

Royal Academy of Engineering

State of UK Deep Tech 2025

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1.

Foreword

1. Foreword

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Chief Technology Officer, Ceres Power
Chair of the Royal Academy of Engineering
Enterprise Committee



The story of UK deep tech in 2025 is one of ambition, achievement, and urgent challenge.

Since 2019, UK deep tech startups have attracted \$43.7 billion in venture capital, ranking third globally behind only the United States and China. Our ecosystem is home to thousands of companies, with privately held startups now valued at \$155 billion. Over 50 UK deep tech firms have crossed the \$1 billion valuation or \$100 million revenue threshold, and 2025 is set to be the second-strongest year on record for fundraising. Deep tech now represents 31% of all UK VC funding, triple the share of a decade ago. Our academic spinouts are the backbone of deep tech innovation, representing 34% of the ecosystem and an even higher share of value creation.

Deep tech outperforms the rest of the tech sector in several key areas. UK deep tech startups tend to raise larger funding rounds at every stage, progress more reliably from seed to Series A. However, conversion rates decline at series D.

Deep tech, underpins five of the eight growth-driving sectors in the Industrial Strategy and enabling the nation to compete globally in advanced manufacturing, clean energy, digital technologies, defence, and life sciences. As such, deep tech is the cornerstone of much of the UK's industrial ambitions and economic growth ambitions.

This is the third edition of the State of UK Deep Tech report, led by the Royal Academy of Engineering, with data and analysis from Dealroom for the 2025 version. This year's report tells a tale of two realities that define our place in the global innovation landscape.

On the one hand, the UK stands as Europe's undisputed leaders in deep tech. Yet our leadership within Europe cannot be taken for granted. The data shows that while the UK is

ahead, the gap is narrowing. Other European countries are investing heavily, building their own innovation clusters and attracting international capital. The UK's share of deep tech funding, though impressive, is not immune to competition. If we become complacent, we risk losing ground to neighbours who are moving quickly to support their own deep tech sectors.

Meanwhile, compared to the US, our per capita investment in deep tech is just over a third of the US, and the US median round sizes are typically double those in the UK. US startups are nearly twice as likely to reach Series C and three times more likely to reach Series D. The UK's conversion rate to unicorn status or \$1 billion exits is less than half that of the US. UK startups often find it easier to secure late-stage funding from overseas than from domestic sources, particularly the US, which accounts for 59% of late-stage funding.

The challenge is structural. The UK relies heavily on foreign capital, primarily from the US to scale its deep tech startups. Domestic investor participation falls from 57% at seed stage to under 10% at late stage. This leaves us vulnerable. If international investors look elsewhere, promising UK companies will face even greater struggles to scale or could be acquired before reaching their full potential here at home. Closing this late-stage funding gap requires an annual increase of \$4-11 billion, a goal targeted by the Mansion House Reforms, which aim to unlock pension fund allocations to private markets.

UK Deep Tech has particular strengths in Biotech and Pharma, Medical Devices, and Quantum, with the UK accounting for 18% of global funding for Quantum since 2020. AI is also a key area of deep tech, and now accounts for 39% of all UK deep tech funding in 2025, which is on a par with China, while the US has seen dramatic rapid increases in funding, rising to 77% of all deep tech funding.

Deep tech is where engineering's ingenuity meets scientific discovery. It is the Academy's core mission to foster breakthroughs that address society's toughest challenges, drive economic growth, and secure the UK's future prosperity. Engineering is the backbone of deep tech, transforming research discoveries into real-world solutions, from Quantum Computing and Biotech to Advanced Materials and Artificial Intelligence.

Alongside the Mansion House Reforms, the Industrial Strategy and Regulatory Innovation Office are also putting in place frameworks to accelerate innovation, streamline regulation and catalyse growth. These are important steps,

but the outcomes are not yet visible. While the UK Modern Industrial Strategy provides a much needed focus and a longer-term policy framework, Government may also need to consider other policy levers, such as lowering energy costs, providing a stable and joined-up policy environment with innovation-driven public procurement, investing in open-access, industry-grade R&D infrastructure and demonstration environments, and supporting companies to access the talent they need. The speed and effectiveness of implementation will determine whether the UK can retain and scale its deep tech champions. The opportunity is immense, but so is the risk of complacency.



2.

Executive summary

State of UK Deep Tech: at a glance

This report provides the definitive overview of the state of deep tech in the UK in 2025.

A strong funding environment

UK deep tech VC investment remains strong, but competition is tightening.

The UK ranks third worldwide for deep tech venture capital (VC) since 2019 (\$43.7 billion) behind the US (first) and China (third). 2025 is on track to be the second-strongest year on record, with \$5.9 billion raised year-to-date and a forecast of \$7.4 billion by year end. Deep tech now represents 31% of all UK VC funding, a threefold increase from a decade ago, underscoring its growing strategic importance in national innovation. However, the UK invests just a little more than one third of what the United States does in deep tech per capita and the rest of Europe is catching up.

High value creation in both public and private markets.

Privately-held UK deep tech startups now hold a combined value of \$155 billion (4.8x since 2019). This value, including exits and public listings, amounts to \$406 billion. More than 50 deep tech companies have achieved a \$1 billion+ valuation and/or \$100 million+ revenue – demonstrating deep tech's strength in the UK economy.

An active, multi-directional exit market.

2025 is the second most active year to date, delivering nearly \$20 billion in mergers and acquisitions (M&A) value through UK deep tech startups and five \$1 billion+ exits. Most of these acquisitions come from US buyers, with additional activity from Germany, France, Japan, and the Nordics demonstrating international demand and the UK's capacity to scale frontier technologies. UK corporates and funds have acquired many foreign deep tech companies, leading to a balanced flow of value.

Challenges in the ecosystem

Persistent late-stage capital gaps despite global leadership.

The UK relies heavily on foreign backers to scale up deep tech startups, primarily US investors. Domestic investor participation falls from 57% at seed stage to under 10% at late stage. Closing the late-stage funding gap requires a \$4-11 billion increase annually, including a greater allocation of pension funds to private markets.

Diverse but uneven funding sources.

Venture funds provides over half of UK deep tech equity, complemented by 31% corporate investment and 17% from private equity, family offices and sovereign wealth funds. UK deep tech startups received \$1.9 billion in grants since 2019 (mainly from Innovate UK), which remain critical for early-stage R&D and have been recognised as a strong support by startups. UK debt financing is less developed relative to global peers.

Scaling success surpasses Europe - but lags behind the US.

US median deep tech round sizes were between 50% to 100% larger than their UK counterparts in 2025, indicating that UK startups typically have less 'firepower' to compete as global champions. UK startups are more likely to convert through funding stages than the rest of Europe, while a notable gap persists with the US at late stage.

Key sectors for UK deep tech

The UK is a leader in sectors such as Quantum, Techbio, Biotech and Pharma, and Medical Devices.

In Quantum, the UK made up over 18% of global VC funding since 2020 and has created \$14.4 billion of enterprise value.

36% of deep tech investments are now heavily connected to Artificial Intelligence.

Artificial Intelligence (AI) is accelerating progress in Robotics and Autonomous Systems, Health and Life Sciences (such as AI-driven drug discovery and AI-powered medical imaging), as well as in Materials and Manufacturing through AI-enabled material discovery and AI-driven engineering.

Deep tech is the engine beneath five of the eight priority areas of the UK Industrial Strategy (IS-8).

Deep tech underpins Advanced Manufacturing, Clean Energy Industries, Digital & Technologies, Defence, and Life Sciences. The UK shows a vast and internationally leading startup scene in Life Sciences (across both Pharma and Medical Devices), as well as Quantum (part of Digital & Technologies), Carbon capture and storage, and

removal (part of Clean energy industries). Weaknesses in the startup scene emerge instead in AI (part of Digital & Technologies), Drones (part of Defence), and Nuclear energy (part of Clean energy industries).

Defence strategy reframes innovation as growth, but delivery details matter.

The 2025 Defence Industrial Strategy aims to accelerate SME and startup access, including allocating 10% of the equipment budget to 'novel technology'. However, grouping early-stage startups with more mature SMEs risks overlooking the specific support young ventures need. The UK also holds only a small share of the global defence tech startup landscape.

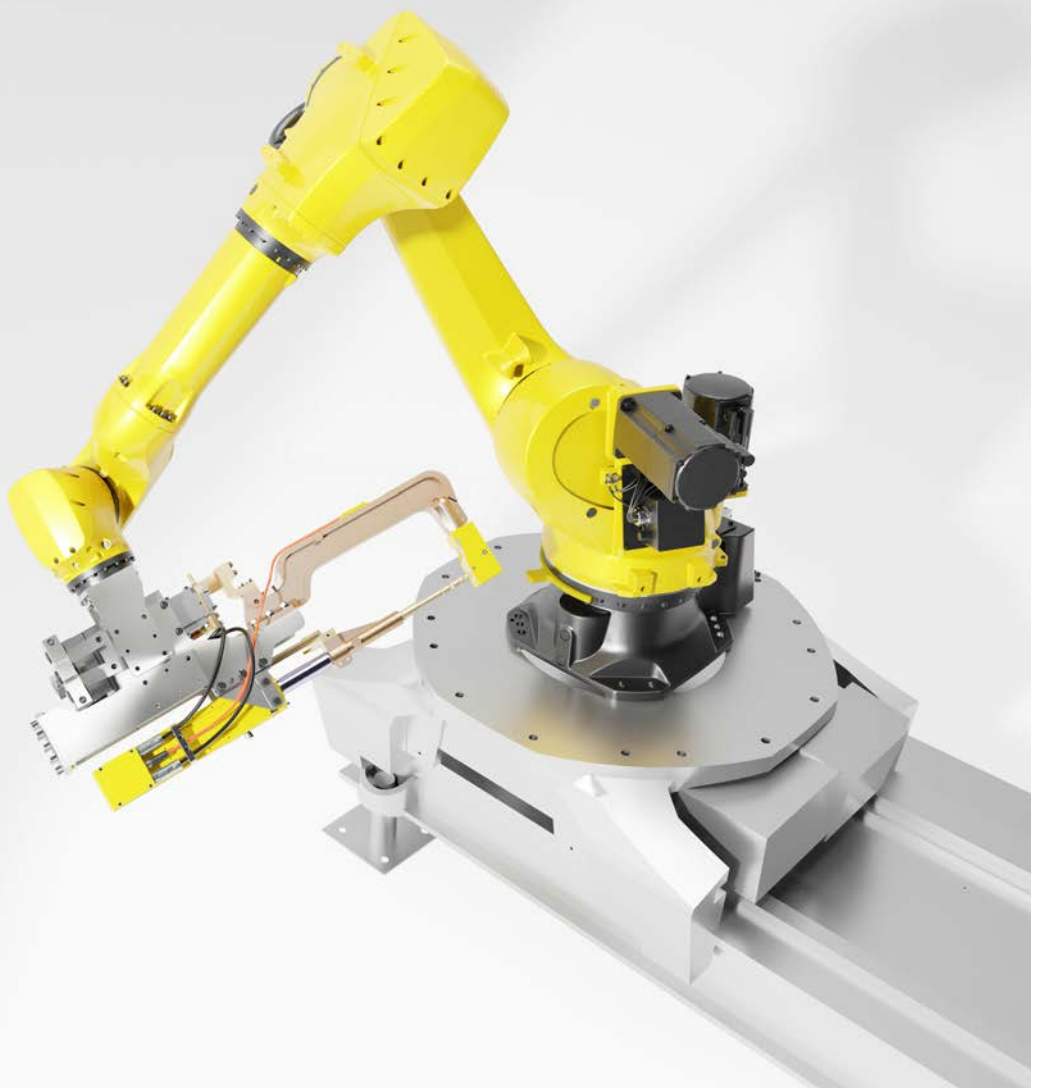
Regulation is shifting from brake to catalyst via the RIO.

The Regulatory Innovation Office (RIO) launched in October 2024 focused on four high-impact domains in

its first year of operation: Engineering Biology, Space, AI & Digital Health, and Drones and Autonomous Systems. Covering over 560 UK Deep tech startups and \$2.4 billion in projected 2025 funding and over £100 billion of combined gross value added (GVA) for the UK economy.

Academic spinouts are the backbone of UK deep tech innovation, especially in sectors such as Quantum, Photonics and Life Sciences.

Since 2010, over 920 VC-backed deep tech spinouts have been created, representing 34% of the deep tech ecosystem, and an even higher share of value creation (37% of the enterprise value, and 43% of the startups which raised \$10 million+ in funding). Their performance underscores the UK's globally competitive research commercialisation model and the critical role of universities in translating breakthrough engineering and science into scalable ventures.



3.

Defining deep tech

The Royal Academy of Engineering defines deep tech **as companies that build on the fundamental principles of engineering and science to create novel solutions and are capital, time and R&D-intensive. Being grounded in cutting-edge advances in engineering and science, deep tech offers solutions to the world's most complex environmental, economic and societal challenges.**

Practically, a company is considered deep tech based on the requirements of significant time to market, the technology complexity, large capital requirements to develop the company's technology and product. Other secondary criteria can be the presence of significant intellectual property. Many deep tech companies emerge from research environments, and though the link to academic research or being from a spinout origin is common, it is not essential.

It can be challenging to find a universally applicable definition for deep tech. By its very nature, the term

encompasses a broad and evolving spectrum of innovative technologies, and what constitutes deep tech can vary based on the perspectives and metrics of the different stakeholders concerned. Some examples are included in the image on page 11.

Some technologies once considered part of the deep tech landscape may now have transitioned into the mainstream. Once the technology matures or the product is no longer novel, what was once deep tech becomes regular tech. To enable coherent reporting of historical trends, we keep considering companies as deep tech that have started commercialising technology which was deemed as deep tech at the time, even if it has now become mainstream. This allows for sensible analyses over time.

More details are available in the Methodology Section 11.

Deep Tech defined

Practically, a company based on

Primary criteria

Time to market / complexity: The company is working with a technology that takes a long time to reach market-ready maturity due to the complexity and novelty of the research and development involved. It thus employs a lot of highly educated staff early on and may create novel hardware or intellectual properties

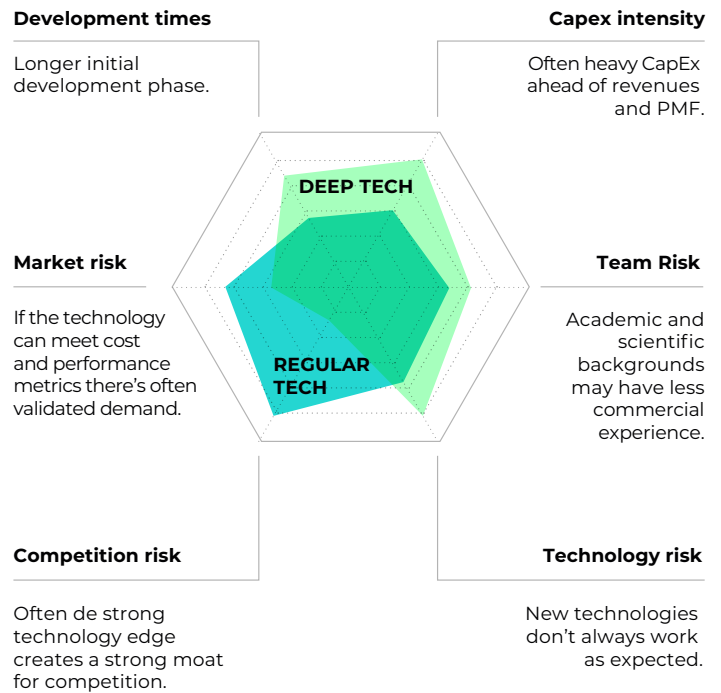
Capital requirement: The company's technology should require substantial investment to fund research, development, testing, and scaling of the product in service

Secondary criteria

IP and spinouts: Companies holding significant IP and commercializing research innovations are more likely to be Deep Tech

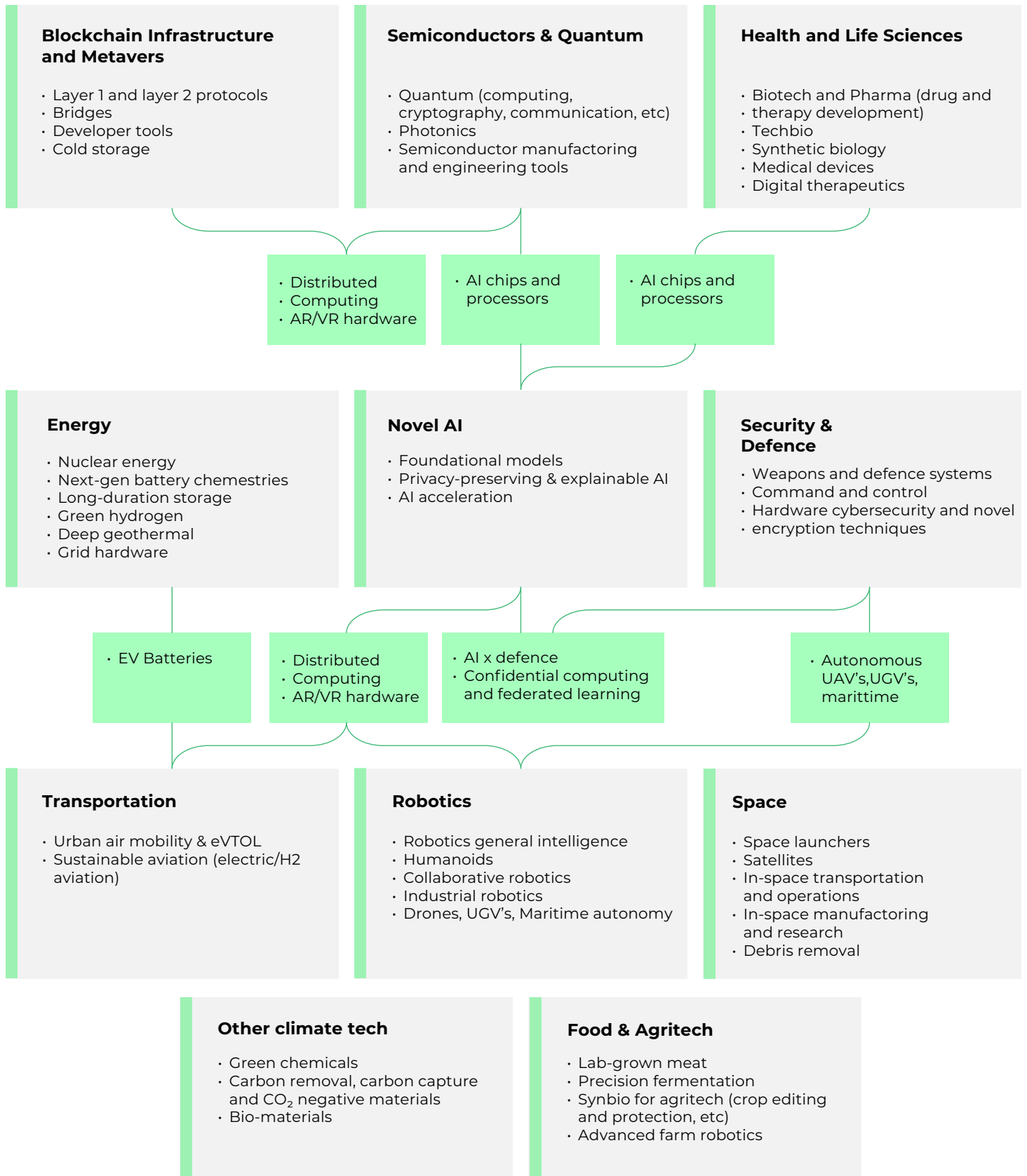
Scope of this report: In this report, we explore innovations in Deep Tech, as defined above, as well as in the Life Sciences sector.

Differences in risk profile deep tech vs regular tech startups



Source: Dealroom

EXAMPLES OF KEY DEEP TECH SECTORS





4.

Deep tech investment landscape

4a. The value of the UK deep tech ecosystem

The value of the UK deep tech ecosystem cannot be understated and it has grown substantially over the past decade. UK Deep Tech overall has demonstrated significant commercial success, with over 50 outlier outcomes already being created across unicorns,

\$1 billion+ exits and thoroughbreds (\$100 million+ revenues). The startup pipeline is also very strong, with a pool of over 3,100 deep tech startups at earlier stages that could convert to these outcomes at a later stage.

THE DEEP TECH STARTUP FUNNEL IN THE UK

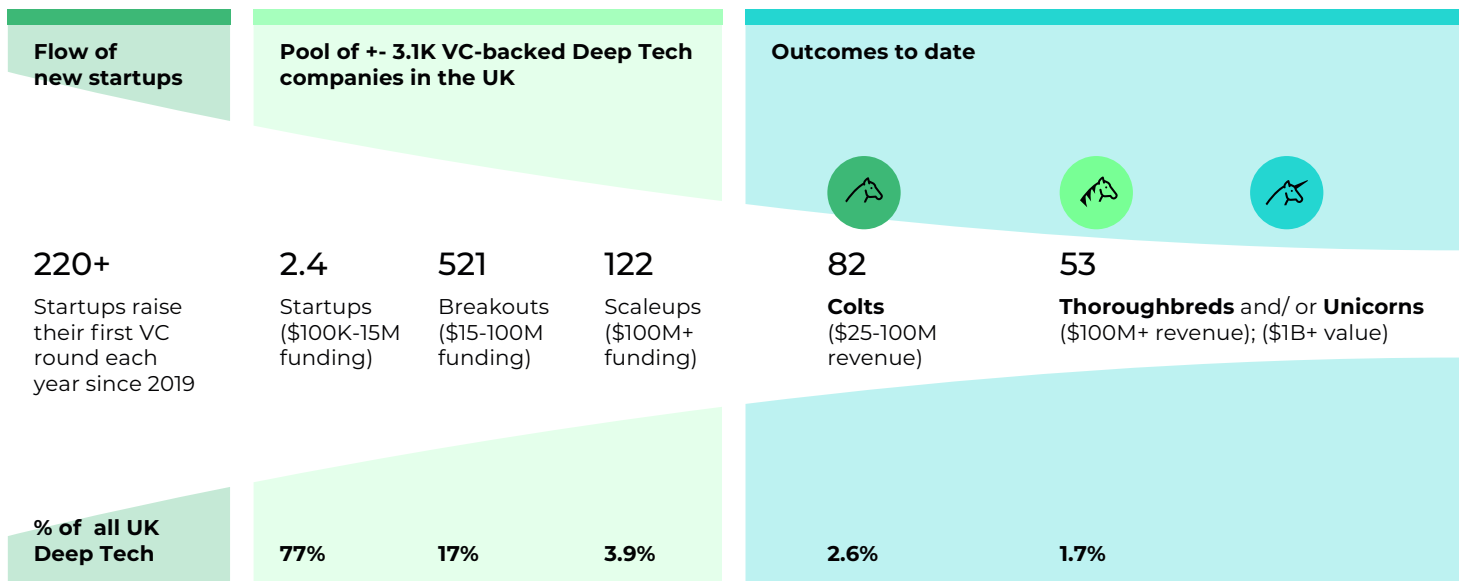


FIGURE 4.1 THE DEEP TECH STARTUP FUNNEL IN THE UK
 SOURCE: DEALROOM.CO; INCLUDES STARTUPS HQ'D OR FOUNDED IN THE UK; EXCLUDES CLOSED STARTUPS. STARTUP STAGE INCLUDES STARTUPS WITH UNDISCLOSED FUNDING.

Cumulatively, the 2,700, privately held UK deep tech startups are now worth \$155B, up 4.8x from 2019. Most of this value, around 70%, sits in a population of startups that have been created since 2015, which indicates ample room for future growth.

When including public and acquired companies that were VC-backed and founded since 1990, these 3,300 UK deep tech startups are worth a combined \$406B (£303B). Of this value, 38% is held by privately held independent startups, 17% by companies that have since been acquired, and 44% by public listed companies. However, this public valuation is heavily concentrated in ARM. When ARM is excluded, publicly listed UK deep tech companies account for just over 5% of the total value.

Considering the distribution of enterprise value across company launch year cohorts, we can see that largest value of acquired and public companies comes from an older cohort, whereas privately held companies are biased towards newer startups. Even in deep tech, most value tends to be realised once the company has exited.



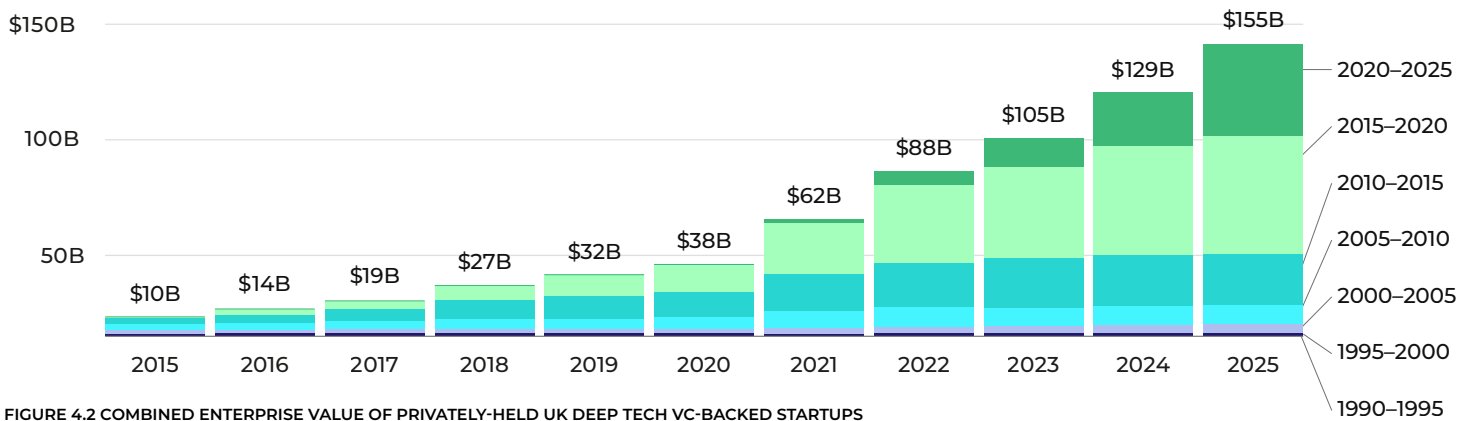
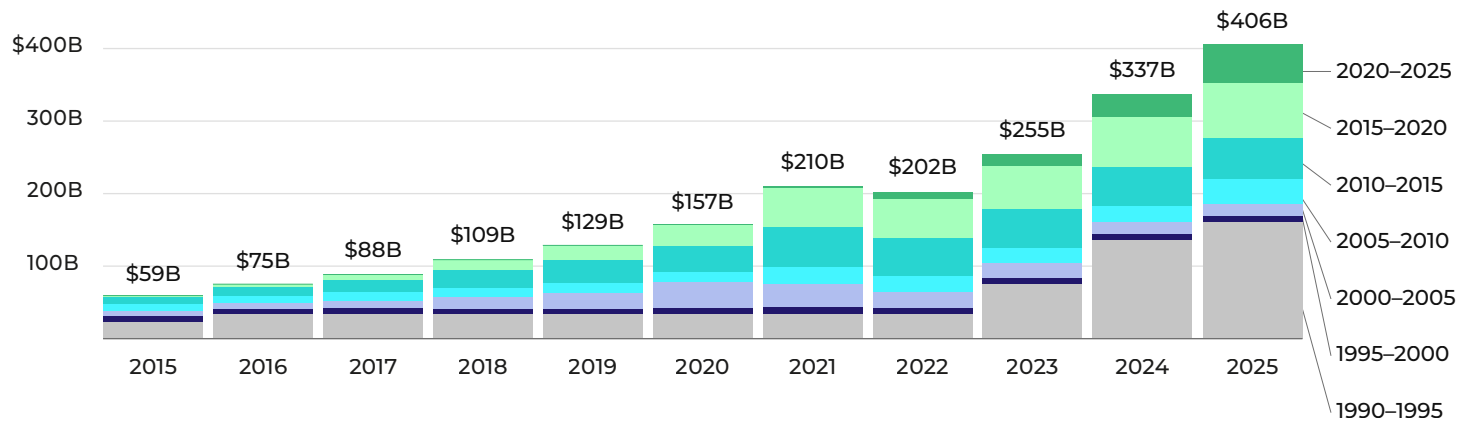
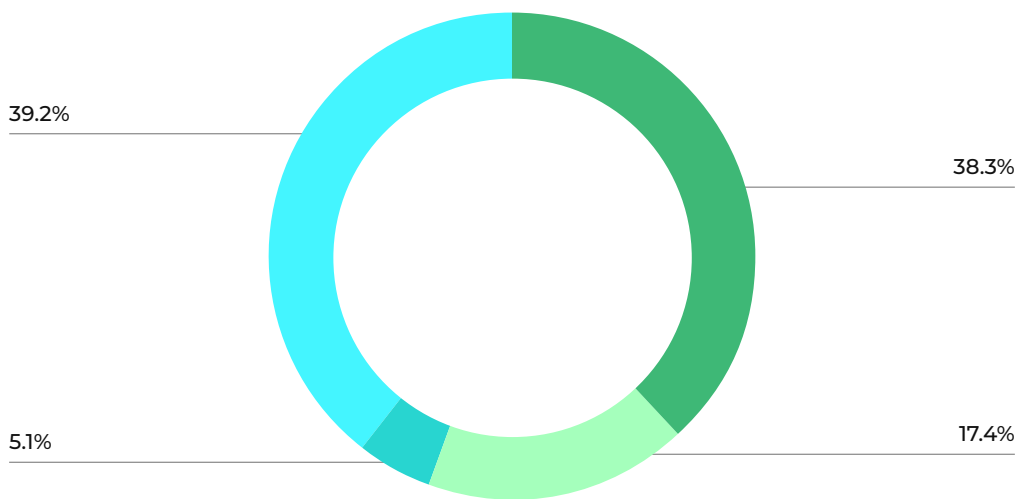


FIGURE 4.2 COMBINED ENTERPRISE VALUE OF PRIVATELY-HELD UK DEEP TECH VC-BACKED STARTUPS
 UPDATED 20/10/2025 / SOURCE: DEALROOM.CO



4.3 COMBINED ENTERPRISE VALUE OF UK DEEP TECH VC-BACKED STARTUPS
 UPDATED 20/10/2025 / SOURCE: DEALROOM.CO



■ Private, non acquired
 ■ Acquired
 ■ Public ex ARM
 ■ ARM

FIGURE 4.4 COMBINED ENTERPRISE VALUE OF UK DEEP TECH VC-BACKED COMPANIES BY STATUS.
 DATA AS OF 20/10/2025 THE STATUS REFER TO CURRENT STATUS, SO IF A COMPANY FIRST WENT PUBLIC AND THEN HAS BEEN TAKEN PRIVATE IN AN ACQUISITION IT WILL FEATURE AS ACQUIRED (E.G. DARKTRACE), WHILE IF IT WAS ACQUIRED AND THEN LISTED IT WILL BE COUNTED AS PUBLIC (E.G. ARM). ARM DRIVES MOST OF THE PUBLIC VALUE. /SOURCE: DEALROOM.CO

4b. Funding overview

2025 is demonstrating a strong fundraising environment for UK Deep Tech, which is on track to become the second-strongest year on record by VC raised. This is second only to the funding peak of 2021, which was fuelled by favourable monetary policy, such as low interest rates and an increasing money supply, leading to high capital availability for venture funds.

