



startup estonia



# Baltic Deep Tech Report 2024

May 2024



**Kasparas  
Jurgelionis**

Managing Partner @ **Iron  
Wolf Capital**

**“The Baltic region continues to beat the global trends, with the number of unicorns built in the Baltics or by the Baltic founders rising to 20, underscoring the exceptional talent and entrepreneurial spirit of its people.**

This year’s report highlights the thriving ecosystem of Deep Tech, AI, and Climate Tech startups. Investments are growing and the value created is growing even faster. Amazing companies are being built. This year, we also decided to sharpen the focus and took time curating and analyzing a list of over 100 AI-first companies in the region that are building products at the forefront of technological advancements.

I am proud to say that Iron Wolf Capital is committed to uniting Baltic talent in AI and Deep Tech, and to tripling down on our efforts to make the Baltics an indispensable hub for strategic technologies. This report, along with the newly introduced Top 250 Deep Tech Startups list and the Deep Tech Breakfast community events series are just a few examples of our dedication to fostering a collaborative and resilient ecosystem.

We’re excited to continue the work on this much-needed report, and planning for the next edition, looking to introduce and examine additional topics relevant to the ecosystem such as dual-use technology.”



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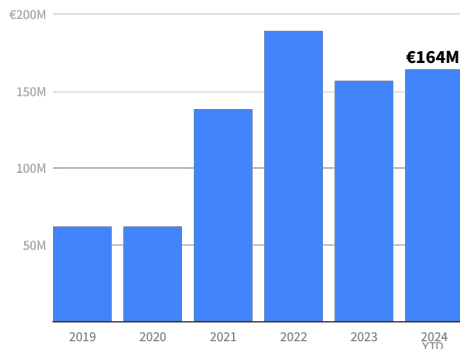
dealroom.co

# Key takeaways

## The Baltic countries raised over €150M in investment for Deep Tech three years in a row.

Baltic startups raised €164M in 2024 YTD, which is the best result for any full year aside from 2022, and have seven more months to set a new record.

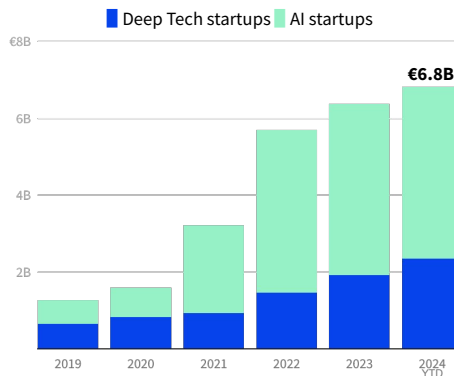
Deep Tech VC investment



## Deep Tech and AI startups continue to grow and have a combined enterprise value of €6.8B.

Combined enterprise value of Deep Tech & AI startups accounts for 20% of the total value of the Baltic ecosystem. This number has doubled over the last five years.

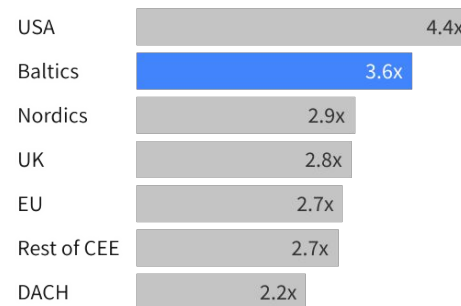
Combined EV of Deep Tech & AI startups



## The Baltics Deep Tech sector is one of the fastest growing in Europe.

The combined enterprise value of Deep Tech startups in the Baltics has more than tripled since 2019, outpacing that of many leading regions globally.

Combined EV of Deep Tech startups  
5 year growth (2019-2024 YTD)



- 1 Baltic funding update

- 2 Deep Tech in the Baltics

- 3 The Baltic startup ecosystem

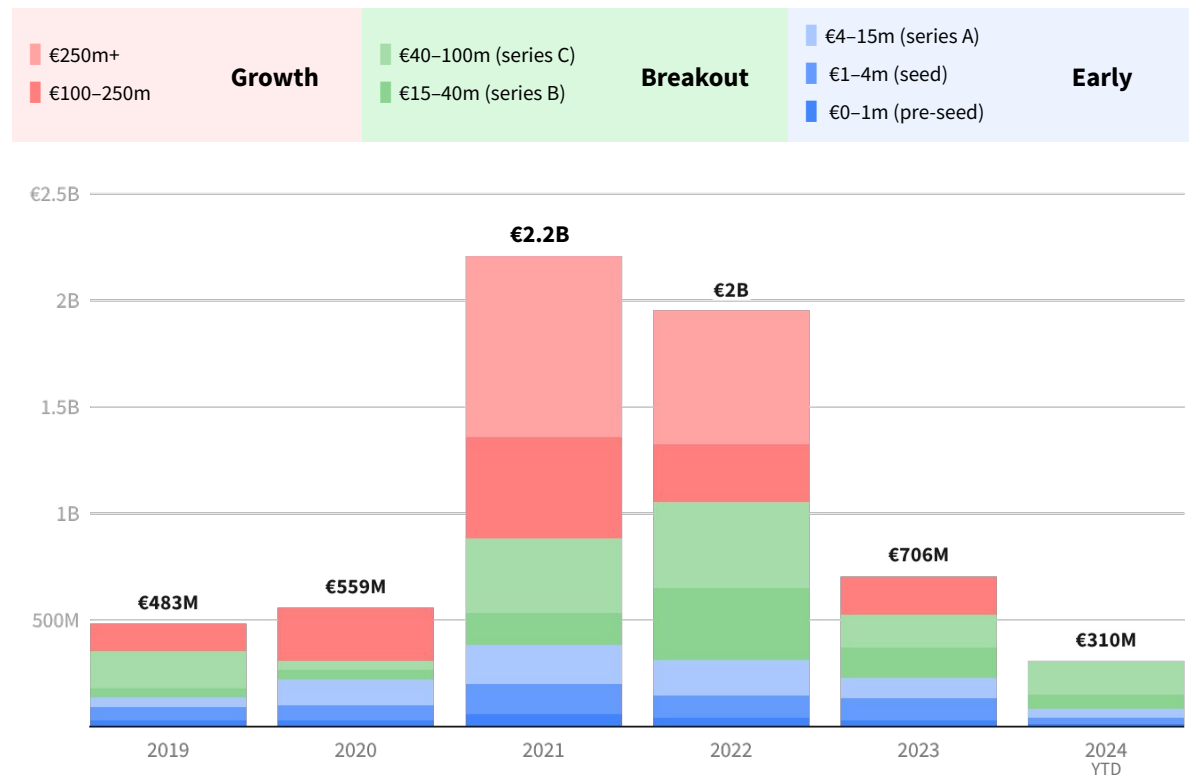


## Baltic startups raised €706M in 2023 and €310M so far in 2024.

Since 2023, there have been over 300 funding rounds across the Baltics.

