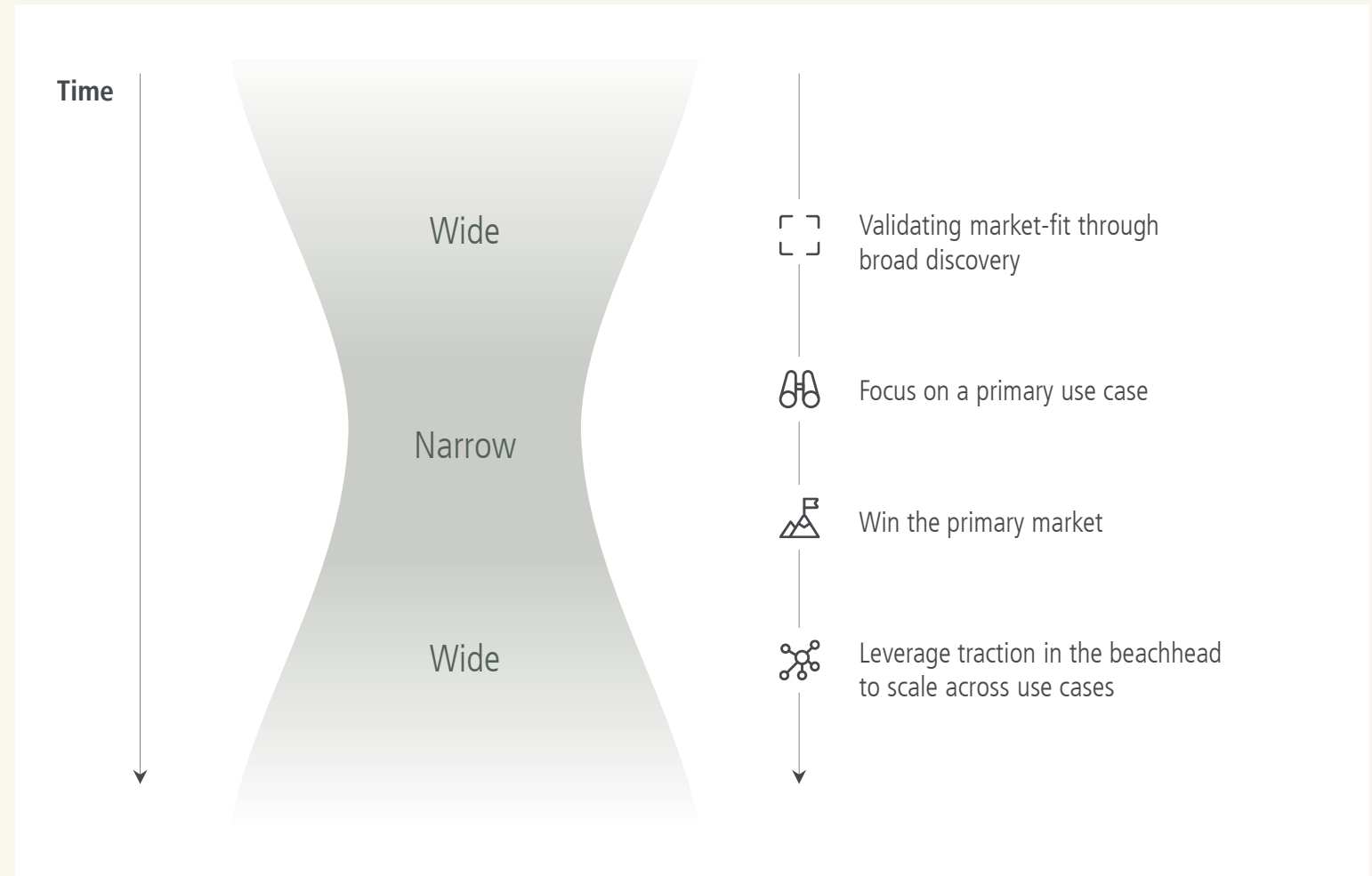
# From vision to value: Taking Deep Tech to market

Deep Tech startups are often trying to commercialize ‘horizontal’ technologies that have many potential applications.

The challenge is often ‘*where to start*’? Resource constrained startups can’t serve multiple verticals at once. Even if the technology is similar for each use case, how it is productised, marketed and sold will be different across use cases and will overburden a startup.

To address this, early-stage Deep Tech companies can follow a ‘wide-narrow-wide’ process.

Illustrative Wide-Narrow-Wide process



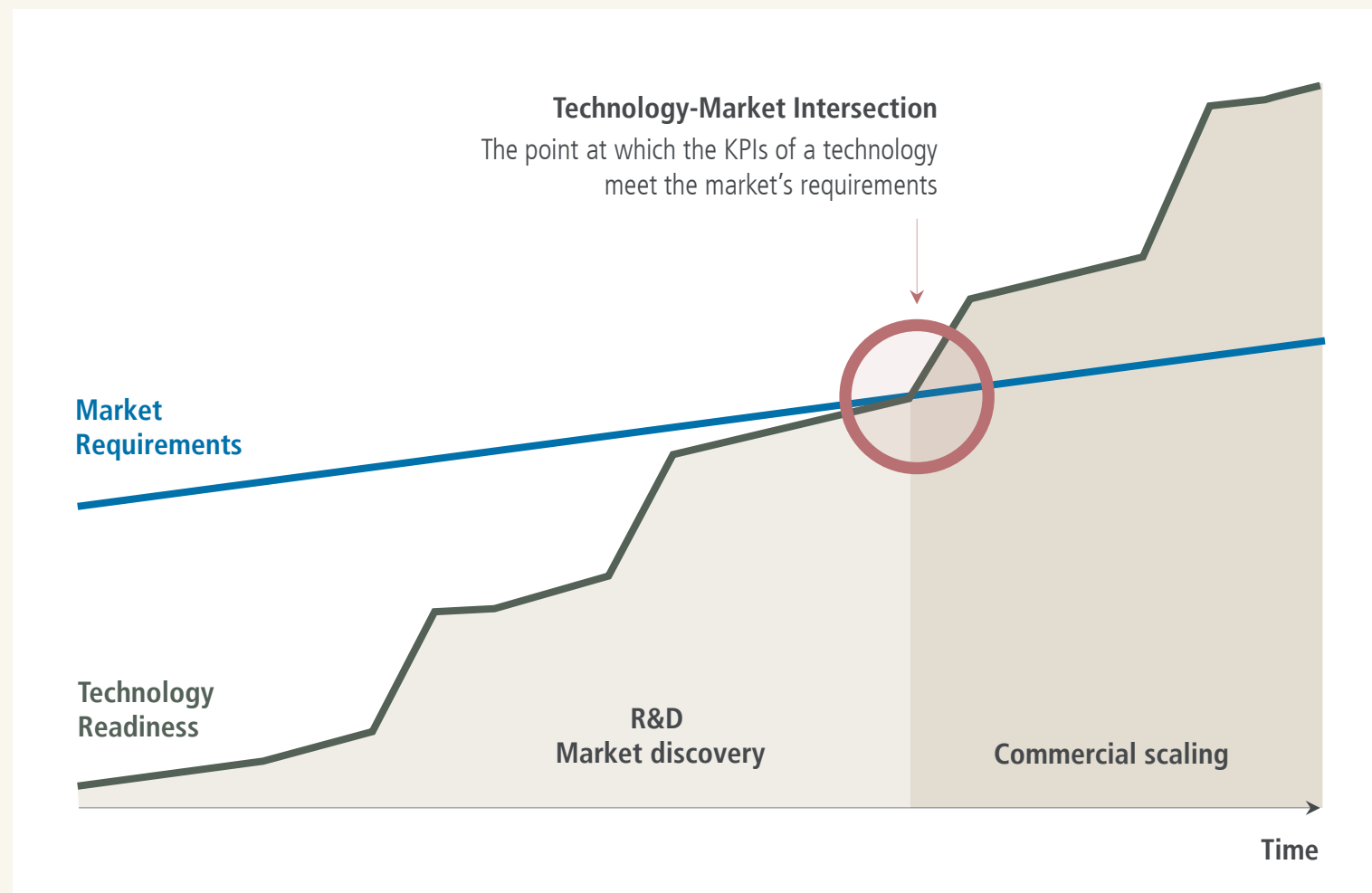
## From vision to value: Selling to corporates – technology readiness