Thus far, \$5.9 billion (£4.3 billion) has been invested in UK deep tech startups in 2025, across the whole range of early-stage startups to later-stage scaleups. We project the VC total to reach about \$7.4 billion (£5.6 billion) by end of year.

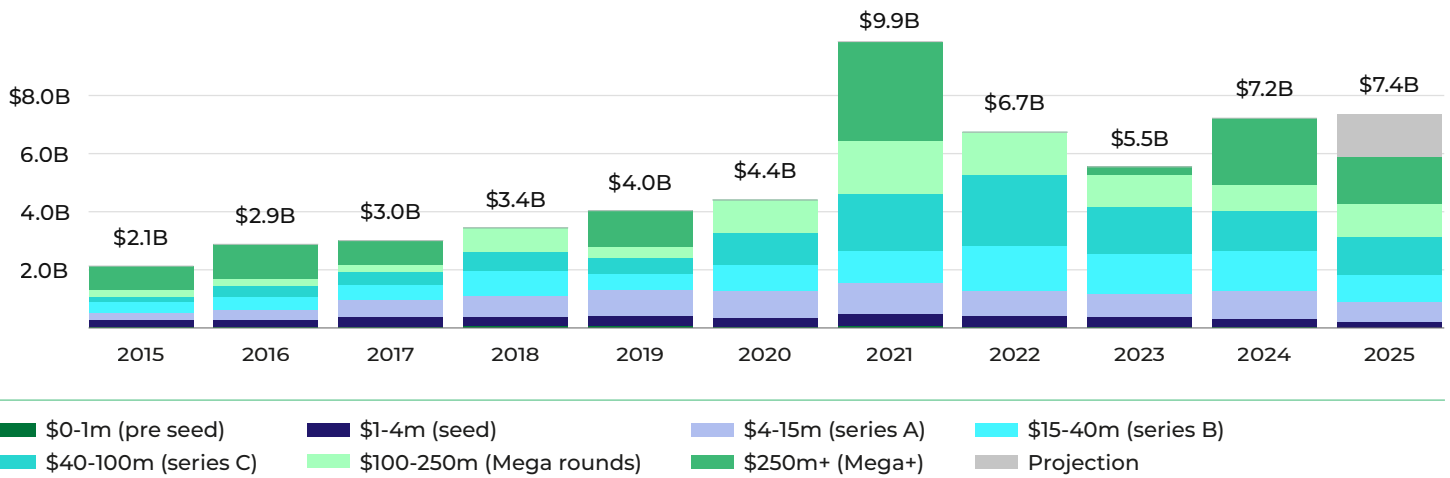


FIGURE 4.5 UK DEEP TECH VC FUNDING BY STAGE. DATA AS OF 20/10/2025 / SOURCE: DEALROOM.CO

Based on current estimates, deep tech funding is projected to rise 2% year-on-year, while the rest of the tech ecosystem is projected to grow 56%, driven mainly by FinTech, enterprise software and AI.

However, looking back to 2021, the peak year for overall VC activity, Deep Tech has proven far more resilient, with funding down 18% since then compared to a 37% decline for the rest of the tech sector, as it stands, based on 2025 year-to-date volumes.

Row name	2025 Funding	2019-2025 Funding	2024-2025 growth	2021-2025 growth
Deep tech	\$5.9B	\$44B	2%	-18%
Rest of tech	\$12.7B	\$115B	56%	-37%

FIGURE 4.6 COMPARISON DEEP TECH VS REST OF TECH. DATA AS OF 20/10/2025 / SOURCE: DEALROOM.CO

The ‘rest of tech’ population noted here refers to all startups not classified as deep tech, primarily comprising FinTech and enterprise software, marketing, HRTech, gaming, but also including non-deep-tech segments of health, energy, transportation, and other adjacent sectors.

In 2025 so far, Deep Tech has accounted for 31% of total VC funding in UK startups. This is the third-highest share in the past decade, following last year’s peak of 41%. The share has risen steadily since 2022, reflecting a growing focus of VC on Deep Tech. This trend is also visible globally, as explored in Section 4c.

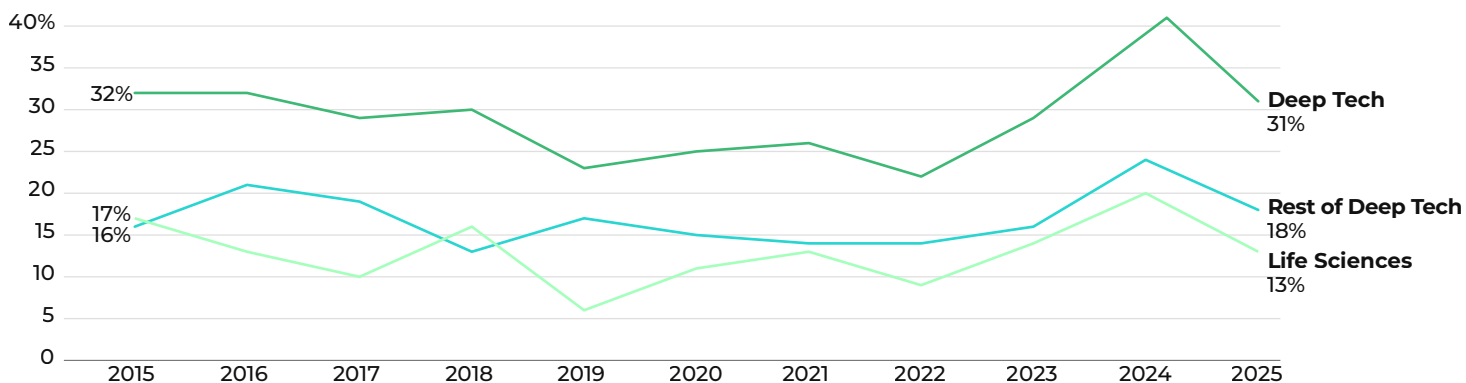


FIGURE 4.7 SHARE OF TOTAL UK FUNDING GOING TO DEEP TECH.

DATA AS OF 20/10/2025 / SOURCE: DEALROOM.CO

This chart separates Life Sciences from the Rest of Deep Tech to reflect its unique regulatory and investment pathways. In the broader definition used throughout the report, Life Sciences is included within the Deep Tech category and within the overall total shown. Rest of Deep Tech refers to all remaining Deep Tech segments.

In 2025, there have already been 12 investment rounds above \$100 million in UK Deep Tech. While the majority of these have been AI-focused investments (Isomorphic Labs, Eleven Labs, Synthesia, PhysicsX, CuspAI), similar rounds have also been seen across Life Sciences (Isomorphic Labs, Verdiva Bio, Draig Therapeutics, CellCentric), Medtech (OrganOx, CRM Surgical), Quantum (Quantinuum),

Defence (Cambridge Aerospace), and Robotics (Dexory). Autonomous driving startup Wayve is also reported to be in advanced talks with Microsoft and Softbank for a new \$2 billion round, which is not included in this report as it is not yet finalised. Wayve previously raised a \$1.1 billion round in May 2024 led by Softbank, with participation from Microsoft and Nvidia.

Name	Investors	Market	Location	Round valuation	Last round	Date	Latest valuation
Isomorphic Labs	Thrive Capital CV	Health Biotechnology	London, United Kingdom	\$2.4B-£3.6B	\$600M Late VC	March 2025	\$2.4B-£3.6B
Quantinuum	Nvidia Honeywell Quanta Computer QED Investors JP Morgan	Semiconductors Enterprise Software	Cambridge, United Kingdom	\$10B	\$600M Late VC	September 2025	\$10B
Verdiva Bio	General Atlantic Forbion Capital Partners OrbiMed Lilly Asia Ventures RA Capital Management	Health Pharmaceutical Biotechnology	London, United Kingdom	\$1.6B-\$2.5B	\$411M Series A	January 2025	\$1.6B-\$2.5B
Synthesia	MMC Ventures CV NEA World Innovation Lab Atlassian Ventures	Media Content production	London, United Kingdom	\$2.1B	\$180M Series D	January 2025	\$2.1B
OrganOx	Sofina Business Growth Fund Oxford Technology Longwall Ventures HealthQuest Capital	Health Medical Devices	Oxford, United Kingdom	-	\$160M Growth Equity VC	February 2025	\$1.5B
Draig Therapeutics	Access Industries Intermediate Capital Group Canaan SR One SV Health Investors	Health Pharmaceutical Biotechnology	Cardiff, United Kingdom	\$560M-\$840M	\$140M Series A	June 2025	\$560M-\$840M

FIGURE 4.8 FUNDING ROUNDS ABOVE \$100 MILLION IN UK DEEP TECH IN 2025.

Name	Investors	Market	Location	Round valuation	Last round	Date	Latest valuation
PhysicsX	Atomico General Catalyst Temasek Siemens NGP Energy Capital Management	Enterprise Software Engineering and manufacturing equipment	London, United Kingdom	\$1B	\$135M Series B	June 2025	\$1B
CellCentric	Forbion Capital Partners RA Capital Management Avego Bioscience Capital BrightEdge	Health Pharmaceutical Biotechnology	Little Chesterford, United Kingdom	\$480M-\$720M	\$120M Series C	May 2025	\$480M-\$720M
Cambridge Aerospace	Accel Lakestar Lux Capital Spark Capital D3 Venture	Security Engineering and manufacturing equipment	Cambridge, United Kingdom	\$400M	\$100M Series A	July 2025	\$400M
Dexory	Atomico Elaiia Partners Lakestar DTCP Endeavour Catalyst	Robotics Enterprise Software	Hastings, United Kingdom	\$400M-\$600M	\$100M Series C	October 2025	\$400M-\$600M
CuspAI	Northzone NEA Samsung Electronics Temasek Hyundai Motor Company	Energy Engineering and Manufacturing Equipment	Cambridge, United Kingdom	\$520M	\$100M Series A	September 2025	\$520M
CMR Surgical		Health Robotics Medical Devices	Cambridge, United Kingdom	\$3B	\$100M Late VC	April 2025	\$3B

FIGURE 4.8 FUNDING ROUNDS ABOVE \$100 MILLION IN UK DEEP TECH IN 2025.

Funding by investor type

Venture capital remains the dominant source of equity funding for UK deep tech startups, accounting for 52% of the total in 2025, despite some volatility due to variations in fundraising conditions. Corporate investment, for both

strategic and financial reasons, contributes 31% of the total, providing a stabilising funding backstop. The remaining 17% is provided by a diverse mix of private equity (PE) firms, family offices and sovereign wealth funds. UK deep tech startups can thus draw from a wide range of investor profiles, boosting ecosystem resilience

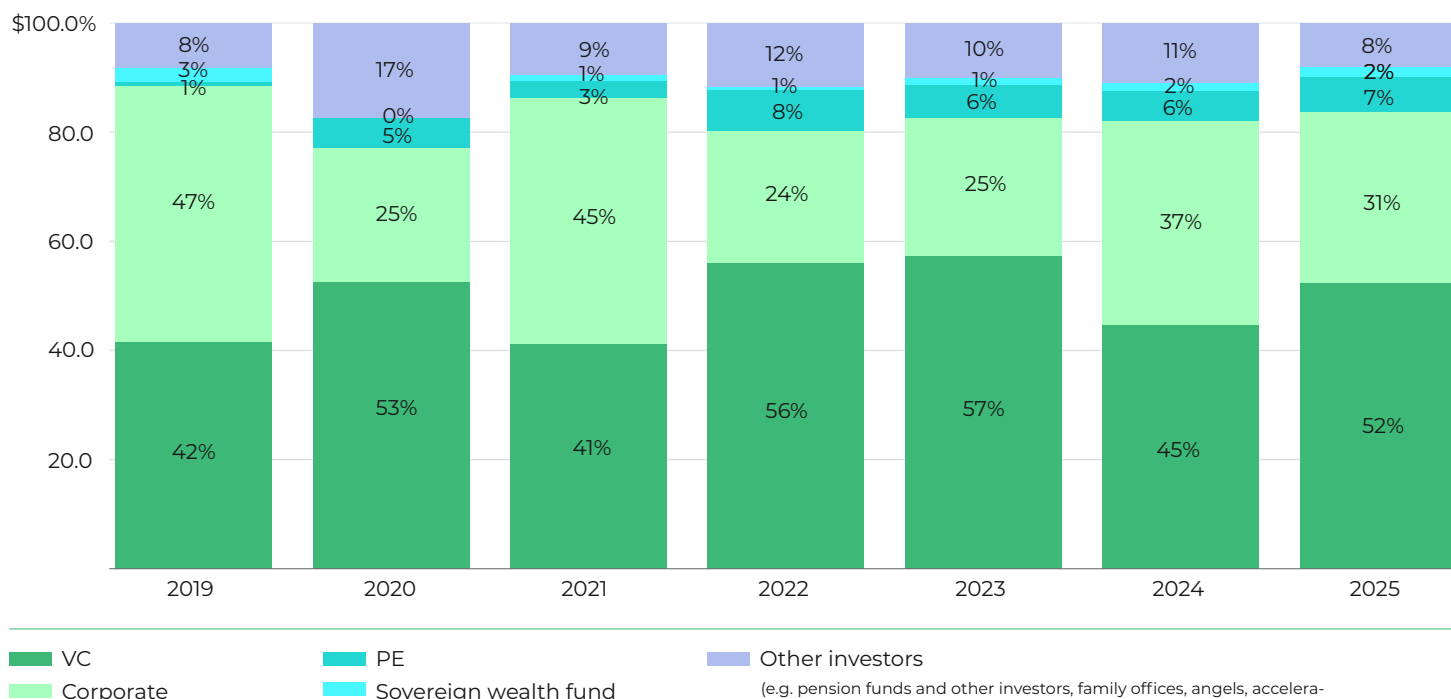


FIGURE 4.9 VC FUNDING BY INVESTORS TYPE IN UK DEEP TECH BY AMOUNT.

DATA AS OF 9/9/2025/ SOURCE: DEALROOM.CO

Note: Pension funds are included under 'other investors' as they generally participate indirectly as Limited Partners (LPs) in venture capital and private equity funds, rather than investing directly in deep tech startups.

4c. Nondilutive funding: grants and debt financing

Nondilutive funding, particularly in the form of grants, plays a crucial role in enabling UK deep tech startups to innovate and scale, especially during early R&D stages. While nondilutive sources such as grants and debt represent a smaller share of the total financing, grants remain a cornerstone of support for deep tech ventures, bridging critical funding gaps and derisking early R&D.

Since 2019, UK deep tech startups have raised over \$1.9 billion in grant funding across more than 2,000 grants, with the majority being provided through Innovate UK under UK Research and Innovation (UKRI). This substantial public

investment underscores the UK’s strategic commitment to nurturing high-potential, high-risk technologies that underpin the nation’s innovation pipeline.

By contrast, debt financing remains significantly underutilised in the UK compared to leading deep tech ecosystems globally, with only \$438 million since 2019.

Strengthening both grant and debt mechanisms will be key to ensuring deep tech founders can access a larger spectrum of nondilutive finance needed to scale sustainably.

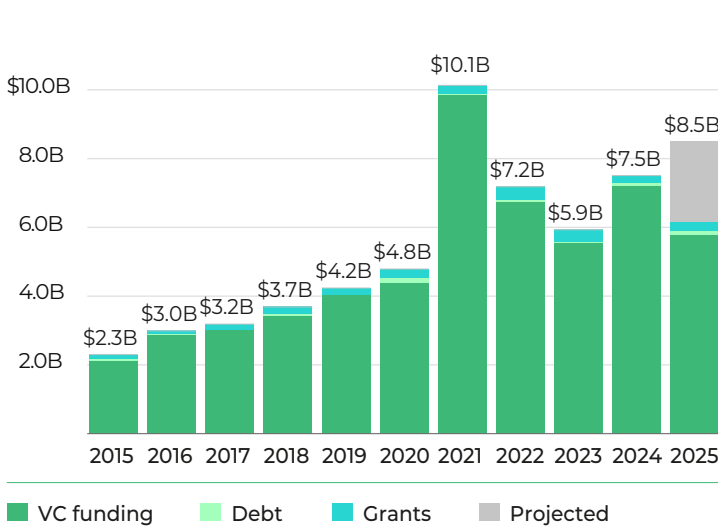


FIGURE 4.10 VC FUNDING AND NONDILUTIVE FUNDING FOR UK DEEP TECH STARTUPS.

UK deep tech startups have raised a very limited amount of debt funding, at about 1% of their VC fundraising. This only refers to long-term forms of debt such as venture debt and growth debt (bank and government loans, and asset-backed debt) and does not include short-term forms of debt such as revolving credit, invoice financing and factoring, revenue-based financing, and similar. Venture debt is also not always discernible in the overall startup financing since it is not reported in regulatory filings and is not transparently reported in press releases and other communications. Dealroom splits up the equity and debt components of rounds where this breakdown is publicly disclosed, but this segmentation remains opaque in all markets.

The UK’s reliance on debt is considerably lower than that of other countries such as France and Germany (about 15% and 8% respectively). In Sweden, it is exceptionally high

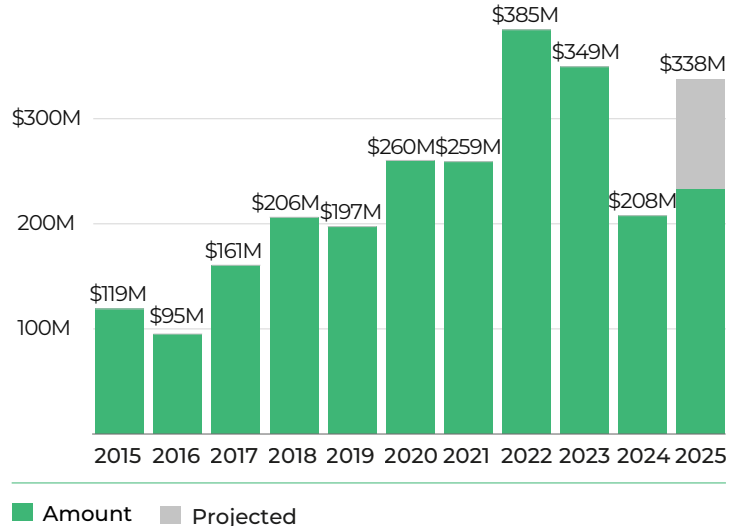


FIGURE 4.11 GRANT FUNDING FOR UK DEEP TECH STARTUPS.

at 78%, driven by innovative first-of-a-kind large energy-infrastructure projects. The statistics reported here on debt include project finance debt, but only for VC-backed deep tech companies therefore including financing for first-of-a-kind plants on novel battery chemistry manufacturing or e-SAF but not including renewable energy developers that might raise financing to build commercial solar plants or wind turbines for instance.

Similarly, the US taps more into debt funding, with \$54 billion since 2015, representing about 7% of VC funding, highlighting its more mature and diversified financing environment.

Expanding access to venture and growth debt instruments could help bridge funding gaps for UK deep tech startups, particularly at late stage.

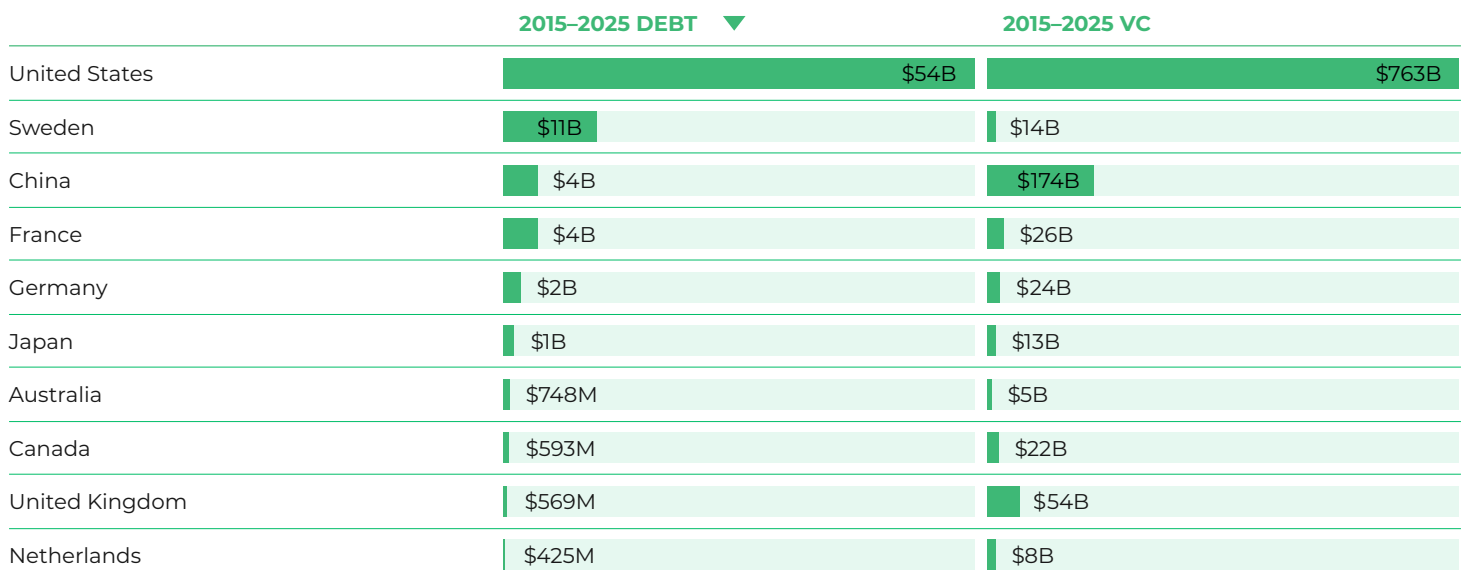
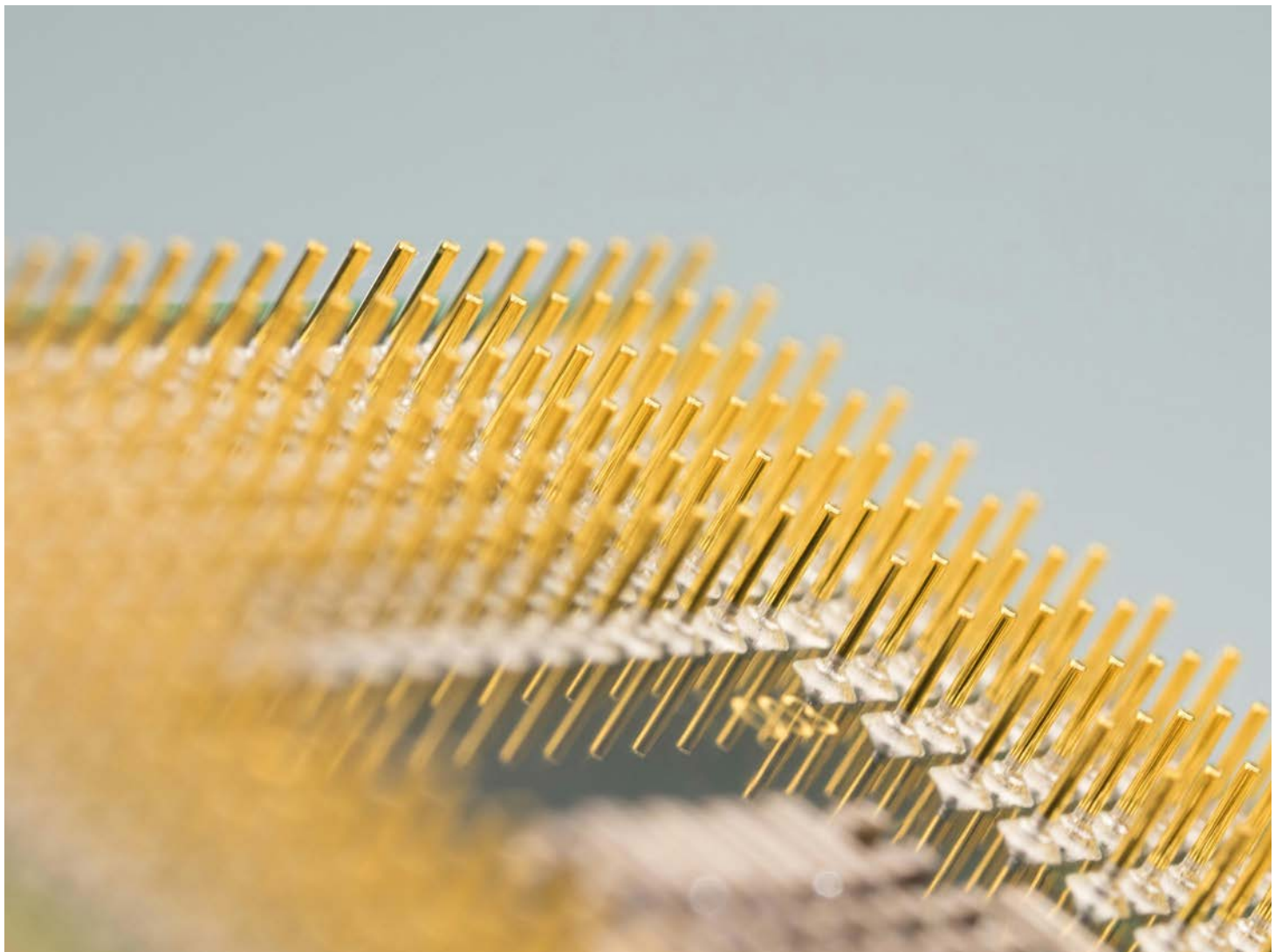


