

Deep Tech Study Finland

December 2025

Foreword

2025 edition of Tesi's deep tech study builds on our initiative started in 2022. Over the past decade, Finnish deep tech businesses have come to represent a notable part of the total investment volumes into Finnish startup and scale-up overall. Besides the investments through which Tesi participates into the supporting Finnish deep tech, we hope to share valuable insight to current and future participants of the ecosystem through this report.

In last year's edition, for the first time we conducted a survey directed for Finnish deep tech founders and executives as a part of the study to better understand and include their views on the market as the most important part of the ecosystem. The insight gathered through the survey was greatly valuable for us and the ones reading the study. Therefore, we are happy to continue including founders' and executives' view through similar survey also in this year's edition.

In this edition, we will continue sharing insight on Finnish deep tech ecosystem, investment environment and the views from deep tech company perspective. In addition, we will also provide a bit closer observations from selected themes within deep tech. 2025 has provided us records in terms of investment volume and, thus, we hope we can provide insightful data and views for the readers of this study.

We extend our sincere thanks to all who contributed to this report, with special acknowledgment to our collaborators in this report: Voima Ventures, Lifeline Ventures, Kvanted, Innovestor, and the Finnish Startup Community. Tesi remains a dedicated supporter of the Finnish deep tech ecosystem, investing in funds and companies across various stages of their growth cycle. This approach now supports deep tech companies throughout their entire lifecycle.

In Collaboration with:



Kvanted

≥ INNOVESTOR



Tesi

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Glossary

BESS - Battery Energy Storage System

GPU - Graphics Processing Unit

LLM - Large Language Model

OEM - Original Equipment Manufacturer

P&P - Pulp & Paper

Petchem - Petrochemicals

QC - Quantum Computer

SAR - Synthetic Aperture Radar

SMR - Small Modular Reactor

VPP - Virtual Power Plant

W&WW – Water & Wastewater

YTD – Year-to-date

Findings & Insights

- 1 Investment volume hits new highs (again)

Finnish deep tech companies have set a clear new **high-water mark for funding raised per year in 2025, €1 594million** to date, and we are still a month and a half from the year-end. This marks a **170% increase over the full year 2024**, which itself was the previous record year for raised funding. The success is considerably driven by large funding rounds by the likes of Oura and IQM earlier this year, meanwhile the number of smaller sub-€20 million funding rounds is on track to be a bit lower than a year ago. This means the capital flow into Finnish deep tech companies is highly concentrated and more work is required to build the Finnish deep tech ecosystem stronger overall.
- 2 Mind the gap

Success stories such as Oura, IQM and Iceye demonstrate how Finland is punching above its weight class in deep tech, while the activity in seed stage investments and research-to-business pipelines is at sufficient level. However, the link between early and later stage funding, i.e. Series A and B rounds, is where the ecosystem has more work to do. The amount of Finnish deep tech Series A and B rounds in total hasn't been high in the previous years, while many of the materialized rounds have gathered somewhat low amounts of capital. The ecosystem needs work on many fronts to fix the gap if we want to produce continuously more Finnish deep tech champions in the future.
- 3 AI meets the world

Artificial intelligence dominates the tech media headlines and has its share of attention in this report as well. However, the signs of the disruption happening are not only showing through LLMs or AI-native SaaS businesses, but also through increased need for new deep tech. AI is being used for discovering new materials and implemented into physical devices, new innovations are being built to make computing ever more efficient and to satisfy the increased power demand for the computing. Finnish deep tech businesses have not missed the train as ~97% of surveyed deep tech businesses have implemented AI into daily use, some to support R&D, some as a core part of their technology.
- 4 The new normal of geopolitics

Last year we highlighted how the changes in geopolitics have had an effect to the deep tech start-ups and the investment landscape. The change is no longer news, and the deep tech ecosystem has adapted to the new normal of geopolitics. Deep tech start-ups targeting dual-use or pure military use cases are no longer oddities, while several new VC funds with a dual-use, defense or resilience theme are being raised. On the flip side, capex-heavy businesses in many climate tech related verticals face tougher funding environment than in the previous years.

Deep Tech Taxonomy – How we classify different deep tech innovations

285

companies in total

Our definition of deep tech relies on considerable scientific or engineering innovation with strong disruptive potential and high barriers to entry. While some deep tech innovations become “less deep” over time, we want to include companies with deep tech origins to the scope. This year we refined the taxonomy to separate different Deep Tech company types more clearly from each other. Rather than creating an exhaustive taxonomy, we wanted to give a **simple way to categorize Deep Tech companies**



Advanced materials & manufacturing¹

Novel material and manufacturing innovations, or new technologies enabling transformation of industrial processes

Bio-based and sustainable materials, new functional materials and coatings, alternative proteins, novel industrial and manufacturing technology

ONEGO^{Bio}
ICEYE

CANATU
spindrive



Future of compute

Next-generation computing technologies that enable faster and more efficient processing across hardware and software

Quantum computing, advanced chips and chip architectures, novel AI models and systems, spatial computing and vision systems, intelligent data infrastructure

IQM



FLOW

Distance



Energy technologies

Novel innovations across energy efficiency, electrification, and decarbonization

Advanced energy generation and conversion, next-generation energy storage, carbon-neutral and renewable fuels, smart grid and intelligent energy solutions

STEADY — ENERGY

hycamite

LIQUID SUN 



Health & Lifesciences

Science-intensive companies operating in therapeutics, diagnostics and well-being

Novel drug development, diagnostics, medical devices, well-being wearables, other enabling tools for drug development and manufacturing




 StemSight
vision unlimited

 KASVU
therapeutics

ŌURA

Scope of the Research

Our mission is to improve ecosystem transparency. We aim to do this not only by conducting research, but by promoting collaboration among a growing array of market participants, which in turn provides a more holistic view.

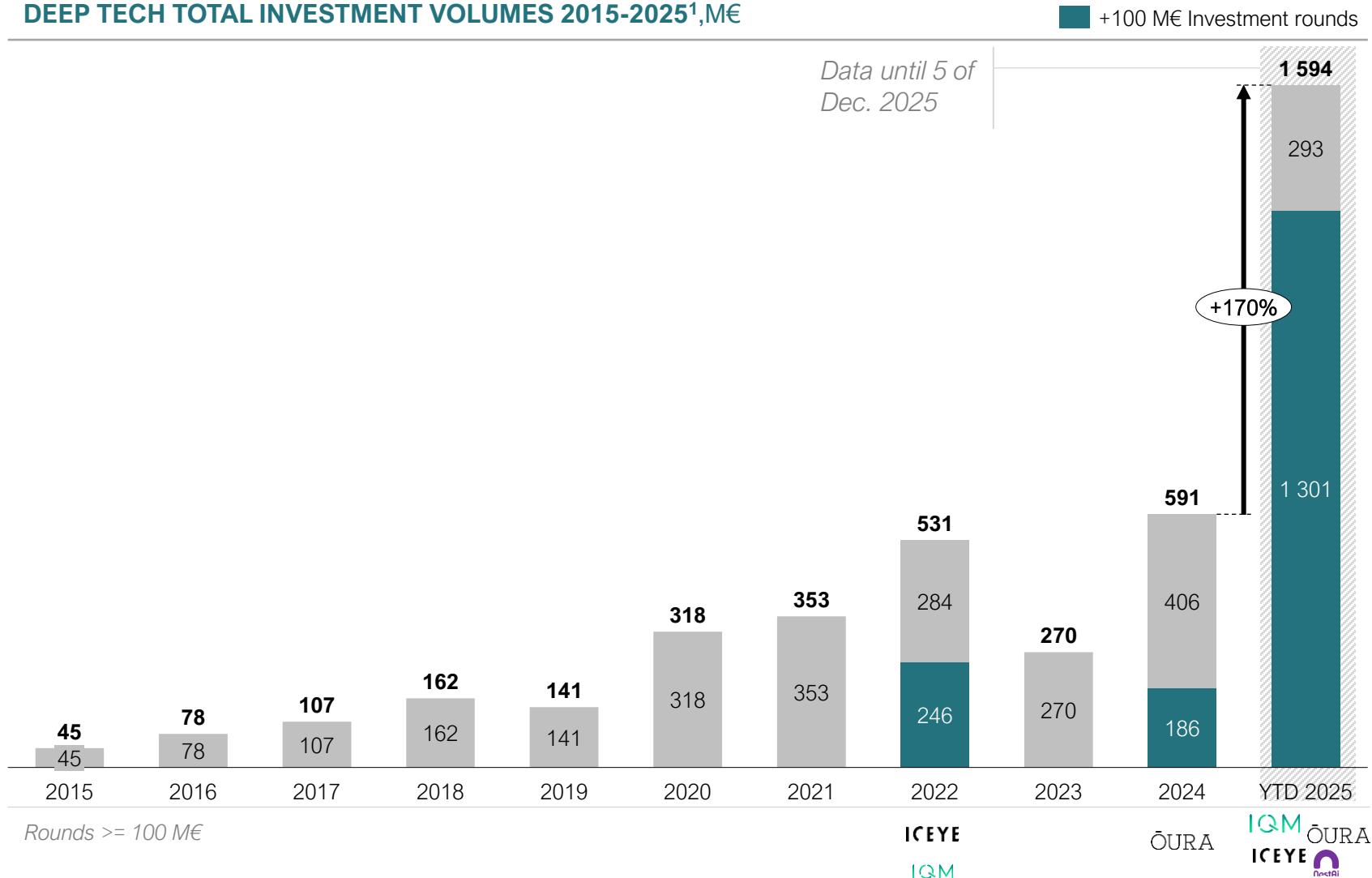
	SURVEY TO DEEP TECH COMPANIES	FINNISH DEEP TECH INVESTOR INTERVIEWS	QUANTITATIVE ANALYSIS
 Description & Purpose	<ul style="list-style-type: none"> Deepen the understanding of key phenomena and underlying developments in the ecosystem 61 Finnish Deep tech companies answered the survey 	<ul style="list-style-type: none"> We interviewed the 4 prominent Finnish VCs with a stable track record of deep tech investments Aim was to deepen the understanding of underlying trends in each fund's area of expertise 	<ul style="list-style-type: none"> Quantitative analysis provides a high-level understanding of the development of the ecosystem Data-analysis contains topics such like analysis of private equity investments, investors, and company financial data
 Methodology	<ul style="list-style-type: none"> The questionnaire was sent to all deep tech companies in our definition The survey was conducted via SurveyPal 	<ul style="list-style-type: none"> Interview (60-90 min) per investor 	<ul style="list-style-type: none"> Tesi's data model is used as the main data source, which includes multiple different data sources, including Pitchbook, Dealroom, Talouselämä (Finnish media), Bureau van Dijk (Orbis), Mergermarket, and other data sources
 Limitations	<ul style="list-style-type: none"> The sample of responses may not give full picture of Finnish deep tech ecosystem, especially as the sample size is limited 	<ul style="list-style-type: none"> The investor interviews covered four different venture capital funds, thus, while we believe the results reflect well on the general view by Finnish deep tech investors, they <u>do not represent views of every Finnish deep tech investor</u> 	<ul style="list-style-type: none"> The data utilized may be partially incomplete or faulty