While some early-adopters might partner a startup before a technology is ready for market, most companies want to buy products and solutions, not platforms or technologies. And their requirements are not static but evolve over time.

Deep Tech startups need to develop their technology to meet the market where it will be when it's ready – the 'Technology-Market Intersection'.

Beyond this point, the tech may be ready, but that doesn't mean corporates will buy; success depends on productization, effective sales, and marketing. While technical R&D continues to extend leadership, it must be balanced against the commercial demands of scaling.

### Illustrative Technology-Market Intersection



# Patents are key for Deep Tech startups

Patents help founders do three things at once:

1. Protect their investments in R&D,
2. Signal credibility to partners and investors, and
3. Create strategic options for the management of their intangible assets (licensing, partnerships, market access).

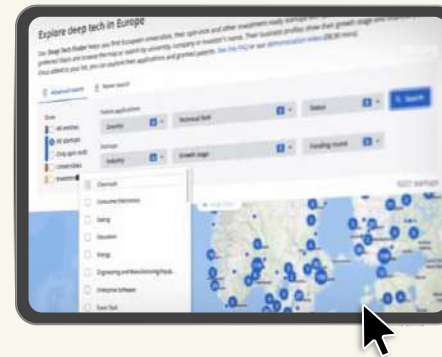
EPO Observatory studies found that seed-stage startups with patents can have up to 10x higher funding odds compared with peers without them.

The European Patent Office (EPO) offers support:

Fee reductions for smaller entities and universities: [epo.org/fees](https://www.epo.org/fees)

The European Unitary Patent system reducing the costs of patenting in EU by up to 70%: [epo.org/unitary-patent](https://www.epo.org/unitary-patent)

The free **Deep Tech Finder** connects potential investors with over 12,000 European startups with EPO patent applications.



Insights and tools to find the latest insights of technology and better position your startup: [epo.org/observatory](https://www.epo.org/observatory)

EPO's **Startup guide** offers valuable insights on how to protect your innovations and leverage intellectual property to grow your business.

“Europe’s growth and competitiveness depend largely on our ability to scale Deep Tech.

Patents help startups protect their edge, build investor confidence, and forge partnerships to reach global markets. That’s why the EPO is strengthening support for founders – and going further through the EPO Observatory on Patents and Technology, turning patent insights and data-driven tools into practical help from day one.”



The background features a complex network of white lines and squares on a dark green background. The lines are a mix of solid and dashed, forming a grid-like structure with rounded corners. Small squares are placed at various points along these lines, creating a sense of connectivity and data flow.

# 7. CHALLENGES & RECOMMENDATIONS

# To build a thriving European Deep Tech ecosystem, capable of creating generation defining technology companies that remain European, we identify four main challenges

While these are widely recognized problems and there is a willingness to address them, there has been only modest tangible progress to date.

## 1. The growth-stage funding gap

Beyond Series A there is not enough capital in Europe to fund businesses locally. As a result, companies either sell or take capital from overseas that often results in a shift in the 'geographic centre of mass' of the business away from Europe. This is true from Series B onwards and includes stock exchanges as a source of primary capital.

## 2. Fragmentation

Europe suffers from high-friction, fragmented regulation across countries while lacking the power of concentrated talent clusters.

## 3. From Researcher to Founder

More needs to be done to turn European research excellence into high quality startups, with strong and diverse founders.

## 4. Risk appetite

European corporates and governments need to work more closely with startups and embrace risk to drive success.

# Recommendations

## Challenge 1: The growth-stage funding gap

### Strengthen *European growth-stage capital* to reduce non-EU dependency



- Half of European Deep Tech late-stage funding comes from non-EU investors (primarily US), creating strategic dependency and governance misalignment for companies building sovereign-critical technologies
- Develop dedicated European Deep Tech growth funds, backed by a mix of institutional LPs, sovereign wealth, and public co-investment (building on EIC ScaleUp Europe)

### Expand *alternative financing tools* for hardware-heavy Deep Tech



- European Deep Tech companies rely too heavily on equity financing for capital expenditure, leading to excessive dilution and unsustainable valuation-driven growth
- Develop early-stage credit products particularly for hardware-based startups with physical production assets
- Support dedicated public-private credit facilities (e.g., EIB-backed) for "first-of-a-kind" Deep Tech production scaling