FIGURE 4.12 TOP COUNTRIES BY DEEP TECH DEBT FUNDING



4d. Round sizes and conversion between stages

Median round sizes for deep tech startups in the UK have increased significantly across all stages in recent years. Series B and Series C+ rounds saw a clear peak during the 2021-2022 bull market, which, driven by COVID-era monetary policy, was

characterised by ample availability of capital. Private markets have seemingly stabilised over the last three years, returning to pre-pandemic volumes and round sizes

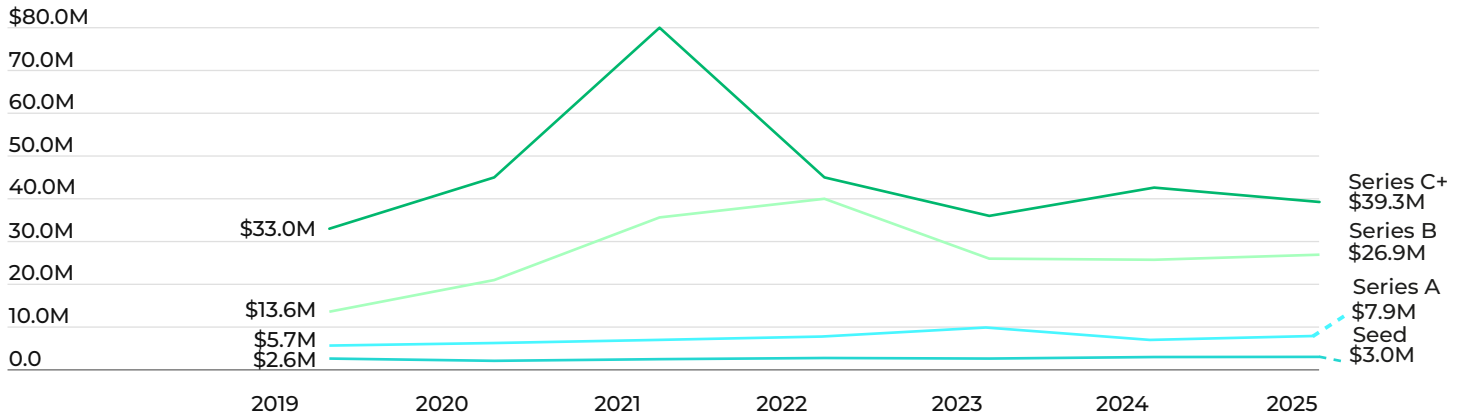
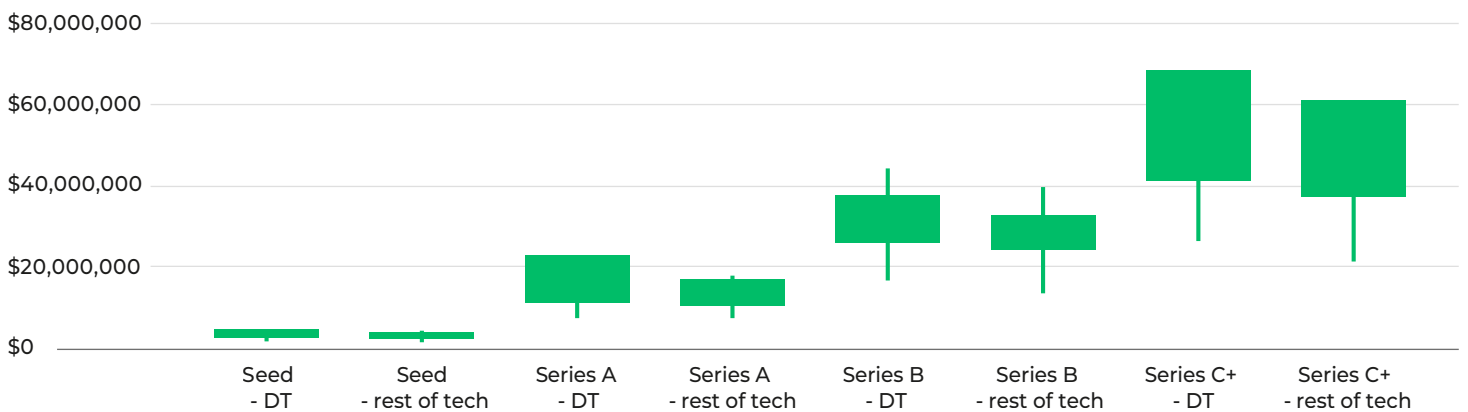


FIGURE 4.13 UK DEEP TECH AND LIFE SCIENCES MEDIAN ROUND SIZE.

Compared to the 'rest of tech', deep tech startups tend to raise larger rounds at every stage, with the difference ranging from 13% to 33%. This is driven by significant capital expenditure that is necessary for most deep tech companies before generating substantial revenues or achieving product-market fit. Unlike asset-light startups, deep tech companies

often channel much of their early capital into specialised infrastructure, advanced equipment and technical validation, essential to proving their core innovations. While increasing upfront funding needs, it can build strong defensibility and long-term competitive advantage, forming a durable moat around their technology.



Round size Deep Tech vs All Tech, UK '24-'25	Bottom quartile	Median	Average	Top quartile
Seed	13%	16%	18%	14%
Series A	-1%	7%	33%	3%
Series B	24%	7%	15%	12%
Series C+	24%	10%	13%	9%

FIGURE 4.14 MEDIAN ROUND SIZE DEEP TECH VS REST OF TECH IN THE UK (2024-2025).

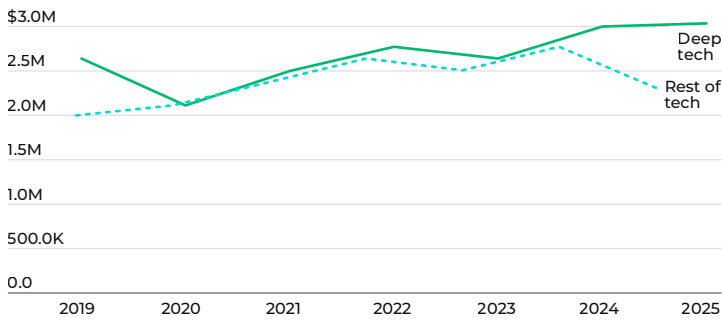


FIGURE 4.15 UK MEDIAN SEED ROUND SIZES: DEEP TECH VS REST OF TECH.

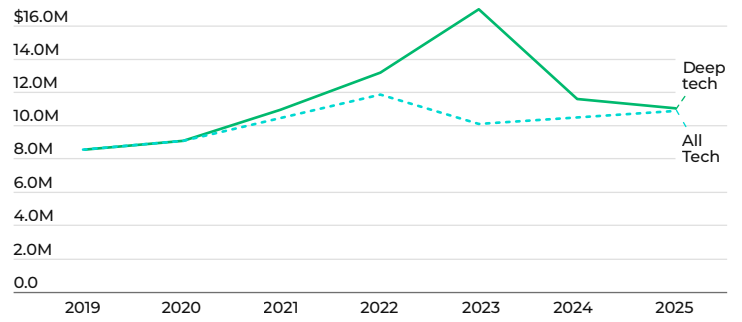


FIGURE 4.16 UK MEDIAN SERIES A ROUND SIZES: DEEP TECH VS REST OF TECH.

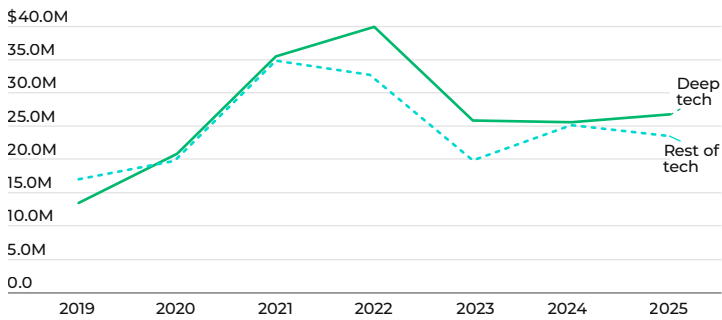


FIGURE 4.17 UK MEDIAN SERIES B ROUND SIZES: DEEP TECH VS REST OF TECH.

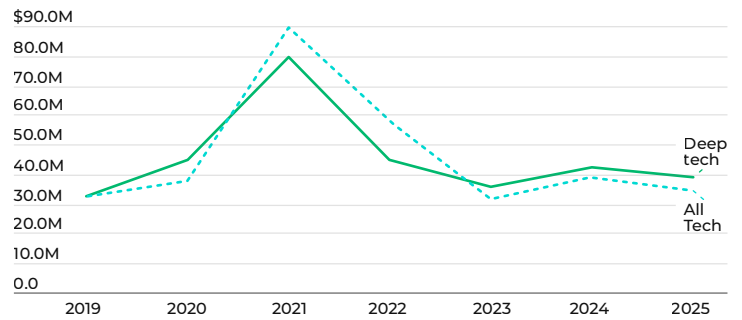


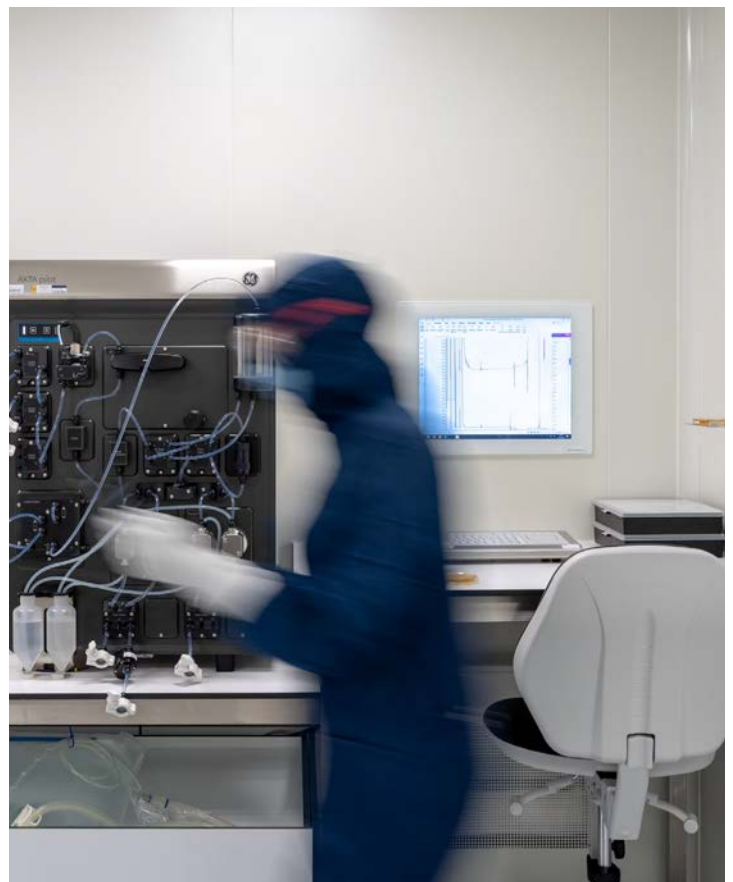
FIGURE 4.18 UK MEDIAN SERIES C+ ROUND SIZES: DEEP TECH VS REST OF TECH.

Conversion between stages and growth

When looking at conversion rates of deep tech startups, almost one-third of deep tech startups that raised a Seed round between 2010 and 2020 went on to secure a Series A (29.7%). This is slightly higher than the rate observed in the rest of the tech sector (26.9%), suggesting deep tech startups are at least as successful, if not more so, at progressing beyond the seed stage.

At later stages, deep tech startups show similar conversion rates to Series B and Series C compared to the rest of the tech ecosystem, indicating a broadly comparable progression trajectory beyond the early stages.

However, at Series D, conversion rates decline for deep tech startups, which may reflect the longer development cycles and capital requirements typically required to reach those stages. Similarly, exit rates are comparable to the rest of the tech sector at earlier stages, but tend to fall slightly behind at later stages. In this context, a ‘Series A exit’ refers to a company that exits after its Seed round, before raising a Series A, making it a comparable outcome to raising a subsequent round from a conversion perspective.



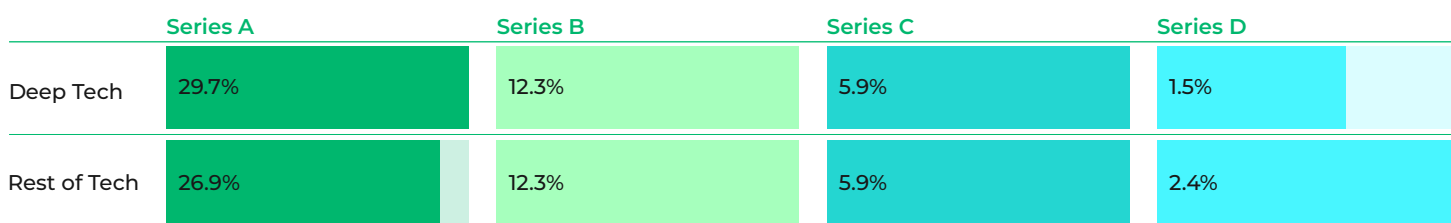


FIGURE 4.19 UK CONVERSION RATES: DEEP TECH VS REST OF TECH (SEED COHORT 2010-2020).

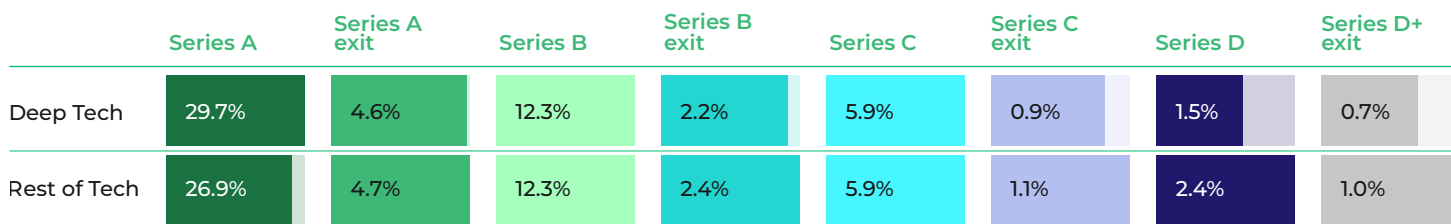


FIGURE 4.20 UK CONVERSION RATES: DEEP TECH VS REST OF TECH (SEED COHORT 2010-2020)

4e. Global comparisons

On the global stage, the UK ranks as the third-largest country for deep tech venture funding since 2019, with \$43.7 billion (£32.6 billion) raised, about twice the amount attracted by France and Germany. The UK sits behind only the US and China, underscoring the UK's strength as

Europe's leading deep tech hub and its ability to attract sustained investment despite global headwinds. The same holds for 2025, where the UK remains the third most funded country, followed by France.

Country	Deep Tech funding ('19 - '25)	Deep Tech % of country VC funding ('19 - '25)	Deep Tech funding '25	Deep Tech % of country VC funding '25	Deep Tech funding ('19 - '25) per capita
US	\$628.7B	44%	\$136B	59%	\$1,810
China	\$142.7B	39%	\$11B	45%	\$101
UK	\$43.7B	29%	\$6B	31%	\$628
France	\$22.4B	36%	\$4B	57%	\$336
Germany	\$21.5B	31%	\$3B	43%	\$255
Israel	\$19.0B	48%	\$2B	40%	\$1,994
Canada	\$17.8B	33%	\$2B	39%	\$444
Sweden	\$13.3B	43%	\$791M	34%	\$1,252
Switzerland	\$11.2B	53%	\$2B	69%	\$1,248
South Korea	\$9.9B	17%	\$1B	29%	\$193
Japan	\$9.6B	37%	\$1B	38%	\$78
Netherlands	\$6.6B	32%	\$976M	43%	\$362
India	\$6.1B	5%	\$982M	9%	\$4
Australia	\$4.1B	19%	\$388M	18%	\$154
Spain	\$3.8B	24%	\$878M	36%	\$80

FIGURE 4.21 COMPARISON BY COUNTRIES FOR DEEP TECH FUNDING. DATA AS OF 20/10/2025 ONLY COUNTRIES WITH \$1B+ IN DEEP TECH VC FUNDING SINCE 2019 / SOURCE: DEALROOM.CO

However, when looking at the share of total VC funding going to Deep Tech since 2019, the UK has a lower allocation than many other leading ecosystems. Countries such as Switzerland, Israel,

the US, Sweden, and China have seen 40–50% of their funding directed toward Deep Tech, while the UK stands at about 29%, comparable to Germany and the Netherlands.

US	\$135.6B
China	\$11.0B
UK	\$5.8B
France	\$3.8B
Germany	\$2.8B
Canada	\$1.7B
Israel	\$1.9B
Switzerland	\$790.8M
Japan	\$1.9B
South Korea	\$1.1B
India	\$1.2B
Spain	\$975.6M
Finland	\$982.2M
Netherlands	\$388.3M
Sweden	\$878.4M

FIGURE 4.22 TOP 15 COUNTRIES FOR DEEP TECH FUNDING IN 2025.

Switzerland	53%
Israel	48%
US	44%
Sweden	43%
China	39%
Japan	37%
France	36%
Canada	33%
Netherlands	32%
Germany	31%
UK	29%
Spain	24%
Australia	19%
South Korea	17%
India	5%

FIGURE 4.23 SHARE OF VC FUNDING GOING TO DEEP TECH FOR THE TOP 15 COUNTRIES (2019–2025).

The share of funding going to Deep Tech has grown markedly worldwide, particularly since 2022. This trend is broadly consistent across regions, though the intensity and shape of growth vary.

OpenAI and Anthropic, but also because of a renewed emphasis on domestic manufacturing and defence.

In China, a shift occurred around 2019, when the ecosystem pivoted heavily toward Deep Tech, especially in areas such as semiconductors, robotics, batteries, and space. In the US, the share has climbed sharply over the past two to three years, driven largely by advances in foundational AI models, notably

In 2025, Deep Tech accounts for 31% of total funding in the UK, below the global average but broadly in line with that in Europe. This partly reflects the UK’s strong performance in other sectors, particularly FinTech. Targeted efforts to increase the proportion of capital flowing into Deep Tech could help the UK maintain its position as a leading innovation hub and continue to capture more value from deep tech startups.

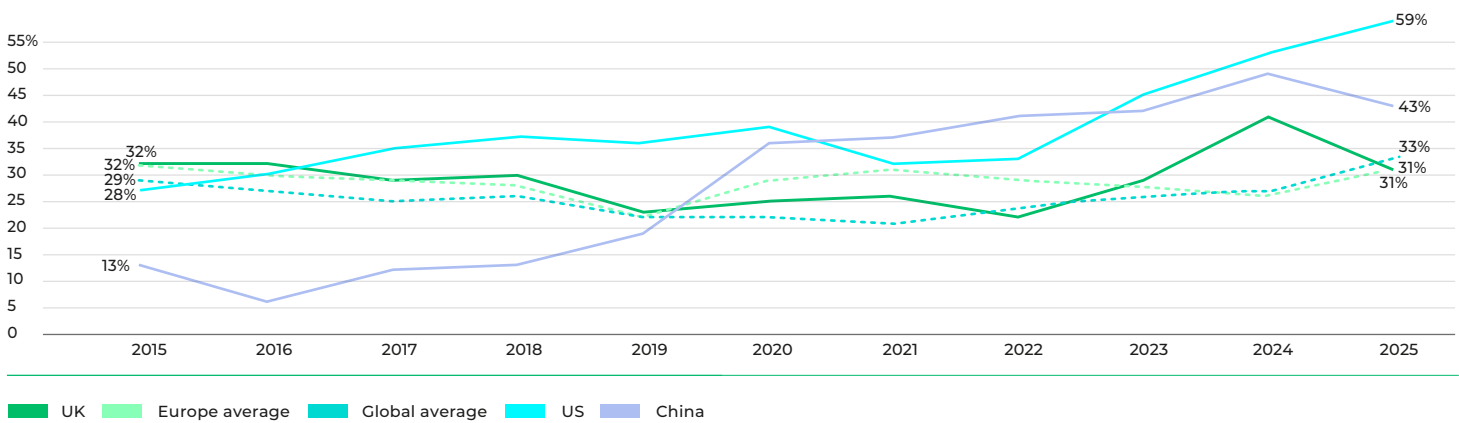


FIGURE 4.24 SHARE OF TOTAL VC FUNDING GOING TO DEEP TECH, UK VS GLOBAL/EUROPE.

These comparisons can be skewed by the strong impact of AI. In 2025, a notable 39% of UK deep tech fundraising was related to AI. While a significant share, this is lower than France (Mistral) and Germany (Helsing), and especially in the US where 77% of deep tech funding in 2025 was related to AI. This was driven in part by the mega-rounds of investment into foundational models such as OpenAI, Anthropic, X.ai and Safe SuperIntelligence, as well as AI-enabled deep tech companies like Anduril (Defence) and Figure (Robotics).

The share of deep tech funding related to AI has risen sharply over the last two years, particularly in the US, where it has more than doubled from around 35% to 77%. France and Germany show a similar upward trajectory. The UK has remained comparatively stable. To note, NScale is classified as AI but not as deep tech.

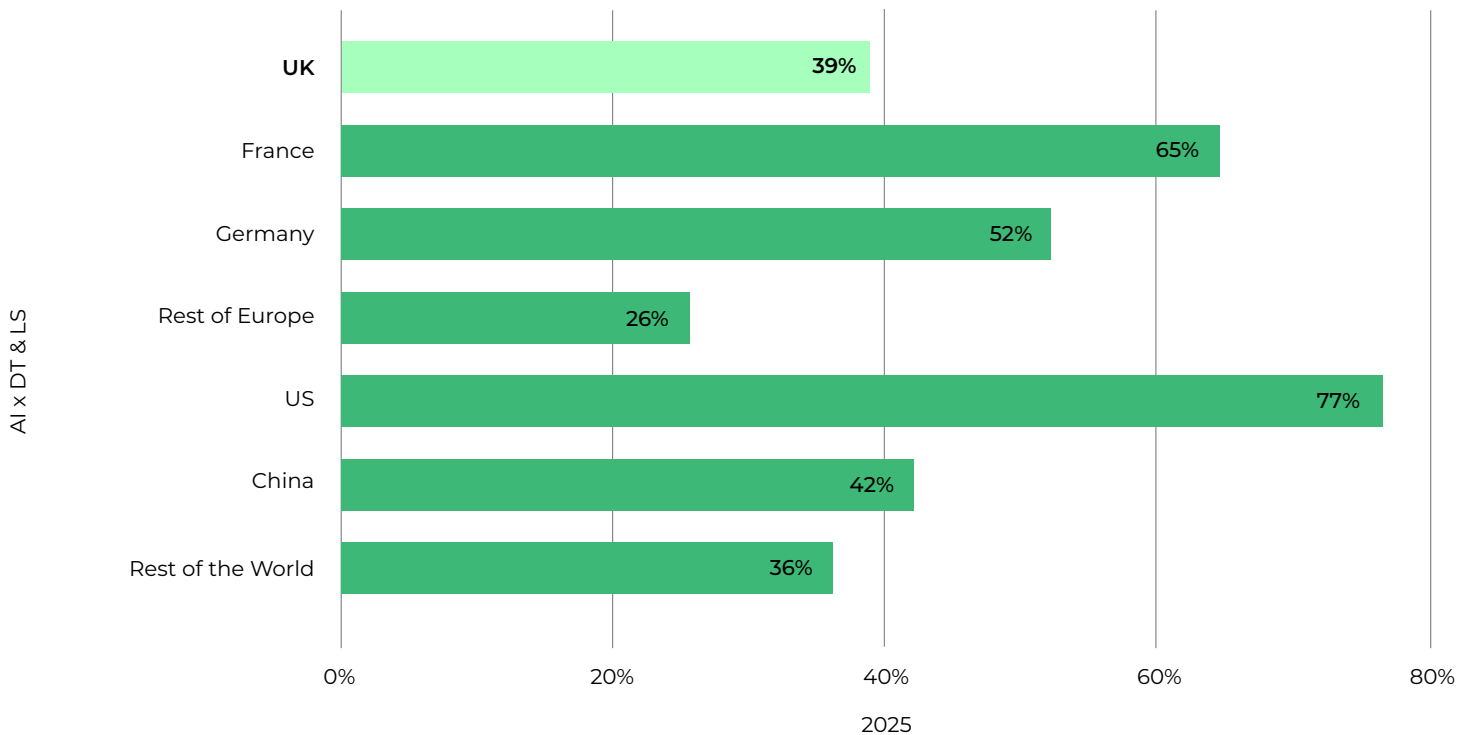


FIGURE 4.25 AI AS A PERCENTAGE OF OVERALL DEEP TECH FUNDING GLOBALLY IN 2025
 DATA AS OF 20/10/2025 ONLY COUNTRIES WITH \$1B+ IN DEEP TECH VC FUNDING SINCE 2019 / SOURCE: DEALROOM.CO

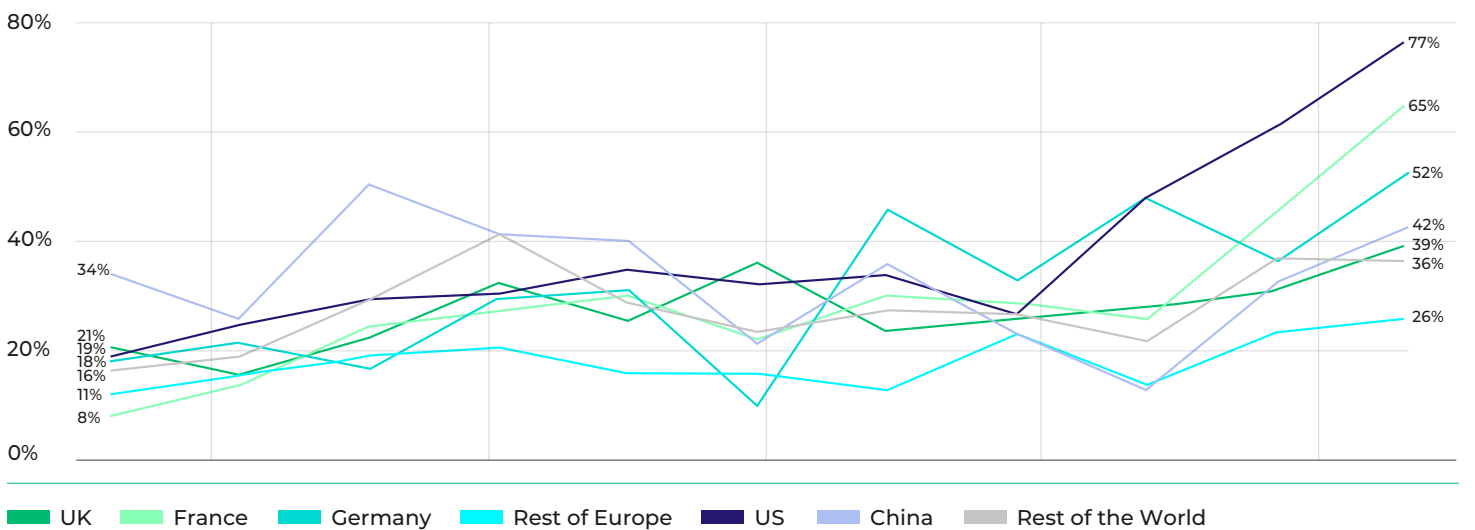


FIGURE 4.26 AI AS A PERCENTAGE OF OVERALL DEEP TECH FUNDING GLOBALLY (2015-2025)

When looking at the UK and US alone, in 2025 the US invested a staggering 43x more than the UK in AI x deep tech, while the difference was much less for the rest of deep tech at 8.4x.