Finnish deep tech investment environment 2025

A record breaking year driven by a handful of success stories

DEEP TECH TOTAL INVESTMENT VOLUMES 2015-2025¹, M€

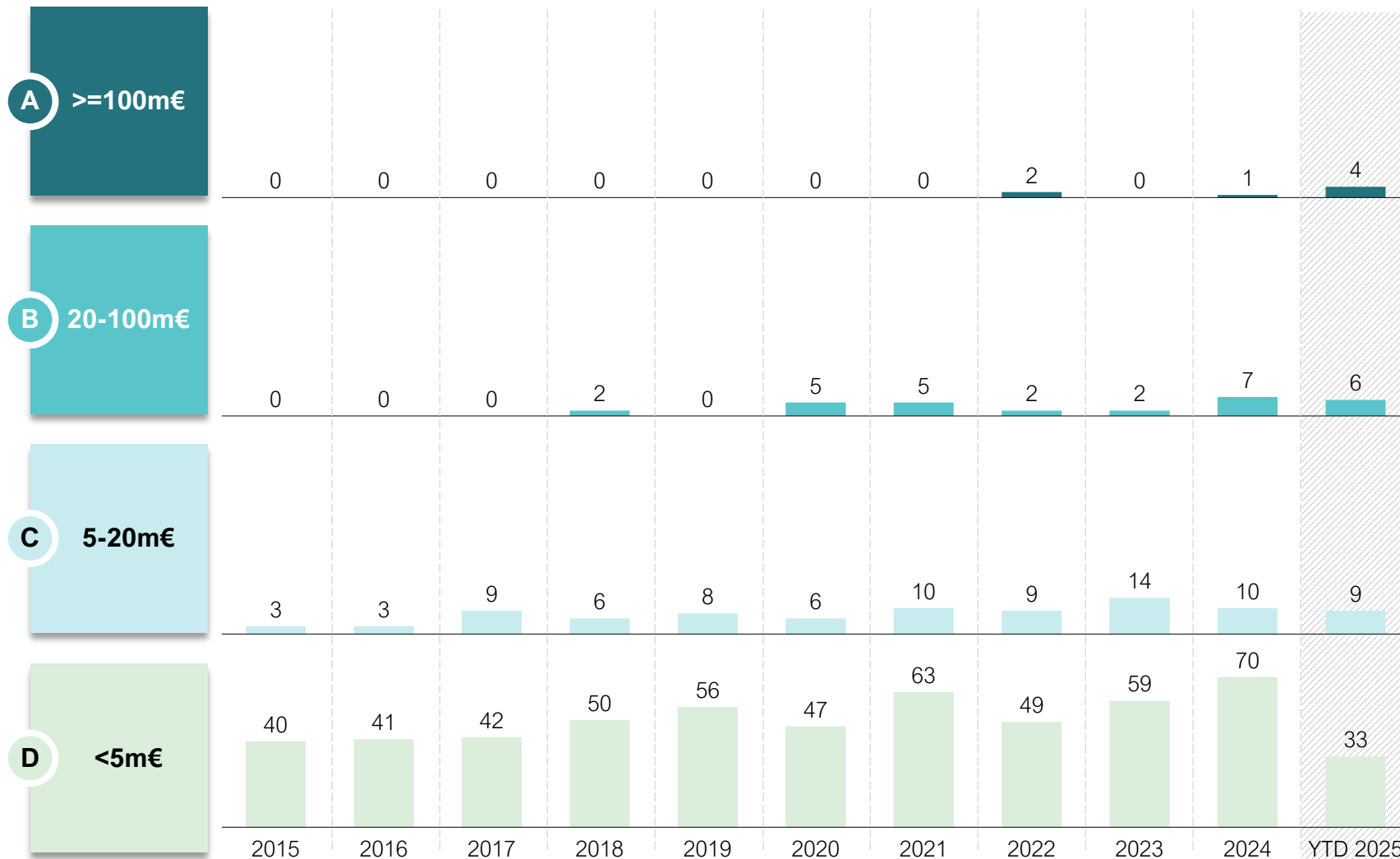


COMMENTS

- Finnish deep tech companies have raised close to **€1.6 bn** year-to-date 2025, corresponding to over 170% growth to previous yearly high
 - The total figures are again driven by few large rounds, this year by Oura, IQM, Iceye, and Nest AI
- Finnish deep tech companies often raise funding with ca. 18-month intervals, therefore, it will likely require teams other than the four mentioned above to raise substantial funding for 2026 investment volumes to be close to this year's
- **Outside of the large rounds, the year have been a moderately quiet.** Significant Series A and B funding rounds have materialized, but at somewhat modest level (as illustrated by the graph in this page)
- The investment volume of small-to-mid-sized (sub 100 m€) Finnish deep tech funding rounds hasn't grown notably in this decade but needs to revitalize if we want to grow the total investment volumes in the long-term.

The momentum in early-stage funding remains strong, later stage funding rounds have been slow to materialize despite the success cases

NUMBER OF INVESTMENT ROUNDS PER ROUND SIZE GROUP 2015-2025,#



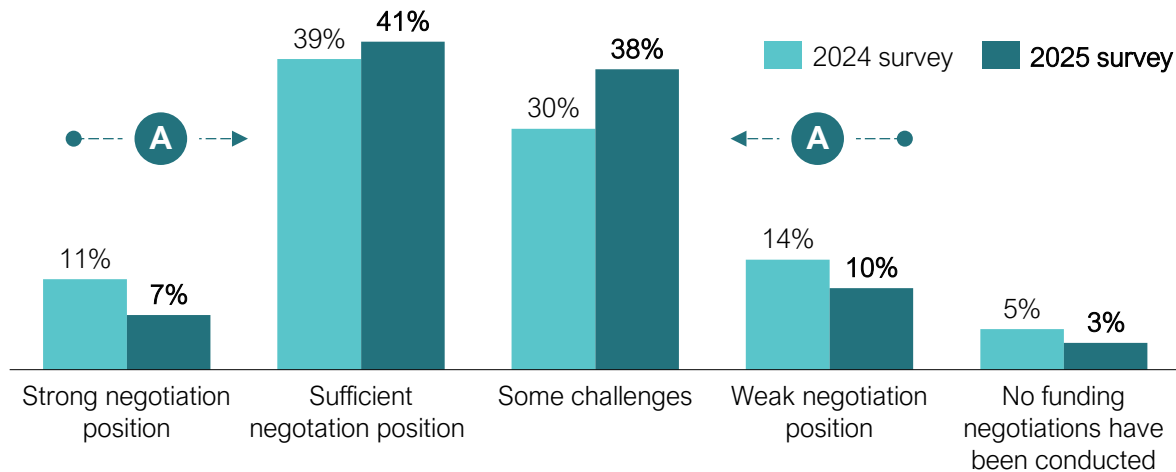
COMMENTS

- As the data shows, our deep tech ecosystem has grown notably over the past 10 years and only a few companies have yet grown their traction to the level to raise +100m€ rounds
- Eventhough a number of somewhat large rounds (Groups B+C) have materialized over the past year, most of these rounds weren't what one might call "text book A or B rounds"
 - E.g. from Group B, only one round was lead by a new external VC investor
 - In Group C, only two rounds were lead by a new external VC investor
 - Other rounds in scope contained crowdfunding rounds, or rounds containing corporate investments and notable public financing
- Early-stage will likely see a minor dip in investment volumes this year, however, some of the materialized rounds are likely to be announced with some lag and actual decrease in <5 m€ round likely isn't as dramatic as the YTD figures show

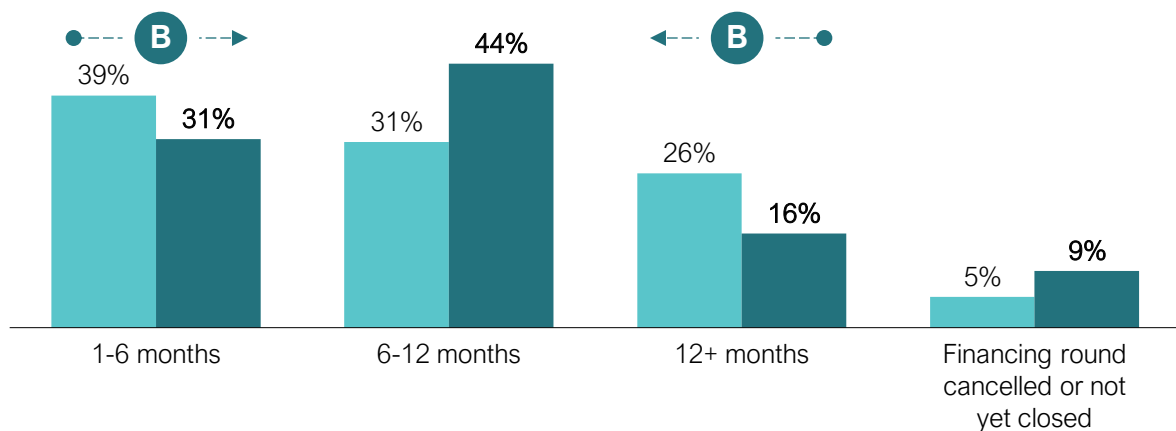
Overall sentiment amongst deep tech companies seems neutral or cautiously optimistic

INDICATIVELY, NO MAJOR CHANGES ON FUNDING ENVIRONMENT¹

Company's negotiation position in the latest funding round, % of respondents



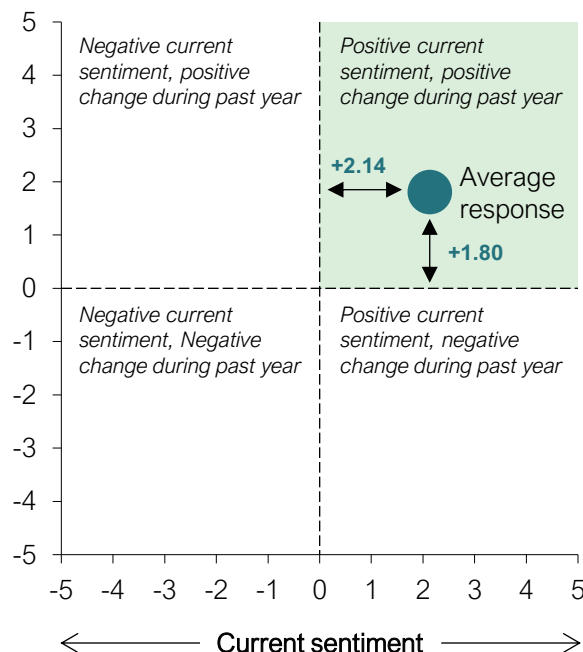
Latest fundraising process duration, % of respondents



CAUTIOUS OPTIMISM ABOUT INDUSTRY DEVELOPMENT¹

Q: How would you describe the current sentiment in your primary vertical, and how has it developed over the past year?