### Developments

- 50% of European Deep Tech late-stage funding still comes from outside Europe, a figure that has not materially improved
- The Scaleup Europe Fund, targeting €5bn, will be the EU's flagship late-stage vehicle for Deep Tech. The EU mobilized founding investors including APG (Dutch pension fund ABP), Novo Holdings, Wallenberg Investments, and CriteriaCaixa, with operations expected to start in Q2 2026 ([Source](#))
- British Business Bank has an increased mandate to back growth stage venture funds ([Source](#))
- Several larger Deep Tech funds have had first closes recently including Kembara ([Source](#)) and Jolt Capital ([Source](#))
- European venture debt hit a record \$5.6bn in 2025, representing 12% of total capital invested, and structures are evolving beyond traditional SaaS into hardware, infrastructure, and defence ([Source](#))
- Germany's WIN Initiative includes a specific focus on developing credit financing tools for CleanTech scale-ups, a model that could extend to other Deep Tech verticals ([Source](#))

# Recommendations

## Challenge 1: The growth-stage funding gap

### Increase LP base and institutional investors for growth-stage Deep Tech Funds



LIMITED PROGRESS

- Inform broader range of capital allocators about the asset class of Venture Capital and Deep Tech
- Shift assets from public to private, especially institutional investors to democratize returns (e.g., Tibi initiative in France)
- Remove regulatory hurdles to pave the way for a new asset allocation
- Create broad access, e.g., by lowering investment thresholds

### Strengthen public markets



LIMITED PROGRESS

- Promote the Capital Markets Union to strengthen European liquidity pools
- Adopt regulations to foster harmonisation and unification (e.g., EU Listing Act), including for secondary liquidity (e.g., Forge Europe)

### Developments

- The European Commission published a targeted consultation on venture and growth capital funds for 2026, specifically addressing barriers to pension fund and institutional participation ([Source](#))
- ELTIF 2.0 – the revised European Long-Term Investment Fund regulation became fully operational in 2025 lowering minimum thresholds for retail and institutional investors to access private markets, including VC ([Source](#))
- The Savings and Investment Union (SIU) was launched by the EC in March 2025 ([Source](#))
- While the SIU, Mansion House Reforms and other policy vehicles show political will, implementation (particularly pension reform) has been slow and uneven across Europe
- Despite the Listing Act, European IPO numbers remain disappointing. Bloomberg reported a drop in Euronext IPOs as evidence the Capital Markets Union is not yet working ([Source](#))
- Of the 22 VC-backed European Deep Tech companies that had an IPO or SPAC merger at above \$500m valuation since 2015, 18 listed on US exchanges and just four on European exchanges
- ESMA selected EuroCTP as the EU's first Consolidated Tape Provider for shares and ETFs on December 19, 2025 – the most significant European capital markets infrastructure development in years, creating the first real-time, standardized view of European equities trading ([Source](#))

# Recommendations

## Challenge 2: Fragmentation

### Review innovation regulation



LIMITED PROGRESS

- Tie regulation and corporate responsibility to size of the company to not stifle early innovation (“stronger shoulders can carry more”)
- Install pan-European ESOP legislation as demanded by ESNA, mirroring new models like in Germany
- Review & harmonize legal frameworks across Europe on an ongoing basis (e.g., how to set up a company)

### Strengthen talent / excellence clusters



LIMITED PROGRESS

- Raise awareness for talent clusters to attract expertise into highly dense clusters for various technologies (e.g., Munich for space & defence, Paris for AI, etc.)
- Foster a framework that encourages co-competition rather than fragmented competition for scarce talent, public funding, and private investment

### Developments

- The European Commission launched EU Inc (the “28th Regime”) at Davos in January 2026, allowing entrepreneurs to register a company fully online in any member state within 48 hours. The European Parliament adopted the resolution with 492 votes in favour ([Source](#)). If Europe approves an implementation akin to a European Delaware Inc it will be major step towards solving the fragmentation challenge. However, at the time of writing the exact form of implementation is unclear.
- Paris cemented its position as Europe's AI capital: French Deep Tech raised \$3.9bn in 2025 with Paris capturing 77% of that capital. Mistral AI's €1.7bn raise is Europe's largest AI round
- Munich continues to grow as a dual-use/defence hub. Anthropic opened offices in both Paris and Munich in November 2025, validating both cities' AI talent pools ([Source](#))
- London remains the largest single centre of Deep Tech startups in Europe

# Recommendations

## Challenge 3: From Researcher to Founder

### Encourage more entrepreneurs to move into Deep Tech



- Encourage a cultural shift towards embracing risk
- Drive collaboration between researchers and startups and establish university programmes that integrate technology and business, mirroring successful models like Stanford and MIT
- Attract more commercially-savvy and experienced operators
- Implement framework to attract talent back to Europe

### Harmonize spinout terms and reduce bureaucracy



- Harmonise and standardize processes across Europe
- Streamline procedures to expedite the spinout process while minimising bureaucracy
- Establish proper incentives for Technology Transfer Offices (TTOs) across academia
- Implement a common framework for valuing intellectual property (IP)

### Developments

- The EIC 2026 Work Programme allocates €1.4bn to support Deep Tech entrepreneurs and researchers, including a new Pre-Accelerator programme targeting widening countries with €500k-€1m grants ([Source](#))
- 76 European Deep Tech university spinouts reached \$1bn valuations or \$100m in revenue by end of 2025, showing the pipeline is producing outcomes ([Source](#))
- The UK government backed the spinout review with £30m for four innovation hubs and plans for an annual transparency dashboard showing university equity stakes ([Source](#))
- Continental Europe remains fragmented in its approach with Switzerland and Nordics having the most progressive and founder friendly models

# Recommendations

## Challenge 3: From Researcher to Founder

### Promote *diversity*



- Promote diversity across founders & investors
- Stress importance of education, equal opportunity, and offer support to ensure individuals have the necessary resources for success
- Shine light on role models

### Developments

- Deep Tech companies with at least one female founder attracted only 14% of VC funding in 2025 with the remainder going to all male founding teams. There has been minimal change for the last eight years
- This is mirrored in general tech where the starting point is higher (15-20% depending on stage), but there has been no progress since 2016 ([Source](#))

# Recommendations

## Challenge 4: Risk appetite

### Encourage corporates to work with startups



- Encourage a cultural shift towards embracing risk
- Corporates should allocate a percentage of their procurement budget specifically for unproven technology
- Help corporates to recognise that partnering or acquiring Deep Tech startups can supplement inhouse R&D to secure a technological edge

### Shift governments to become customers



- Encourage a cultural shift towards embracing risk
- Design the right framework where public entities must involve startups e.g., as part of procurement processes
- Reform vendor vetting to encourage working with startups e.g., removing requirements for 5 years of audited accounts
- Stress the importance and benefits of commercial contracts for startups over grants

### Developments

- There are several government initiatives and policy instruments designed to encourage corporate-startup engagement e.g., the European Defence Industrial Strategy (EDIS), EU Chips Act and the revised UK Industrial Strategy but none of these require corporates to work with SMEs
- Corporate Venture Capital arms such as those at Bosch, BASF and Airbus continue to be active
- US strategic acquirers are often willing to pay a premium for European startups transformative technologies – a gap European strategics have yet to close

- There has been a notable change in government procurement in defence. For example, the European Defence Fund 2026 Work Programme dedicates €1bn to collaborative defence R&D, with dedicated SME and mid-cap support tracks ([Source](#))
- Government-linked accelerators like NATO DIANA or the UK's Defence and Security Accelerator (DASA) continue to provide faster procurement pathways for startups

8.