When comparing round sizes internationally, the UK's median deep tech round sizes are slightly larger than

the rest of Europe but significantly smaller than those in the US. In 2025, the US median deep tech round sizes were typically double than their UK counterparts. However, while the US has re-accelerated following a short correction, the UK market has stabilised at more moderate levels.

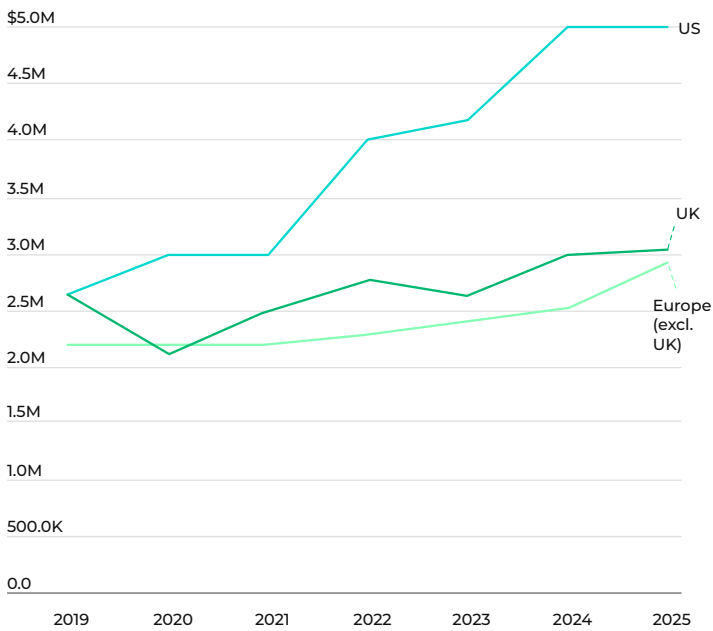


FIGURE 4.27 SEED DEEP TECH MEDIAN ROUND SIZE PER REGION.

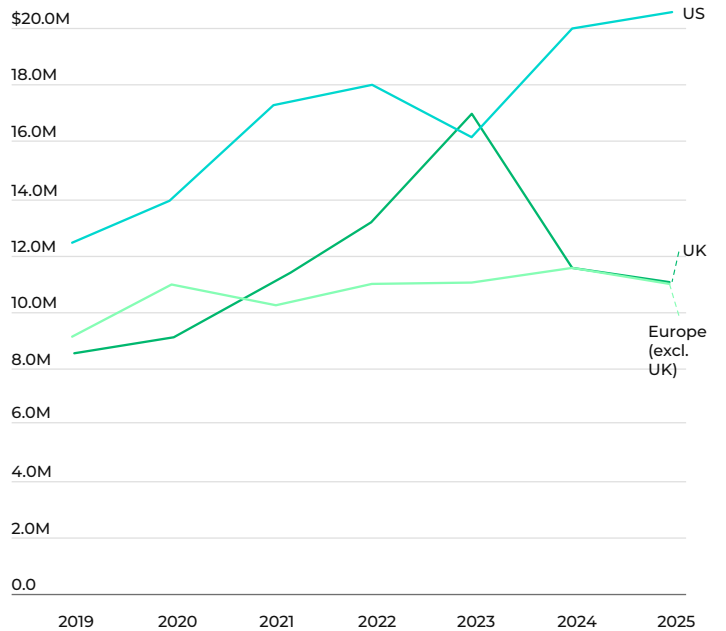


FIGURE 4.28 SERIES A DEEP TECH MEDIAN ROUND SIZE PER REGION.

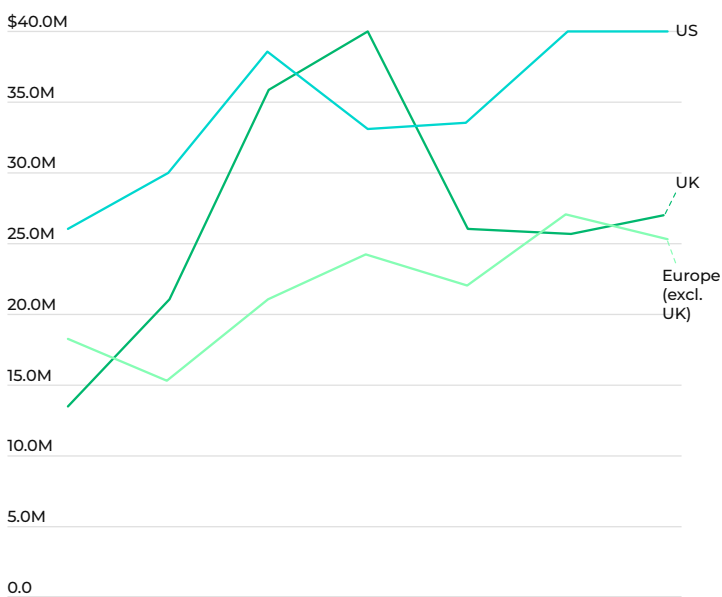


FIGURE 4.29 SERIES B DEEP TECH MEDIAN ROUND SIZE PER REGION.

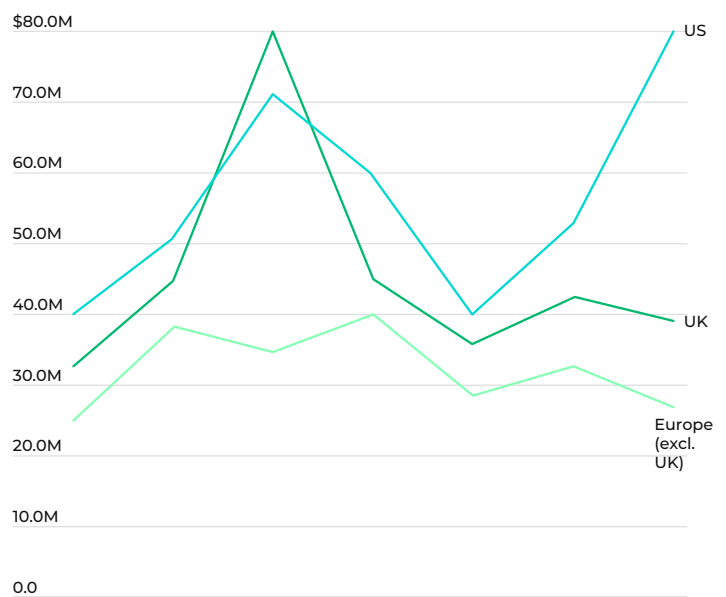


FIGURE 4.30 SERIES C+ DEEP TECH MEDIAN ROUND SIZE PER REGION.

When examining how UK deep tech startups progress through successive funding stages, the UK generally shows stronger conversion rates than the rest of Europe, including major markets such as France and Germany. However, a notable gap persists compared to the US at later stages. UK startups are more likely to progress from Seed to Series A than the rest of Europe, including France and Germany,

though still slightly below the US (33.9% vs 29.7%). However, the gap widens considerably at later stages, with US startups converting at nearly twice the rate of UK startups at Series C and about three times more at Series D. This disparity likely reflects the more limited availability of late-stage capital for deep tech startups in the UK compared to the US, as is discussed in the Mansion House deep dive.

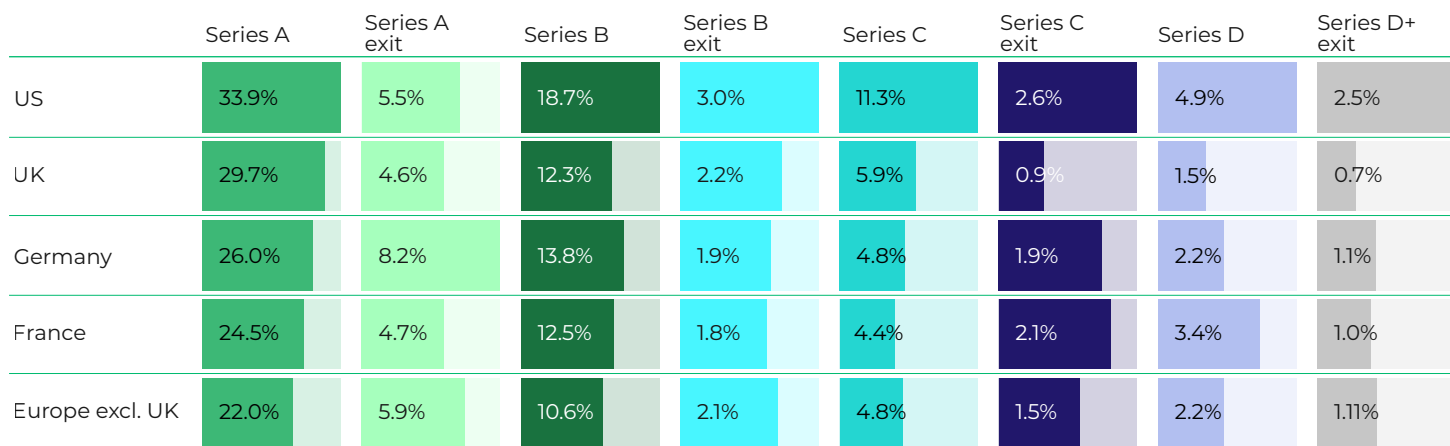


FIGURE 4.31 DEEP TECH CONVERSION RATES, UK VS OTHER GEOGRAPHIES.

A similar pattern emerges when tracking conversions to unicorn status, \$1 billion exits or \$100 million revenue milestones, where UK deep tech startups reach less than half the conversion rate of their US counterparts.

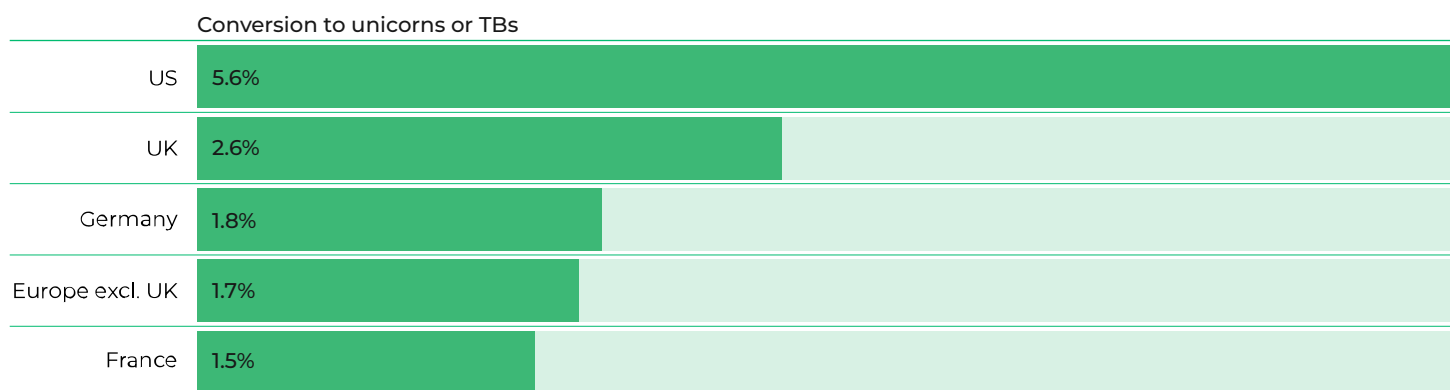


FIGURE 4.32 CONVERSION OF VC-BACKED DEEP TECH STARTUPS TO UNICORNS, \$1 BILLION+ EXIT, AND/OR \$100 MILLION REVENUES.

4f. Deep tech segments

Looking at the leading deep tech segments in the UK, we see particular strength in Biotech and Pharma, Techbio, Quantum, and Medical Devices.

Biotech and Pharma is the largest sector for deep tech startups in the UK, with almost 900 VC-backed companies, worth over \$87 billion and the most funded sector in 2025, with \$1.3 billion in funding so far. The largest deals this year have been Verdiva Bio, Draig Therapeutics and CellCentric.

The UK is also a leader in the Techbio sector, such as AI drug discovery, where it accounted for nearly 20% of global funding since 2020. Techbio is also the second-most funded sector in 2025 so far, with \$870 million. The largest deals this year have been Isomorphic Labs, CHARM Therapeutics and Latent Labs.

The UK is a global leader in Quantum, accounting for over 18% of global funding since 2020, and has created a notable \$14.4 billion of enterprise value with a small startup population of 45 VC-backed firms. Quantum has also been the third most funded sector in 2025, with nearly \$690 million led by Quantinuum’s \$600 million late round, which valued the company at \$10 billion, making it the most valuable private VC-backed company in Quantum globally.

Medical Devices also emerges as a strong area for the UK, with nearly 9% of global funding since 2020. It is the fourth most funded segment in 2025 year-to-date and has had strong growth since 2020. The largest rounds this year include OrganOx (later acquired for \$1.5 billion as discussed in exit Section 4H), CRM Surgical and CoMind.

Sector	Number of VC-backed startups ▼	Enterprise Value	Funding (2020-2025)	% of global funding (2020-2025)	Funding 2025	2025 vs 2020 growth
Biotech and Pharma	910.00	\$87.6B	\$9.0B	3.7%	\$1.3B	89%
Energy	302.00	\$15.7B	\$4.2B	5.3%	\$512.7M	102%
Medical Devices	292.00	\$18.1B	\$3.7B	8.8%	\$595.0M	85%
Semiconductors (ex. quantum)	189.00	\$171.8B	\$1.7B	2.3%	\$252.7M	-30%
Robotics	189.00	\$7.7B	\$770.3M	1.7%	\$172.2M	387%
Techbio	180.00	\$23.6B	\$5.0B	19.7%	\$870.7M	76%
Digital Health	173.00	\$7B	\$1.6B	5.1%	\$144.4M	-17%
Food & Agritech	156.00	\$8.4B	\$1.2B	5.0%	\$146.3M	7%
Other Technical Enterprise software	111.00	\$4.6B	\$468.1M	4.5%	\$72.1M	34%
Space	103.00	\$2.9B	\$2.7B	7.4%	\$103.1M	48%
Blockchain infrastructure & Metaverse	91.00	\$9.8B	\$1.3B	6.9%	\$12.8M	-72%
Rest of Climate Tech	90.00	\$5.2B	\$711.7M	4.9%	\$68.9M	-66%
Other transportation (autonomous driving, etc)	61.00	\$6B	\$2.0B	4.9%	\$102.3M	4%
Cybersecurity	54.00	\$8.6B	\$444.9M	5.5%	\$31.2M	-78%
Quantum	45.00	\$14.4B	\$1.9B	18.2%	\$687.8M	610%
AI*	1,036.00	\$234.5B	\$11.5B	3.0%	\$2.1B	67%

FIGURE 4.33 UK DEEP TECH STARTUPS BY DEEP TECH SEGMENT. DATA AS OF 20 OCT 2025. INCLUDES VC-BACKED COMPANIES WITH UNDISCLOSED FUNDING. *AI OVERLAPS HEAVILY WITH OTHER SEGMENTS SHOWN. BEYOND AI, THE OVERLAPS ARE MINIMISED BUT ALLOWED FOR LIMITED CASES. AI AND SEMICONDUCTORS ENTERPRISE VALUE NOTABLY INCLUDES ARM /SOURCE: DEALROOM.CO

AI is increasingly supercharging many deep tech domains, accelerating progress in Robotics and Autonomous Systems; Health and Life Sciences (for example, AI-driven drug discovery and AI-powered medical imaging); as well as in Materials and Manufacturing through AI-enabled material discovery and AI-driven engineering.

In 2025, AI-related deep tech activity accounted for 36% of total deep tech funding (\$2.1 billion, £1.6 billion), mainly across deep tech applications, as well as in foundational

models and semiconductors for AI. This is the highest share to date, on par with 2020 (which was driven by major fundraising from Graphcore and several AI drug discovery companies).

The share of AI in UK Deep Tech is higher than in the rest of tech (36% vs 28%), reflecting the role of AI in enabling and amplifying other frontier technologies. Similarly, the rest of tech shows strong growth driven by GenAI adoption in Enterprise Software and data centre infrastructure.

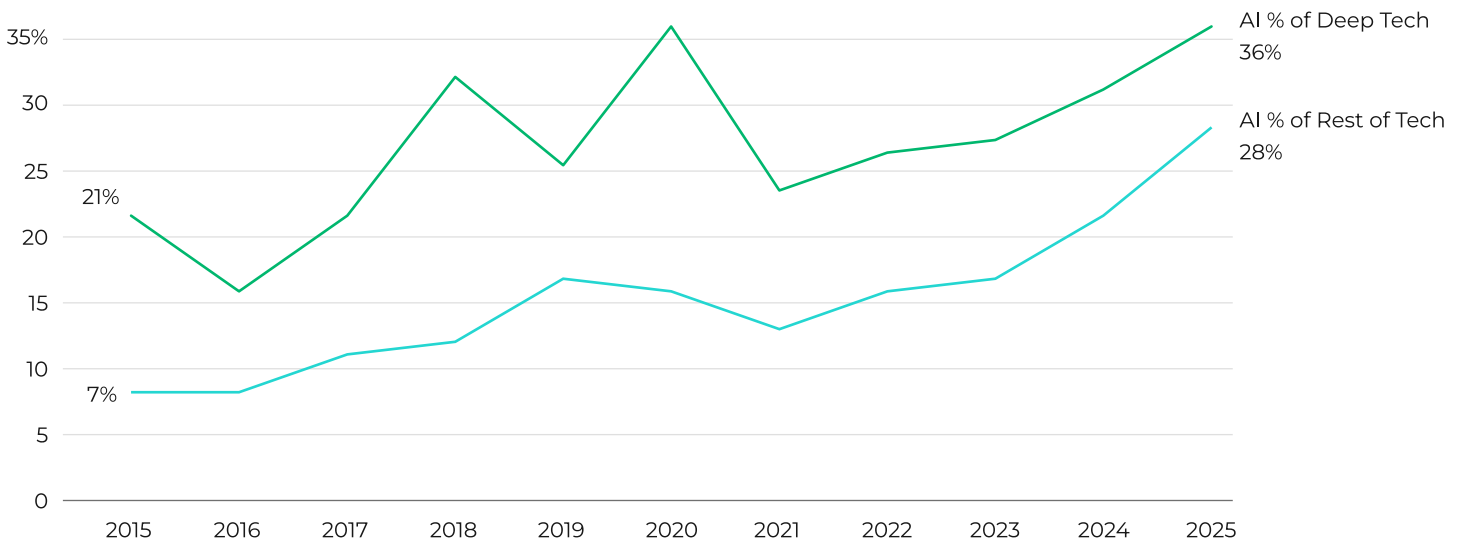


FIGURE 4.34 AI AS A SHARE OF UK VC FUNDING.

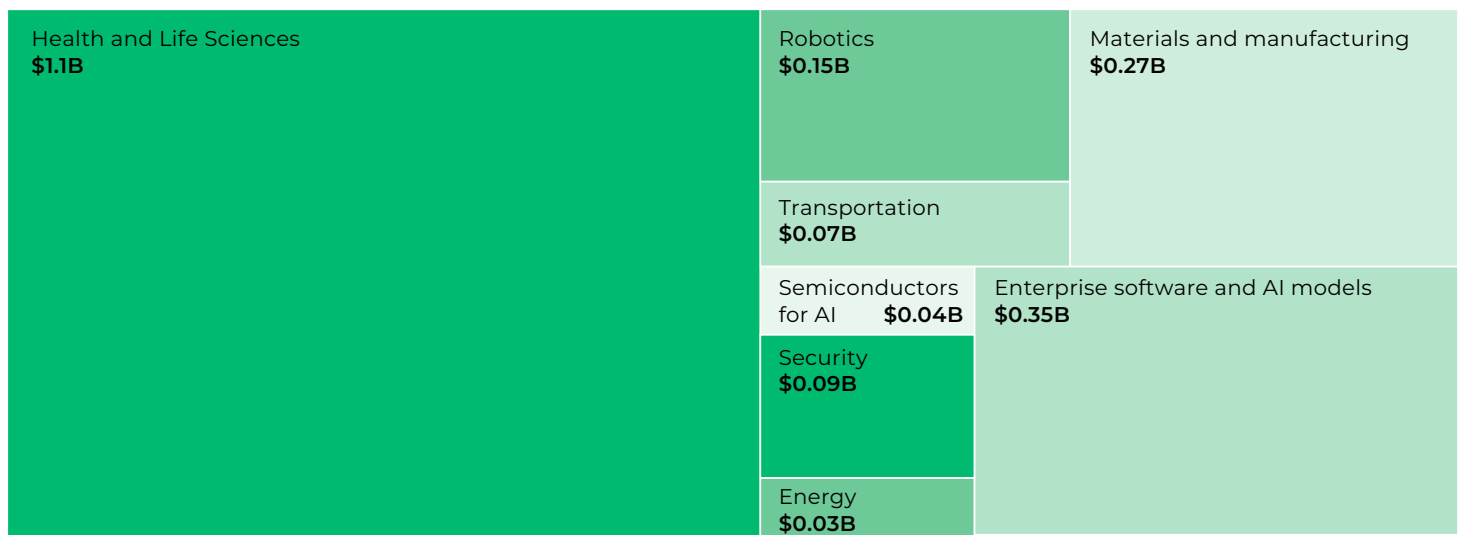


FIGURE 4.35 AI X DEEP TECH VC FUNDING IN THE UK IN 2025

Further reading on the sectoral composition of UK Deep Tech can be found in Section 6, where we discuss how Deep Tech sits at the core of many focus areas of the UK Industrial Strategy (such as Advanced Manufacturing, Clean Energy Industries, Digital and Technologies, Defence, and Life Sciences), and

investigate the Defence sector in more detail. Further, we explore the role of the Regulatory Innovation Office (RIO) in simplifying the UK’s regulatory environment for emerging technologies, such as Engineering Biology, AI x Health, Space, and Drones and Autonomous Systems.

4g. Investor landscape

The number of unique active investors in UK Deep Tech has grown over 3x in the last decade, showing that the investor ecosystem accessible for UK deep tech startups has expanded.

Some small decline in the number of total active investors can be seen compared to 2021–2022, where an abundance of capital availability pushed firms’ investments to record levels.

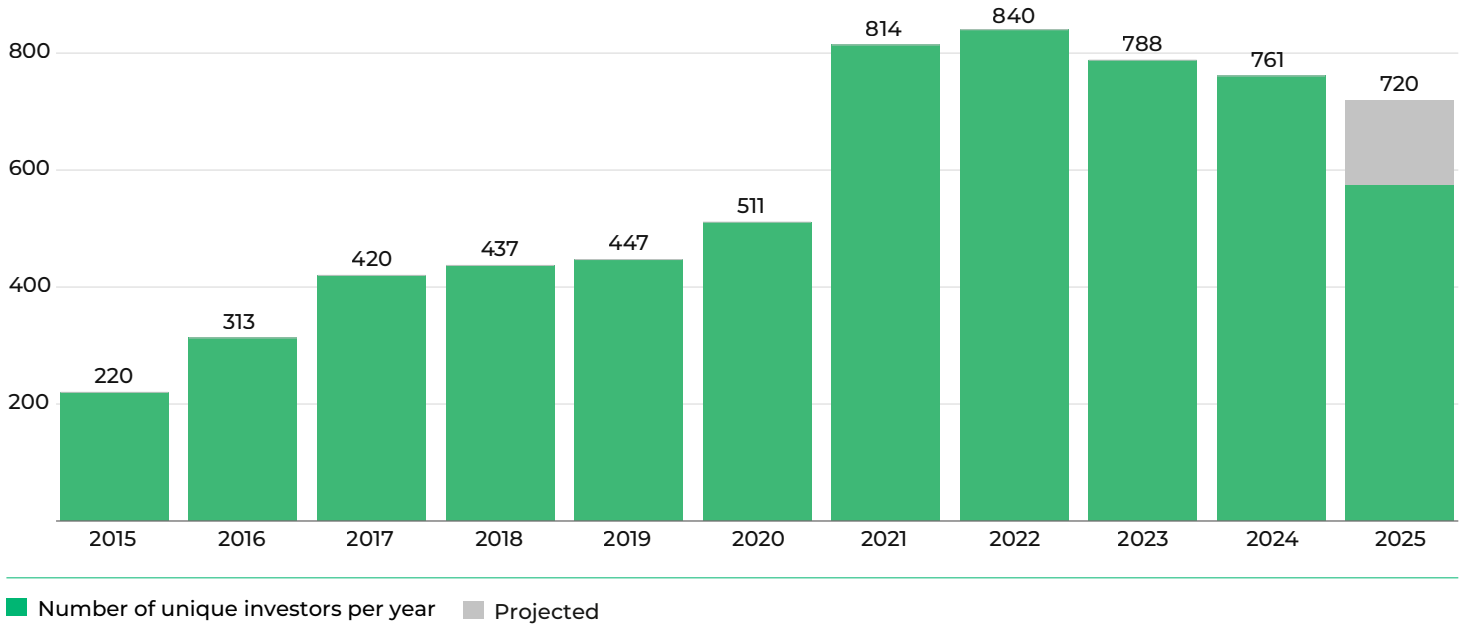
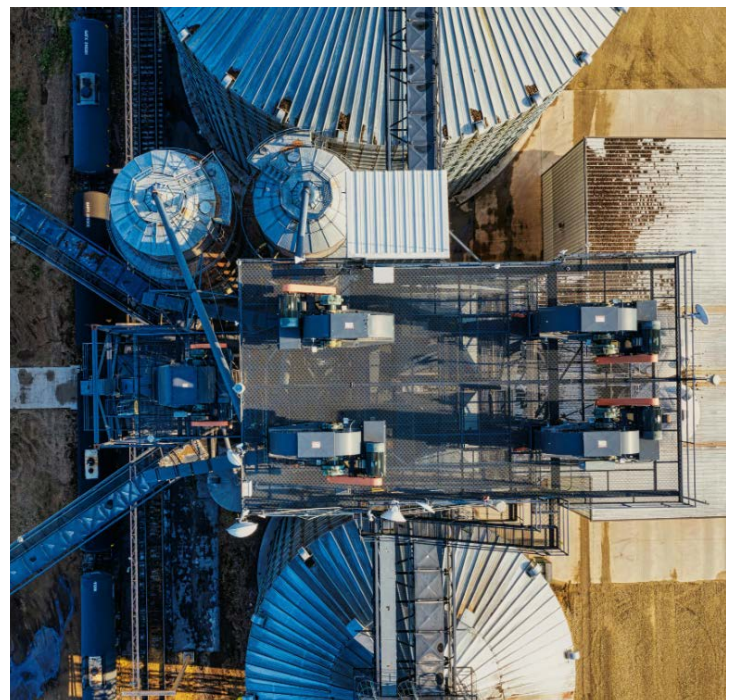


FIGURE 4.36 NUMBER OF UNIQUE INVESTORS PER YEAR IN UK DEEP TECH VC ROUNDS.
 Each investor doing at least one deal is counted in that year as a single count, whether they did one or ten deals. The count excludes angel investors and crowdfunding.

The most active investors since 2024 include funds such as SFC Capital, Scottish Enterprise Growth Investments, Parkwalk Advisors, Business Growth Fund, Oxford Science Enterprises, Mercia Asset Management, Northern Gritstone, IQ Capital, UK Innovation & Science Seed Fund, and Maven Capital Partners, among others.