Change during past year

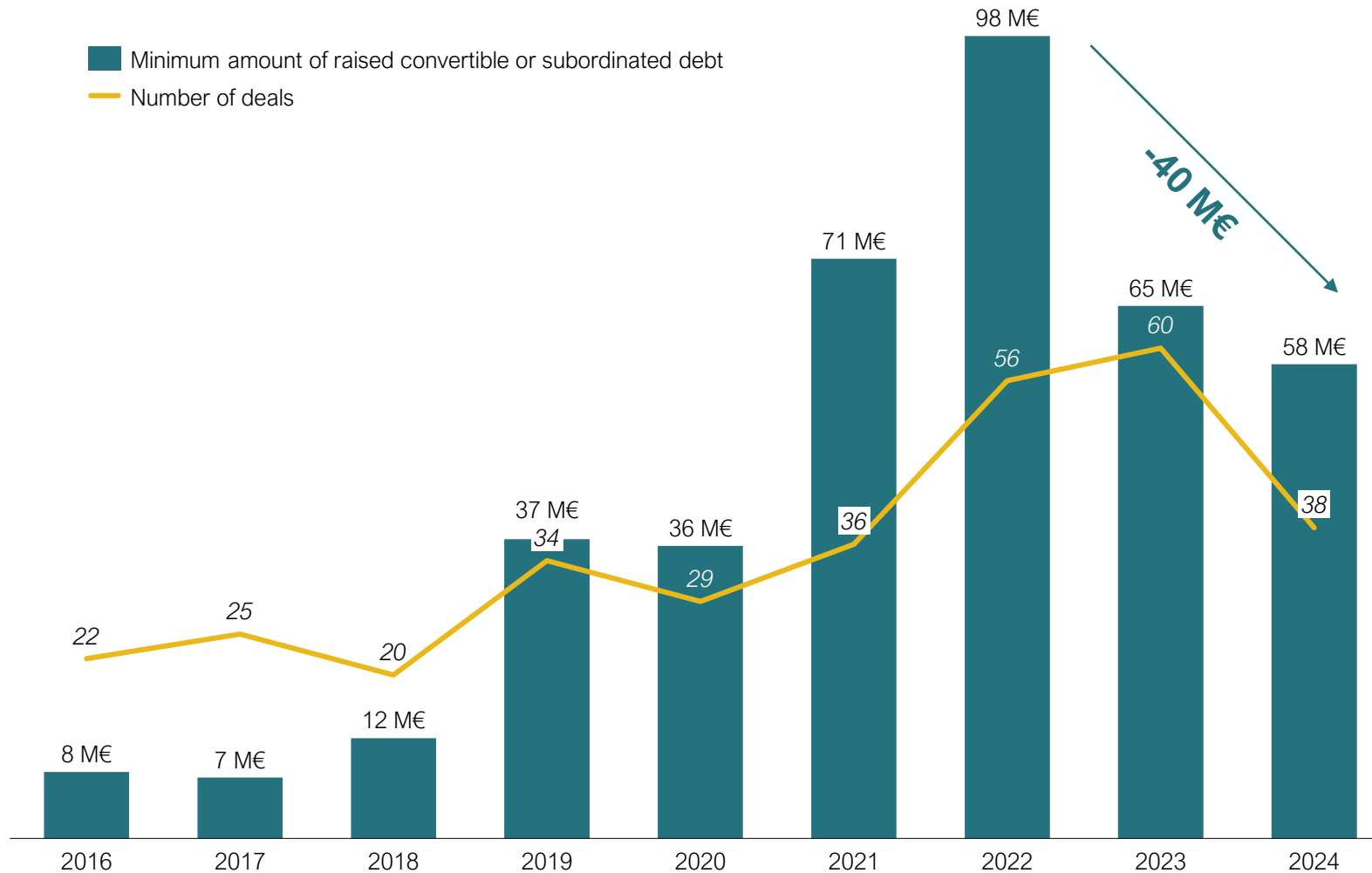


COMMENTS

- In this year's survey, **the sentiment amongst deep tech companies towards the funding environment was similar to last year.**
 - The views regarding funding negotiation position, as well as reported fundraising duration follow very similar pattern to the responses in last year's survey
 - This year there are less very optimistic and very pessimistic views, instead, the responses have sifted towards the mean (A B) in both questions
- **Concerning their specific vertical or industry, deep tech executives are seeing more positive signs.** The average response on current sentiment was clearly positive (+2.14), and the sentiment on change during the year signaled the same (+1.8), the scale being from -5 (negative) to +5 (positive)

The trend in hybrid financing supports cautious optimism

TOTAL AMOUNT OF NEW CONVERTIBLE OR SUBORDINATED DEBT RAISED '16-'24¹, M€, # OF DEALS



COMMENTS

- Most deep tech businesses are hardware or hardware-software plays with higher fixed costs and longer build cycles. Thus, scaling the cost base down without compromising viability is difficult; bridge financing is therefore critical and, in some cases, comparatively large.
- Even though not all convertible (and/or capital) loans are signs of trouble, significant increase in convertible and capital loans can be a sign of weak economic conditions and funding market.
- In 2022, the venture capital funding market weakened rapidly due to Russo-Ukrainian war and changing inflationary environment. This rapid shift halted the capital markets, driving a significant increase in bridge rounds in 2022.
- **In year 2024, hybrid financing was on a decline.** Only 58m€ of new hybrid financing was raised, by only 38 deep tech companies.
- While 2025 financial statement figures won't be available for several months, we expect 2025 figures to be in similar level to the previous year, as the macro-economic business environment has remained somewhat similar for last 12 months.



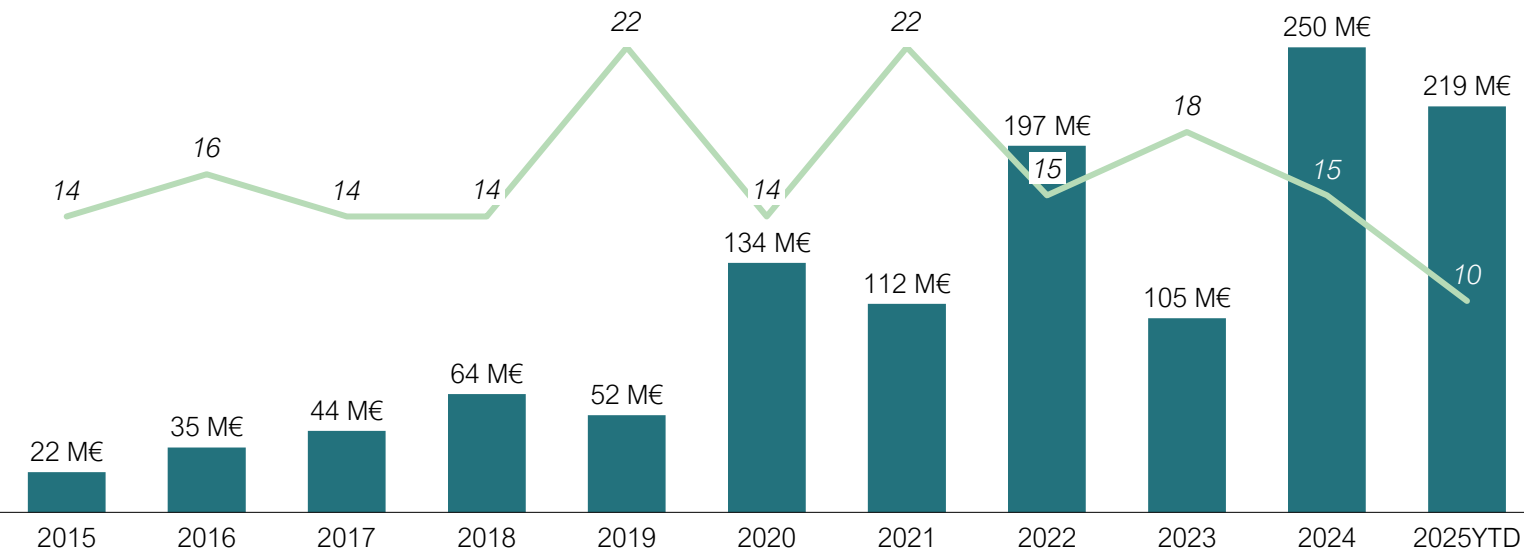
Thematic observations

Advanced Materials & Manufacturing - Finnish view

Highly innovative technologies transforming the industrial processes in the form of novel materials, food ingredients, manufacturing technologies and industrial testing, simulation & optimization tools

TOTAL INVESTMENTS 2015-2025¹, M€,

■ Total investments — # of deals



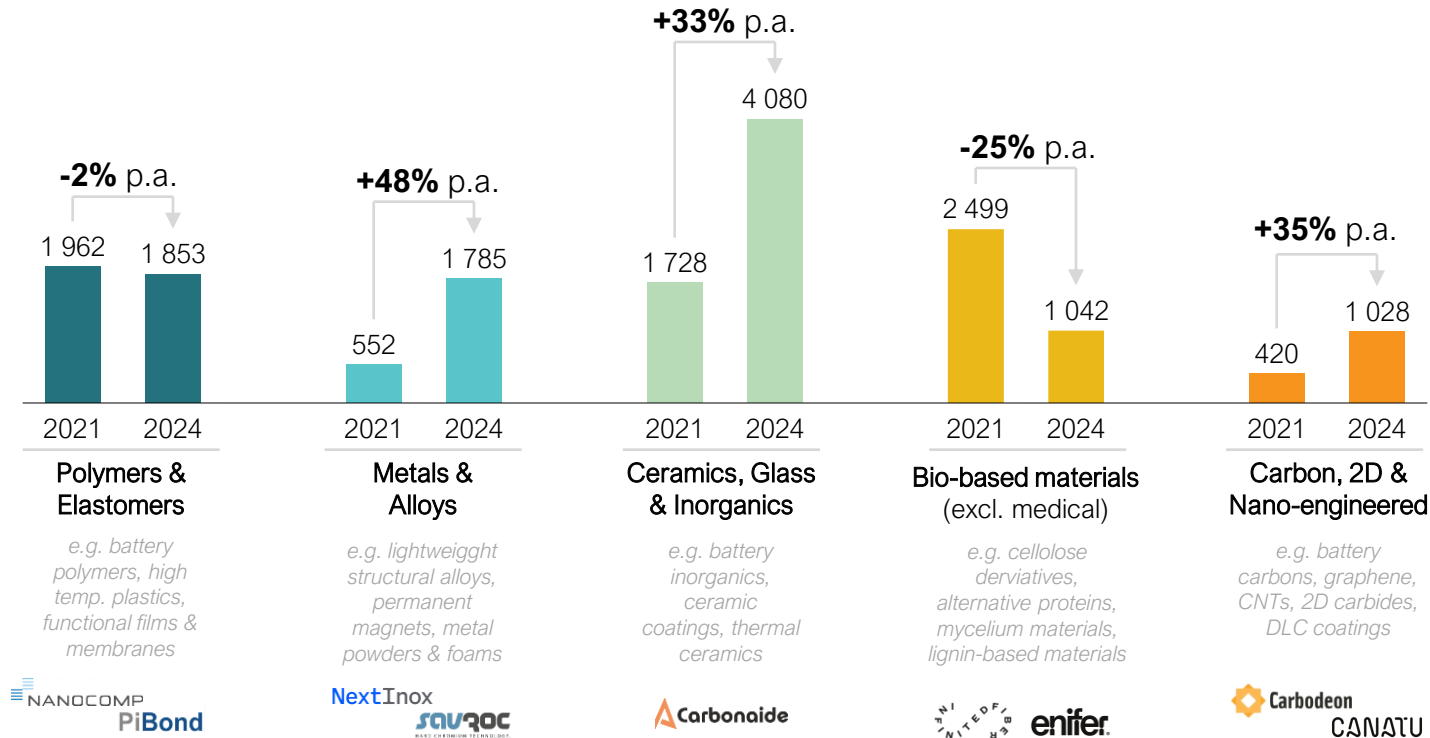
SELECTED TRANSACTIONS IN 2025

spindrive	Active Magnetic Bearing systems	undisclosed	Growth
Volare	Fully circular proteins	26 m€	Series A
ICEYE	SAR satellites & intelligence	150 m€	Series C

- 2025 up-to-date proves to be a bit quieter year in terms of investment volume into Finnish Advanced Materials & Manufacturing technology start-ups. Despite of this, few businesses in the section such as Volare (fully circular proteins) and SpinDrive (active magnetic bearing systems) have been able to raise mid-to-later stage funding in 2025. Across different funding round stages, majority of equity funding in this category is raised by start-ups in the early stages of commercialization. In 2025, 60% of all equity funding euros raised by start-ups within the theme was raised by businesses at pre-commercial or market-entry phases (55% across 2024-2025).
- During 2024-2025, seven of the ten largest recorded equity funding rounds in this section are funding rounds by businesses with a strong environmental focus. While we still expect to see large funding rounds of hardware climate and food tech businesses in Finland materializing, the number of such funding rounds especially for start-ups still in pre-commercial phase may be decreasing as the requirements for time-to-market and reaching price parity have grown stricter as of late.
- The development of artificial intelligence provides new opportunities in the industrial value chains as well. Physical AI applications are gathering momentum and can address several use cases within industrial processes, while the development of foundational models have unlocked new opportunities in material sciences related areas. The number of Finland-based teams innovating within these fields is still limited, and we hope see more industrial AI-enabled start-ups coming out of stealth to provide the industrial solutions of tomorrow.

Advanced Materials & Manufacturing – Global view

GLOBAL VC INVESTMENTS INTO NOVEL MATERIAL INNOVATIONS 2021-2024, BY CATEGORY¹



Historically majority of novel material innovations have been developed in universities or in the R&D labs of large corporates. Nowadays, as spinning off a research project from a university is more accessible than before and as startup funding landscape has evolved and expanded, start-ups are starting to be notable sources for new disruptive material innovations.

As all physical goods industries rely on raw material, we feel looking at the amounts of private capital invested into different material innovations tells us something about where investors bet the industrial world is going. The change in geopolitics has accelerated the race for rare earth metals, probably yielding to increased investments into metals related material innovations. Some of the same drivers can possibly be attributed to increased investment volumes into inorganic material innovations, as many of them are needed in semiconductor fabrication and battery manufacturing processes. Finnish startup-based innovations exist in variety of different material categories, with strong representation in bio-based and polymer & elastomer material fields.