Source:  
Dealroom.co. Round information for Baltics region accurate as of May 2024. Note: due to reporting lag, the last 12 months are systematically under reporting on rounds especially small rounds.

VC investment, Baltic startups » [view online](#)



# The Baltic States are home to a strong pipeline of promising Deep Tech, AI & Climate tech startups.

## Selected top rounds in the Baltics

» [View more](#)

Startup	Round	Location & date
 argyle	€14M Series C	Vilnius, Mar 2024
 transferGo	€9M Late VC	Vilnius, Apr 2024
 NORD SECURITY	€91M Growth Equity VC	Vilnius, Sep 2023
 RANGEFORCE	€18M Series B	Tallinn, Mar 2023
 lokalise	€56M Late VC	Riga, Feb 2023






## Selected top Deep tech rounds

» [View more](#)

Startup	Round	Location & date
 SKELETON TECHNOLOGIES	€54M Series E	Tallinn, Oct 2023
 stargate hydrogen	€42M Seed	Tallinn, May 2024
 sentante	€6M Seed	Kaunas, Dec 2023
 NACO	€1.2M Seed	Riga, Dec 2023
 UP CATALYST	€4M Seed	Tallinn, Dec 2023






## Selected top AI rounds

» [View more](#)

Startup	Round	Location & date
 cast	€32M Series B	Vilnius, Nov 2023
 Haut.AI	€2M Seed	Tallinn, Nov 2023
 Supersimple	€2M Seed	Tallinn, Apr 2024
 Genus Artificial Intelligence	€5.5M Seed	Vilnius, Sep 2023
 Fyma	€2M Seed	Tallinn, Oct 2023

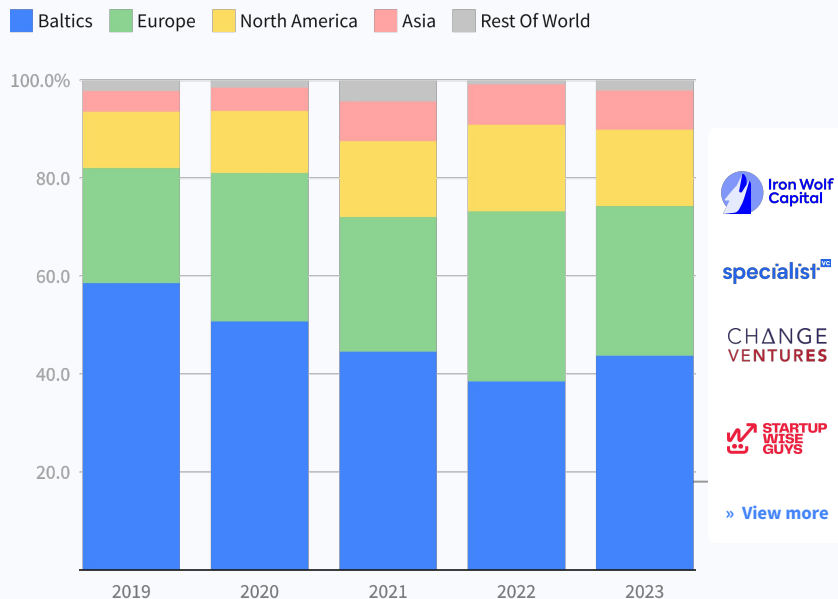
## Selected Climate tech rounds

» [View more](#)

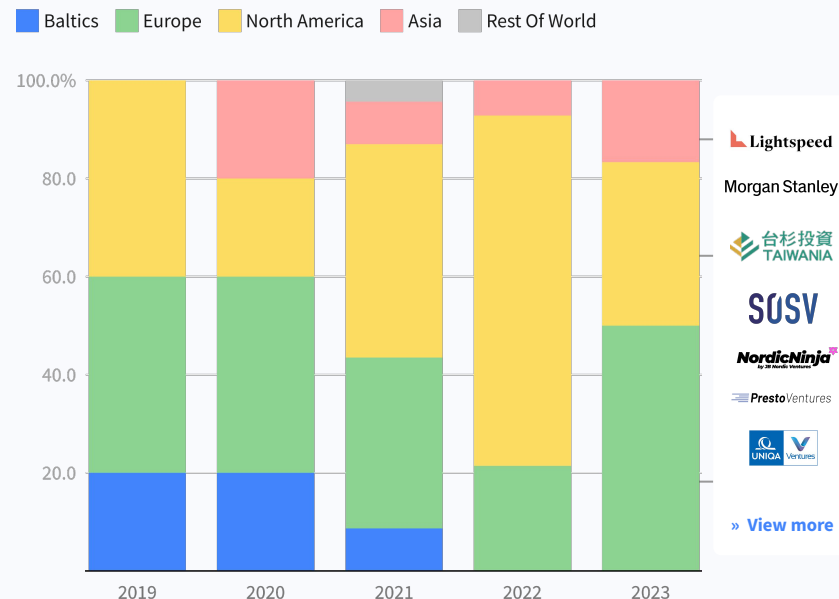
Startup	Round	Location & date
 PVcase	€91M Series B	Kaunas, Jul 2023
 RAIKU	€3.1M Early VC	Tallinn, Nov 2023
 Roofit.solar	€6.5M Late VC	Tallinn, Mar 2023
 eAgronom	€5M Early VC	Tallinn, Jun 2023
 VOK	€3.8M Seed	Tallinn, Jun 2023

# Early-stage investment in the Baltics is led by local investors, while startups almost exclusively secure later-stage rounds from overseas investors.