However, Deep Tech is composed of very different sectors, which often require in-depth sectoral expertise. For this reason, most investors tend to focus only on certain areas, and it is key for founders and other ecosystem enablers to understand which investors are the most active in each major investment area. For instance, the most active in semiconductors since 2020 are Parkwalk Advisors, Oxford Science Enterprises, Business Growth Fund, IQ Capital, and IP Group.

In Space, Seraphim Space and 7PC Ventures appear among the top investors.



“

The substantial technical risk, greater capital intensity and longer development timelines of deep tech have important implications for portfolio construction, management and fund structuring in VC. Through a combination of classroom instruction, guest lectures, experiential learning and exposure to a carefully curated network of leading investors, the Science and Technology VC Fellowship has been designed to help develop the next generation of deep tech and life sciences VC leaders who will play a critical role in funding and scaling companies in these sectors.

Professor Ramana Nanda

Professor of Entrepreneurial Finance and
Academic Lead for the Institute for Deep Tech
Entrepreneurship, Imperial College London

	Investor name	Type	Preferred round	Deep Tech rounds since '20	Deep Tech rounds '24-'25	Share of Deep Tech '20-'25	Semiconductors since '20	Life Sciences since '20	Med-Tech since '20	AI x Deep Tech since '20	Energy since '20	Space since '20	Defence since '20	Food since '20
1	SFC Capital	Angel Fund	Seed	104	37	22%	1	28	14	28	16	11	2	6
2	Scottish Enterprise Growth Investments	Government	Seed	98	24	62%	6	48	20	14	15	9	0	12
3	Parkwalk Advisors	SFC Capital	Series A	80	23	90%	18	25	15	17	8	4	2	3
4	Business Growth Fund	Venture Capital	Growth Equity	77	23	40%	13	30	9	11	15	3	2	3
5	Oxford Science Enterprises	Venture Capital	Seed	79	21	99%	14	29	10	23	8	1	2	3
6	Merica Asset Management	Venture Capital	Seed	74	18	37%	4	28	18	21	9	2	2	1
7	Northern Gritstone	Venture Capital	Seed	37	15	80%	6	12	7	7	3	0	0	2
8	IQ Capital	Venture Capital	Seed	51	15	70%	12	11	3	26	7	3	0	0
9	UK Innovation and Science Seed Fund	Private Equity	Seed	49	15	92%	8	18	2	10	0	6	1	7
10	Maven Capital Partners	Private Equity	Growth Equity VC	39	15	30%	5	16	3	5	8	0	2	0
11	Foresight Group	Venture Capital	Seed	32	14	33%	10	3	2	8	1	1	1	1
12	EOS Advisory	Venture Capital	Seed	27	13	87%	1	20	10	7	4	0	0	0
13	Northstar Ventures	Venture Capital	Seed	29	12	48%	0	18	0	1	4	0	0	2
14	British Business Bank	Sovereign Wealth Fund	Debt	26	12	43%	0	11	5	2	3	2	3	0
15	Amadeus Capital Partners	Venture Capital	Series A	44	11	80%	4	7	2	21	5	0	0	4

FIGURE 4.37 TOP UK INVESTORS BY DEAL COUNT, OVERALL AND BY SECTORS

In the online visualisation, you can explore the top investors beyond the top 15 for each stage, sector and geography. Detailed data on numbers of Deep Tech rounds in specific sectors is also available.

[Link here](#)

Although the UK benefits from an increasingly active and gradually diversifying investor base, the structure and capability of many domestic funds are still not optimised for Deep Tech. Deep tech investing requires the ability to evaluate complex technical risk, support capital intensive development, and sustain long development timelines – conditions that differ from the ‘rest of tech’ UK population. This remains to be a strategic constraint for scaling UK Deep Tech domestically.

To address this, the Science and Technology Venture Capital Fellowship was developed by the Royal Academy

of Engineering Enterprise Hub and Imperial Business School, with support from the Department for Science, Innovation and Technology (DSIT). Now entering its second cohort, the Fellowship is seeking to build a new generation of UK investors able to lead and raise deep tech funds – equipping mid-career VCs with the skills related to portfolio construction, portfolio management and fundraising and structuring. The potential of UK Deep Tech depends not only on capital, but investors with the capability and confidence to deploy it at the pace and scale these companies require.

4h. Acquisitions and exits

The exit market for UK deep tech startups is remarkably active with nearly \$20 billion (£15 billion) in M&A value in 2025, making this year the second-most active ever for VC-backed Deep tech exits in the UK (when excluding ARM).

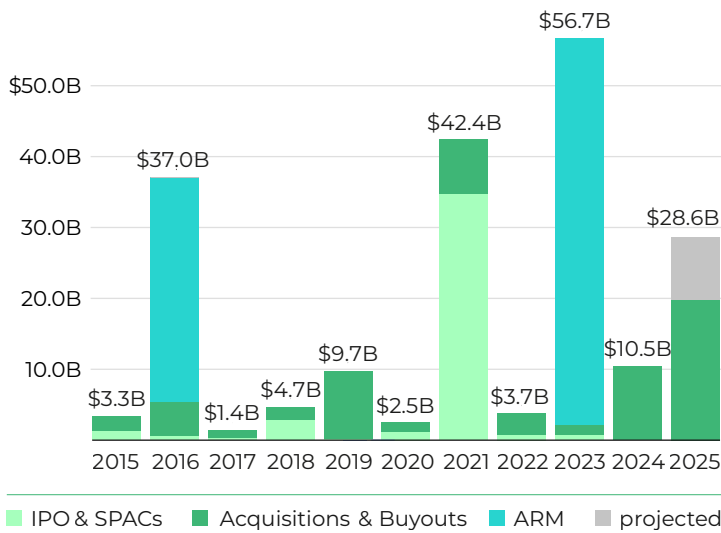


FIGURE 4.38 COMBINED VALUE OF DEEP TECH EXITS OF UK VC-BACKED STARTUPS.

There have been five exits of UK deep tech startups at a \$1 billion+ valuation so far in 2025: Verona Pharma, Dotmatics, Vicebio, OrganOx, and Oxford Ionics.

Verona Pharma and Dotmatics are ‘secondary’ exits. Verona Pharma was a publicly listed UK biopharmaceutical company focused on chronic respiratory diseases and was acquired by US pharma Merck for \$10 billion in 2025. Dotmatics, which provides Life Sciences R&D software, was previously acquired in 2021 by Insightful Science (part of Insight Partners) and has now been resold to German industrial corporate Siemens AG for \$5.1 billion.

Oxford Ionics and Vicebio have both impressively scaled from founding in 2019 to a \$1 billion+ exit just six years after.

Oxford Ionics is a spinout from Oxford University which develops leading trapped-ion qubit technology. The startup was acquired in June 2025 by US-based IonQ, one of the global leaders in quantum computing and a publicly listed company with over \$22 billion in market capitalisation. The rationale behind the acquisition was to combine the strengths of two leading players in trapped-ion quantum computing and pursue a joint development roadmap. IonQ also plans to significantly expand its

2021 was an absolute outlier for the value and number of public listings, which (except for ARM relisting) have been largely absent in the last three years.

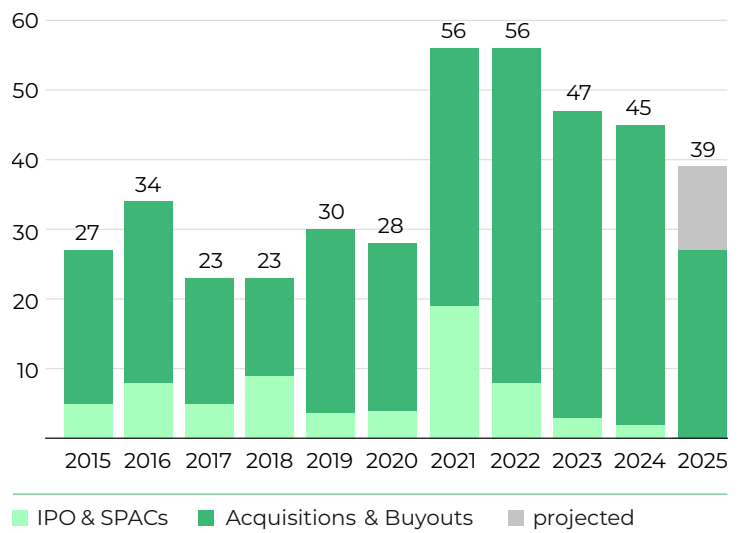


FIGURE 4.39 COMBINED VALUE OF DEEP TECH EXITS OF UK VC-BACKED STARTUPS.

presence in Europe by setting up a base of operations in the UK.

Vicebio was acquired by French pharma Sanofi for \$1.6 billion for its advanced vaccines for life-threatening respiratory infections. The UK biotech startup was originally founded in 2019 to commercialise the Molecular Clamp technology invented at The University of Queensland, Australia.

OrganOx, another Oxford University spinout founded in 2008, focuses on organ preservation devices and was acquired for \$1.5 billion by Japanese medical technology corporate Terumo Corporation to expand in the transplantation sector. Terumo had already become an investor in the company in the \$160 million primary and secondary equity round raised by the company in February this year.

Other notable acquisitions include Sheffield-based aquaculture tech startup Benchmark Holdings, acquired by Novo Holdings for £260 million, and Convergence, founded in 2024 to develop long-term memory AI agents and acquired by Salesforce for £120 million just a year later.

Name	Acquirors	Market	Transaction	Exit date	Latest valuation
Verona Pharma	Merck & Co.	Health Biotechnology	\$10B acquisition	July 2025	\$10B
Dotmatics	Siemens	Health Biotechnology	\$5.1B acquisition	July 2025	\$5.1B
Vicebio	Sanofi	Health Pharmaceutical Biotechnology	\$1.6B acquisition	July 2025	\$1.6B
OrganOx	Terumo Corporation	Health Medical Devices	\$1.5B acquisition	August 2025	\$1.5B
Oxford Ionics	IonQ	Semiconductors	\$1.1B acquisition	June 2025	\$1.1B
Benchmark Holdings	Novo Holdings	Health Food Agritech Biotechnology	\$260M acquisition	March 2025	\$13M
Convergence	Salesforce	Enterprise Software	\$120M acquisition	May 2025	\$158M

FIGURE 4.4 NOTABLE UK DEEP TECH STARTUPS EXITS SO FAR IN 2025.

The majority of these acquisitions, especially in value, have been from US corporates and investment funds, totalling \$37.2 billion since 2019 across 120 exits. Germany, France, Japan, and the Nordics are also large exit routes.

There were over 50 acquisitions by UK domestic investors since 2019. These, however, were small in combined value, pointing to more early-stage domestic M&A activity, compared to larger international acquisitions.

Location	Count of acquisitions	Value of acquisitions
US	122	\$37.2B
Germany	12	\$6.3B
France	7	\$2.7B
Japan	9	\$2.7B
Rest of Europe	14	\$2.0B
Nordics	10	\$1.4B
United Kingdom	54	\$369.1M
China	3	\$135.0M
India	4	\$132.0M
France	6	\$80.8M
Ireland	5	\$4.0M
South Korea	2	\$0.0
Rest of Asia	1	\$0.0
Australia	2	\$0.0
Rest of the World	1	\$0.0

FIGURE 4.41 COUNT AND VALUE OF ACQUISITIONS BY ACQUIRER HQ (2019–2025).

The majority of top acquirers (by combined value of startups) are not UK-based. The top 3 are American, two big pharma (Merck and Eli Lilly) and a private equity firm (Thoma Bravo),

followed by industrial corporate Siemens from Germany, and pharma company Sanofi from France.

Acquirors	Country	Number of acquisitions	Value of acquisitions
Merck & Co.	US	2	\$13.0B
Eli Lilly	US	2	\$8.0B
Thoma Bravo	US	1	\$5.3B
Siemens	Germany	3	\$5.1B
Sanofi	France	2	\$2.7B
SS&C Technologies	US	1	\$1.7B
Terumo Corporation	Japan	1	\$1.5B
Novartis	Switzerland	1	\$1.5B
Philip Morris International	US	1	\$1.5B
IonQ	US	1	\$1.1B
Biogen	US	1	\$877.0M
EQT Group	Sweden	1	\$858.0M
BioNTech	Germany	1	\$741.8M
Insightful Science	US	1	\$690.0M
Recursion Pharma	US	1	\$688.0M
SoftBank	Japan	1	\$600.0M
Pfizer	US	1	\$525.0M

FIGURE 4.42 COUNT AND VALUE OF VC-BACKED UK DEEP TECH STARTUP ACQUISITIONS BY ACQUIRER HQ (2019-2025)

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Reflecting on our journey from university spinout to a \$1.075 billion acquisition just six years later, the key drivers of our success were the clarity of our vision and the strength of our team. From the outset, Oxford Ionics was guided by the conviction that powerful quantum computers would fundamentally change how we approach era-defining challenges. We chose a unique path, solving the hardest problems first to create truly scalable technology. Over the years, we built a laser-focused team around this mission - employees, investors, early partners, and customers - all of who helped us turn this vision into reality.

Dr Thomas Harty
Co-Founder, Oxford Ionics

UK

Combined funding \$759M

Examples: Brill Power, Adaptix, Vortex IOT

IRELAND

Combined funding \$66M

Examples: Rinocloud, Ro5, Redx Pharma

US

Combined funding \$4B

Examples: Oxford Ionics, Convergence, Ducentis BioTherapeutics

CANADA

Combined funding \$34M

Examples: Tictrac, Senceive, Ballard Motive Solutions

GERMANY

Combined funding \$444M

Examples: DeepAR, Echo, Five AI

FRANCE

Combined funding \$394M

Examples: Vicebio, Congenica, Kymab

NORDICS

Combined funding \$181M

Examples: Sonatic, Blue Bear Research, Hummingbird Technologies

REST OF EUROPE

Combined funding \$371M

Examples: Deimos Space, Deep Branch, Cervest

ISRAEL

Combined funding \$371M

Examples: AimBrain

JAPAN

Combined funding \$1.1B

Examples: OrganOx, Graphcore, Orchard Therapeutics

AUSTRALIA

Combined funding \$43M

Examples: Lightpoint Medical, RotaGeek

SOUTH AFRICA

Combined funding \$0.4M

Examples: Alderley Analytical

INDIA

Combined funding \$19M

Examples: Aceleron, Faradion, Fertility Focus

CHINA

Combined funding \$26M

Examples: Vernalis, Oxgene, Flusso

SOUTH KOREA

Combined funding \$25M

Examples: Phasor Solutions, Oxford Semantic Technologies



Mapping of UK deep tech companies categorised by the country of the acquirer.

FIGURE 4.42 MAPPING OF UK DEEP TECH COMPANIES CATEGORISED BY THE COUNTRY OF THE ACQUIRER.

However, acquisition activity is not a one-way flow. UK corporates and funds have been strong acquirers of deep tech startups globally, totalling \$57.7 billion since 2019. The combined value of global deep tech startups acquired by UK entities and acquisitions of UK deep tech startups by global players sums to a similar total valuation over the last six years (\$57.7 billion vs \$52.6 billion). Most UK startup acquisitions are indeed from foreign entities, but UK entities are also very active international investors and ‘balance’ the flow.

In the Pharmaceutical sector, AstraZeneca and GSK have been the most active for global acquisitions. This year, GSK has acquired US-based biotech startup IDRx for \$1 billion in cash, plus \$150 million contingent on reaching a success-based regulatory approval milestone, to strengthen its oncology pipeline. AstraZeneca acquired Belgian startup EsoBiotec for an upfront \$425 million cash, and up to \$575 million in contingent consideration based on development and regulatory milestones, for its in-vivo cell therapies for cancer.

Domestic acquisitions, UK deep tech startups acquired by UK corporates and funds, totalled just below \$400 million but are spread across many small acquisitions.

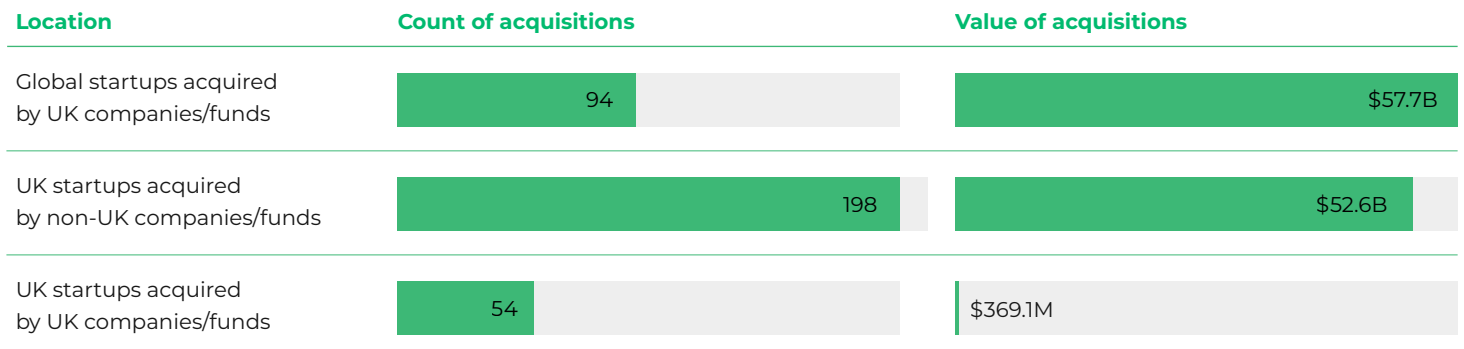


FIGURE 4.43 COMPARISON BETWEEN GLOBAL DEEP TECH STARTUPS ACQUIRED BY THE UK VS UK DEEP TECH STARTUPS ACQUIRED BY OTHER COUNTRIES.



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Longwall was the lead investor in OrganOx at founding in 2008. The first business plan predicted the product would be on the market within three years, profitable within four, and sold within five. In the end, it took 13 years to reach profitability, before being acquired for \$1.5 billion in 2025 (17 years later). This should come as no surprise, because complex engineering takes time, and the hurdles for clinical proof are high. But the tenacity paid off with a technology that has contributed to a 20% increase in liver transplants, thousands of lives saved, and a return of £84 million on Longwall's £4.4M investment (19X).

Matthew Frohn

Partner, Longwall Venture Partners

4i. Corporate investments

Example of notable corporate investors in UK Deep Tech include Eli Lilly, Barclays Climate Ventures, Novo Holdings, M Ventures, Novartis, Pfizer, NVIDIA, Softbank, Tencent, Shell Ventures, and GV, among others.

NVIDIA invested for the first time in the UK deep tech ecosystem in 2023, backing Synthesia (AI video generation) and CHARM Therapeutics (AI drug discovery). In 2024, it joined Wayve's \$1.1 billion Series C (autonomous driving), and in 2025, it co-led Quantinuum's \$600 million late VC

round, participated in Cusp AI's \$100 million Series A (AI material discovery), and CHARM Therapeutics's \$80 million Series B (AI drug discovery).

Nvidia has recently announced a further £2 billion investment to catalyse the UK's AI startup ecosystem, working with venture capital firms Accel, Air Street Capital, Balderton Capital, Hoxton Ventures, and Phoenix Court to invest in companies such as Wayve, Nscale, Oxa, Revolut, PolyAI, Synthesia, Latent Labs, and Basecamp Research.



Investor name	Investor country	Type	Preferred round	Deep Tech rounds since 2020	Deep Tech rounds 2024-2025
Eli Lilly	United States	Corporate	SERIES A	13	6
Barclays Climate Ventures	United Kingdom	Corporate	SERIES A	10	6
SIS Ventures	United Kingdom	Corporate	SEED	14	5
Saudi Aramco Energy Ventures	Saudi Arabia	Corporate	SERIES A	9	5
DSW Ventures	United Kingdom	Corporate	SEED	6	5
Novo Holdings	Denmark	Corporate	SERIES A	12	4
M Ventures	Netherlands	Corporate	SERIES A	11	4
Novartis Venture Fund	Switzerland	Corporate	SERIES A	9	4
Pfizer Ventures	United States	Corporate	SERIES A	9	4
SR One	United States	Corporate	SERIES B	8	4
Nvidia	United States	Corporate	SERIES B	4	4
Hostplus	Australia	Corporate	SERIES B	12	3
M&G Investments	United Kingdom	Corporate	SERIES C	12	3
Anglo American	United Kingdom	Corporate	SEED	8	3
Shell Ventures	Netherlands	Corporate	SERIES A	7	3
XTX Ventures	United Kingdom	Corporate	SERIES A	6	3
GV	United States	Corporate	SERIES A	5	3

FIGURE 4.44 TOP CORPORATE INVESTORS IN UK DEEP TECH.

5.

Scaling UK Deep Tech and the role of Mansion House Reforms

The UK is a global leader in Deep Tech, consistently ranking as the third most funded country globally. Home to thousands of startups that have collectively created \$406 billion (£303 billion) in value since 1990, with \$155 billion (£116 billion) remaining in the private market, indicating strong potential for further growth.

However, despite the UK, and most notably London's, position as one of the world's foremost financial centres, the UK remains highly reliant on foreign investors, especially to scale deep tech companies. A key structural factor is the limited allocation of UK pension funds to VC, which remains far below that of US peers.

Recent initiatives, such as the UK Mansion House Reforms, aim to address this by unlocking greater pension allocation into VC, private equity (PE), and private infrastructure and lending.

Since 2023, less than one-third of deep tech funding into deep tech startups has come from UK-based investors. Over half (54%) of all funding originated from outside Europe, with the US providing the lion's share of nearly 42%. This underscores the UK's international attractiveness, but also its dependency on foreign capital for scale up financing.

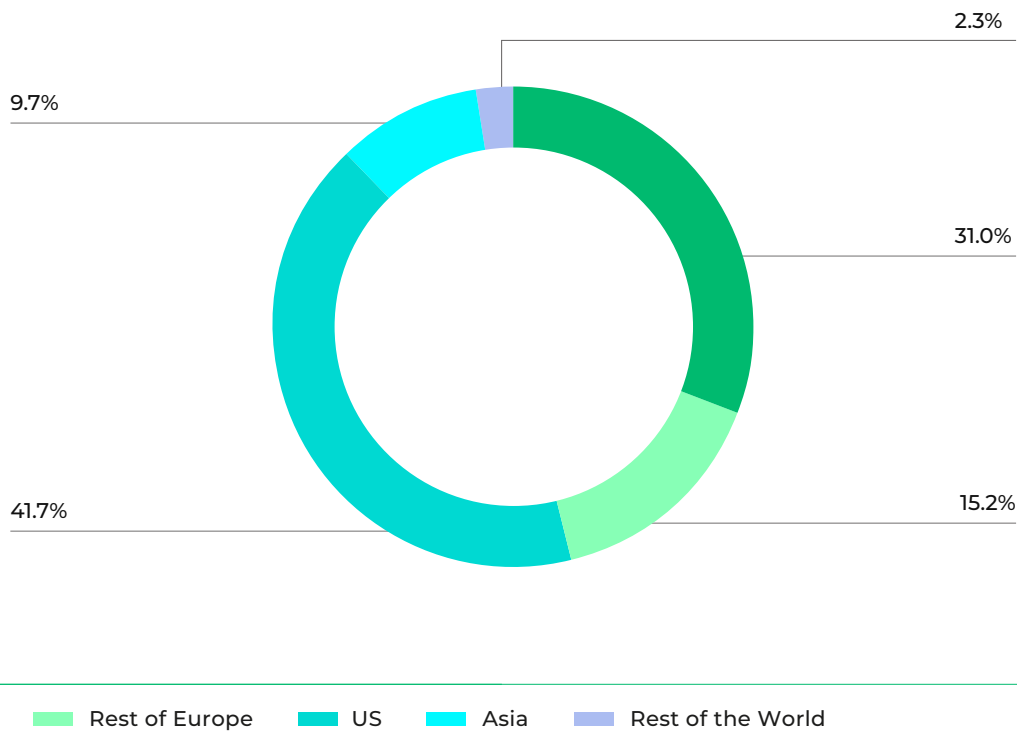


FIGURE 5.1 UK DEEP TECH VC FUNDING AMOUNT BY INVESTOR LOCATION (2023-2025).

When looking at investment by stage, there is a clear divergence between early- and late-stage funding. The domestic share of investment falls sharply from 57% at early stage to just 18% at late stage. Conversely, the share of non-European funding grows from 27% at early stage to over 72% at late stage. The US, in particular, accounts for 59% of late-stage funding, demonstrating the reliance on US investors to scale UK deep tech companies beyond the early growth stages.



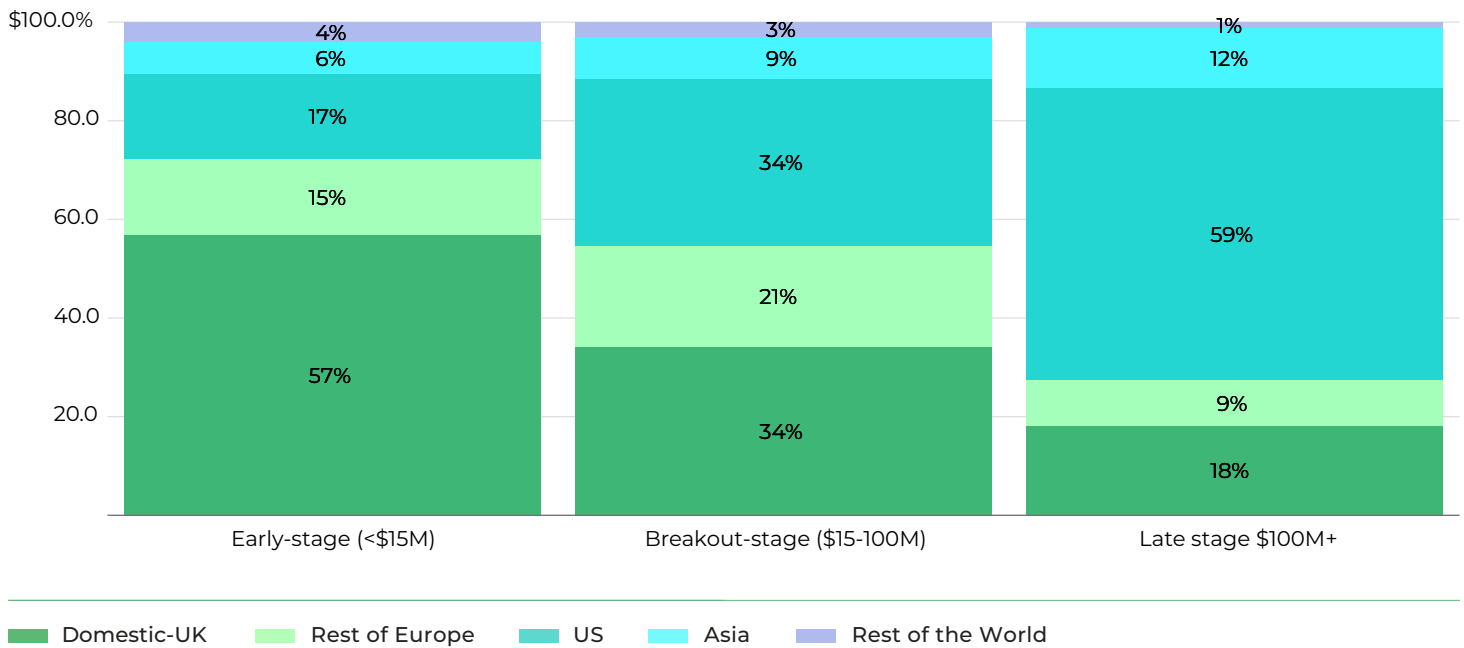


FIGURE 5.2 UK DEEP TECH VC FUNDING AMOUNT BY INVESTOR LOCATION BY STAGE (2023-2025).

This late-stage funding gap has not closed in recent years, on the contrary, it has even widened. UK domestic share of late-stage funding reached its minimum in 2024-2025, accounting

for just 9% of funding in 2025, while the US share of funding reached 72% in 2025.