INVESTOR'S VIEW



Axel Ahlström
Partner

Kvanted

The European
Industrial Tech
Investor

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Materials and manufacturing technology companies operate often within capital-intensive value chains, and the start-ups producing new materials or hardware typically face high up-front capex, whereas funding needs for pure software-plays can be more flexible.

To complement equity fundraising, non-dilutive grants and/or project financing are often critical. The public funding availability plays an important role and recent geopolitics have shifted, but not eliminated, the support with larger public funding steered toward strategic sectors in each region.

One highly strategic topic is the availability of rare earth metals. With the ongoing U.S – China disputes, the race to secure access to some of the most critical raw materials for modern society is heatedly contested.

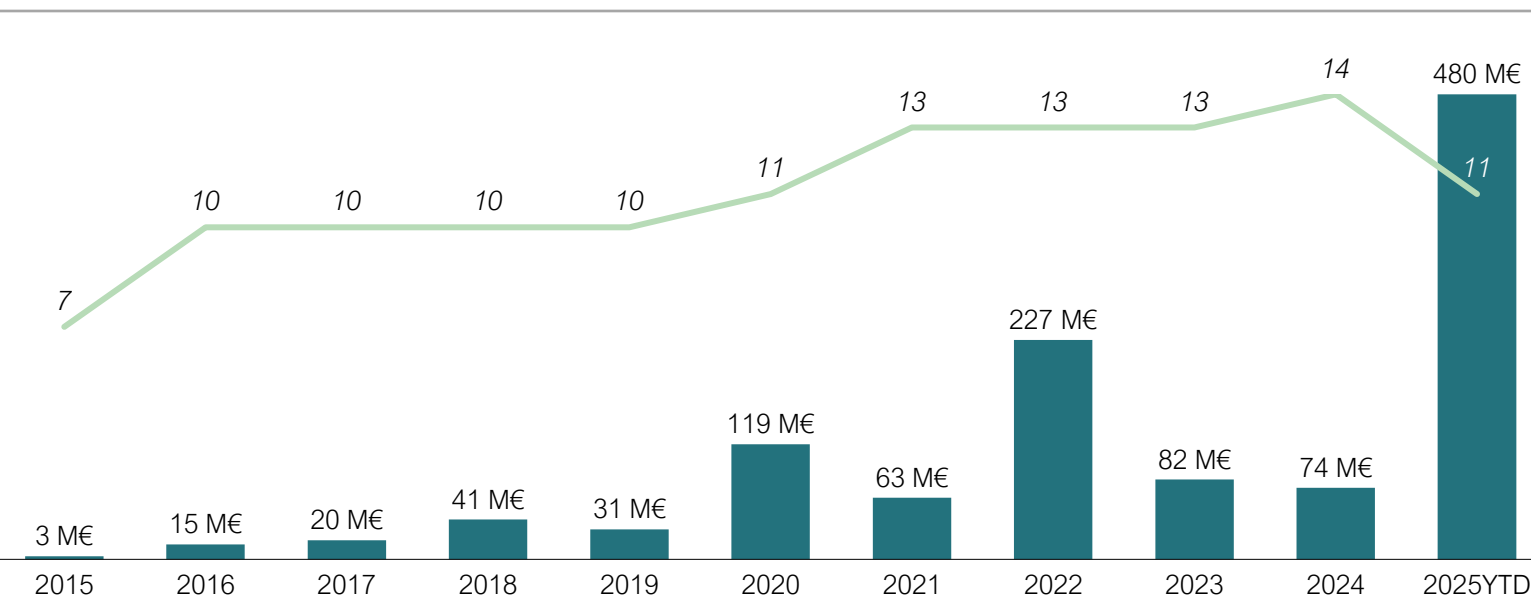
AI might provide an alternative solution to the issue as we are seeing a wave of AI-enabled material discovery start-ups aiming to accelerate routes to novel material alternatives to scarce inputs. The field is rapidly evolving, and we will see in the future what kind of business models will scale the fastest and succeed. “

Future of Compute – Finnish view




Technologies driving the next wave of innovation through breakthroughs in quantum, artificial intelligence, spatial computing, advanced chips, computing architectures and intelligent infrastructure

TOTAL INVESTMENTS 2015-2025¹, M€,

■ Total investments — # of deals



SELECTED TRANSACTIONS IN 2025

	Adaptive eyewear	33 m€	Series A
	Next-generation physical AI lab	100 m€	Seed
	Superconducting quantum computers	275 m€	Series B

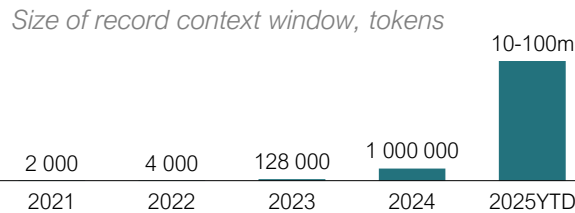
- Investments in quantum technology have been a key driver of capital flowing into Finland's Future of Compute-related deep tech sector. IQM, one of the global frontrunners in full-stack quantum computing, has clearly played its part with a €275 million Series B announced in Q3 2025. The Finnish quantum ecosystem is also active elsewhere - QMill, SemiQon, QuantrolOx, and Arctic Instruments all raised funding in 2024–2025 to advance solutions across the value chain.
- The amount of capital being poured globally into different layers of the AI value chain entails significant investments into cutting-edge AI models and solutions, as well as hardware innovations enabling them. Nest AI raised recently a 100 m€ seed funding round coupled with strategic partnership agreement with Nokia. As 2024 entailed several seed rounds by Finnish deep techs operating in the AI value chain, we expect to see number of Series A rounds by Finnish deep techs at the both ends of the value chain.
- The intersection between cutting-edge computing technology and vision systems has been active in the Finnish startup landscape for several years. Distance Technologies and Agate Sensors have raised seed rounds in 2024-2025, while IXI announced Series A round in Q2 2025. In addition, Dispelix is reportedly being acquired by AAC Technologies, making the possible acquisition one of the few if not the only acquisition of a Finnish deep tech business in 2025.

Future of Compute – Global view

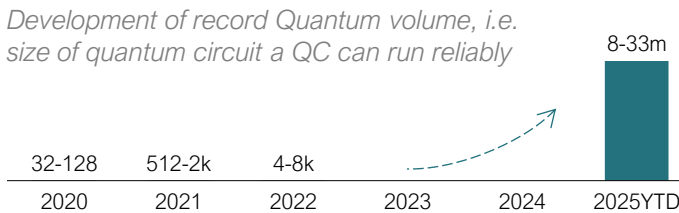
THEME

DEVELOPMENT OF AI...

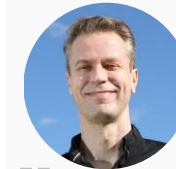
Development of technology¹



...AND QUANTUM



INVESTOR'S VIEW



Jussi Sainiemi
Partner



Voima Ventures

Leading Nordic Deep
Tech VC investor

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The landscape for new and more efficient computing technologies has been evolving noticeably on many fronts – chip design, alternative computing architectures, LLMs, and quantum, to mention a few.

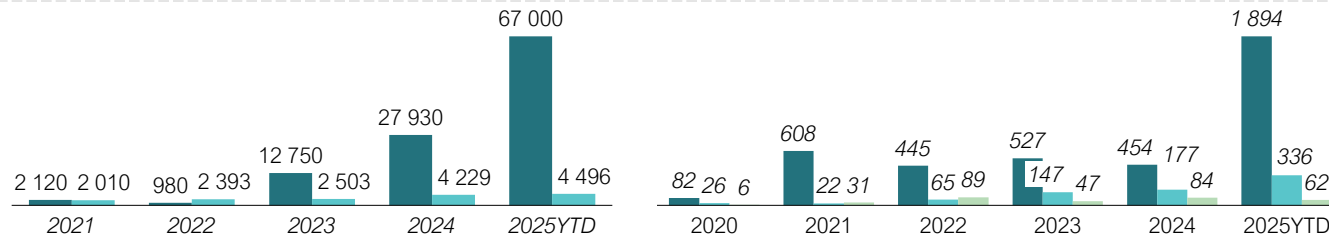
The rapid growth in demand for GPU computing capacity has driven innovation on several fronts, from new chip designs that make computing more efficient, to technologies in data centers aimed at increasing efficiency and reducing energy use at the infrastructure level. On the software-layer, more compact LLMs targeting specific use cases to provide higher quality with less computation are being developed rapidly.

The quantum computing ecosystem in Finland remains strong, and the global landscape has also been evolving for some time, even if we are still some way from quantum becoming applicable to mainstream business.

Once quantum systems become more integrated into the commercial world, it will be interesting to see the complementary roles of quantum and AI, as both are needed to reap the full benefits.

“

Global VC investments 2020- 2025², M€



Category explanations

Category	Description	Finnish companies
Frontier LLMs	Selected frontier LLM providers (Anthropic, OpenAI, xAI)	
Enabling frontier technologies for AI	Enabling frontier tech for AI, e.g. advanced chips and packaging, optical comms, cooling technologies, memory	HYCOM CORE FLOW

Category	Description	Finnish companies
Full-stack	Complete QCs	IQM
Enabling quantum hardware	Components, control HW	SemiQon™, ARCTIC INSTRUMENTS, BLUE FORS, VEXLUM
Quantum software	Middleware, quantum algorithms	QMill, algorithmiq, QuantrolOx

Investment and technical progress in LLMs have skyrocketed since ChatGPT's 2022 launch. Enabling frontier technologies in several fields have followed with a short lag.

As inference takes a larger share of workloads, demand shifts to low-latency, lower-cost hardware benefitting both inference-optimized frontier and traditional technology businesses. We hope to see a larger number of Finnish frontier technologies in this space going forward.

Quantum technology is progressing well but obviously at an early maturity stage and has advanced rapidly in recent years, visible in multiple different funding and technology milestone announcements this year by major QC builders.

Capital inflow into full-stack QC builders is increasingly filtering to quantum software and especially to enabling hardware, where Finnish companies are well represented.

¹ Published performance of LLMs and quantum computers

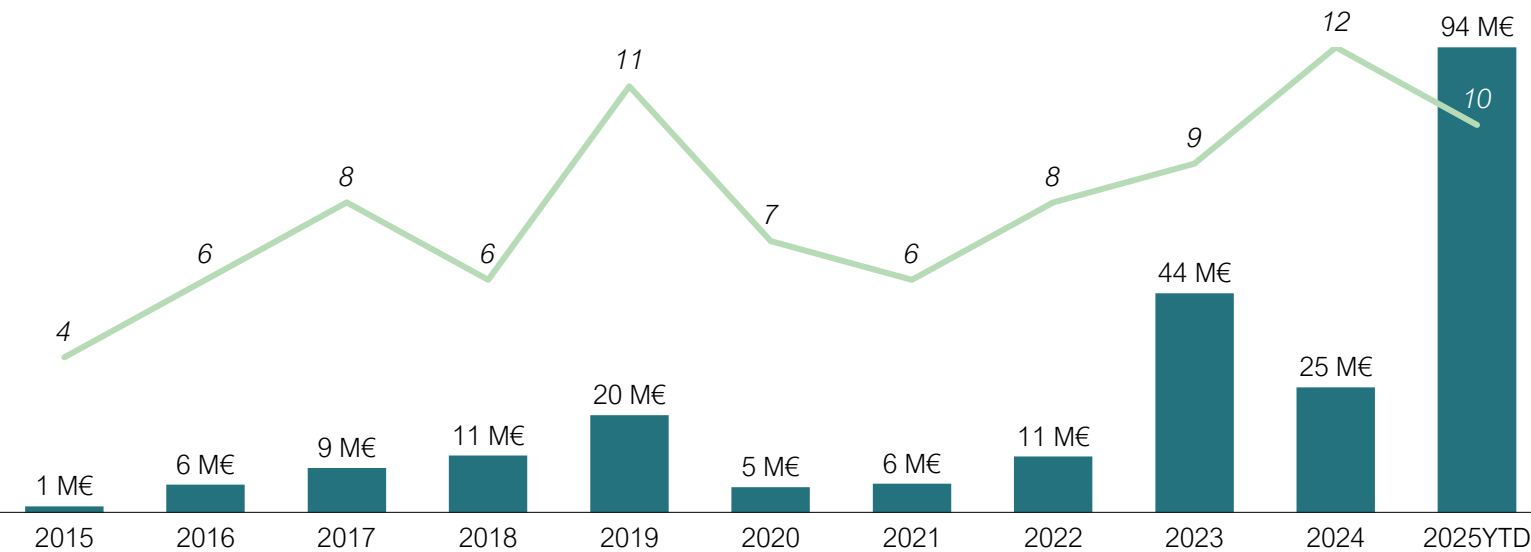
² Scope: privately held companies; primary equity funding rounds included; secondaries, M&A transactions and IPOs excluded; data center operator, traditional data center hardware and generic semiconductor OEM businesses excluded. Source: Pitchbook (data until 7/11/2025).