Early-stage VC funding by investor location (€0-€40M) » [view online](#)



Late-stage VC funding by investor location (€40M+) » [view online](#)



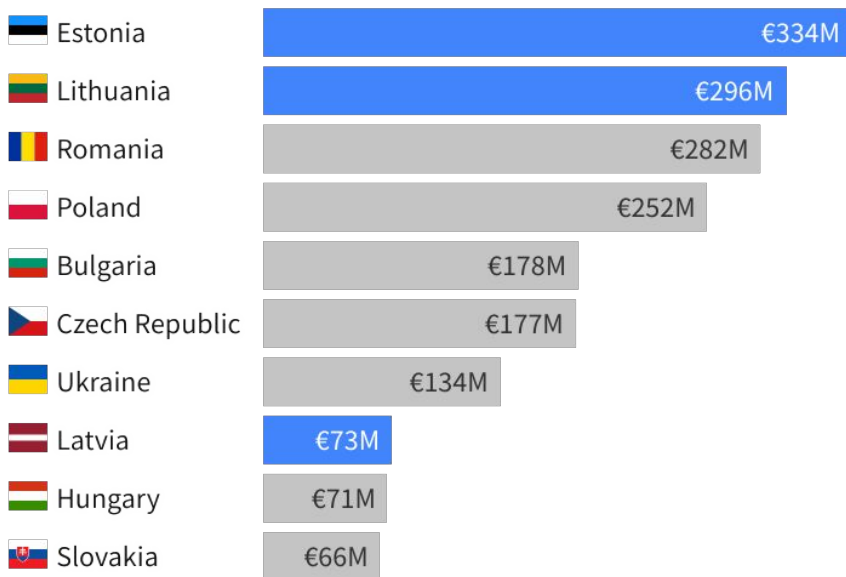
Pre-seed / Seed / Early

Breakout

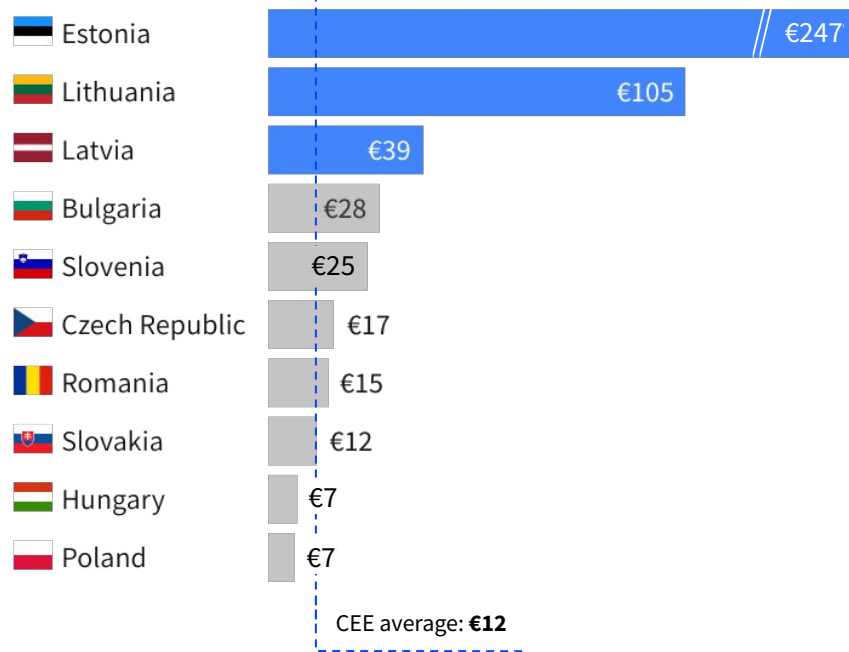
Late

# Baltic countries are among the leading startup nations in Central and Eastern Europe. On a per capita basis they punch way above their weight.

VC investment, 2023



VC per capita, 2023



# Enterprise Software, Energy and Security startups raised the most VC funding in 2023.

Out of €147M raised in the Security industry in 2023, €91M was raised by Nord Security.

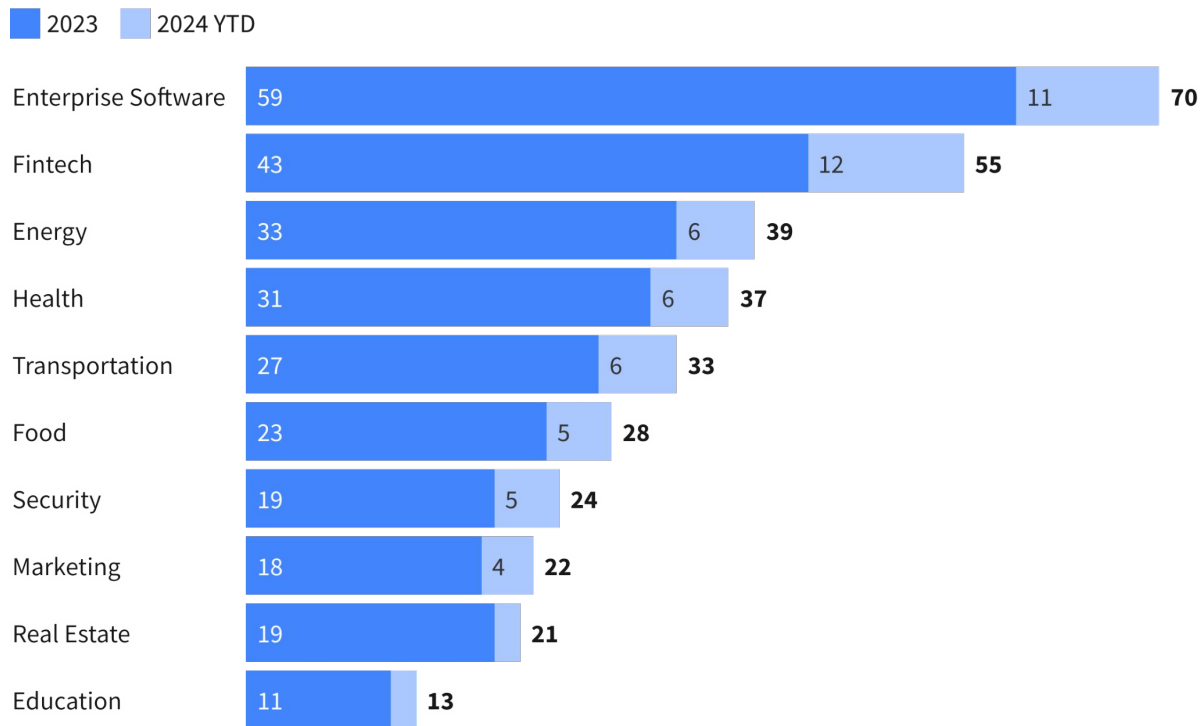
So far in 2024, Robotics and Transportation are the top-funded industries, thanks to Starship Technologies' round in January 2024.

VC Investment into Baltic startups across industries » [view online](#)

	2019	2020	2021	2022	2023	YTD 2024
Enterprise Software	€85M	€69M	€277M	€442M	€355M	€21M
Energy	€11M	€48M	€73M	€140M	€226M	€32M
Security	€6M	€42M	€76M	€203M	€147M	€13M
Transportation	€148M	€303M	€704M	€743M	€117M	€90M
Fintech	€72M	€115M	€386M	€516M	€46M	€58M
Gaming	€24M	€12M	€31M	€113M	€26M	€725K
Health	€5M	€8M	€14M	€25M	€20M	€2M
Education	€3M	€22M	€14M	€5M	€20M	€1M
Real Estate	€3M	€9M	€32M	€22M	€19M	€2M
Marketing	€30M	€11M	€468M	€62M	€19M	€3M
Food	€65M	€256M	€635M	€652M	€16M	€1M
Robotics	€45M	€4M	€19M	€91M	€13M	€79M

**Enterprise Software startups raised the highest number of rounds since 2023, followed by Fintech and Energy startups.**

Number of rounds into Baltic startups by industry (2023-2024 YTD) » [view more](#)



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- 2 Deep Tech in the Baltics
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# Deep Tech, a definition.