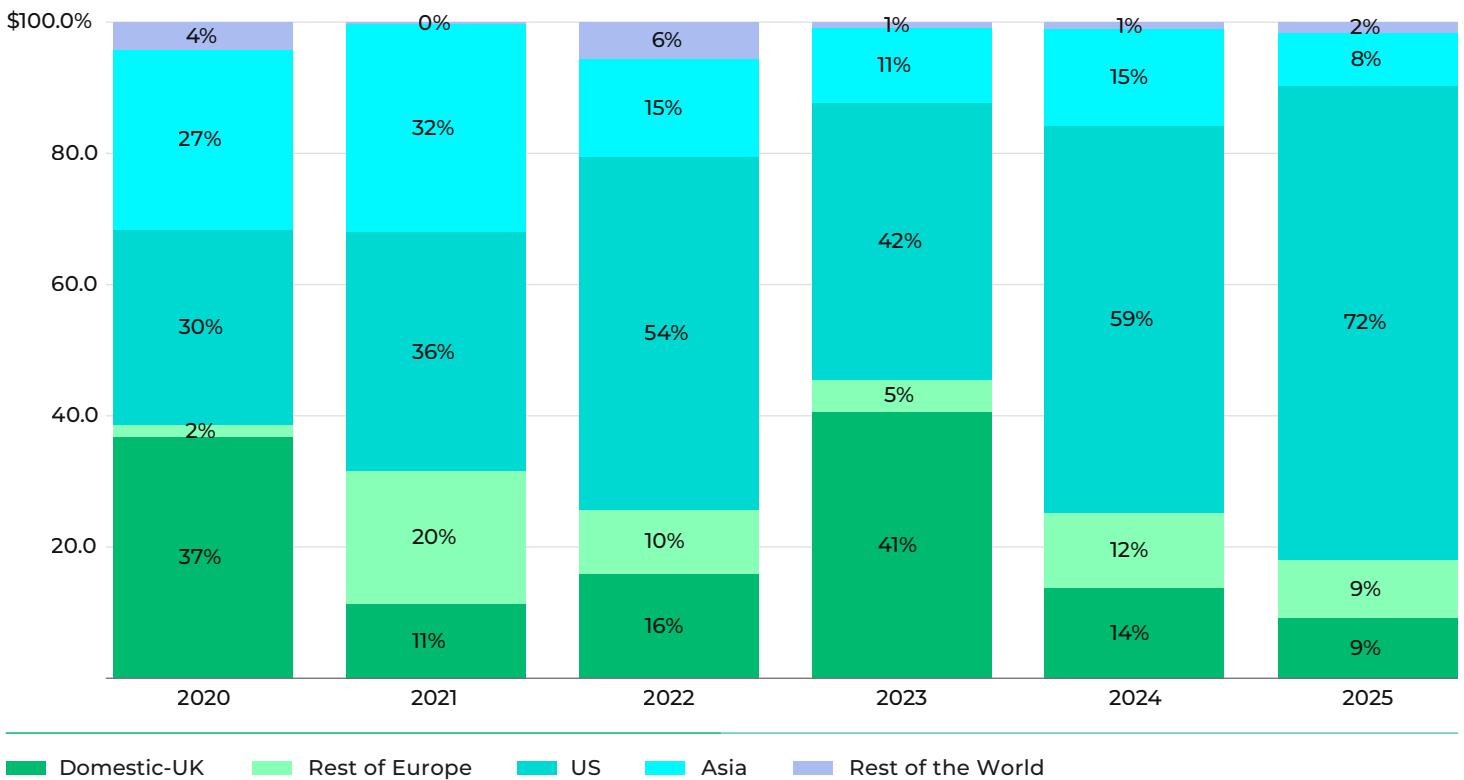


FIGURE 5.3 LATE STAGE (\$100 MILLION+) UK DEEP TECH VC FUNDING AMOUNT BY INVESTOR LOCATION.

Among the top 10 investors that were active in at least two late-stage rounds for UK deep tech startups since

2023, only two are UK-based (British Business Bank and Intermediate Capital Group).

Name	Country	\$15-100M count	\$100M+ count ▼	\$15M+ count
Forbion Capital Partners	Netherlands	2	4	6
British Business Bank	United Kingdom	7	3	10
RA Capital Management	United States	3	3	6
NEA	United States	1	3	4
Nvidia	United States	2	2	4
Sofinnova Partners	France	2	2	4
GV	United States	1	2	3
Intermediate Capital Group	United Kingdom	1	2	3
Honeywell	United States	0	2	2
Temasek	Singapore	0	2	2
TCCX	United States	0	2	2
Intuitive Ventures	United States	0	2	2
Oxford Science Enterprises	United Kingdom	8	1	9
Business Growth Fund	United Kingdom	8	1	9
SV Health Investors	United Kingdom	4	1	5

FIGURE 5.4 TOP BREAKOUT AND LATE-STAGE INVESTORS IN UK DEEP TECH STARTUPS (2023–2025).

We can then estimate what it would take to close the UK growth stage funding gap. UK deep tech startups have been raising on average \$5.1 billion (£3.8 billion) yearly in rounds above \$15 million since 2023.

The share of domestic funding in these \$15 million+ rounds only was 26%, accounting for \$1.35 billion (£1 billion) yearly, while US-domestic funding at this same stage is 78%. If the UK were to reach the 78% domestic funding share, this would require an **extra \$4 billion (£3 billion) per year**.





FIGURE 5.5 SHARE OF DOMESTIC FUNDING IN DEEP TECH PER COUNTRY.

Additionally, US startups are 2.1x times more likely to reach \$15 million+ of funding, which is partly due to larger capital availability, along with other factors such as market access.

If the UK were to close this gap and keep the 78% share of domestic funding, that would require an **extra \$7.2 billion (£5.4 billion) in domestic investment per year.**



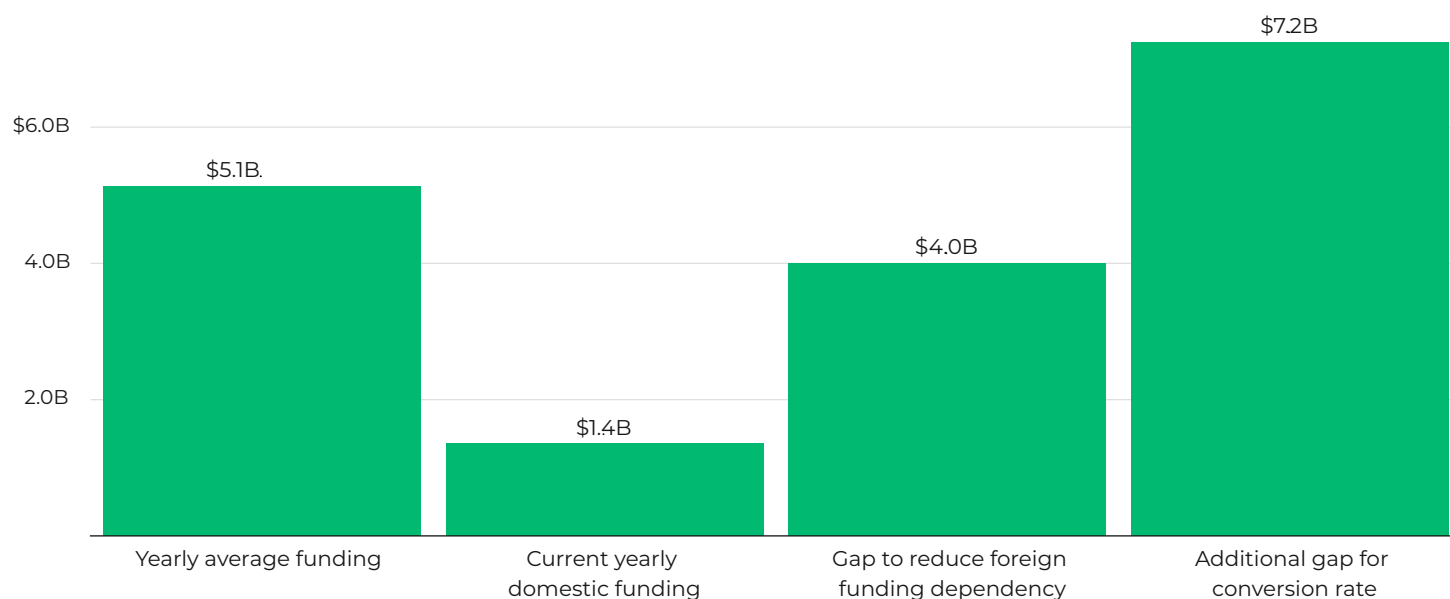


FIGURE 5.6 ESTIMATED YEARLY DOMESTIC FUNDING GAP FOR UK DEEP TECH.

The methodology used to calculate the gap has been developed by Dealroom and Atomico for the State of European Tech 2024 report (p.43).

1) Gap to reduce foreign dependency looks at \$15 million+ rounds and how much funding would be required to get to a similar domestic share as the US. Looking at 2023-2025, the UK provided 26% of the deep tech funding to UK startups, while in the US, 78% of the funding was domestic. Closing this gap would require \$4 billion annually.

2) The additional gap for conversion rates comes from looking at the fact that UK startups convert less to \$15 million+ rounds (4.1% vs 8.3% for the US). Closing this conversion gap requires a further \$7.2 billion in VC investment.

Therefore, for the UK to be able to support scaling up and retaining late-stage deep tech companies, the funding gap is estimated to be in the range of **\$4–11 billion annually**.

A key avenue for this to happen is increasing the allocation of pension funds to VC in the UK. While US pension funds allocate 1–2% of their capital to VC, the UK rate was just 0.2% before the Mansion House Reforms.

To address this, the UK government launched the Mansion House Compact in 2023, asking for Defined Contribution (DC) pension schemes to commit to investing 5% of default funds in unlisted equities (such as VC and PE) by 2030. The later Mansion House Accord raised this ambition to 10% in broader private markets (unlisted entities plus infrastructure), with at least 5% directed towards UK assets. This potentially will unlock £50 billion in investment for UK business and major infrastructure projects. Seventeen workplace pension providers, covering 90% of active savers’ DC pensions, have signed the Accord.

Progress is emerging but gradual, and the speed of implementation matters. As of early 2025 the **Mansion House Compact Progress**¹ update notes allocations to unlisted equities had reached 0.6% of default fund assets

(£1.6 billion), up from 0.36% in 2024, out of a total of £268 billion assets.

Signatories continue to pave the way for increased investment in unlisted equities, putting in place the operational frameworks needed to expand private market exposure. However, shifting from a cost-based to a value-based approach, to gain support from clients, remains a key challenge. Allocation to unlisted equities carries more cost and fees for clients, many signatories cite the importance of policy interventions to shift client perceptions and support of further increases to investment in unlisted equities.

The pathway to 2030 is supported by several intermediate reforms including scheme consolidation, regulatory reserve powers, value-for-money frameworks, and reporting. However, there is no binding interim schedule for increasing allocations until then, meaning the pace of implementation will determine whether this initiative delivers its full impact. Some of this might be established in the final government report, which should propose the structure, enablers and perhaps binding or regulatory steps.

1. <https://www.abi.org.uk/globalassets/files/publications/public/lts/2025/mansionhousecompactprogressupdateoctober2025.pdf>

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Deep tech companies scale to global success when patient capital, policy and innovation move together. We excel at take-off, but falter at altitude.

Turning the Mansion House commitments into outcomes requires the government to set clear long term return objectives for pension funds so they can make a prudent 0.5% allocation to high-quality venture.

Predictable, mission-oriented policy through clear standards, workable sandboxes and reliable visa routes are also needed, together with government procurement to act as the first customer in health, energy and security. Aligning these levers will enable UK innovation to create globally competitive companies, keeping value, capability and technology sovereignty at home.

Dame Anne Glover DBE HonFREng FRSE
CEO and Co-Founder, Amadeus Capital

6.

Deep Tech and the UK's Modern Industrial Strategy

The **UK's Industrial Strategy**¹, published in June 2025, sets out a decade-long plan to back the most promising sectors to increase national productivity and strengthen economic security. While deep tech is not a named focus of the strategy, it is a critical enabler across five of the eight high-growth priority sectors (IS-8), namely: Advanced Manufacturing, Clean Energy Industries, Digital and Technologies, Defence, and Life Sciences. These sectors depend on deep tech innovation (from AI and quantum to advanced materials and biotechnology) to deliver the innovation and competitiveness the strategy seeks to unlock.

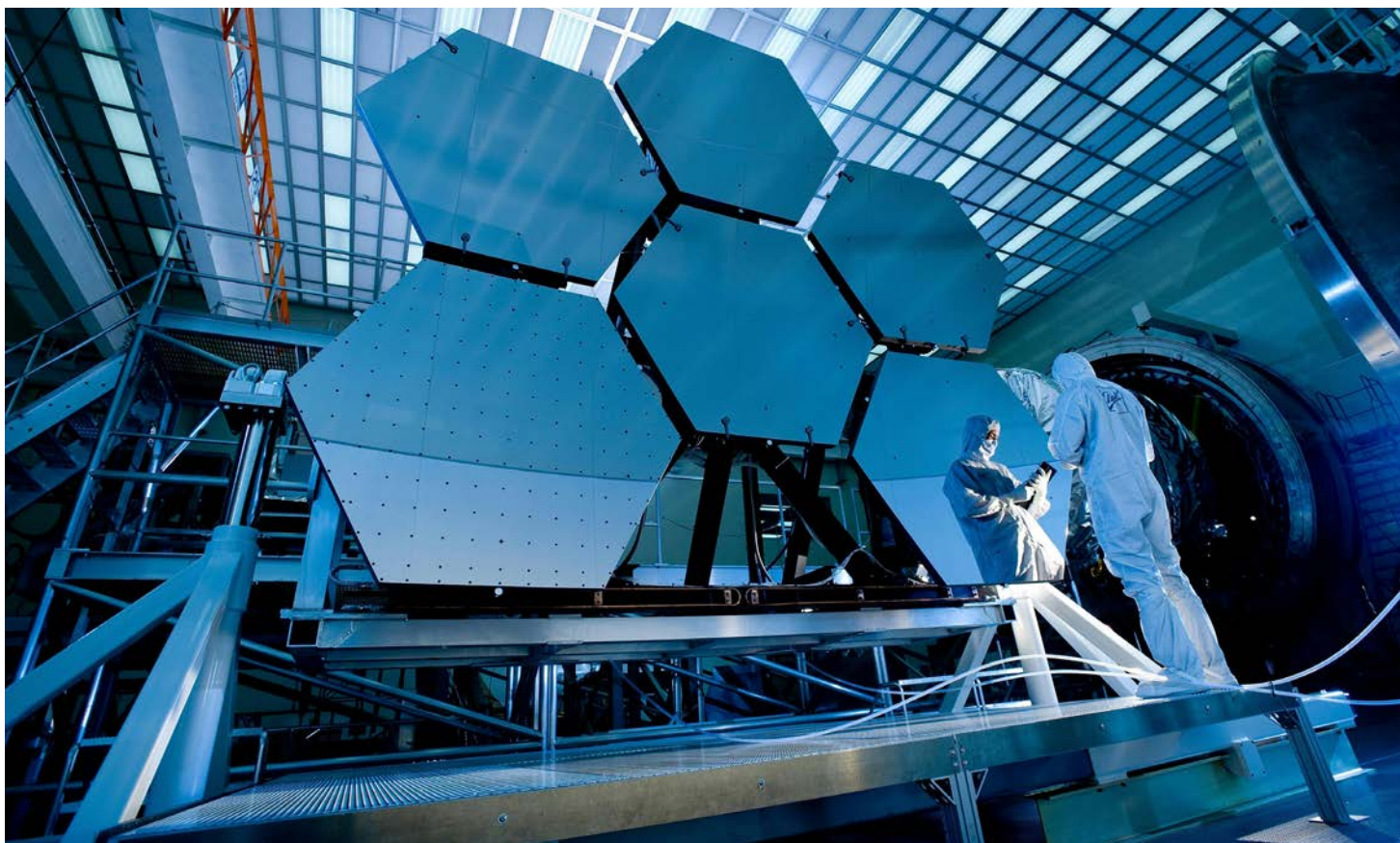
The remaining sectors: Financial Services, Creative Industries, and Professional and Business Services, tend to be adopters rather than developers of deep tech. While not deemed in scope for this report, examples of such are creative industries increasingly applying AI and augmented reality to enhance digital experiences, while financial services are integrating AI-driven analytics and automation.

Deep tech therefore underpins much of the UK's industrial strengths and ambitions, serving as a strong foundation

for sectors that will shape cleaner energy systems, smarter manufacturing and more secure digital infrastructure, as well as enhancing UK economic prosperity.

The Industrial Strategy highlights the need for the UK to better support its highest-potential sectors and foster the growth of 'superstar firms' (companies capable of generating spillover benefits across the wider economy). Increasing investment in deep tech start-ups and spinouts, combined with the UK's strong R&D base - including existing strengths in AI, quantum and advanced materials - presents a significant opportunity to nurture these capabilities and cultivate the next generation of deep tech 'superstars'.

Not only can the growth of deep tech companies drive broader economic growth, but more than many other sectors, they also offer the UK the ability to build strategically important domestic capabilities. Deep tech companies also play a critical role in supporting domestic supply chains and strengthening foundational industries, reducing reliance on external suppliers in strategically sensitive areas.



1. <https://www.gov.uk/government/publications/industrial-strategy>

THE INDUSTRIAL STRATEGY'S GROWTH DRIVING SECTORS AND THE FRONTIER INDUSTRIES WITHIN THEM

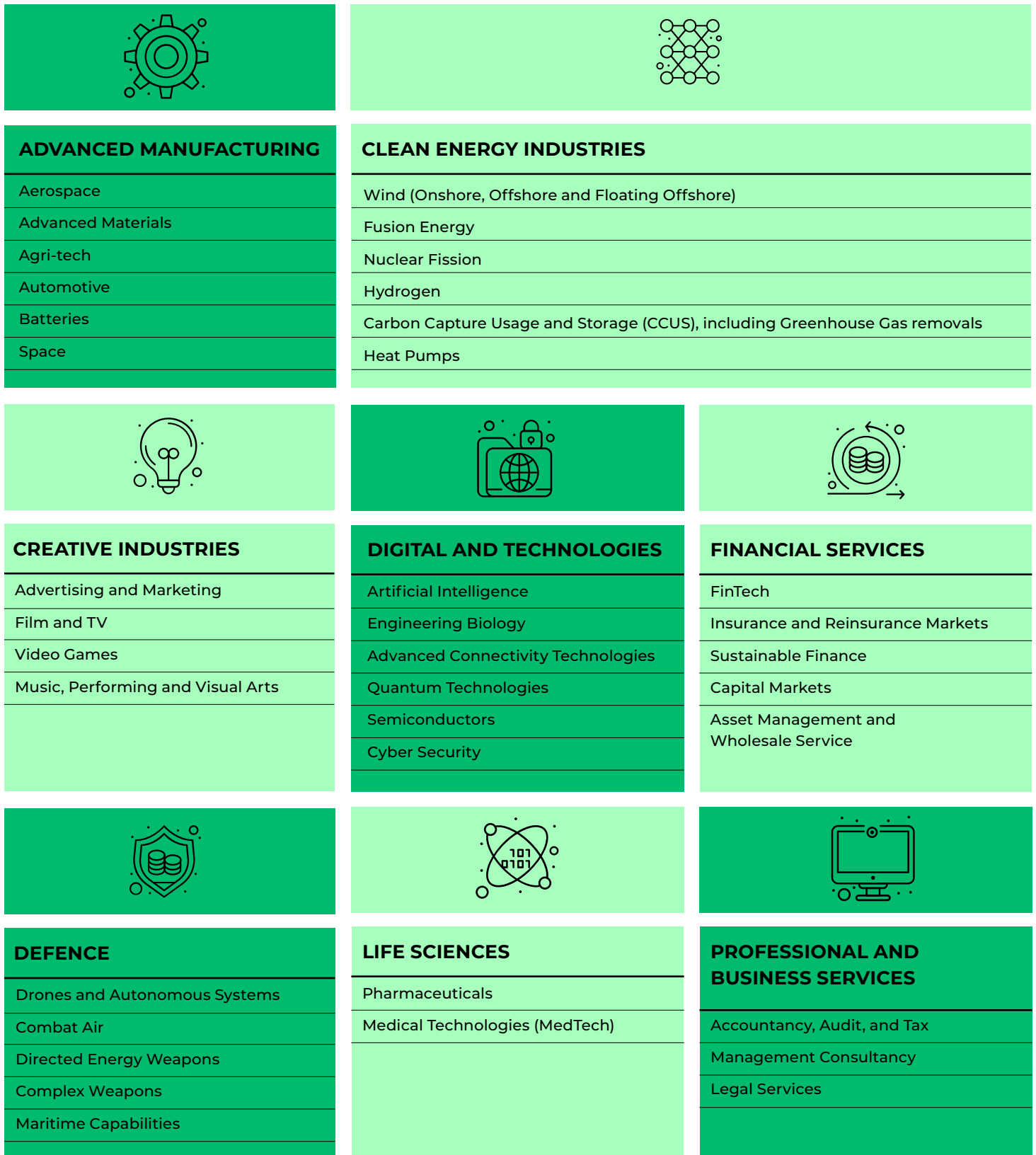


FIGURE 6.1 THE INDUSTRIAL STRATEGY'S GROWTH DRIVING SECTORS AND THE FRONTIER INDUSTRIES WITHIN THEM. SOURCE: THE UK'S MODERN INDUSTRIAL STRATEGY, CP1337. (2025, JUNE). DEPARTMENT OF BUSINESS AND TRADE, PAGE 116.

- Life Sciences startups (which include both Pharma and MedTech) represent the largest startup pool with nearly 1400 VC-backed startups, worth over \$129 billion and that have attracted the most funding since 2012 together with Digital and Technologies.
- Digital and Technologies created the most Enterprise value with over \$256 billion (however, 60% of it is driven by ARM).
- Advanced Manufacturing follows with 560 VC-backed startups, worth over \$30 billion and that raised \$9.2 billion since 2020.
- Defence is still a nascent ecosystem for startups in the UK as we will discuss in more details in the following Section 6.b).

	Number of VC-backed startups	Enterprise Value	VC funding (2020-2025)	Funding 2025
Life Sciences	1,382	\$129.3B	\$17.6B	\$2.7B
Digital and Technologies	1,334	\$256.2B	\$17.6B	\$3.0B
Advanced manufacturing	560	\$30.6B	\$9.2B	\$1.2B
Clean energy	218	\$9B	\$2.4B	\$208.6M
Defence	66	\$4.5B	\$936.4M	\$195.0M

FIGURE 6.2 UK DEEP TECH STARTUPS BY UK PRIORITY AREA.

Statistics reported here refer only to deep tech startups in those priority areas. Startups that fit those priority areas but are not deep tech are excluded, for instance energy wind energy and heat pumps are quite mature technologies in large commercial rollout, and most of the startups are not considered Deep Tech and excluded. Exceptions exist, if novel technology for wind blade recycling, or a completely novel heat pump technology, but they represent a minority of the market.

Looking in more detail at the UK's performance in the frontier industries further identified within the five high-growth driving sectors a mixed picture emerges:

- We can see that in **Life Sciences** the UK accounts for 9.4% and 8.8% of global funding in since 2020 for Pharma and Medical Devices respectively, this is more than double the share that the UK holds on average in Deep Tech which amounts to 4.3%, showing these are large deep tech startups segments where the UK is strongly positioned.

- Instead, in **Digital Technologies** UK competitiveness varies strongly. The UK accounts for a remarkable over 18% of global **Quantum** funding since 2020, but just 3% for **AI** and 2.3% for **Semiconductors (excluding quantum)**, showing that UK competitiveness varies strongly in this priority area.

- In **Defence**, as we will discuss in the next section, the UK account for about 3% of global funding since 2020 which is already below the 4.3% average, but the UK startup scene is particularly underdeveloped in **Drones and Autonomous Systems** accounting for just 0.6% in the segment.

- Across **Clean Energy Industries** the competitiveness of the UK startup scene also varies strongly, the UK shows a strong **Carbon capture and storage, and removal (CCUS & CDR)** startup scene but punches below its weight in **Nuclear energy**.

- Across **Advanced Manufacturing** the UK shows moderate strength in **Space and AgriTech**, while the **Advanced Materials** startup scene appears more in its early stage even if notably 2025 saw notable strong funding with CuspAI raising \$100 million to design new

materials for sustainability and clean energy using use generative AI, deep learning and molecular simulation.

- **Batteries** is a segment where the UK shows both strengths and weaknesses, a large amount of funding has flown into the sector but notable failures in battery manufacturing at scale have prevented the creation of long-term value. Where the UK excels instead is novel battery chemistries such as Nyobolt which develops lithium batteries with niobium-based anode materials for high-performance applications and raised £22.7 million in 2025.



For more see the [Faraday Battery Challenge study](#).



Big priority area	Sub-segment	Number of VC-backed startups	% of global funding ('20 - '25)	EV	VC funding ('20 - '25)	Funding '25
Life Sciences	Pharma	1,090	9.4%	%111.2B	\$13.9B	\$2.1B
Life Sciences	Medtech	292	8.8%	%18.1B	\$3.7B	\$595.0M
Digital and Technologies	AI	1,036	3%	%234.5B	\$11.5B	\$2.1B
Digital and Technologies	Engineering biology	93	2.16%	%7.6B	\$806.9M	\$115.4M
Digital and Technologies	Quantum	45	18.2%	%14.4B	\$1.9B	\$687.8M
Digital and Technologies	Semiconductors (ex. quantum)	189	2.3%	\$171.8B	\$1.7B	\$252.7M
Digital and Technologies	Cybersecurity	78	5.89%	\$11.9B	\$892.2M	\$33.2M
Digital and Technologies	Connectivity tech	53	16.15%	\$5.4B	\$2.3B	\$46.3M
Defense	Drones and autonomous systems	17	0.6%	\$195.1M	\$59.9M	\$9.4M
Clean energy industries	Nuclear	7	2.7%	\$737.3M	\$341.6M	\$9.6M
Clean energy industries	CCUS & CDR	34	7.64%	\$2.4B	\$555.1M	\$63.5M
Clean energy industries	Hydrogen	28	5.95%	\$1.8B	\$498.2M	\$106.9M
Advanced manufacturing	Batteries	61	11.38%	\$2.8B	\$3.1B	\$64.1M
Advanced manufacturing	Advanced Materials	83	0.31%	\$5B	\$1.0B	\$398.2M
Advanced manufacturing	Space	103	7.4%	\$2.9B	\$2.7B	\$103.1M
Advanced manufacturing	Agri-tech	91	4.96%	\$2.5B	\$724.7M	\$130.2M

FIGURE 6.3 UK DEEP TECH STARTUPS BY UK PRIORITY AREA AND SUBSEGMENTS.





7.

Strategic
capability: deep
tech and defence
innovation

Deep tech sits at a natural intersection of defence and innovation. Many of the technologies driving the next generation of defence capabilities, AI and autonomy, quantum sensing, advanced materials, semiconductors, and space systems, are multidomain deep tech fields that also underpin productivity and resilience across other sectors.

Defence is increasingly being recognised as a strategic engine for growth in the UK. In 2025 the UK government committed to the largest sustained rise in defence spending since the end of the Cold War, increasing investment to 2.6% of GDP by 2027, and an ambition to reach 3% in the next Parliament. **The Strategic Defence Review**¹ set the ambition for the UK to become a leading “tech-enabled defence power” by 2035. **The Defence Industrial Strategy**² that followed outlines how this will be delivered by addressing skill gaps, increased private engagement, prioritising dual-use innovation, and expanding export and co-development pathways to lower barriers for SMEs and startups.

To accelerate innovation, the government has announced a £400 million ring-fenced Defence Innovation budget alongside a commitment to allocating at least 10% of the Ministry of Defence (MoD) equipment budget to novel technologies.