Energy Technology – Finnish view




Novel innovations across electricity, heat & cooling, and fuels including advanced generation and conversion, next-generation storage, carbon-neutral fuels, and AI-enabled grid solutions

TOTAL INVESTMENTS 2015-2025¹, M€,

■ Total investments — # of deals



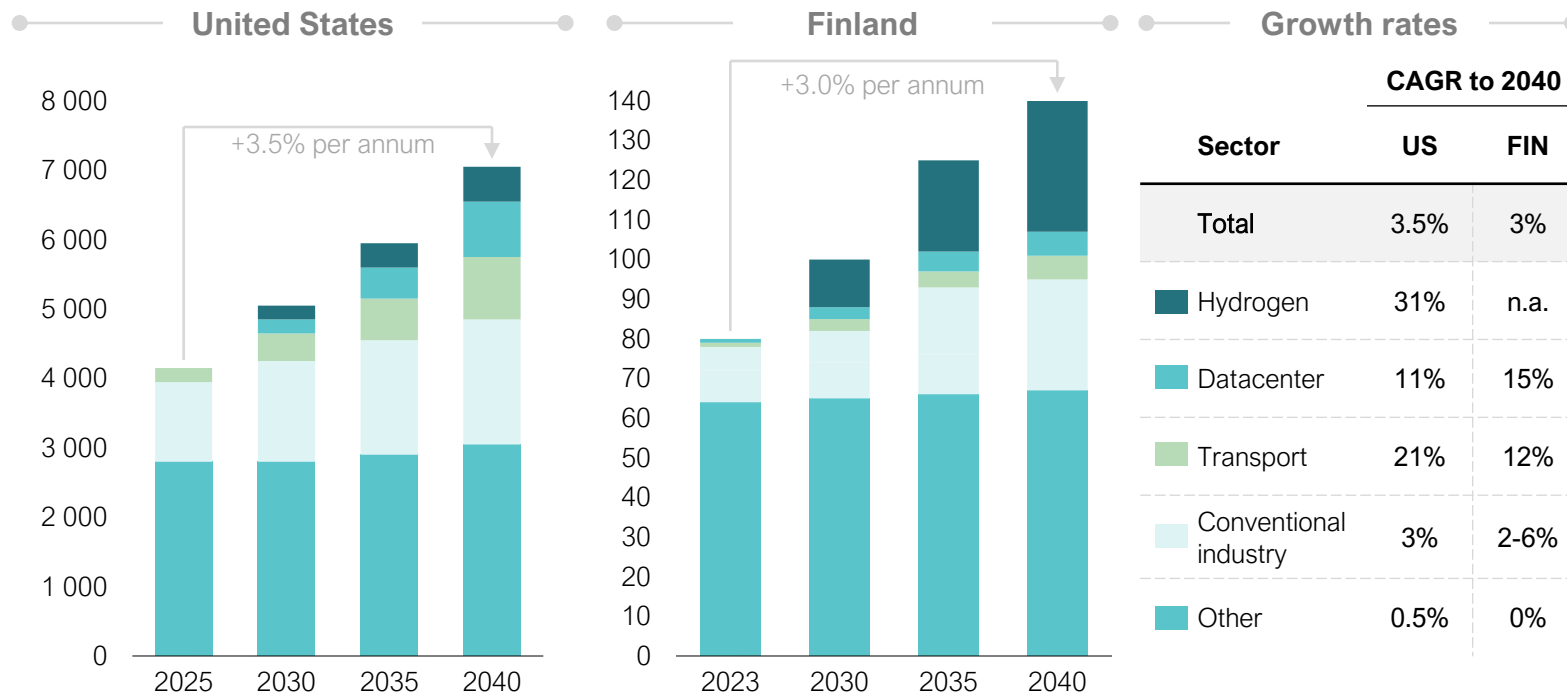
SELECTED TRANSACTIONS

	Smart grid management	8,5 m€	Growth round
	SMR for industrial and district heating	32 m€	Series B
	Green hydrogen	44 m€	Series A

- Equity flows into Finnish novel energy technology have traditionally concentrated on the supply side of the energy system (generation, conversion, and infrastructure), where production-intensive models demand heavy capex well before scale. In 2025, Hycamite and Steady Energy, both of which disclosed notable Series A–B funding rounds earlier in the year to fund the next steps towards commercialization - pushing year-to-date investment to record levels.
- Equity funding rounds into companies in the section have been relatively small (average 2,33 m€ funding round size since 2015), and the availability of non-dilutive financing² has certainly been an essential part of total funding gathered by the companies. Non-dilutive financing will need to continue complementing the gathered equity funding especially for the capex-heavy businesses, however, we hope to see a wider and more diverse representation of Finnish novel energy technologies across the energy system in the future.
- Software-enabled and AI-driven energy technology innovations have grown in numbers globally in the recent years. In Finland, several such solutions in e.g. power conversion and battery diagnostics spaces have been gathering seed rounds in 2024-2025 to accelerate their product development. Grid-level management and optimization tools is an area that is attracting globally new market entrants with an AI-driven approach. Safegrid and Capalo AI are already in the market representing Finland, with hopefully more to come in the future.

Energy Technology – Global view

THE DEVELOPMENT OF POWER DEMAND IN USA AND FINLAND 2023-2040, TWh¹



Some of the key drivers for innovation in the energy infrastructure are somewhat straightforward. Power demand is growing fast due to green transition (green hydrogen production, electrification of transport) and global increase in the demand of computational capacity.

The current grid capacity is insufficient to meet the demand of data centers estimated to be in operation by the end of 2020s in the U.S.² nor in Finland³. New and modern technologies are actively being scouted to solve at least part of this issue, whether it is nuclear power or BESS solutions for supply, or VPP and other solutions for enhancing grid flexibility.

A significant portion of the supply being built to match the overall demand growth is renewable energy. Renewable electricity sources naturally have volatile energy production and other side effects like low grid inertia. To battle these challenges new innovations and solutions are required, with several Finnish start-ups in position to be parts of the solution.

INVESTOR'S VIEW



Juha Lindfors
Partner



Early-Stage VC
founded by Serial
Entrepreneurs

“The environment around different energy technologies has changed considerably over the past couple of years. The changes stem from shifts on the macro level, visible in the energy technology-related deal flow we’ve been getting lately.

A clear change that everyone recognizes is the role global geopolitics now play in business and investment decisions. The change has brought resilience as a theme to the forefront. In the energy sector, this can mean more focus on supplier selection and more investments in e.g. grid-stability and off-grid solutions.

When adding AI-driven power demand to the mix, certain areas in energy technology are seeing strong innovation activity and new start-ups born. Examples include SMRs, new ways of active grid participation and long-term storage among others.

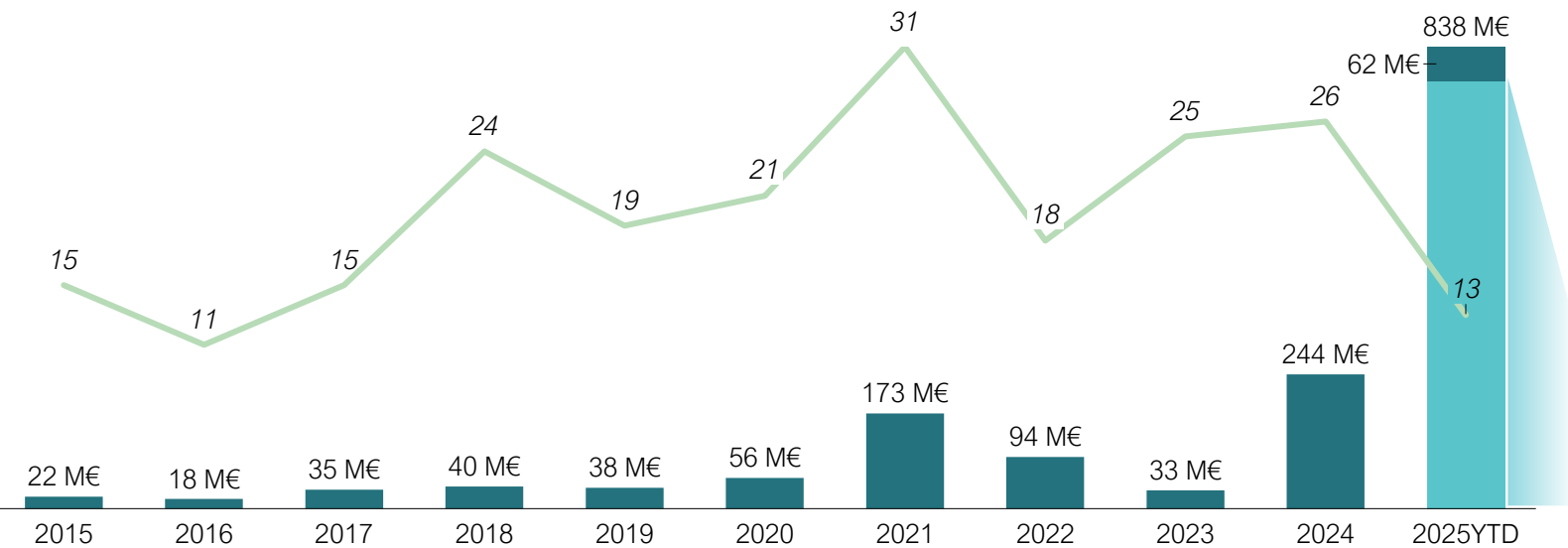
Finally, sustainability isn’t as high on some political agendas as before, and fundraising for start-ups relying on a “green premium” is much harder. Novel energy technologies still have doors open for business and investments, just not at any price (point).”

Health & Life Sciences – Finnish view

Innovative technologies that improve human health and help address the key challenges facing healthcare systems – covering a broad range of companies across drug development, diagnostics, medical devices, digital health and wellness.

TOTAL INVESTMENTS 2015-2025¹, M€,

■ Total investments — # of deals



SELECTED TRANSACTIONS

SURGIFY
FOR SAFER BONE SURGERY

Bone-safe surgical technology

7 m€

Series A

HederaDx

Cancer diagnostics

15 m€

Series A

OURA

Personal wellness wearables

~780 m€

Series E

- Health & Life Sciences funding reached an all-time high in 2026, with investment volumes increasing almost quadrupling from last year.
- Volumes were driven by the \$900 m (c. €780 m) investment in Oura, which was the largest ever scale-up round in Finland and one of the biggest equity rounds in Europe this year. With the round, Oura's valuation rose to \$11 bn and Oura became the second Finnish company to reach decacorn status.
- Excluding Oura's funding round, financing activity in the health & life sciences space has been relatively muted. The number of deals YTD is 13, with full year deal numbers expected to fall short of previous years – following a trend seen also more broadly in the European health & life sciences sector where transaction numbers are down despite strong investment volumes. Excluding Oura, median round sizes were small, and only a handful of companies raised rounds exceeding €10 m.
- On the positive side, funding rounds were raised by companies across all the health & life sciences subsectors, including drug development and biotech, diagnostics, medical devices, wellness and digital health.