# DEEP TECH (MIS) CONCEPTIONS

## There are common (mis)conceptions about Deep Tech

1.

Do Deep Tech companies  
need *more capital*?

2.

Do Deep Tech companies  
*take longer to  
achieve revenue*?

3.

Do Deep Tech companies  
*fail more often*?

4.

Do Deep Tech companies  
need *more time to exit*?

5.

Do Deep Tech companies  
have *larger exits*?

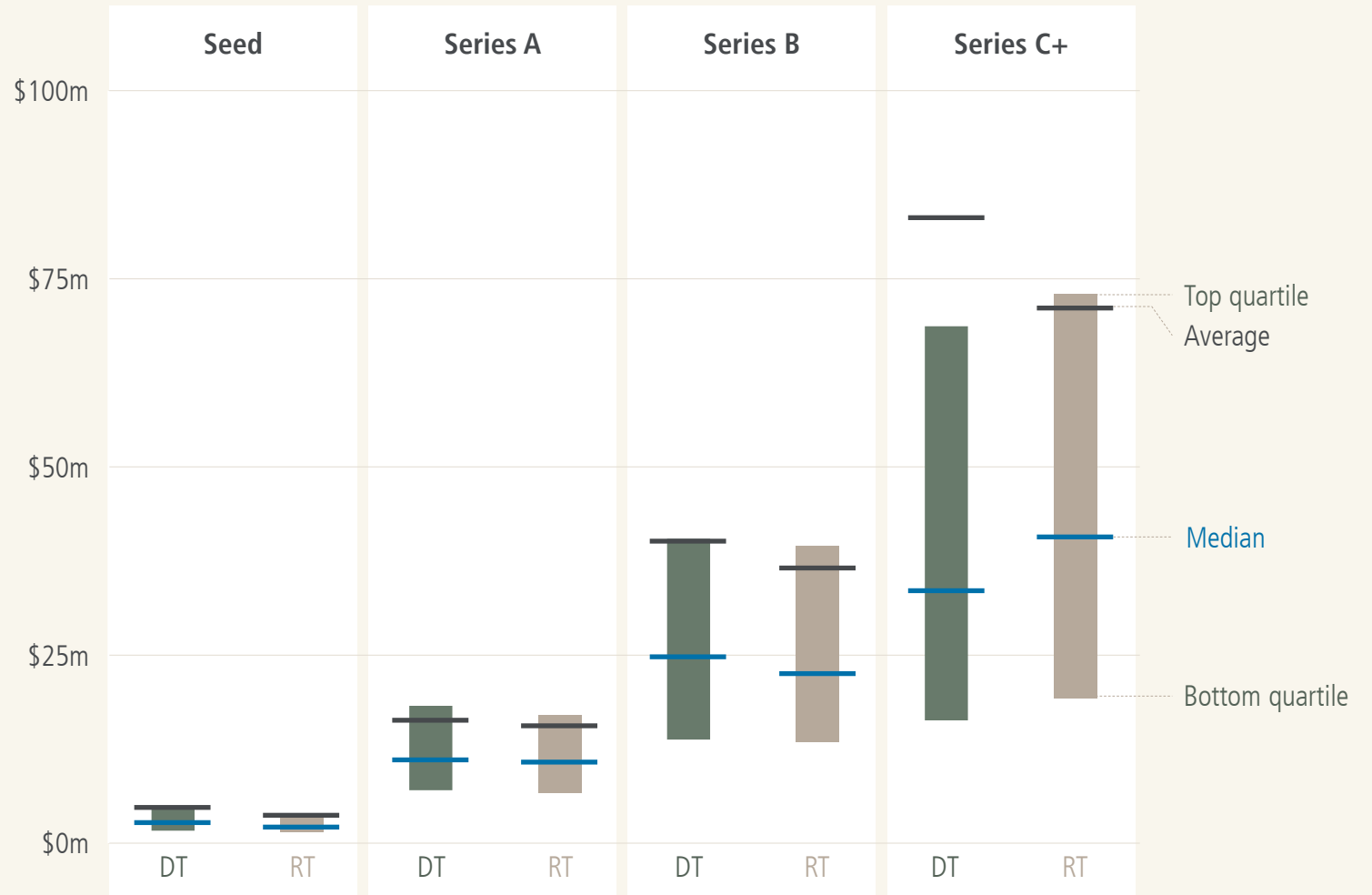
6.

Does Deep Tech  
investing deliver  
*top returns*?

1. Do Deep Tech companies need *more capital*?

# Deep Tech companies raise more capital than Regular Tech

Round sizes for European Deep Tech (DT) and Regular Tech (RT), 2024-2025



# Deep Tech CapEx builds moats that AI can't replicate

## The conventional wisdom of venture capital investing is to avoid CapEx.

The rationale is that a CapEx heavy business requires more capital investment which dilutes early-stage investors and reduces investment returns. It also assumes that given the risks of raising in unpredictable capital markets, the higher the company's capital needs, the riskier it is that at some point in their journey, they will fail to raise and run out of cash. Moreover, historically, CapEx was often spent on fungible items such as tools or assembly equipment that anyone could buy off the shelf.

This logic held true in the past, but is failing due to the advent of generative AI tools that can build software.

## Recent innovations in AI started to disrupt conventional software businesses heavily.

When building a software product, the speed and low cost that has historically made it attractive to investors also makes it easy for a competitor or generative AI models to replicate. The evidence is already visible: in February 2026, comments from Palantir's CEO on an earnings call arguing that AI agents make traditional SaaS obsolete wiped \$300 billion from listed software company valuations overnight.

Software businesses with no physical assets, proprietary data, or regulatory position have no floor once a model can replicate their core function; and AI tools are now eroding the last remaining defences: data lock-in and workflow integration.

## Deep Tech companies can invest these funds into infrastructure and heavy assets unique to their new technology that makes it hard for AI businesses or other challengers to compete.