Defence procurement and access for startups

While the strategy sets clear innovation commitments, the ability of deep tech companies to scale in the UK in this sector hinges largely on procurement, specifically whether early engagement and pilots can convert into repeatable contracts and sustained adoption. The strategy sets out several initiatives to make defence procurement more open, faster and easier to navigate for emerging technology companies:

• **Defence Innovation Network** – a single entry point for startups engaging with the MoD and Defence and Security Accelerator (DASA).

• **Expanded Defence Venture Fund** – to co-invest in AI, autonomy, cybersecurity, quantum, and other deep tech areas.

• **Agile Acquisition Pathways** – commitments to shorter contracting timelines, outcome-based procurement and pilot schemes for direct SME contracting.

• **Defence Export Promotion Scheme** – supports international scaling of UK-origin technologies.

However, in the strategy startups and SMEs are currently combined under one category which could risk nonintuitive reporting and results. It also risks obscuring distinct challenges faced by earlier-stage deep tech companies compared to more established SMEs already competing for major contracts. Companies such as Helsing, Cambridge Aerospace and Tekever illustrate this distinction, that while still emerging as startups they may not be considered in the SME support because of their scaling, which allowed them to compete for defence contracts in the first place.

Delivery will be overseen by the new Office for Defence Industrial Growth (ODIG) with targets to double SME participation in defence contracts by 2030 and mobilise private capital into dual-use technologies.

The **priority technology** domains that will anchor upcoming funding and procurement are:

- AI, autonomy and data fusion
- cyber resilience and secure communications
- advanced materials and energy systems
- space-based systems and ISR (intelligence, surveillance, reconnaissance)
- quantum technologies and photonics
- additive manufacturing and supply chain resilience tools.

The UK Defence startup scene in detail

Defence VC funding in the UK has been steadily increasing over the past decade. Funding in 2025 is already matching the 2022 peak and projected to make 2025 the sector’s highest-funded year on record. This funding was heavily driven by Cambridge Aerospace, which raised a \$100 million round to develop defence systems for intercepting drones and cruise missiles.

1. <https://www.gov.uk/government/publications/the-strategic-defence-review-2025-making-britain-safer-secure-at-home-strong-abroad>

2. https://assets.publishing.service.gov.uk/media/68bea3fc223d92d088f01d69/Defence_Industrial_Strategy_2025_-_Making_Defence_an_Engine_for_Growth.pdf

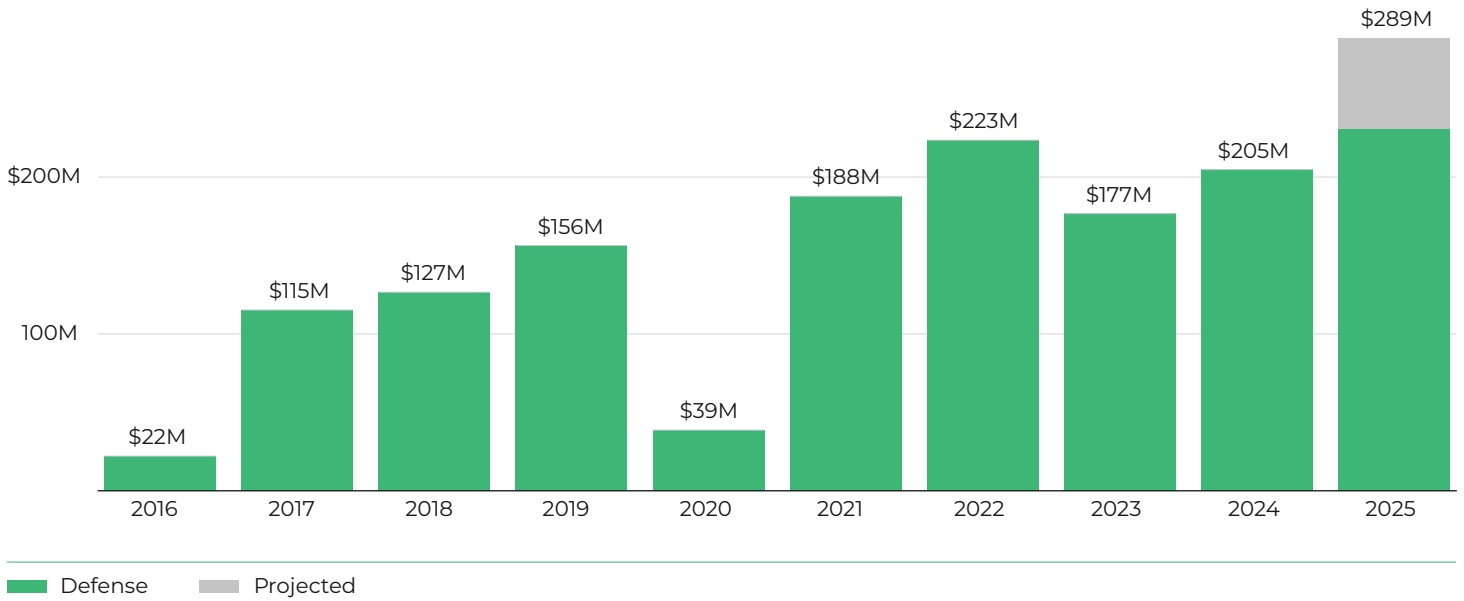


FIGURE 7.1 DEFENCE AND DEFENCE APPLICATION VC INVESTMENT IN THE UK.

The UK is becoming an increasingly attractive base for defence tech companies. Several international startups are establishing a presence in the UK due to defence regulatory reforms, commitments to opening procurement, rising defence investment, and prioritisation of domestic suppliers. Examples include Anduril, Helsing, Quantum Systems, Stark, Tekever, and Alpine Eagle. This growth contributes to job creation and enhances the UK defence supply chain and talent pool. While strengthening the ecosystem, it also increases competitive pressure for domestic startups seeking to scale.

The UK accounted for just 3% of global defence tech funding since 2020, compared with 4.3% of global deep tech investment overall. While the UK remains the second most active defence tech market in Europe, Germany significantly outperforms the UK – investing nearly twice the amount in total absolute funding as well as allocating a much larger share of its national funding to defence. The UK follows with a wide margin over other countries and regions in absolute numbers, but a relatively modest relative allocation to defence, well below Germany, Central and Eastern Europe (CEE) and Southern Europe in the last two years.

The UK defence tech startup ecosystem is growing but is not scaling at the same rate as other international markets.

Region	Defence VC funding (since 2020)	Defence VC funding (since 2024)	% of country total funding (since 2020)	% of country total funding (since 2024)
Germany	\$2.1B	\$1.6B	3.4%	10.4%
UK	\$1.1B	\$435.7M	0.8%	1.2%
France	\$423.4M	\$166.7M	0.7%	1.1%
Nordics	\$174.1M	\$79.9M	0.3%	0.7%
Southern Europe	\$435.4M	\$343.8M	1.6%	3.9%
Rest of Europe	\$251.7M	\$77.7M	0.4%	0.4%
CEE	\$94.4M	\$78.8M	0.7%	2.9%

FIGURE 7.2 DEFENCE AND DEFENCE APPLICATION VC FUNDING IN EUROPE BY REGION.

London, Reading, Cambridge, Oxford, and Bristol feature among the top 10 hubs in Europe for defence tech,

with London being the most funded defence tech hub (excluding Munich's Helsing).

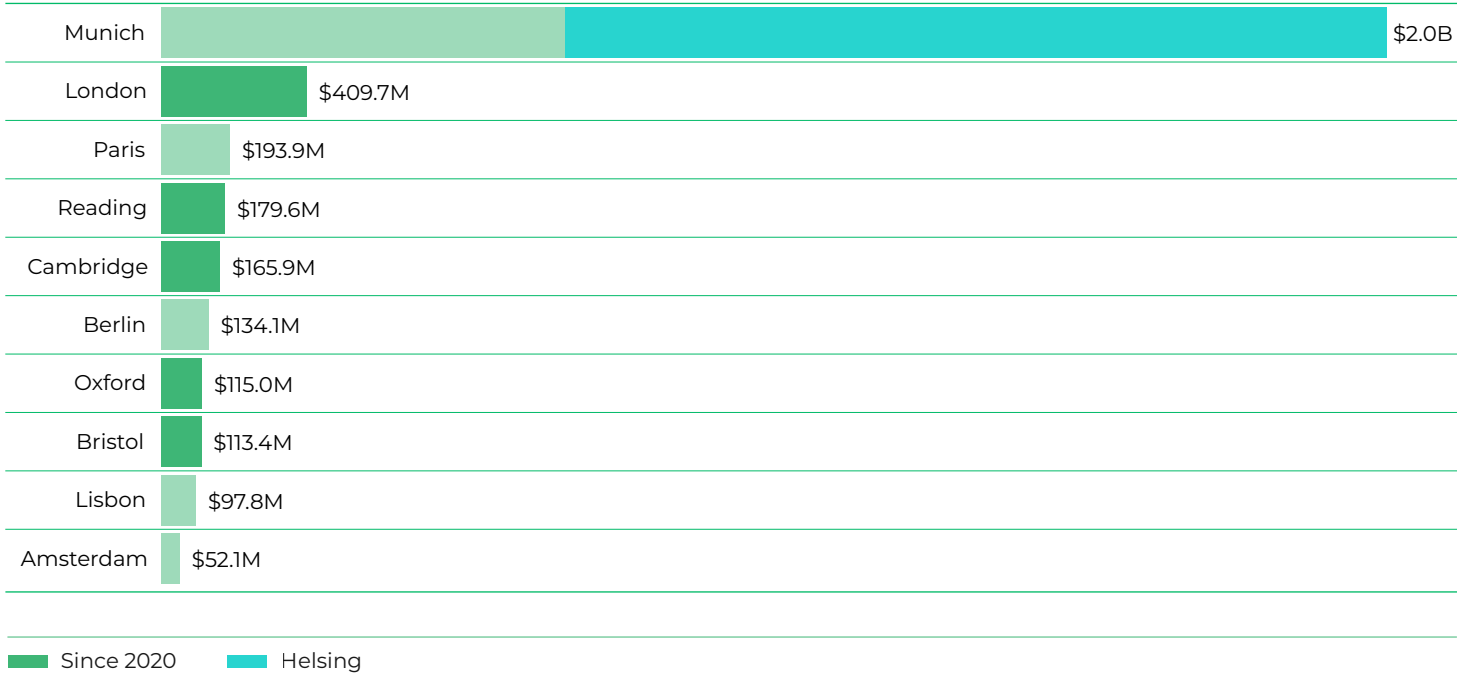


FIGURE 7.3 VC INVESTMENT IN EMERGING EUROPEAN CITIES IN DEFENCE AND DEFENCE APPLICATIONS SINCE 2020.

Export controls and national security considerations

Founders need to proactively plan their export, investment and exit strategies earlier in defence related sectors more than in most other areas of Deep Tech.

The Defence Industrial Strategy aims to position the UK as a trusted innovation partner to allies, with stronger export through frameworks with NATO members and Australia, with a strong emphasis on exports. To operate in this environment, deep tech companies developing technologies with direct or potential defence application must navigate the UK's export control regime and the National Security and Investment (NSI) Act, which together influence where companies can sell, where they can get capital from and their commercial pathways.

What deep tech founders need to know:

Export controls:

The UK strategically regulates the export, transfer and sharing of controlled goods, software, technology, and

technical assistance that could have military, dual-use or security applications. Export licences are required if a product, service or intellectual falls on the consolidated control list (military or dual use) or if end-use or end-user concerns are flagged.

In 2025, controls were expanded to include extra emerging technology categories such as semiconductors, quantum systems and additive manufacturing.

Implications for deep tech startups

With the expanded technology areas, deep tech startups may require export licenses even if they are not directly defence-focused:

- international sales may require longer licensing lead time
- certain markets and potential partners may be restricted
- increased compliance requirements may be required
- export planning should begin early in the commercialisation journey.

National Security and Investment Act

The National Security and Investment Act 2021 gives the UK government (in particular, the newly established

Investment Security Unit (ISU)) the power to screen, review and intervene in acquisitions or changes of control in UK entities or assets where national security risks may arise.

In particular, mandatory notifications are required for 17 sensitive sectors (e.g. defence, computing hardware, advanced materials, quantum, communications), but the government also has the broader capacity to review other transactions not automatically notified but of possible national security concern.

Implications for deep tech startups:

•Startups in the priority sectors or with clear national

security relevance must be cautious when choosing international investors and engage proactively with the government to get investment approval for any edge case.

-For example, control thresholds are low, gaining > 25% shareholding, or 'material influence' can trigger review; and there is no minimal threshold.

•Exit routes and acquisitions may be heavily impacted by this, meaning that startups need to plan for their exit strategy and assuming regulatory limitations might be imposed especially where trade sales or inbound investment opportunities are present.



“

Deep tech is transforming defence as yesterday's frontier technologies become today's commercial solutions. Decades of advances in batteries, edge compute, and AI are enabling the unmanned systems being effectively deployed today. While urgency drives adoption, continued investment in next generation breakthroughs - from quantum sensors to advanced power and energy - is essential. Available public and private capital are strong, but must be directed toward translating innovation into deployable, high-impact capabilities. The UK, with its rich history of invention and robust capital markets, is well positioned to accelerate progress and deliver technologies that meet the evolving needs of tomorrow's war fighters.

Clayton Williams

Managing Director, IQT International



8.

Regulatory
Innovation Office:
regulation as
a deep tech
catalyst

“

Deep tech innovation should not be impeded by unnecessary regulation or rules which assume the old way of doing things. As new technologies emerge at pace, it is vital that our regulatory systems evolve alongside them. The Regulatory Innovation Office is energetically tackling this challenge.

The Rt Hon Lord David Willets PC HonFREng FRS
Chair of the Regulatory Innovation Office

Effective regulation is a powerful enabler of deep tech innovation. For the UK to effectively support deep tech startups, its regulatory system must be responsive, proportionate and forward looking. Regulation, when designed well, can provide strategic advantage – supporting breakthrough technologies to progress from development to deployment at pace and safely. The establishment of the UK Regulatory Innovation Office (RIO) marks a bold step in positioning the UK at the forefront of innovation-friendly governance.

RIO's role has been set out to act as a convenor between industry, regulators, and government departments (including HM Treasury and the Department for Business and Trade), helping to resolve regulatory bottlenecks and enable clearer, more coordinated decision-making. Although RIO does not currently have statutory authority, it plays an important mediating role in ensuring regulatory approaches keep pace with emerging technologies.

Launched within the UK government Department for Science, Innovation and Technology (DSIT) in late 2024, RIO's mandate is to make UK regulation agile and innovation-friendly. In particular, for high-growth and high-impact sectors, it will simplify approvals, reduce duplication and provide clearer routes to market – ensuring the UK remains internationally competitive.

In October 2025, RIO released its **One Year On report**¹, showing meaningful early progress, including engagement with over 40 regulators and 150 businesses supporting removing regulatory barriers through two key instruments:

•**Regulators' Pioneer Fund (RPF)** – £8.9 million in its latest round to fund regulators and local authorities to trial new and innovative regulatory approaches

•**AI Capability Fund** – £3.6 million to help regulators deploy AI for faster, more data-driven decisions.

Looking ahead, RIO plans to strengthen its direct engagement with industry. A dedicated pathway is being developed for innovators in RIO priority areas, enabling earlier and more direct interaction with the Office. To support this, RIO is partnering with organisations including the CBI, TechUK, and the Start-Up Coalition to ensure regulatory barriers are identified and raised with them at an earlier stage.

RIO focus and startup footprint

RIO's initial focus is on four priority sectors, each underpinned by deep tech, where regulation can act as an accelerator or obstacle commercial deployment and national impact:

•**Engineering biology** – for example, synthetic biology, cultivated meat, gene editing in agriculture

•**Space** – for example, satellite launch and operations, new space services

•**AI and digital health** – for example, AI diagnostics, health data tools

•**Drones and autonomous systems** – for example, autonomous drones for delivery and other use cases, autonomous driving.

Looking at the deep tech startup landscape, these sectors collectively contribute more than £100bn gross value added (GVA) to the UK economy and include over 560 startups. Each segment has a vibrant startup cohort, with at least 60+ VC backed and over \$6 billion+ (£5.3 billion+) in combined enterprise value. This represents a significant growth pipeline of future national capabilities.



The startups mapped in these areas can be explored interactively here.



1. <https://www.gov.uk/government/publications/regulatory-innovation-office-report-one-year-on>

AI x Health has the biggest pipeline of startups and the biggest amount of value created, almost \$30 billion across 300+ startups. Eight companies have already achieved unicorn and/or thoroughbred (\$100 million+ revenues) status.

Engineering biology has the smallest pipeline of companies but already created a few strong outcomes with three unicorn and/or thoroughbred (\$100 million+ revenues) outcomes.

Drones & Autonomous Systems have many startups at the early stages but a comparatively small late-stage pipeline. The majority of the enterprise value in this category is driven by a small number of outliers, particularly Wayve.

Space also have a substantial early-stage population but a limited late-stage pipeline. have a lot of startups at early stages, but still a smaller late-stage pipeline. Most of the Enterprise Value here is similarly concentrated, with OneWeb accounting for most of the value created so far.

	Early stage startups	Breakout stage startups	Late stage startups	Unicorns and \$100M+ revenues	Enterprise value	VC funding since 2020
AI x Health	201	79	18	8	\$29.5B	\$7.1B
Engineering biology	60	26	7	3	\$7.6B	\$1.7B
Drones and autonomous systems	60	8	4	1	\$6.4B	\$2.1B
Space	78	15	2	1	\$6.2B	\$684.7M

FIGURE 8.2 UK DEEP TECH STARTUPS OVERVIEW BY REGULATORY INNOVATION OFFICE PRIORITY SECTORS

These four deep tech segments are projected to raise \$2.4 billion (£1.8 billion) in funding this year, likely being their second most active year to date (behind only the 2021 market which was fuelled by monetary expansion and low interest rates).

AI x Health leads funding by a large margin, except in 2024, when Drones and Autonomous Systems surpassed it, due to a mega-round raised by Wayve. Engineering Biology activity has remained relatively consistent in recent years. In the following section, we will explore each of these segments in detail.

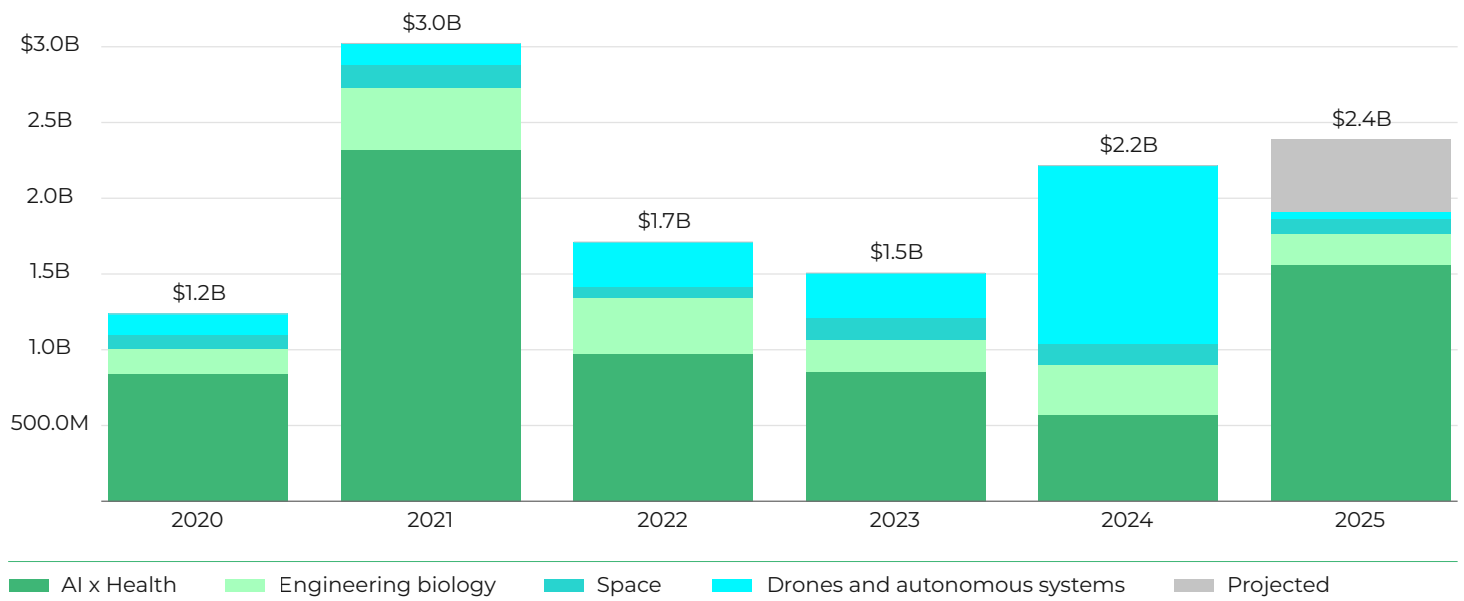


FIGURE 8.2 VC FUNDING IN UK DEEP TECH STARTUPS IN REGULATORY INNOVATION OFFICE PRIORITY SECTORS



9. Spinouts

Deep Tech in the UK is deeply rooted in the country's world-class research base. Many of the UK's most successful companies originate from academic institutions, translating frontier research into commercial impact. There are over 920 VC-backed deep tech spinouts in the UK that have been founded since 2010. Between 2010 and 2018, spinouts accounted for up to 30% of the overall VC-backed deep tech startups. Since 2019, this share has risen to 40%, showing how spinouts are becoming an ever larger and more important part of the ecosystem.

Although spinouts represent 34% of the number of VC-backed companies in Deep Tech since 2010, they contribute a disproportionately higher share of value creation, about 37% of the combined enterprise value, and make up 43% of the startups that raised \$10 million+ funding. This highlights the strength of the UK's academic and research commercialisation pipeline, and the critical role universities and research institutions play in UK Deep Tech.

Spinouts are becoming a larger pie of the Deep Tech ecosystem in the UK.

Spinouts account for 40% of new startups since 2019, 33% more than in 2010–2018, and a larger share of \$10M+ funding and EV since 2010.

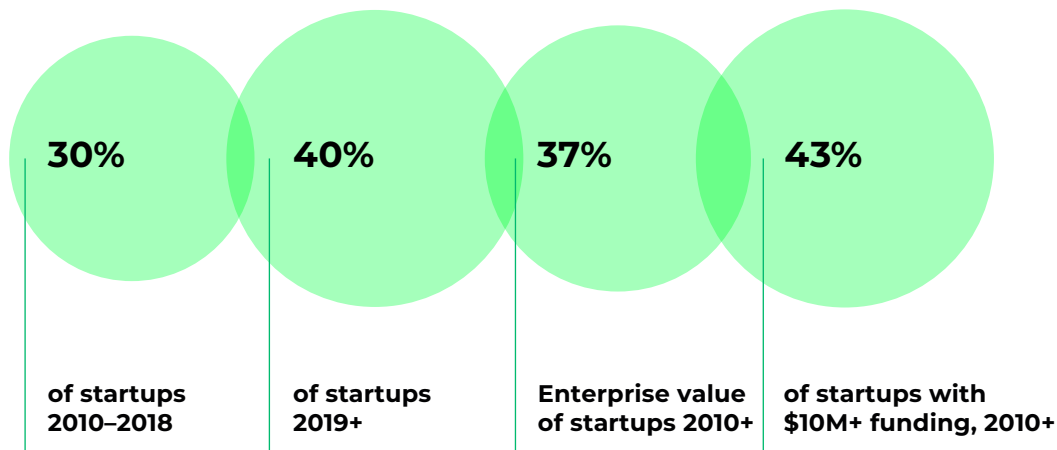


FIGURE 9.1 PERCENTAGE OF DEEP TECH ECOSYSTEM THAT IS ACADEMIC SPINOUTS.

Looking at the total UK tech ecosystem (beyond just deep tech), spinouts make up less than 7% of VC-backed startups since 2010 in the UK, and nearly 11% of the enterprise value created by companies launched since 2010. This is notably much lower than their share in Deep Tech, where links to academic research are much stronger.

Spinouts make up a much larger proportion of the UK deep tech ecosystem in some deep tech sectors than in others, highlighting a varying strength of academic ties. Life Sciences (Biotech & Pharma and Techbio) spinouts make up a considerably larger share of the sector than for the rest of deep tech (47% of the UK deep tech VC-backed startups since 2010). Similar results hold for the related sectors of Medical Devices and Engineering Biology.

Photonics (64% spinouts) and Quantum (58% spinouts) are the deep tech sectors with the strongest academic ties. Startups in Photonics and Quantum are often

based on deep engineering and scientific research, specialised equipment and intellectual property developed in academic labs. Technologies such as quantum computers, quantum sensors, photonic chips, and precision optics require years of fundamental R&D before commercialisation, making universities the key creation platform for these companies.

Despite their heavy R&D reliance, Defence, Space, and Robotics have the lowest share of startups being spinouts. This is because startups in these sectors are often started by founders with commercial experience, rather than a research background. For sectors such as Defence, there are more reasons, such as restrictions on universities working on defence projects.

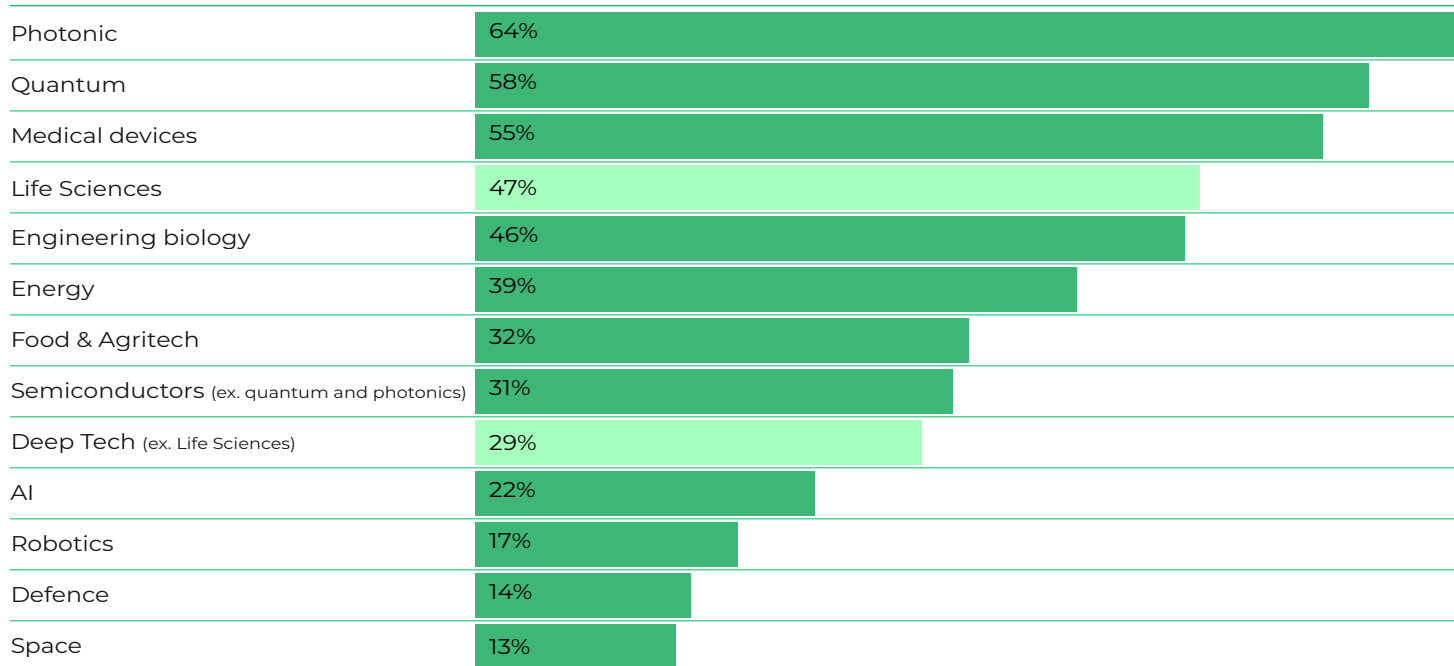


FIGURE 9.2 SPINOUTS AS % OF UK VC-BACKED DEEP TECH STARTUPS (SINCE 2010).
AI or Energy in this chart refers to only the deep tech part of that sector, to allow a more meaningful comparison for spinouts

Further analysis of the UK spinout landscape can be found in the Royal Academy of Engineering’s Spotlight on Spinouts report.