Health & Life Sciences – Global view

KEY FIGURES OF PHARMA PATENT CLIFF¹

\$200-300 bn.

Estimated revenue loss of US pharmaceutical companies between 2025-2030

>50%

of the top 15 pharmaceuticals companies estimated to be affected by the patent cliff

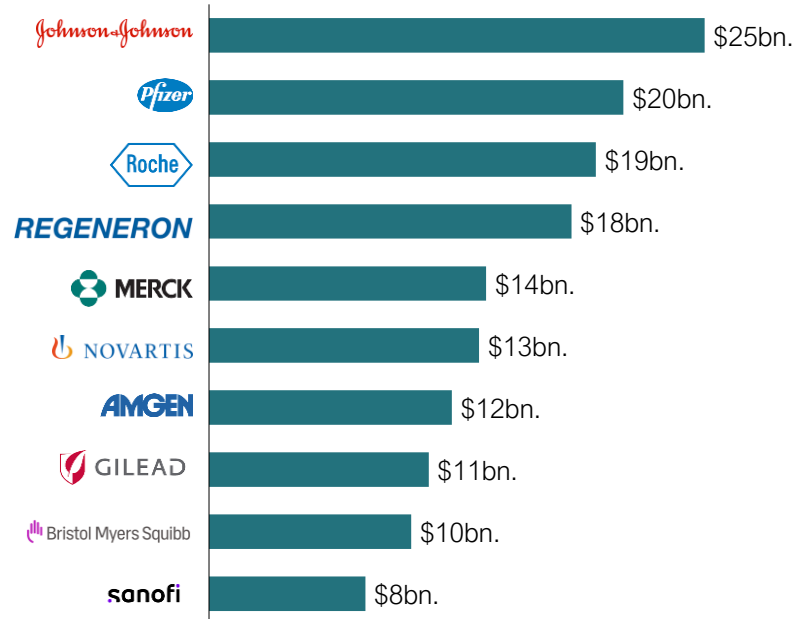
Large pharmaceutical companies are heading into a period of major transition. A key driver is the looming “patent cliff”, with an estimated 200–300 bn\$ of revenues at risk over the next six years.

To bridge this emerging revenue gap, pharma companies need a steady stream of new therapeutics. In addition to internal R&D, big pharma has for many years increasingly relied on external innovation. According to industry estimates, since 2018 more than 70% of new molecular entity revenues have come from externally sourced products.³

This shift has important implications for biotech start-ups, creating significant opportunities for both M&A and licensing agreements. Pharma companies have substantial capital to deploy, and when combined with the sizeable revenue potential of successful new drugs, this supports meaningful deal values.

Reflecting these trends, 2025 has been an active year for biopharma M&A; deal volumes of 77 bn\$ as at the end of Q3 have already surpassed full year 2024 levels. In licensing, total announced deal value has reached 182 bn\$ year-to-date.⁴

PHARMA COMPANIES, CASH BALANCE²



INVESTOR'S VIEW



Milla Koistinaho
Partner

≥ INNOVESTOR

Leading Nordic
Life Science VC

”

The health & life science sector's fundamentals are exceptionally strong, driven by an ageing population and a medical need that is enduring and increasing. Exit perspectives are also solid. We are at the cusp of an unprecedented transformation. Large pharmaceutical companies are approaching a patent cliff; over the next 6 years, nearly \$300 bn of revenue is at risk. In addition to large pharma, also mid-caps are becoming more active in M&A, increasingly opting for acquisitions rather than relying solely on in-house R&D.

In terms of therapeutic areas, diseases of the central nervous system (e.g. Alzheimer's, Parkinson's and neuropsychiatric disorders) are now a major area of interest. The scale of the socioeconomic challenge has long been recognized. However, despite significant pharma investment during the past few decades, the field has seen too many disappointments until very recently. The brain was often viewed as a “black box”.

Today, advances in understanding the molecular and cellular drivers of brain diseases, biomarker driven diagnostics and ability to monitor disease progression has improved and enabled the approval of the first disease modifying therapies. Big pharma has returned to the space, and pipelines now include multiple promising assets. “

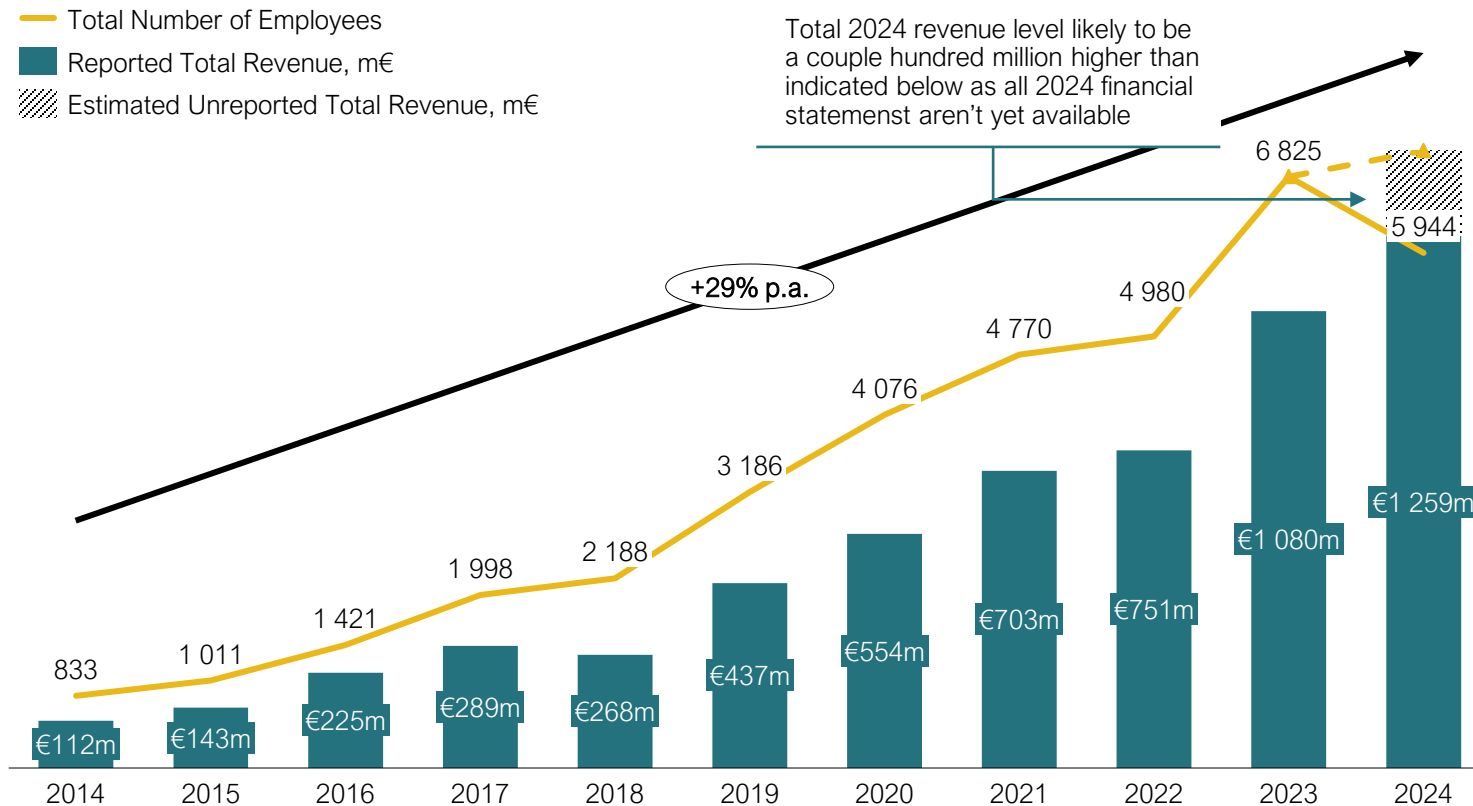


Ecosystem

The ecosystem is still growing at the previously observed rate, and Deep Tech will likely surpass € 2 bn. of revenue in 2025