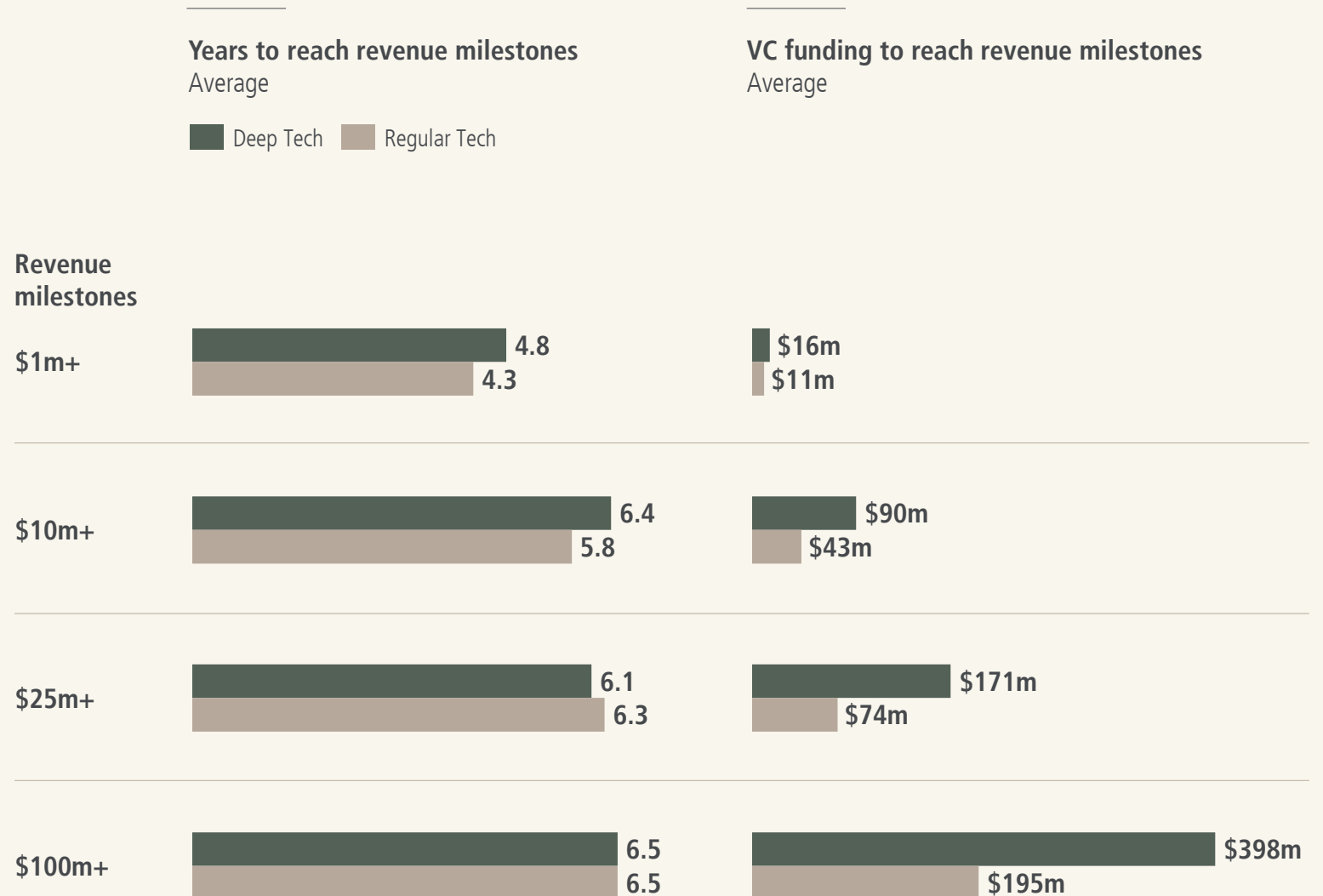
While new AI tools can accelerate science and engineering, they cannot replace the need to manufacture a next-generation chip, commission a fusion pilot plant, or synthesize a novel compound. Each of these requires investment that becomes a source of differentiation and defensibility unique to Deep Tech companies.

Markets are now rewarding this: capacity, networks, infrastructure, and engineering complexity. Assets that cannot be replicated by writing better code or training a larger model.

# To reach significant revenues, Deep Tech require roughly the same time as Regular Tech, but significantly more VC funding

Deep Tech companies have significantly narrowed the time-to-revenue gap with Regular Tech, now reaching milestones in a similar timeframe across all stages.

The capital requirement, however, remains substantially higher, roughly 2x at every stage. This funding is typically deployed into infrastructure and R&D, building durable competitive advantages.



Differences vs. 2025 edition reflect both an updated methodology (larger dataset, broader revenue window) and compositional shifts in the Deep Tech cohort, notably the rapid scaling of AI and defence companies post-2021.