## Deep Tech is fundamentally new science and engineering.

Deep Tech companies apply a novel scientific or engineering breakthrough for the first time in the form of a product. This means there is technical risk in getting the idea to actually work.

Deep Tech starts with an extended R&D phase and involves a higher share of technical staff compared to conventional ventures.

Deep Tech also often involves the development of hardware and/or IP which are more capital and time intensive.

Once technical risk is overcome, there is additional risk in proving market demand for that product. If market demand is proven, Deep Tech startups have stronger defensibility from competition thanks to technology barriers, instead of having to rely on network effects and market lock-up.

[» Download the \*European Deep Tech Report 2023\*](#)

# AI, a definition.

## AI is the simulation of human cognition by machines and computer systems.

Last year's report focused on all AI-powered companies, using AI marginally as part of their offering. We're now exclusively examining "AI-first" companies, those where AI is central to their offerings. This allows for a deeper analysis, but it does limit the overall number of companies included.

We define a company as "AI-first" if it:

- 1) develops computing infrastructure focused on AI, such as AI chips and processors or specialized cloud providers for AI
- 2) develops AI models for other companies, such as generative AI foundational models
- 3) develops machine learning operations tools to: prepare, annotate or generate data for AI; to train and optimize/fine-tune AI models; to deploy and monitor AI performances.
- 4) offer products and services which have artificial intelligence as their core feature.

[» Download the \*State of AI Investing Report\*](#)

# Scope of the Baltic Deep Tech & AI ecosystem.

AI

Part of the R&D intensive ecosystem,  
Often integrated in Deep Tech value  
chain and/or previously Deep Tech.

Cutting-edge R&D, building on next-gen  
science and technology

Deep Tech

Cybersecurity



Robotics & Hardware



Space Tech



Energy



Transportation



Other

Fintech, Education, Foodtech



## Scope of this report.

This report focuses on 100+ AI-first startups and 260+ Deep Tech startups, across a variety of different verticals.

Deep Tech companies are present in almost every sector, but they are more common in certain specific fields such as Space tech and Robotics.

» view 100+ Baltic AI startups

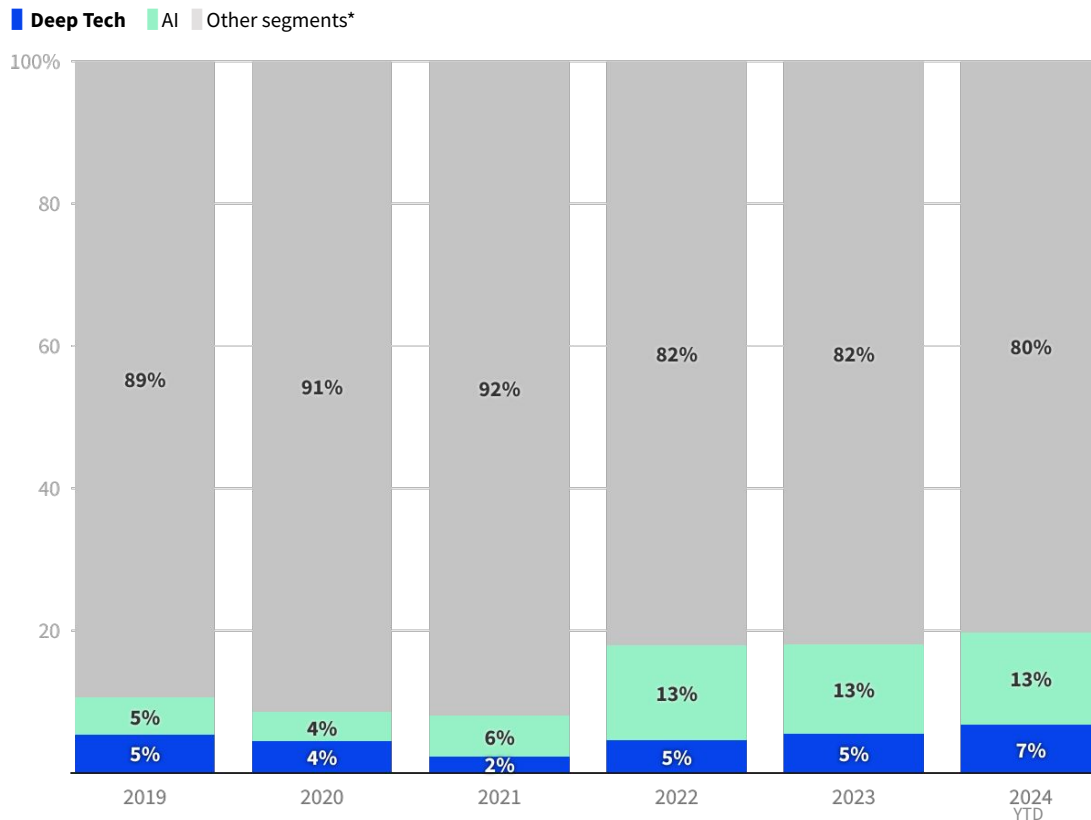
» view 260+ Baltic Deep Tech startups

**Deep Tech & AI startups now account for 20% of the Baltic startup ecosystem by value.**

**This share has doubled in the last five years.**

Source:  
Dealroom.co. Data as of May 2024.  
\* includes startups founded in the Baltics which have relocated their main center of business (HQ) abroad as they scale.