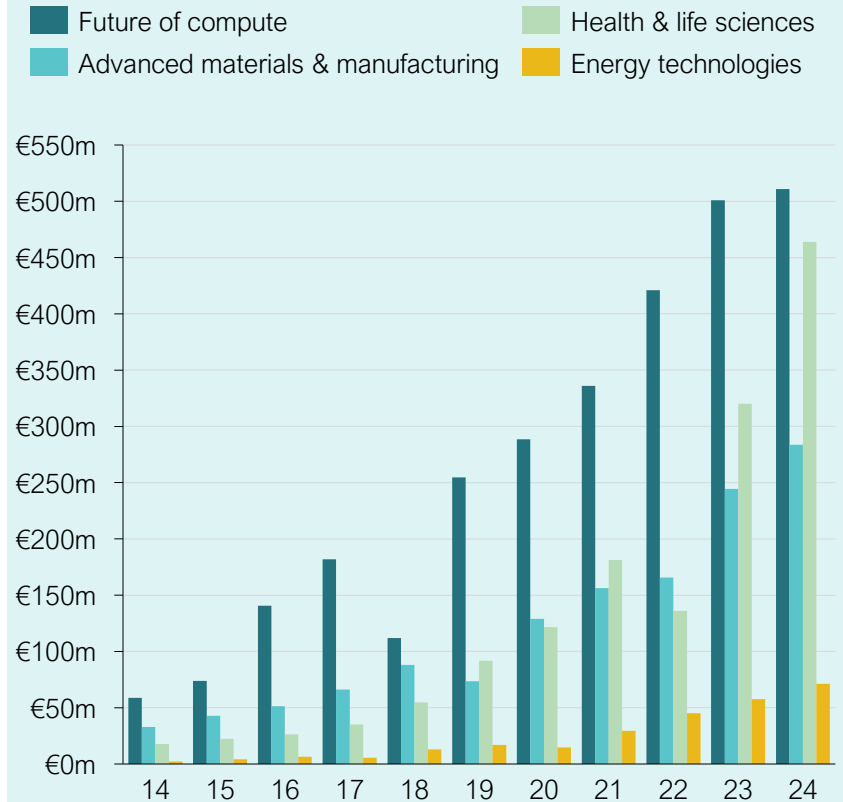
DEVELOPMENT OF TOTAL ECOSYSTEM REVENUE AND NUMBER OF EMPLOYEES, 2015-2024¹

MILLION EUROS, NUMBER OF EMPLOYEES



..., AND REVENUE PER CATEGORY

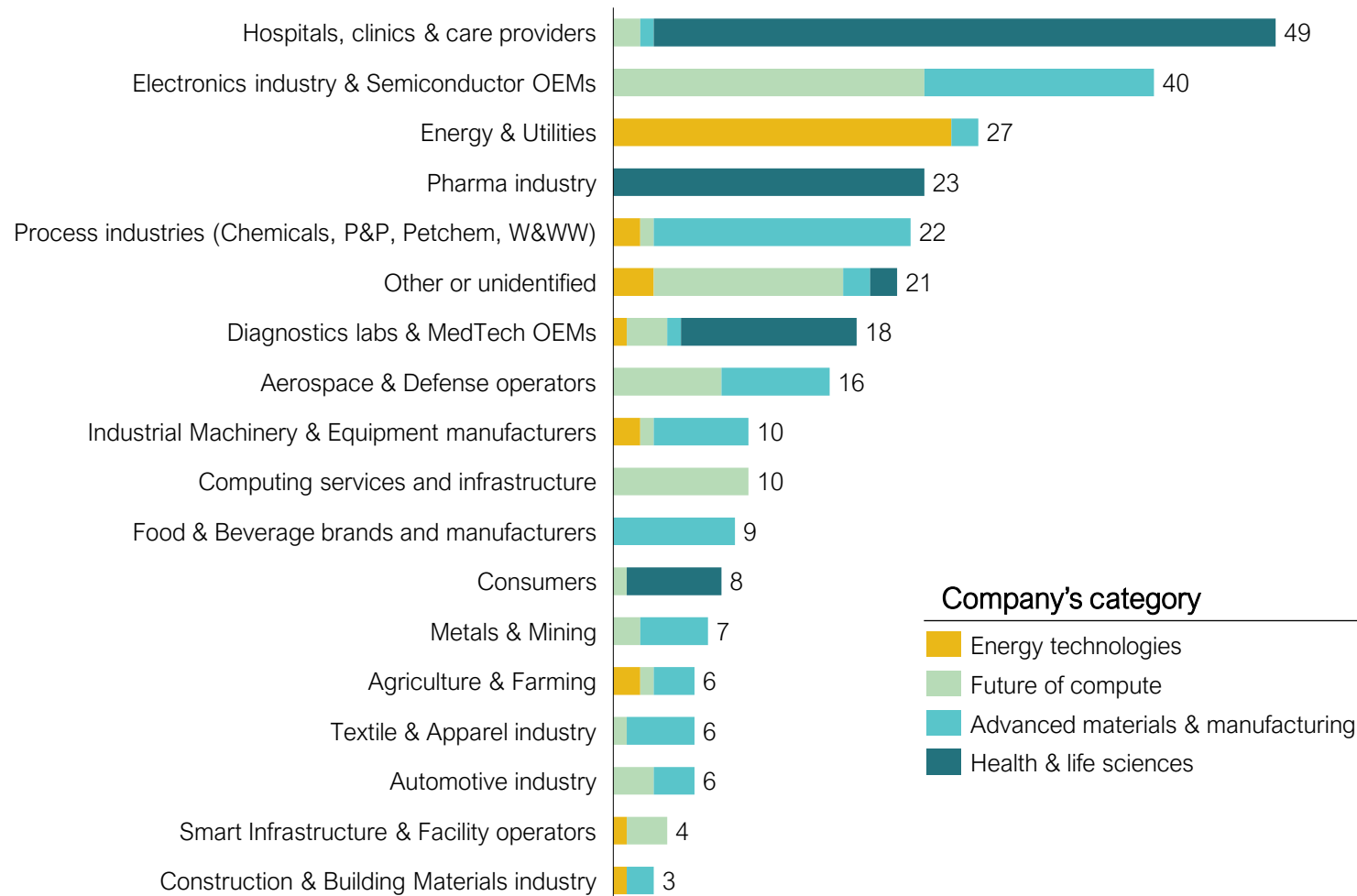
MILLION EUROS, NUMBER OF EMPLOYEES



- The total revenue by Finnish deep techs continues strong growth, in a similar rate to what we have observed in our previous studies. In 2025, we expect yet again a significant jump, as the largest companies in the ecosystem (Oura, Iceye, etc.) are continuing their growth with some public announcements regarding their positive outlook for 2025 sales already being released.
 - E.g. Oura has indicated to exceed \$1 bn. of revenue in 2025, while Iceye has indicated to exceed €200m. Following such developments **Finnish deep tech revenue will end in the region of €2 bn. in 2025**

Finnish deep tech businesses are targeting a wide array of customer segments, with a handful of segments clearly more popular than others

PRIMARY CUSTOMER SEGMENTS OF FINNISH DEEP TECH COMPANIES¹,



COMMENTS

- Deep tech-based products are used in varying environments, some as a stand-alone product to a specific use-case, some as a component in another product for an end-user that is not a direct customer of the deep tech company.
- We analyzed Finnish deep tech companies based on publicly available information per each business and focused on the primary direct customer segment of each company, rather than the possible end-user of the product.
- Hospitals, clinics, and care providers are the most common primary customer segment, reflecting the strong health tech presence and the cross-industry nature of many other deep tech innovations, where the primary customer segment may be selected later.
- Not all deep techs have or openly communicate their primary customer segment; these businesses are grouped under “Other or unidentified”
- Pivoting is somewhat common for early-stage startups. Pivots in customer segment focus happen often between different heavy industries, while several companies have changed their earlier focus to primarily defense industry, a trend which might continue in the future.

R&D is the foundation of deep tech and provides an increasing contribution to the economic growth on national level

ECONOMIST'S VIEW



Youssef Zad
Chief Economist



”

Finland's deep tech startup ecosystem is relatively young. Yet, most firms are built on long research histories, often spanning decades, before the companies were even founded.

R&D today shapes tomorrow's growth: the R&D investments we make now will define Finland's economic growth potential for the coming decades.

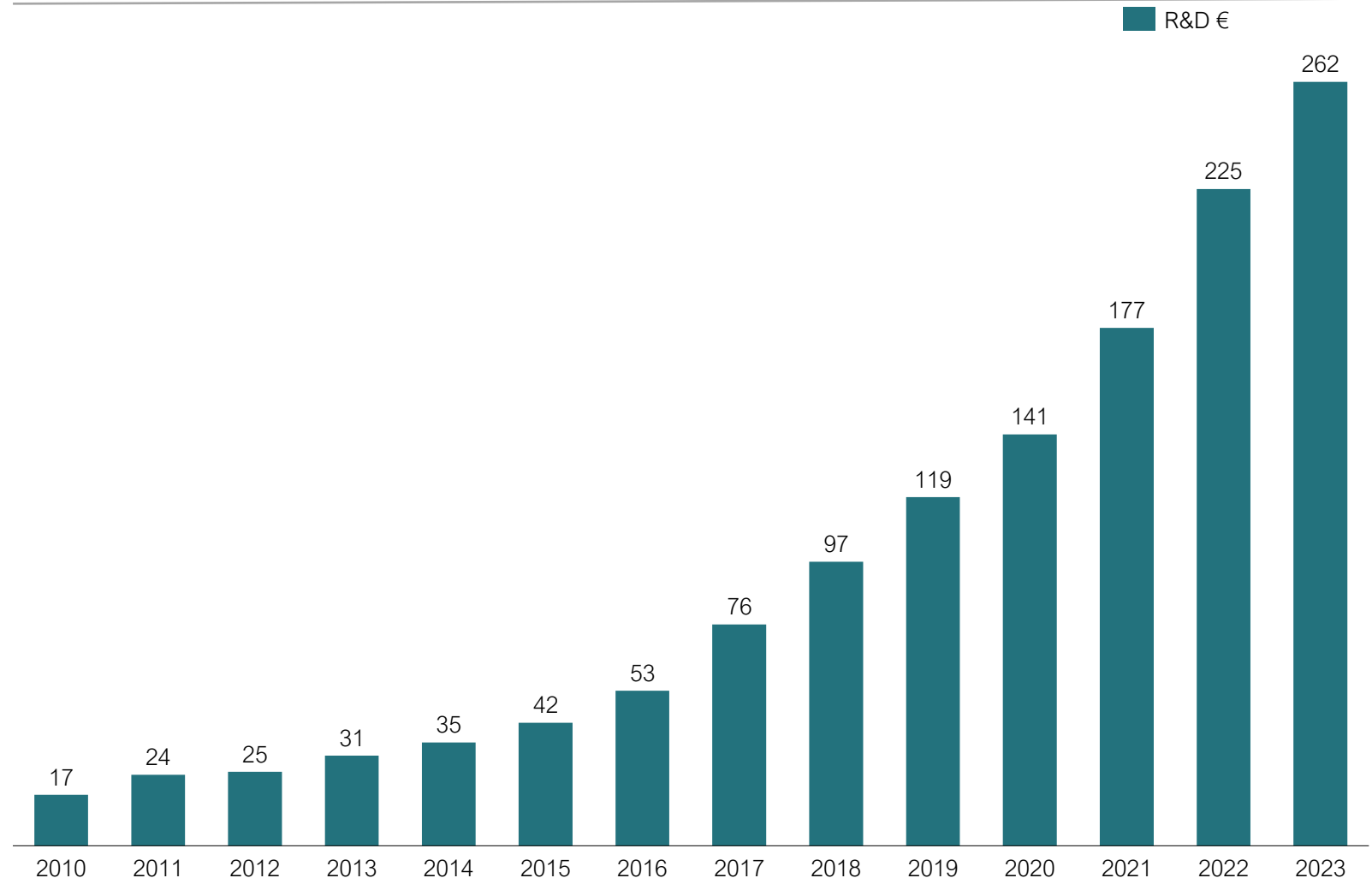
Looking at the current deep tech numbers, the future appears very promising. In 2023, Finnish businesses invested €5,7 billion in R&D.

Deep tech firms accounted for €261,8 million, roughly 5% of all domestic business R&D. Remarkably, this came from just 141 firms for which data were available.

A small number of great firms can truly have an effect on the economy on national level.

“

TOTAL R&D EXPENDITURE 2010-2023¹, M€

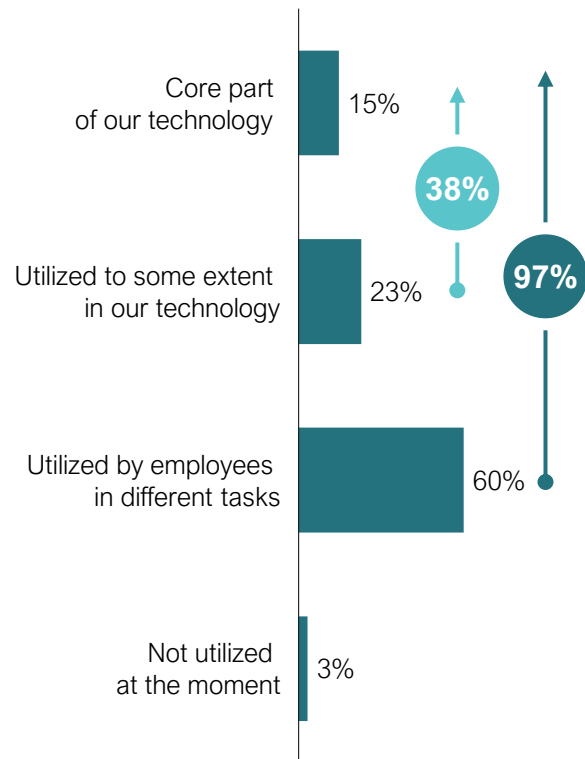


AI creates positive impact for deep tech companies, by creating new business opportunities, or by increasing the R&D efficiency

97% of deep tech companies utilize AI, but only **38%** of companies have AI as part of their technology. AI impacts similar ratio (~**70%**) of companies in the business and science aspects

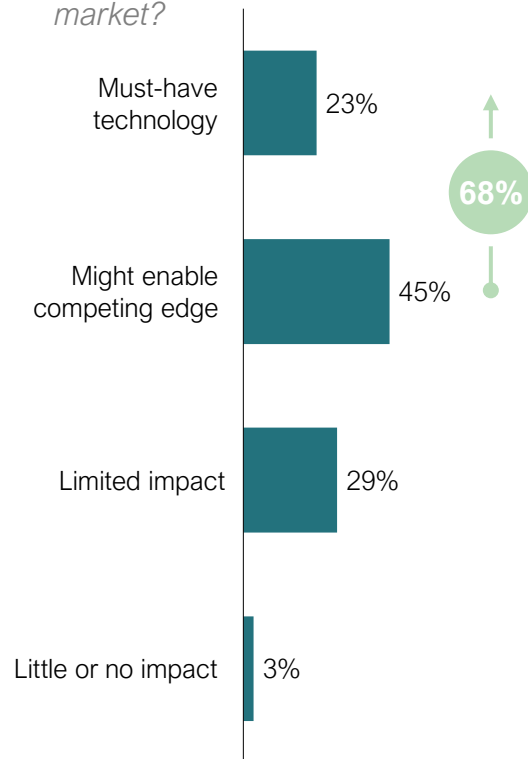
The level of integration overall¹

Q: How do you utilize AI in your business?