## Deep Tech and Regular Tech have similar conversion rates

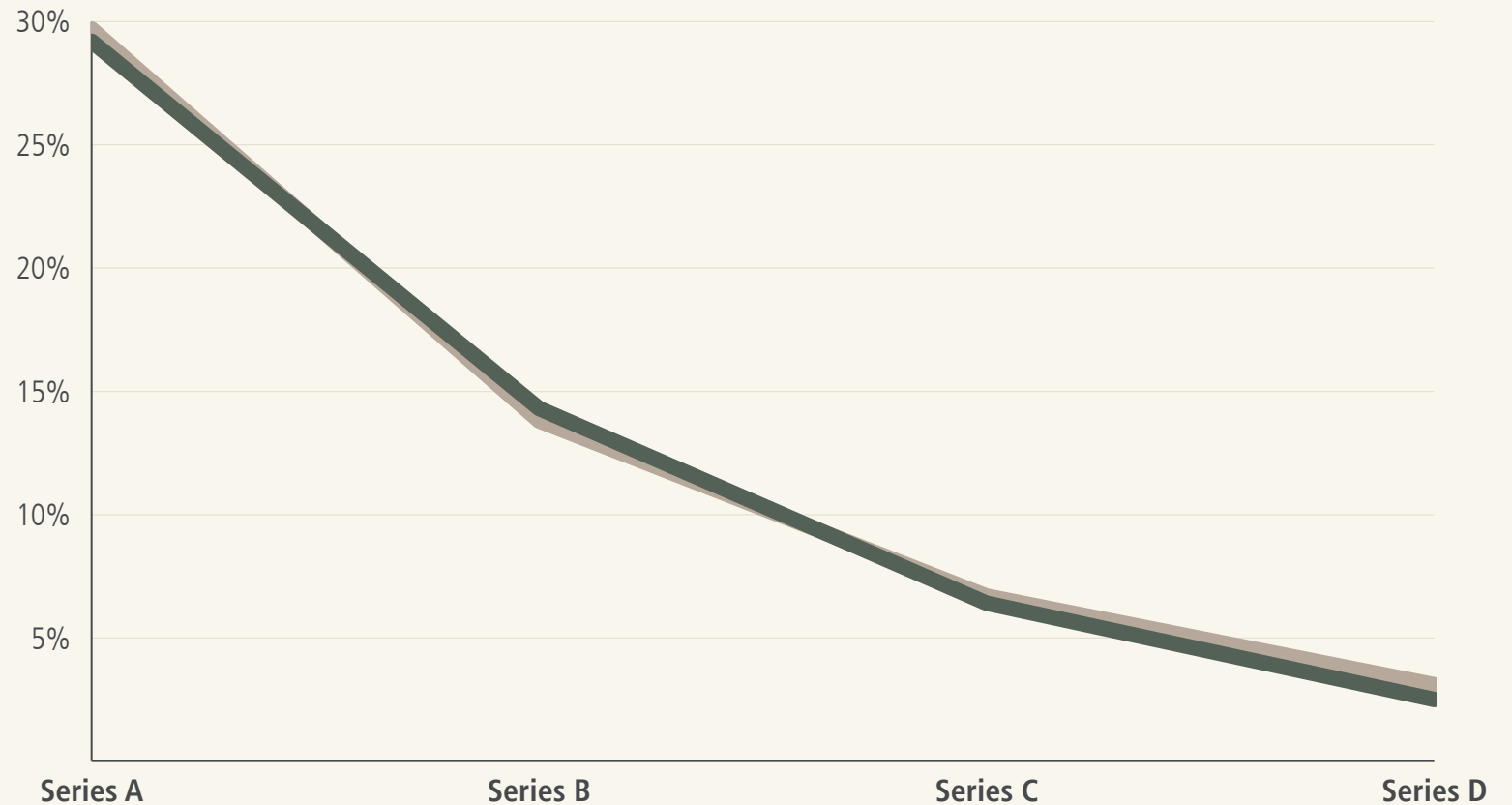
Deep Tech conversion rates are mostly in line with Regular Tech.

However, there are 25% more startups reaching Series D in Regular Tech than in Deep Tech

- One in three companies that raise a Seed go on to raise a Series A
- Just under half of Series A companies go on to raise a Series B
- Less than half then reach Series C
- Overall, 5% of Deep Tech startups reach Series C+ from Seed – which is similar to Regular Tech companies

**Conversion rates Deep Tech vs Regular Tech**  
% of seed companies that reach each stage, Seed cohorts 2010-2020

— Deep Tech — Regular Tech



# Lessons learnt from *Lilium*:

What investors and analysts said we should learn from Lilium's \$1.5bn collapse.



## **Building in public is hard**

Lilium went public via a SPAC merger at a \$3.3bn valuation in 2021 at which point it had a prototype but was years away from certification and a commercial offering. The stock fell 95%+ within 18 months and the company ceased trading in December 2024, filing for insolvency in February 2025. Public markets are a harsh and unforgiving environment for Deep Tech companies still in the experimental phase, as the relentless pressure for quarterly results and transparency leaves no room for the quiet, iterative pivots required to find product-market fit.

## **The fundraising treadmill kills engineering focus**

Lilium raised \$584m through the SPAC merger and then raised further funds in 2022 and 2023. Each subsequent raise diluted existing shareholders and loaded the cap table with warrants, making the next raise harder and more expensive. Management were perpetually fundraising instead of managing the company.

## **High cash burn with a short runway was a death spiral**

Lilium burned €234m in 2021, €253m in 2022, €261m in 2023, and was on track for €350m+ in 2024. Post SPAC merger cash runway never exceeded 18 months and was often just 8-9 months.

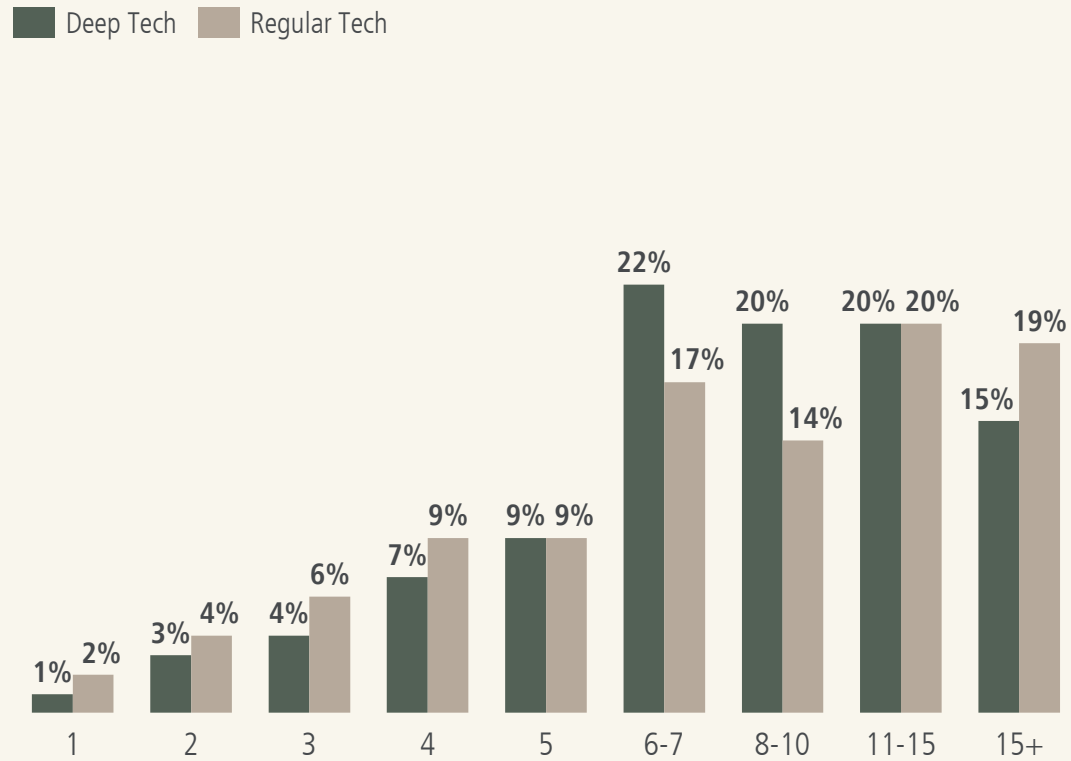
## **Government support should be a catalyst, not a crutch**

Lilium died when the Bundestag blocked a €50m loan guarantee. US competitor Joby got \$163m in DoD contracts; China certified EHang in 31 months. Government money works best when it de-risks private capital, not replaces it.