Combined enterprise value of Baltic ecosystem



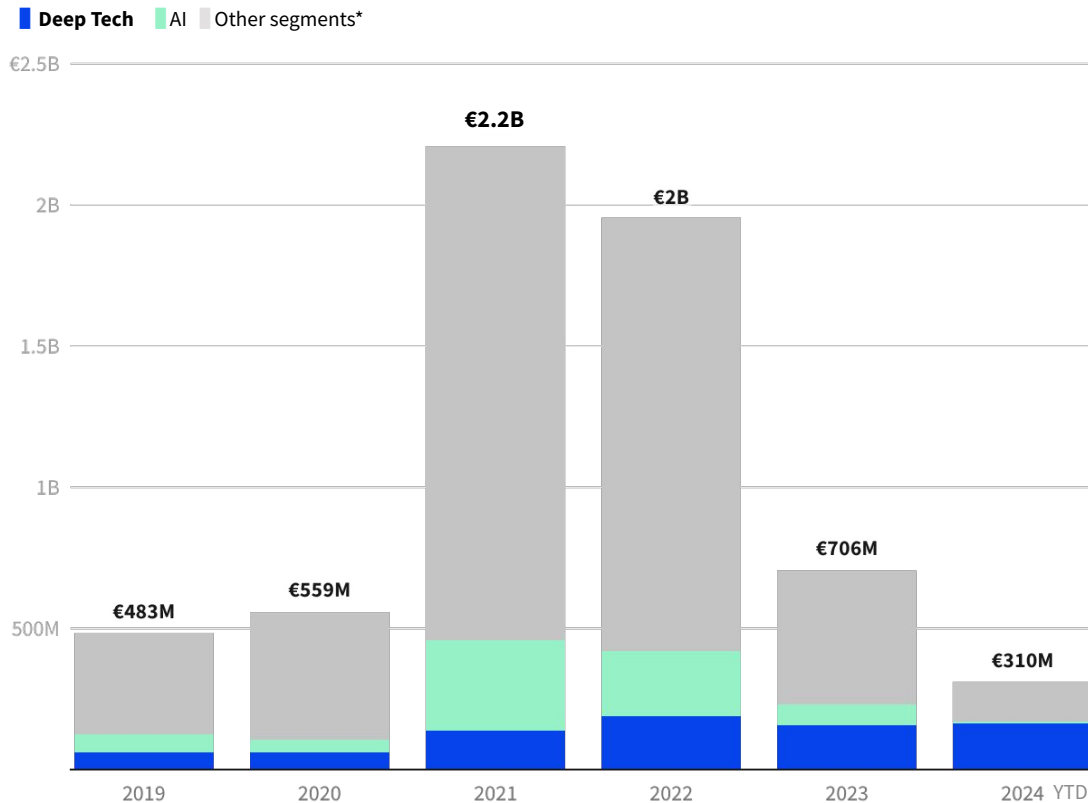
**The Baltic Deep Tech startup ecosystem has grown more than 3x, faster than the rest of Europe.**

Combined enterprise value of Deep Tech startups across selected regions  
5-year growth (2019-2024 YTD)

	2019	2024 YTD	Growth ▼
USA	€1.1T	€4.7T	4.4x
<b>Baltics</b>	<b>€646M</b>	<b>€2B</b>	<b>3.6x</b>
Nordics	€22B	€63B	2.9x
UK	€72B	€203B	2.8x
EU	€118B	€322B	2.7x
Rest of CEE	€12B	€32B	2.7x
DACH	€82B	€184B	2.2x

**So far in 2024, more than half of all Baltics funding has gone to Deep Tech startups.**

## VC funding into Baltic startups by segment

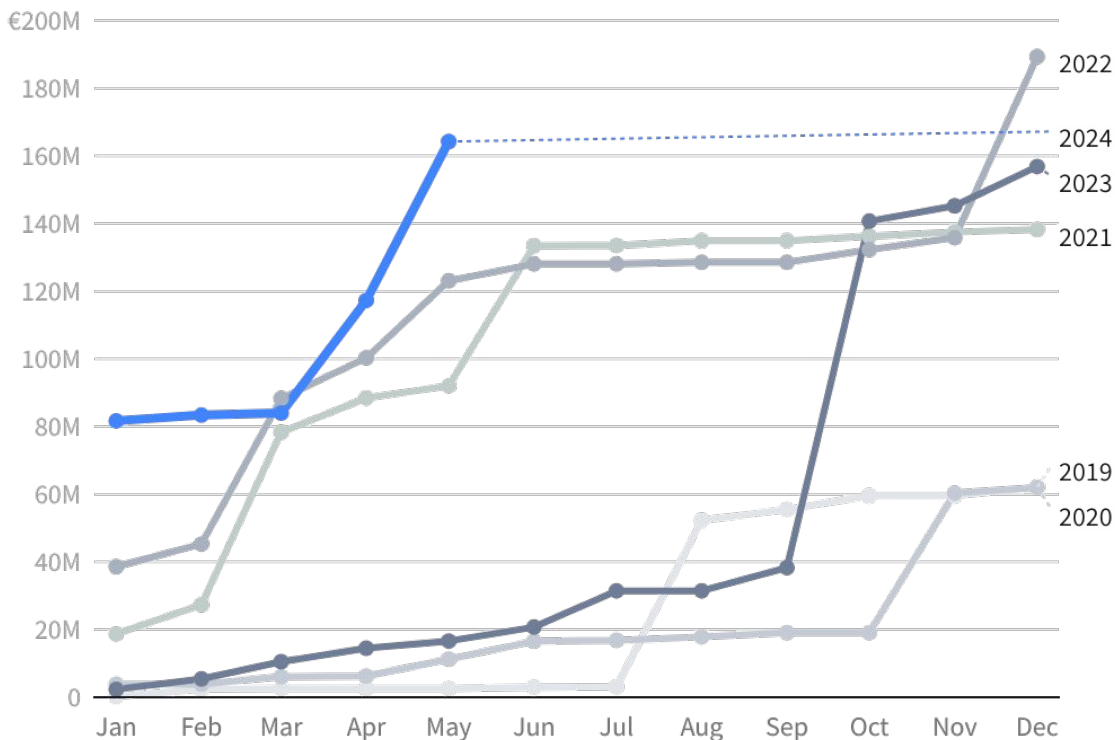


Source:  
Dealroom.co. Data as of May 2024. Due to reporting lag, the last 12 months are systematically under reporting on rounds especially small rounds.

## 2024 is tracking above all previous years in terms of Deep Tech investment in the Baltics.


With less than full five months, 2024 has already surpassed the total investments made in the years 2019, 2020, 2021, and 2023.