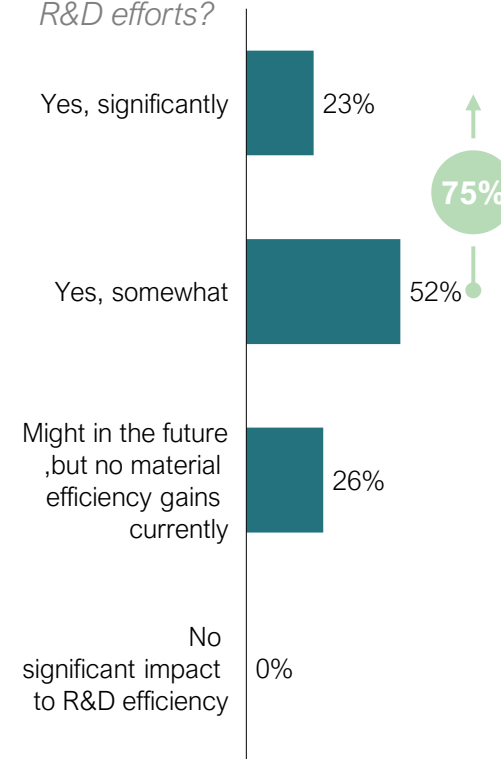
Business impact of AI¹

Q: In your view, what kind of impact AI will have to your business and market?

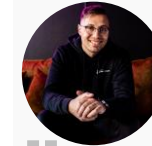


R&D impact of AI¹

Q: Do you believe that AI can increase the efficiency of your R&D efforts?



ECONOMIST'S VIEW



Youssef Zad
Chief economist



”

I believe AI is definitely a general-purpose technology that has various use cases that we are not even aware yet. Start-ups are perfect entities to look for such use cases and bring value to the business.

I am a little worried that only 23% + 15% of respondents utilize AI at least to some extent in their technology, while almost 70% indicate that AI is a must-have technology or AI enables a competitive edge.

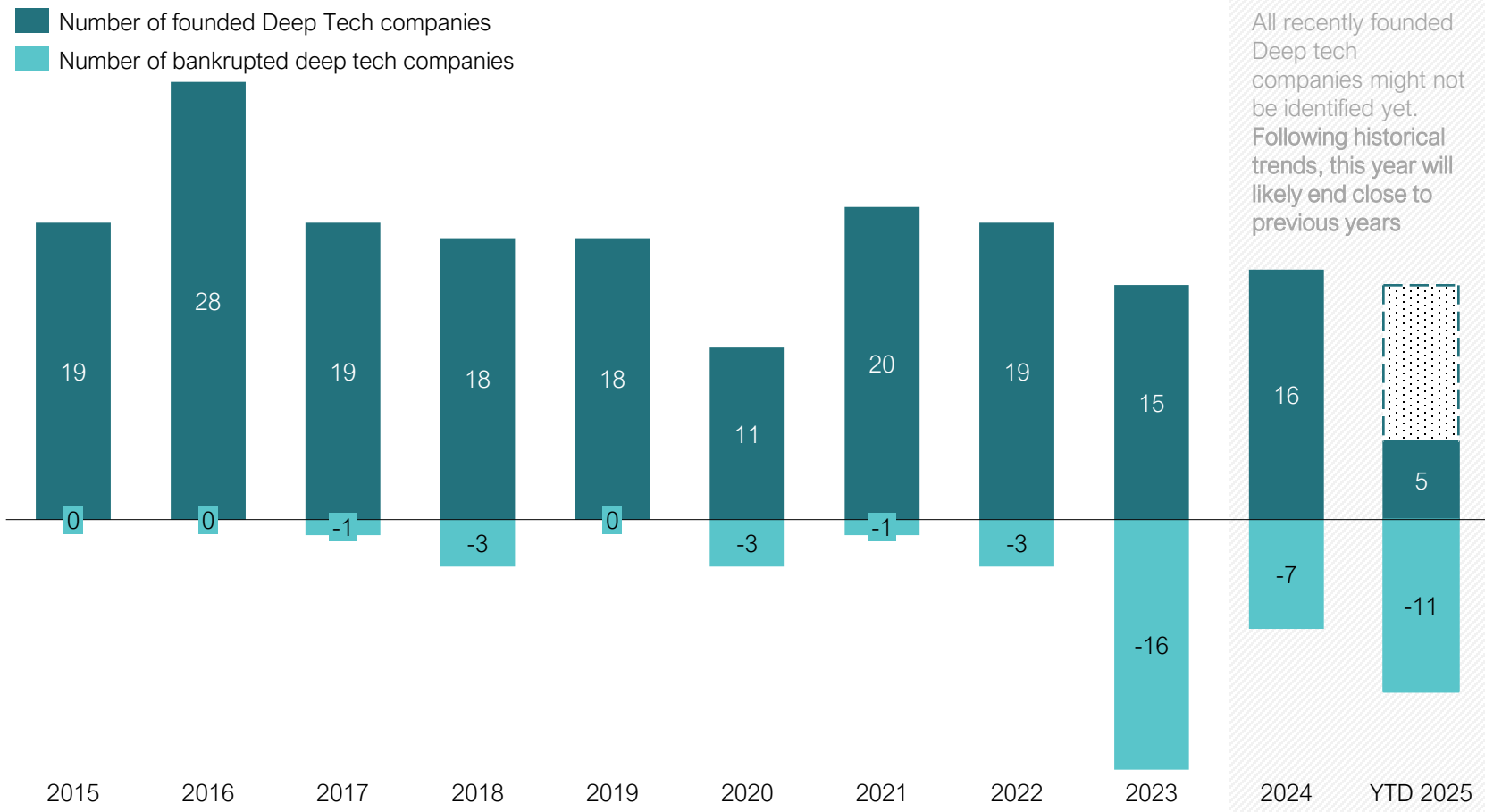
Also, majority of respondents indicate that AI will have positive impact on R&D efforts. Currently we have estimated that the total R&D – spending of startup-based firms is around € 800M and it has been increasing rapidly in the past 5 years.

It seems that AI will boost the efficiency of the R&D spending which means more outputs. Vey good for the Finnish economy“

Currently Deep tech companies are being founded at a steady rate, some evidence of positive development in the future

In our past research we have in many occasions raised our concern about the rate that new deep tech companies are being founded. Currently it seems like the situation has stabilized. Moreover, the future pipeline from universities and research institutions is healthy.

NUMBER OF FOUNDED AND BANKRUPTED COMPANIES 2015-2025¹,#



ABOUT THE FUTURE²

- The research-to-business funnel in Finnish universities and research institutes is active. There are currently 106 active R2B projects ongoing, of which:
 - 29 will end in 2025
 - 60 in 2026
 - and 17 in 2027

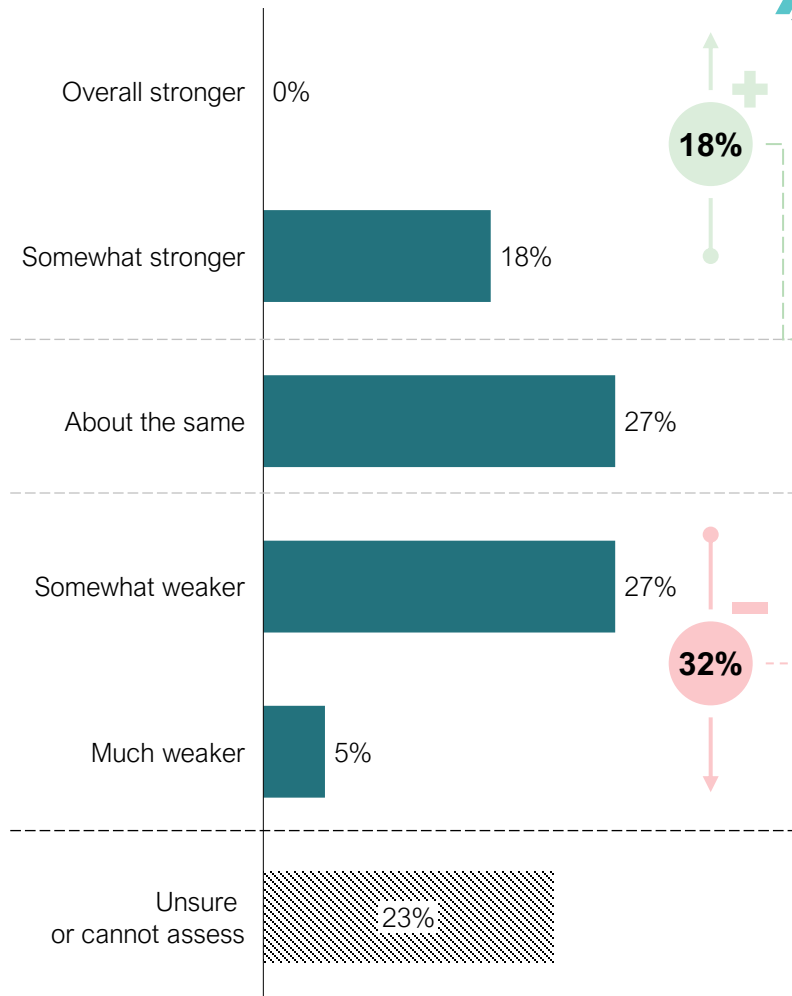
2026

2027

2028

The largest gaps in the Finnish ecosystem are related to funding and small domestic market size

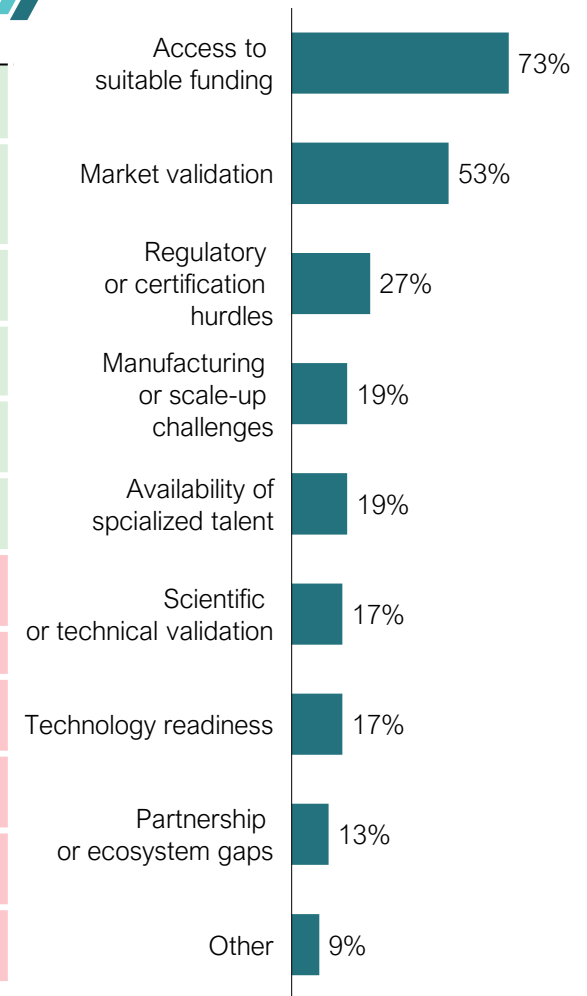
COMPARING THE FINNISH ECOSYSTEM TO EUROPEAN/NORDIC ECOSYSTEMS¹



WHY THE FINNISH ECOSYSTEM IS BETTER OR WORSE THAN BENCHMARKS?¹

Theme	Clarification
World-class education & research base	Strong engineering know-how; smooth academia-industry links
National strategies & clusters (e.g. quantum, semiconductors, space)	Clear tech priorities, growing clusters
Collaboration culture & centralized networks	Tight, helpful community; easy to meet the right people
"Global from day one" mindset	Small home market forces early internationalization
Safe, predictable operating environment	Stable place to build
Public instruments can help (when available)	Business Finland & co. can catalyze early steps
Limited capital — esp. growth-stage (reliance on foreign leads)	"Lots of seed money, little scale/growth capital; US/EU peers raise more/faster"
Small ecosystem & market size	Harder to scale, fewer local customers
Talent attraction/retention frictions (immigration policy shifts)	Hard to keep/bring non-Finnish talent; policy uncertainty
Public program cuts/suspensions	Especially cuts directed towards Business Finland are seen as risky and harmful towards
Slow/uncertain regulation & bureaucracy (esp. medtech/MDR)	Permits and EU MDR timelines slow commercialization
Limited practical lab space for very early teams	Shared infra exists but can feel capacity/cost-constrained for pre-seed hardware

MOST SIGNIFICANT OBSTACLES FOR COMPANY'S GROWTH²





Tesi | 30 years