# Deep Tech has similar exit timelines compared to Regular Tech, with a peak after 6-7 years

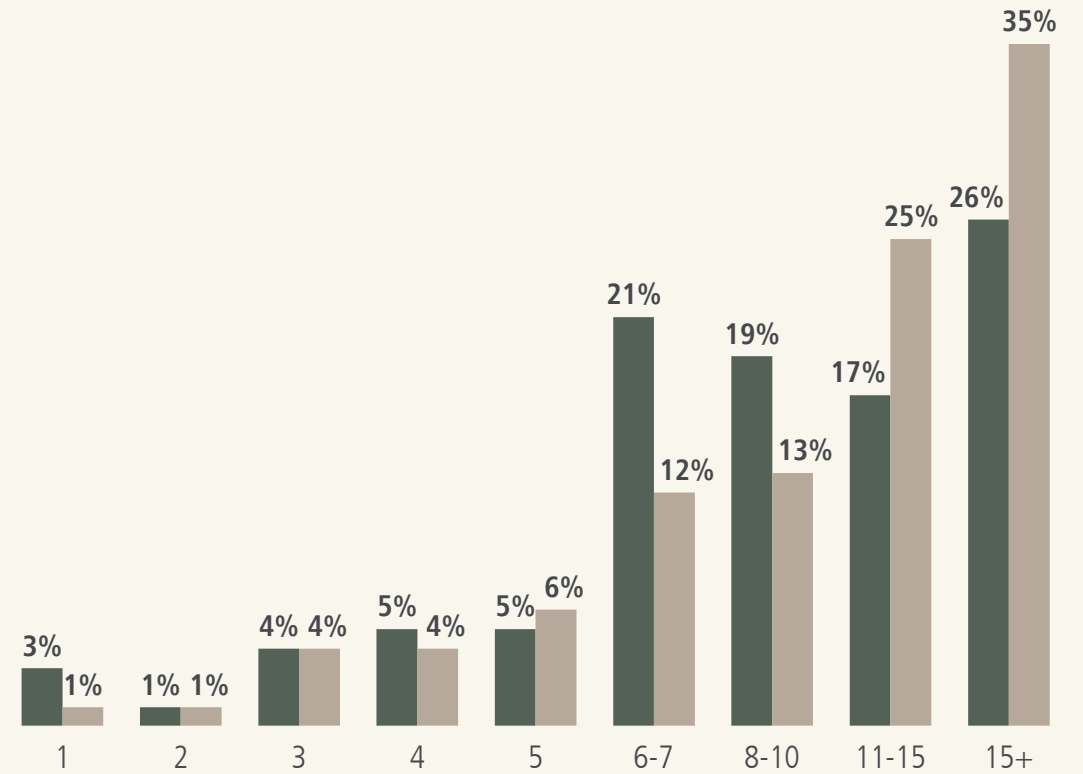
## ALL EXITS

VC-backed exits in Europe by time (years) to exit from founding



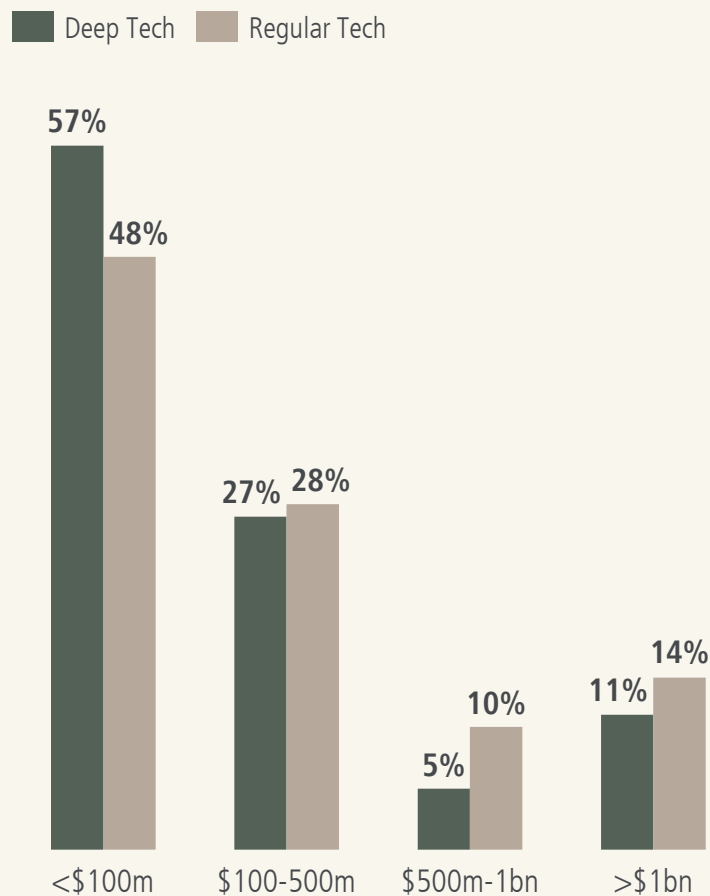
## ABOVE \$100m

VC-backed exits in Europe by time (years) to exit from founding



# The European Deep Tech ecosystem needs more large-scale Deep Tech exits

VC-backed exits in Europe by size (2016-2025)