Baltic countries Deep Tech VC investment by month (2019-2024 YTD)











# Baltic Deep Tech startups raised €157M in 2023, and reached €164M in just the first five months of 2024.

Selected Baltic Deep Tech rounds in 2023-2024 YTD » [view online](#)

Startup	Funding round	Date	Deep Tech Focus
 skeleton <sup>+</sup>	€54M <b>Series E</b>	Oct 2023	Energy
	€77M <b>Late VC</b>	Jan 2024	Robotics
 elcogen Affordable green hydrogen	€31M <b>Late VC</b>	Apr 2024	Energy
 sentante	€6M <b>Seed</b>	Dec 2023	Robotics
 stargate hydrogen	€42M <b>Seed</b>	May 2024	Energy

Explore Deep Tech funding rounds » [view online](#)

NAME	INVESTORS	MARKET	LOCATION
 <b>10Lines</b> Developing autonomous parking I...	Butterfly Ventures Tera Ventures Kairida Mike Oliinyk	robotics transportation	Tallinn, Estonia
 <b>Elcogen</b> A manufacturer of efficient and hig...	Baker Hughes	energy oil & gas energy efficiency	Tallinn, Estonia
 <b>Syntropy</b> Transforming the public internet i...	HY Capital Wave Capital TRG Capital Moonrock Capital CMCC Global	telecom hosting	Vilnius, Lithuania
 <b>GSCAN</b> Developing next generation muon ...	Markus Villig	engineering and manufacturing equipment	Tallinn, Estonia
 <b>Hepta Airborne</b> Offers high-quality consulting serv...	Axon Partners Group	energy energy efficiency	Tallinn, Estonia
 <b>Kingdom Technologies</b> Builds novel robotic lawn mowers ...	Scottish Enterprise Growth Investments Iron Wolf Capital Specialist VC	robotics	Glasgow, United Kingdom
 <b>Starship Technologies</b> A company building a network of r...	-	robotics transportation logistics & delivery autonomous & sensor tech	San Francisco, United States
 <b>Aerones</b> Robotic systems for a smarter win...	European Investment Fund (EIF)	energy robotics clean energy	Riga, Latvia





**Andrius  
Ivanauskas**

Partner @ WALLESS

## “Deep Tech lies at the roots of venture capital.”

The first VC investments, as we know them today, were made in semiconductor innovations. Deep Tech is a tough business because it's not only about building great companies by great teams but first finding out if the idea imagined in math, theoretical physics, or chemistry could work in the first place. It also requires fundamental infrastructure – education, universities, and public funding.

I am particularly happy that this report covers not only investments made and funds raised but also these infrastructure topics. E.g. when one investigates the achievements and focus of Lithuanian science, it is not surprising that biotech giants are found in Lithuania, medtech startups are emerging, our laser technologies are utilized in most advanced labs, or that the Faculty of Mathematics and Information of Vilnius University could give birth to (or at least discover and befriend) teams that build cybersecurity products known globally.

Most European and transatlantic VCs already recognize the strengths of these hubs in the Baltics. Large tickets are being written. Significant investments are being made, signaling a strategic momentum and early opportunities that should not be wasted, both for governments and businesses.”









# Discover 250+ Baltic Deep Tech startups using predictive signals.

**Dealroom has launched a powerful predictive algorithm to discover the most promising companies, Dealroom Signal.**
























The input for each Signal's algorithm includes company growth (team size, product growth), founders strength (previous performance, experience, education), completion score (completeness of the profile), contextual data (does the company fit into segments of interest), timing (is the startup likely to raise their next round soon) and team composition.

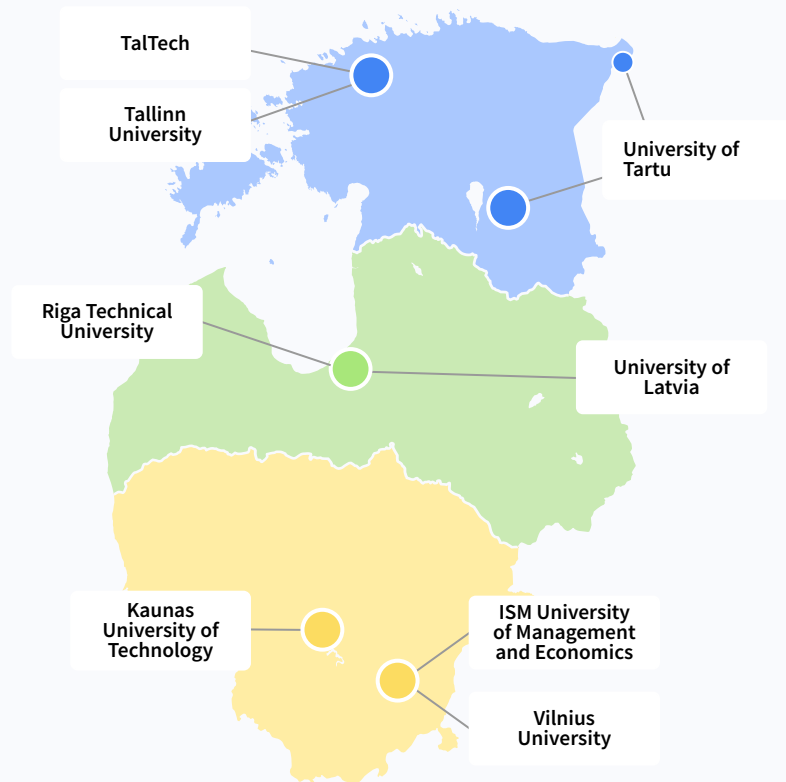
» Top 250+ Deep Tech startups to watch

**dealroom** SIGNAL

NAME	INVESTORS	MARKET	LOCATION
 <b>Aerones</b> Robotic systems for a smarter win...	Mantas Mikuckas Change Ventures Haniel Lightrock Blume Equity	energy robotics clean energy	Riga
 <b>BTK</b> New approach to vehicle control. ...	-	B2B transportation autonomous & sensor tech	Tallinn
 <b>LightCode Photonics</b> Innovates LIDARS into cameras to ...	Intel Ignite	transportation semiconductors autonomous & sensor tech	Tamper
 <b>Litilit</b> Advancing industries through well...	Taiwania Capital Iron Wolf Capital	health semiconductors medical devices	Vilnius
 <b>Efenco</b> Cold-Plasma-Assisted Carbon Neu...	EIC Fund (European Innovation Council Fund)	energy waste solution energy efficiency	Tallinn
 <b>Uplift.io</b> Incubates, launch and accelerate t...	Uniswap Labs Ventures	fintech crypto and defi	Tallinn
 <b>TERRAWASTE</b> A pollution free planet with a pollu...	Techstars	energy chemicals	Rotterdam
 <b>AISPECO</b> Manufacturing advanced geo-spat...	Superhero Capital Capitalia 70 Ventures	robotics	Vilnius