1. <https://raeng.org.uk/policy-and-resources/research-and-innovation/accelerating-enterprise/>



10.

Deep tech beyond the Golden Triangle

The Modern Industrial Strategy embeds a strong place-based approach, with emphasis on regional innovation and targeted support for key growth sectors across the UK. Initiatives cited include £500M Local Innovation Partnerships Fund and a £600M Strategic Sites Accelerator. Alongside this, designated 'AI Growth Areas' across the UK

intended to attract investment, support productivity and strengthen the UK's leadership in AI. Collectively, these signal a clear intention to build a more geographically distributed and resilient UK economy, with deep tech playing a key role in this.

10a. Deep tech – at the national level

England has received most VC funding, with over \$37 billion since 2020, followed by \$1.8 billion in Scotland, \$312 million in Wales and \$182M in Northern Ireland. Although England leads in absolute and per-capita investment, Scotland

stands out on a per capita basis in deep tech VC funding, reflecting the strength of its research base and growing innovation clusters. Wales and Northern Ireland still attract modest levels of VC, even relative to their size.

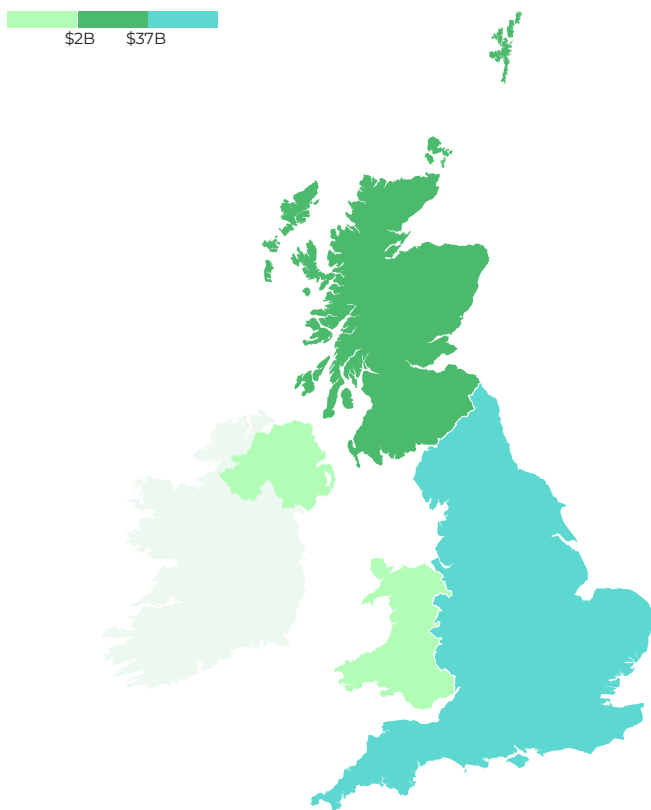


FIGURE 10.1 MAP OF VC INVESTMENT BY UK CONSTITUENT NATION 2020-2025

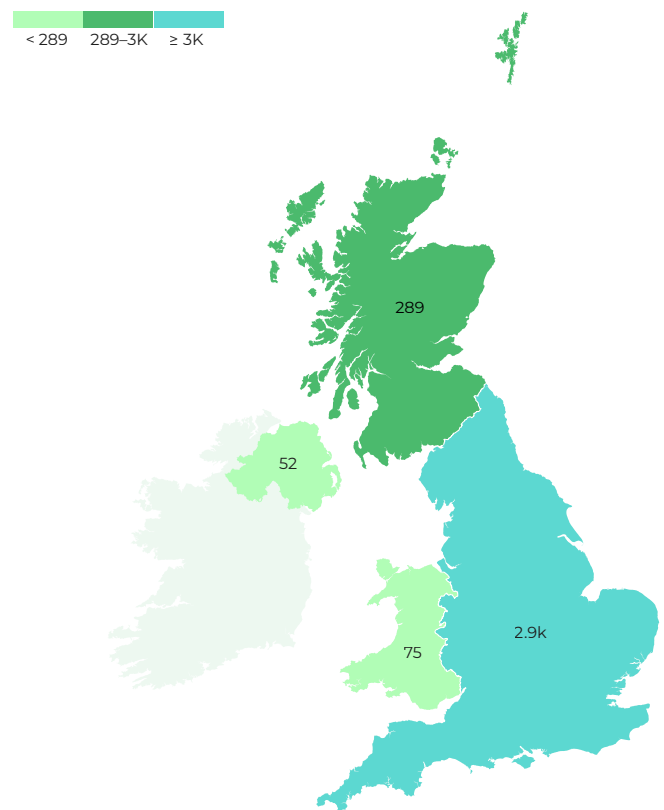
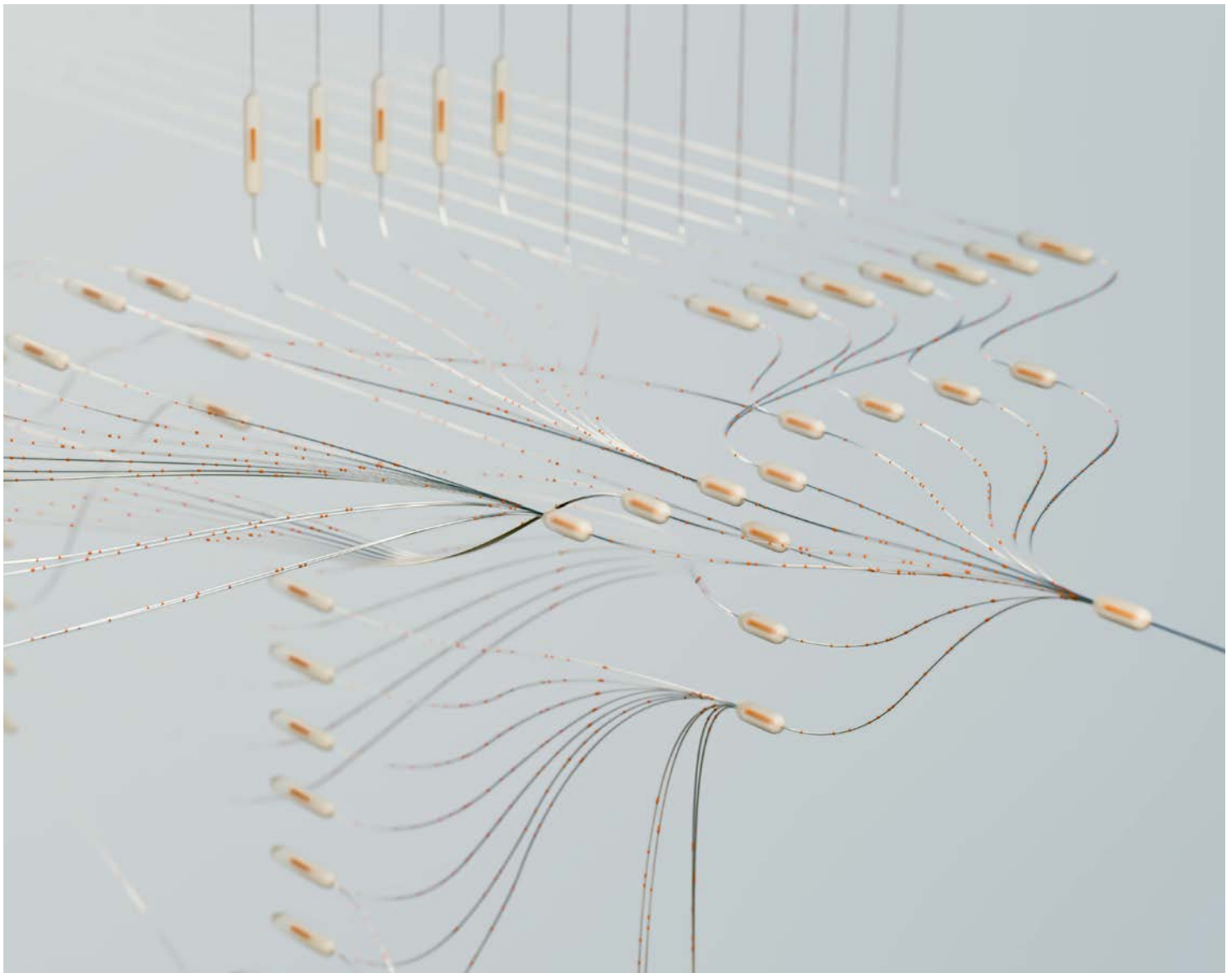


FIGURE 10.2 NUMBER OF VC-BACKED DEEP TECH STARTUPS BY NATION

States	VC funding per capita '20 - '25	VC funding '20 - '25	VC funding '25	Enterprise value	VC - backed startups
England	\$634	\$37.2B	\$5.4B	\$394B	2,875
Scotland	\$327	\$1.8B	\$202.5M	\$9B	288
Wales	\$98	\$312.3M	\$169.8M	\$2B	74
Northern Ireland	\$94	\$181.5M	\$31.6M	\$1B	52

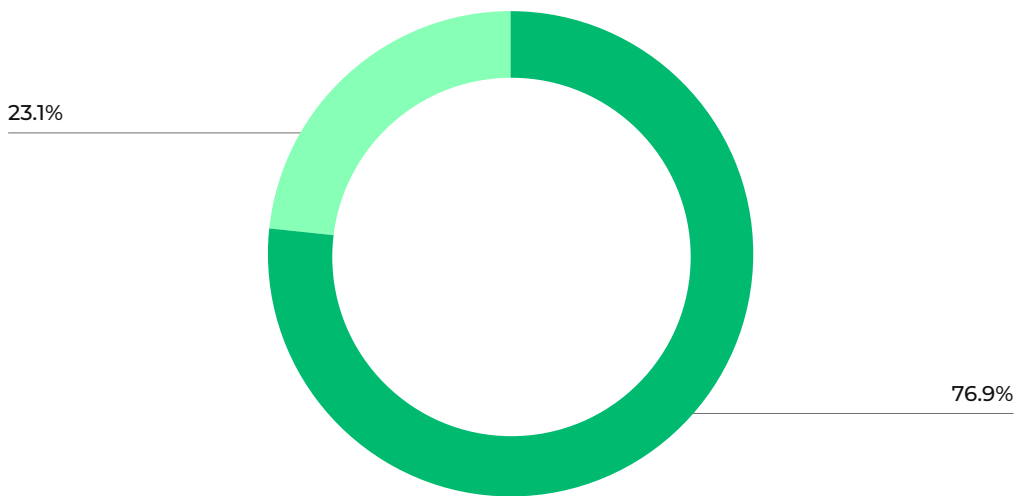
FIGURE 10.3 DEEP TECH COMPARISON STARTUP BY UK CONSTITUENT NATIONS



10b. Golden triangle

As in previous reports, the Golden Triangle (London, Cambridge, Oxford) continues to remain home to an immense concentration of UK deep tech activity, accounting for 77% of deep tech VC investment since 2020. This strength reflects concentration of research institutions, specialist talent, and investment networks.

The Golden Triangle, as a deep tech phenomenon, has remained relatively stable over the last decade, oscillating between 68% and 86% funding share, with the rest of the UK having an average of 23% of VC funding since 2015. So, while this is not true for the rest of UK tech activity, in relation to deep tech, the Golden Triangle remains the epicentre without significant decentralisation of funding over the past year.



■ Golden triangle ■ Rest of UK

FIGURE 10.3 GOLDEN TRIANGLE SHARE OF UK VC INVESTMENT CUMULATIVE 2020-2025

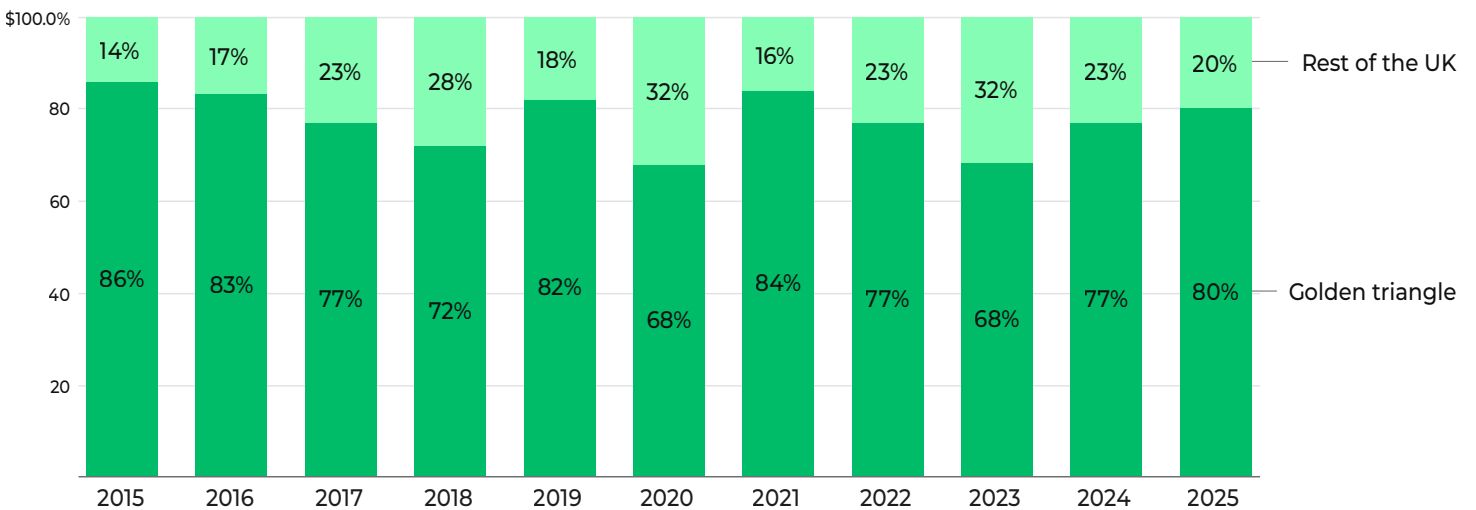


FIGURE 10.4 GOLDEN TRIANGLE VC INVESTMENT SHARE BY YEAR 2015-2025

However, there is sustained momentum in several emerging hubs and an exciting pipeline of deep tech growth observed. Beyond the Golden Triangle, cities such as Bristol, Manchester, Glasgow and Edinburgh have raised the most

VC funding since 2020, with visible growth in sector-specific capabilities. In 2025, Edinburgh and Glasgow rank highest by VC funding in regions outside of the Golden Triangle, pooling \$113 million and \$65 million respectively.

Location	Cumulative VC investment '20 - '25	VC investment '25
London	\$17.3B	\$2.9B
Cambridge	\$7.9B	\$1.7B
Oxford	\$5.9B	\$593.1M
Bristol	\$761.3M	\$21.1M
Edinburgh	\$534.0M	\$113.7M
Glasgow	\$504.9M	\$65.9M
Manchester	\$462.2M	\$27.3M
Reading	\$402.8M	\$1.6M
Newcastle	\$284.7M	\$14.1M
Sheffield	\$168.5M	\$35.7M
Belfast	\$155.3M	\$28.0M
Leeds	\$61.9M	\$16.5M
Liverpool	\$21.2M	\$2.5M

FIGURE 10.5 DEEP TECH VC FUNDING BY CITY IN THE UK (2020-2025)



11.

Methodology,
additional details
and differences
from previous
reports

11a. Key definitions and methodology

What are startups and scaleups?

Startups are companies designed to grow fast. Generally, these companies are backed by VC investments and, sometimes, can become very big (e.g. with \$1 billion+ valuations). When startups are successful, they develop into scaleups. This also includes unicorns and \$1 billion exits. Only companies founded since 1990 are included in this report. Read more on the definition of what a startup is.

What is a unicorn?

Unicorns are former startups that have reached \$1 billion in valuation or achieved an exit of \$1 billion or more. Read more on the definition of what a unicorn is.

Geographical scope

This report focuses primarily on deep tech startups with current headquarters in the UK. The vast majority of the statistics, such as all the analyses on funding, use this geographical scope.

In some other analyses, the scope is enlarged to include startups which were originally founded in the UK and then relocated their headquarters abroad. This is the case of analysis on exits (since companies acquired by foreign entities might relocate in the process) and statistics on the combined enterprise value created. When this is done, it is clearly referenced in the chart and text with the wording "HQ and founded in the UK".

The nationality of the founders and the origin of the underlying technology are not considered determining factors by themselves. Startups founded by UK nationals entirely abroad, with little operational or historical ties to the UK, are excluded from this analysis.

Venture capital, investors

Investments are referred to by their round labels, such as Seed, Series A, B, C, late stage, and growth equity. VC investments exclude debt, nonequity funding, lending capital and grants. Exits (M&A, IPOs) are not considered part of VC financing and are analysed separately.

Deep tech definition

In this report, deep tech refers to companies built on the fundamental principles of engineering and science to create novel solutions and are recognised as being capital-,

time-, and R&D-intensive. Being grounded in cutting-edge advances in engineering and science, Deep tech offers solutions to the world's most complex environmental, economic and societal challenges.

The problem of history in deep tech

Some topics might have been deep tech in the past, but have now become mainstream. This is exactly the essence of deep tech. Almost anything used today had its roots in deep tech at a certain point, from electricity to the telephone and the internet, to cars and planes. What is deep tech today is not necessarily deep tech tomorrow. Once the technology or product is no longer novel and as the company scales, what was once deep tech becomes regular tech.

Dealroom keeps considering companies as deep tech that started commercialising technology which was deemed as deep tech at the time, even if it has now become mainstream. This allows us to show past deep tech successes, such as unicorns and big exits, as well as more meaningful historical comparisons on deep tech investment activity. If we were to remove past deep tech topics, we would have deep tech funding always trending to zero in the past, creating a distorted picture of deep tech growth.

For the scope of this report, deep tech also includes Life Sciences differently from other reports by Dealroom, such as the European Deep Tech report. The term 'Deep Tech' in this report is therefore equivalent to what in other reports might be called 'Deep Tech and Life Sciences'.

However not all of Life Sciences is included, only where areas are driven by fundamental scientific or engineering breakthroughs.

Deep tech by industry examples

This section explains the various industries and technology areas and segments we consider deep tech across.

This summary table is a simplified version, not fully comprehensive, aimed at providing a high-level overview.

Sector	Deep Tech	Brief summary
Semiconductors and quantum	Mostly yes	<ul style="list-style-type: none"> ✔ Usually: almost all is deep tech ✘ Usually not: marketplaces to trade IP or equipment, light SaaS
Space	Mostly yes	<ul style="list-style-type: none"> ✔ Usually: upstream (launch, satellites, ops) ● Sometimes: downstream if IP-intensive ✘ Usually not: apps consuming satellite data
Robotics	Mostly yes	<ul style="list-style-type: none"> ✔ Usually: humanoids, collaborative, surgical ● Sometimes: farm and warehouse robotics, advanced sensors ✘ Usually not: simple consumer robots
Energy	Sometimes	<ul style="list-style-type: none"> ✔ Usually: nuclear (fusion and fission) ● Sometimes: hydrogen, CCS, novel batteries, geothermal, grid hardware ✘ Usually not: standard solar/wind, energy SaaS/marketplaces
Transportation	Sometimes	<ul style="list-style-type: none"> ✔ Usually: eVTOL, sustainable aviation, autonomous aerial ● Sometimes: AV tech, advanced drones, novel EV batteries/motors ✘ Usually not: EV services, micromobility, apps
Health and Life Sciences	Sometimes	<ul style="list-style-type: none"> ✔ Usually: drug development, medical devices, techbio (AI drug discovery, synthetic biology) ● Sometimes: devices/imaging with novel proprietary tech, digital therapeutics with deep science ✘ Usually not: telemedicine, medical SaaS without deep science component
AgriFood	Sometimes	<ul style="list-style-type: none"> ✔ Usually: lab-grown meat, synthetic biology ● Sometimes: precision fermentation, advanced biotech, microbial tech, advanced farm robotics ✘ Usually not: delivery, restaurant management software, basic agri-drones
Chemicals	Sometimes	<ul style="list-style-type: none"> ● Sometimes: green chemicals & polymers, e-fuels (if novel tech)
Engineering and Manufacturing Equipment	Sometimes	<ul style="list-style-type: none"> ● Sometimes: advanced additive manufacturing and 3D printing, novel materials and manufacturing techniques
Fintech	Mostly not	<ul style="list-style-type: none"> ● Sometimes: core blockchain infrastructure (building blockchain tech itself), climate risk prediction with deep science ✘ Usually not: AI credit scoring, general fintech solutions
Blockchain	Mostly not	<ul style="list-style-type: none"> ✔ Usually: Layer 1/2 protocols, ZK proofs ● Sometimes: core infrastructure protocols ✘ Usually not: apps built on blockchain
Enterprise Software	Mostly not	<ul style="list-style-type: none"> ✔ Sometimes: AI models, AI tools, core foundational software (databases, etc.) ● Everything else, most of it
Media, marketing, jobs recruitment	Mostly not	<ul style="list-style-type: none"> ✘ Almost never deep tech
AI	Mostly not	<ul style="list-style-type: none"> ✔ Sometimes: foundational models, LLM infrastructure, deep scientific AI applications ✘ Usually not: most AI-powered applications

Sector	Deep Tech	Brief summary
Security / Cybersecurity	Mostly not	<ul style="list-style-type: none"> ✔ Usually: hardware security innovation ● Sometimes: PETs (e.g., homomorphic encryption, ZK proofs), novel encryption techniques ✘ Usually not: most cybersecurity SaaS
Real estate and Construction	Mostly not	<ul style="list-style-type: none"> ● Sometimes: robotics, green cement, biomaterials if novel ✘ Usually not: real estate platforms, mortgage tech
Fashion	Mostly not	<ul style="list-style-type: none"> ● Sometimes: synbio materials, sustainable dyes with engineering innovation ✘ Usually not: marketplaces, management tools
Marketplaces	Mostly not	<ul style="list-style-type: none"> ✘ Almost never deep tech
VR, AR	Mostly not	<ul style="list-style-type: none"> ● Sometimes: VR/AR hardware; core developers of AR/VR software creating new algorithms and techniques; highly technical and advanced applications (e.g. medical rehab therapy, surgery) ✘ Usually not: most AR/VR, especially gaming, media, interactive content, digital twins, similar tech
Advanced materials	Sometimes	<ul style="list-style-type: none"> ✔ Usually: nanomaterials, semiconductor materials, AI material discovery, synbio materials ● Sometimes: high-performance materials (composites, space/defence materials), sustainable cement, biomaterials only when high-performance or based on novel tech/process ✘ Usually not: sustainable materials focused only on circular economy without deep tech; manufacturing or solutions based on established materials

FIGURE 10.1 INDUSTRIES AND TECHNOLOGY AREAS AND SEGMENTS DEEP TECH CONSIDERED ACROSS.

Underlying data

Dealroom’s proprietary database and software aggregate data from multiple sources: harvesting public information, user-submitted data verified by Dealroom and data engineering. All data is verified and curated with an

extensive manual process. The data on which this report is built is available via app.dealroom.co. For more info, please visit dealroom.co or contact support@dealroom.co.



11b. Differences with past report edition

Last year's report was based on data provided by Pitchbook, while this year the data and analysis are provided by Dealroom.co. This results in some differences in definitions and the scope of the report, which are briefly outlined below.

Key differences:

1) Definition of deep tech

While the broader definition of deep tech by Dealroom.co and Pitchbook is conceptually similar, there are significant differences in their application.

Dealroom defines deep tech as an attribute of a specific company and curates it at the company level. Therefore, while there are sectors where every company is considered deep tech, such as quantum computers or nuclear fusion, there are many other sectors where some companies might be deep tech and others not. Examples of this are Energy, Health and AI. In Energy:

- Subsectors such as Nuclear energy, Next-gen battery chemistries, Long-duration energy storage, Green hydrogen, are considered mostly deep tech by Dealroom.
- Subsectors such as energy providers and energy marketplaces, most energy management Software as a Service, mature solar and wind technology are not considered deep tech by Dealroom.

In contrast, Pitchbook doesn't have a specific deep tech attribute for companies but relies on aggregating several broad startup sectors. This results in the inclusion of companies that do not satisfy the requirements of capital-, time-, and R&D-intensity, as well as a connection to fundamental principles of engineering and science. For instance, in the sector of focus "robotics, hardware and chips" in last year's report, the most funded active VC-backed company included was SumUp, a UK FinTech company which provides EMV (Europay, Mastercard and Visa) card readers and online payment and bank account systems for merchants and businesses (page 19). While SumUp is clearly an innovative startup with a hardware device, this does not suffice to consider them as deep tech in our assessment at Dealroom. A similar assessment regards Thought Machine, a provider of core banking software, included under "Networks" (page 20).

2) Data discrepancies from previous report

A number of rounds considered in last year's report edition were included by Pitchbook and are not counted by Dealroom in this edition. One key example is Conigital, highlighted as the most funded active VC-backed company in "manufacturing and materials" (page 18). The company is reported to have raised £501.7 million, but this information relies on misleading reporting by some tech outlets of a £500 million financing raised by the startup, which proved to be false (and not present in Company House filings).

Last year's report also included some companies and transactions which, while correct, are excluded by Dealroom when reporting VC financing. An example of this is G.Network Communications, the most funded active VC-backed company in the "Networks" sector (page 20). Dealroom does not include this company in its deep tech definition (since fibre optic deployment is a very mature technology focused on commercial rollout, not novel engineering and science), but additionally, the kind of financing raised by these companies is a mix of Debt and PE, not VC financing.

Overall, while the two reports represented a similar overall growth of the ecosystem, any more detailed comparison between the statistics reported in the two reports is not meaningful.

The Royal Academy of Engineering creates and leads a community of outstanding experts and innovators to engineer better lives. As a charity and a Fellowship, we deliver public benefit from excellence in engineering and technology and convene leading businesspeople, entrepreneurs, innovators and academics from every part of the profession. As a National Academy, we provide leadership for engineering and technology, and independent, expert advice to policymakers in the UK and beyond.

The world is changing rapidly, with economies, supply chains and security critically dependent on engineering capability. Engineers are uniquely placed to respond to that change and innovate solutions to the challenges it presents. Working in collaboration with our partners and the profession, we aim to connect public voices to our programmes and unlock greater societal value from technology.

We have three goals:

Sustainable and Innovative Economy, where sustainability drivers, innovative industries and resilient infrastructures are aligned to drive growth and productivity that will support better lives for all.

Technology Improving Lives, where technology in all its forms is used to meet the most important human needs, avoid harm, support fairer societies and break down barriers to opportunity.

Engineering Community Fit for the Future, where our community reflects society in its diversity, commits to creating inclusive cultures to help drive engineering excellence, and has the skills to meet future needs safely, securely and ethically, and to keep pace with innovation.

Our work is enabled by funding from the Department for Science, Innovation and Technology, corporate and university partners, charitable trusts and foundations, and individual donors.

Enterprise Hub

The Royal Academy of Engineering Enterprise Hub supports talented entrepreneurs and decision makers to transform breakthrough engineering innovations into disruptive spinouts, startups and scaleups.

Our entrepreneurs benefit from the prestigious national and global network of the Academy's Fellows and experts. We have delivered over 10 years of success, enabling our members to form a powerful, thriving, and supportive community of over 600 innovators. We run programmes at multiple stages, from ideation to scaleup, for entrepreneurial engineers at different career points. Thanks to our charitable status, we don't take equity, fees or IP.

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