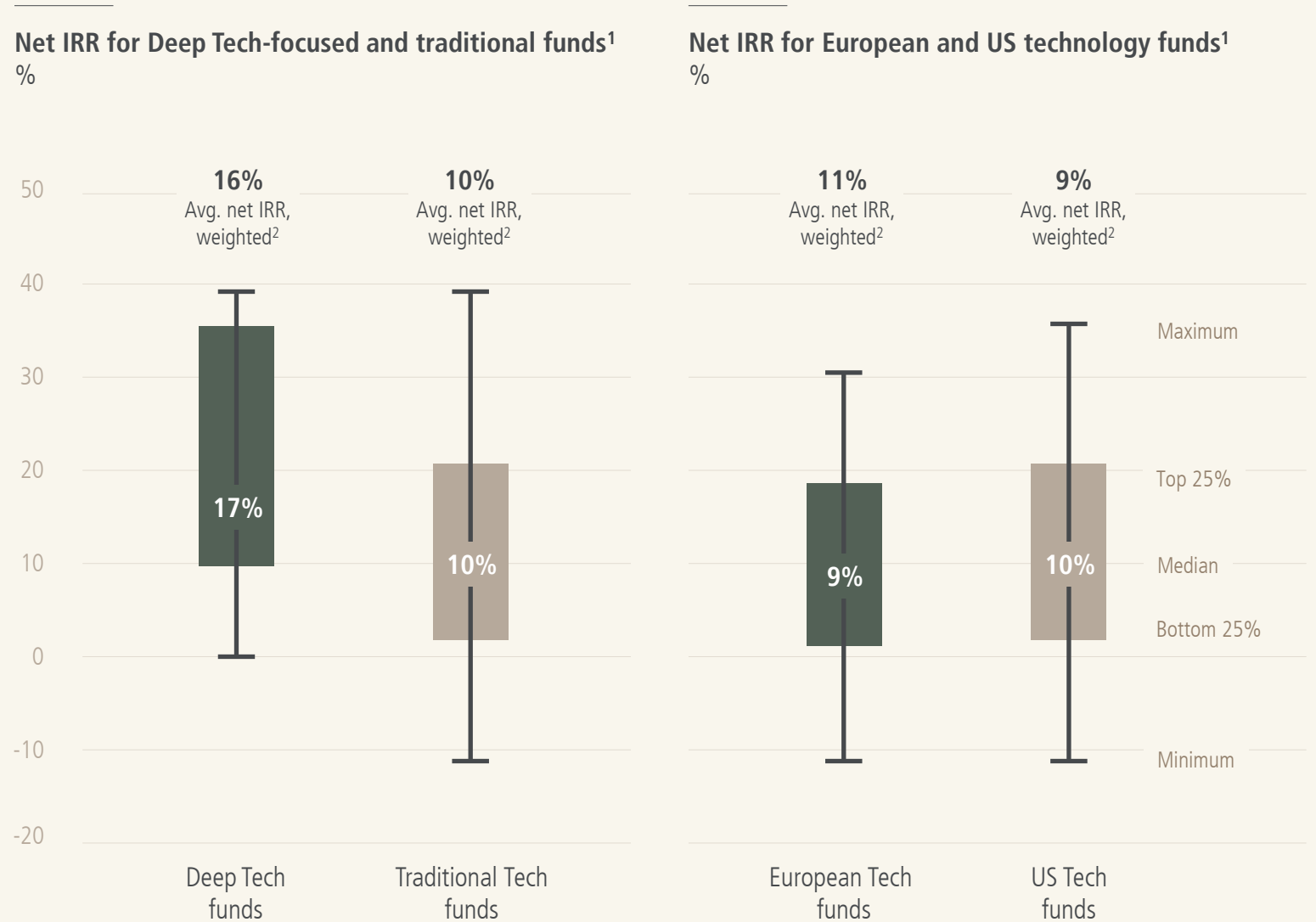
Selected \$1bn+ European VC-backed Deep Tech exits

Company	HQ	Industry	Round Type	Valuation	Launch year	Exit year	Acquiror	Years to exit
AFFIVAL <sup>1</sup>		Transportation	SPAC IPO	\$13bn	2015	2021	CIIG Merger Co.	6
DARKTRACE		Security	Acquisition	\$5.3bn	2013	2024	Thoma Bravo	11
Oxford Nanopore Technologies		Health	IPO	\$4.5bn	2005	2021	-	16
BIONTECH		Health	IPO	\$3.4bn	2008	2019	-	11
LILIUM <sup>1</sup>		Transportation	SPAC IPO	\$3.3bn	2015	2021	Qell Special Acquisition Corporation	6
lumiraDx™		Health	SPAC IPO	\$3bn	2014	2021	CA Healthcare Acquisition Corp	7
nextthink		Enterprise software	Buyout	\$3bn	2004	2025	Vista Equity Partners	21
OrganOx		Health	Acquisition	\$1.5bn	2008	2025	Terumo Corporation	17
einride		Transportation	SPAC IPO	\$1.4bn	2016	2025	Legato Merger Corp. III	9

## Deep Tech funds tend to generate similar to above average returns

There is a clear trend showing Deep Tech-focused funds have outperformed traditional tech funds since 2003.

While Europe has not seen many Deep Tech-focused funds closing and reporting IRR, the expected performance should be in line with US-based benchmarks historically, driven by similarly attractive regional characteristics for Deep Tech and similar net IRR performance for the broader tech funds.



1) Based on 115 Deep Tech-focused funds and 1,572 traditional funds in Europe and North America, with vintage/inception year between 2003 and 2020  
2) Calculated by weighting each fund's net IRR with its final fund closing size, i.e., large funds have more impact on the weighted IRR than small funds  
Source: McKinsey, Preqin database (self-reported data on net IRR)

# There are common (mis)conceptions about Deep Tech

1.

Do Deep Tech companies  
need *more capital*?

**YES**

But often money is spent  
on building moats

2.

Do Deep Tech companies  
*take longer to achieve revenue*?

**YES & NO**

True in the early years,  
false at later stages

3.

Do Deep Tech companies  
*fail more often*?

**NO**

Similar failure rates  
compared to Regular Tech

4.

Do Deep Tech companies  
need *more time to exit*?

**NO**

Similar exit timelines  
compared to Regular Tech

5.

Do Deep Tech companies  
have *larger exits*?

**INCONCLUSIVE**

While some large outcomes exist,  
Europe needs more big exits

6.

Does Deep Tech investing  
deliver *top returns*?

**YES**

Some data shows higher IRRs  
than Regular Tech

# European Deep Tech report 2026: Key numbers and takeaways

## THE EUROPEAN OPPORTUNITY

**30%**  
of top Deep Tech universities are European

**2x+ as many**  
science and engineering graduates as in the US

**137 unicorns**  
with European founders, 40% now US-based

**€50bn+/year**  
public capital targeting European AI, chips, space, defence

## FUNDING LANDSCAPE

**\$690bn**  
total enterprise value of European Deep Tech

**\$20.3bn**  
invested in European Deep Tech in 2025

**32%**  
of all European VC, up from 15% in 2015

**70%**  
of large-scale late-stage funding from non-European investors

## CHALLENGES & RECOMMENDATIONS

**\$4-24bn/year gap**  
in growth-stage funding needed to match US levels

**43 countries**  
in Europe with fragmented regulation without concentrated talent clusters

**33% spinouts**  
but researcher-to-founder conversion needs work

**87% of funds**  
dedicated Deep Tech investors under \$300m, too small to lead Series B+

LAKE  
STAR

(w)<sup>C</sup>  
Walden Catalyst

dealroom.co