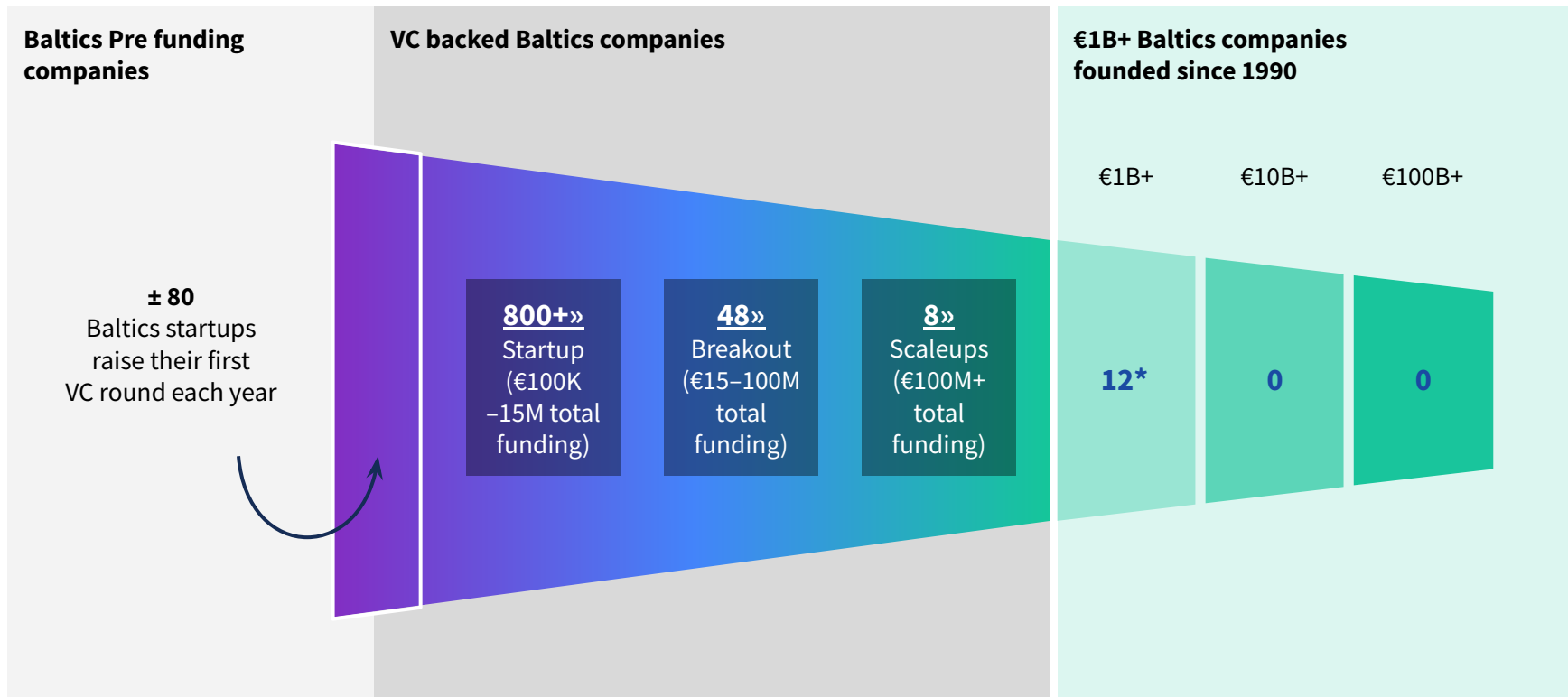
# The Baltic Deep Tech & AI ecosystem builds on a dense network of academic and scientific expertise across the region.

 Vilnius University <i>Notable spinout</i>   Startups founded by Alumni <a href="#">» view startups</a>	 <i>Notable spinout</i>   <a href="#">» view all spinouts</a> Startups founded by Alumni <a href="#">» view startups</a>	 UNIVERSITY OF TARTU <i>Notable spinout</i>   <a href="#">» view all spinouts</a> Startups founded by Alumni <a href="#">» view startups</a>	 UNIVERSITY OF LATVIA <i>Notable spinout</i>   Startups founded by Alumni <a href="#">» view startups</a>
 kaunas university of technology <i>Notable startups founded by Alumni</i>   Startups founded by Alumni <a href="#">» view startups</a>	 UNIVERSITY OF MANAGEMENT AND ECONOMICS <i>Notable startups founded by Alumni</i>   Startups founded by Alumni <a href="#">» view startups</a>	 TALLINN UNIVERSITY <i>Notable startups founded by Alumni</i>  Startups founded by Alumni <a href="#">» view startups</a>	 1862 <i>Notable spinout</i>   Startups founded by Alumni <a href="#">» view startups</a>



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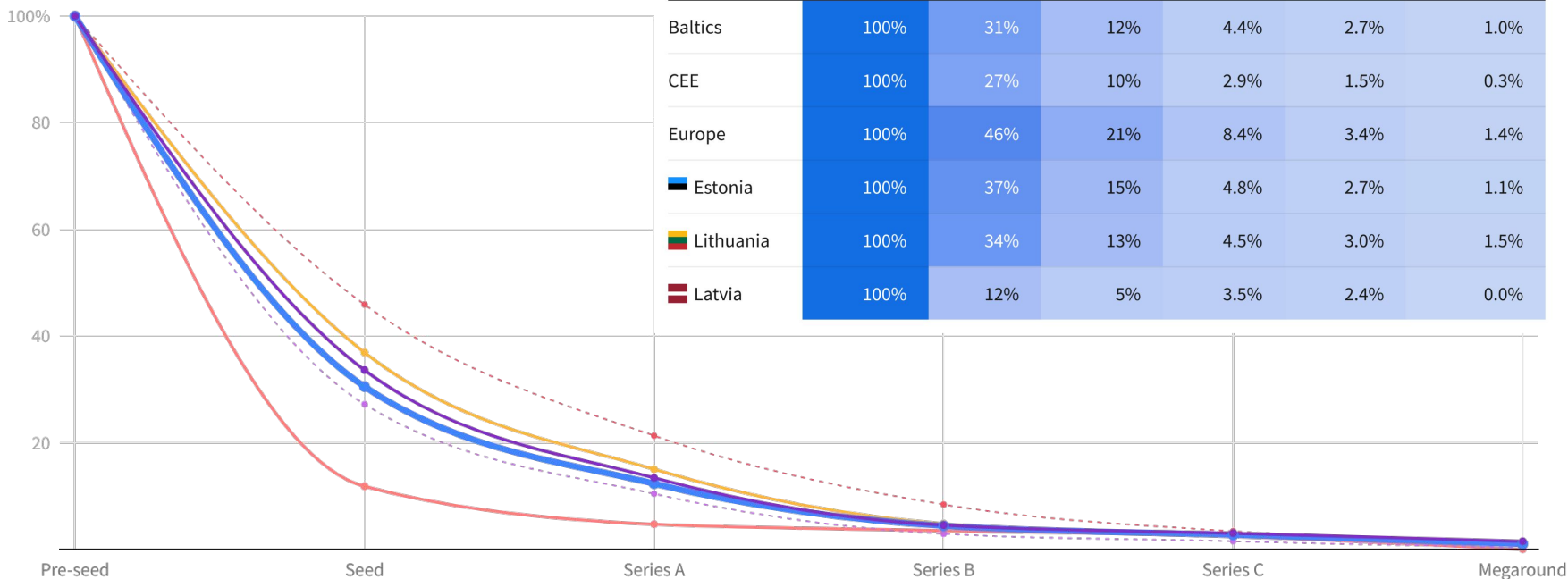
# The Baltic countries are showing a promising funnel of startups, breakouts and scaleups.



# Graduation rate of Baltics startups: above CEE average, close to Europe average at Series C+.

Graduation rate of startups founded between 2015 – 2020

— Baltics — CEE — Europe — Estonia — Lithuania — Latvia



# Baltics unicorn club.

■ HQ in the Baltics ■ Founded AND/OR with a significant presence\* ■ Affiliated\*\*

**Estonia**

veriff  
Bolt

glia 7wise  
playtech  
pipedrive

ZEGO ID.me  
Skype Gelato

**Latvia**

**Lithuania**

BCG BALTIC CLASSIFIEDS GROUP Vinted  
NORD SECURITY  
Flo  
WARGAMING.NET  
MAMBU Unity  
Revolut  
KAYAK



# Baltics breakout startups & rising stars.

Future Unicorns Rising Stars

**Tallinn**

READY PLAYER ME skeleton\*  
STARSHIP

3Commas Werk

GSCAN Rendin.

**Kaunas  
& regional Lithuania**

ELINTA CHARGE Frontu

ENERGIA FUTURA

**Tartu**

EYEVI TECHNOLOGIES Fractory

turnit eAgronom

**Riga  
& regional Latvia**

lokalise

Printify

Elogium AERONES

SquadRobotics

**Vilnius**

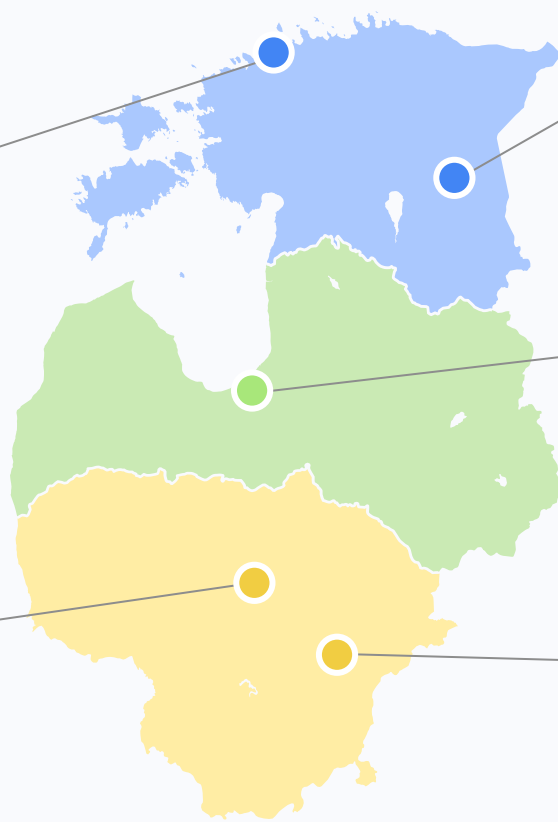
PVcase

citybee

Atrandi BIOSCIENCES libilit

CUJOAI PIXEVIA

Turing College billo



FOCUS ON



920+

Funded Startups

€16.2B

Enterprise value in 2024 YTD

2.5x

Enterprise value since 2019

» Explore the [Estonian Startup ecosystem](#)

Initiated by [startup estonia](#)

Selected startups from Estonia » [view more](#)

skeleton+

STARSHIP

stargate  
hydrogen

GSCAN

eAgronom

turnit

Rendin.

READY  
PLAYER  
ME

katana

montonio

driveX

COMODULE

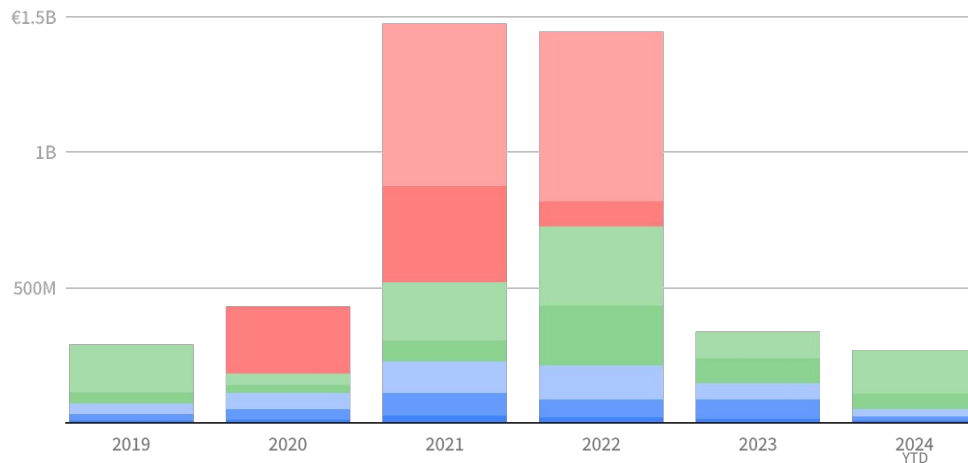
Spinouts

» [view more](#)



VC investment by stage

■ Early stage (€0-15M) ■ Breakout stage (€15M-€100M) ■ Megarounds (€100M+)





**Vaido Mikheim**

Deep Tech Sector Project  
Lead @ Startup Estonia

***“Deep Tech can play an important role in solving complex economic and societal problems, but it’s a long and bumpy road to positive impact.”***

Our promise at Startup Estonia is to support Deep Tech startups in making a notable dent by providing a well-connected ecosystem and accessible resources.

By the numbers, the Estonian DeepTech ecosystem is off to a promising start.

Startup turnover growth in Q1 2024 showed a 38% increase over Q1 2023 whereas economic growth elsewhere is hard to find. Investments into the Deep Tech sector in 2023 and Q1 2024 confirm a similar trend. Over €350M invested in Estonian Deep Tech companies validates investors' focus and priorities.

UniTartu Ventures, an investment and asset management company of the University of Tartu and NATO DIANA Accelerator are worth keeping an eye on.

Oh, and don't worry, our Nordic aspirations haven't disappeared, stay tuned for New\* Nordic Deep\* Tech Valley.

\*New and Deep are silent.”



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FOCUS ON



400+

Funded Startups

€2.8B

Enterprise value in 2024 YTD

5.3x

Enterprise value since 2019

» Explore more on [Dealroom.co](https://dealroom.co)

Selected startups from Latvia » [view more](#)

ORUGA



jeff



Catalyco

TerraWaste



Juro



SquadRobotics

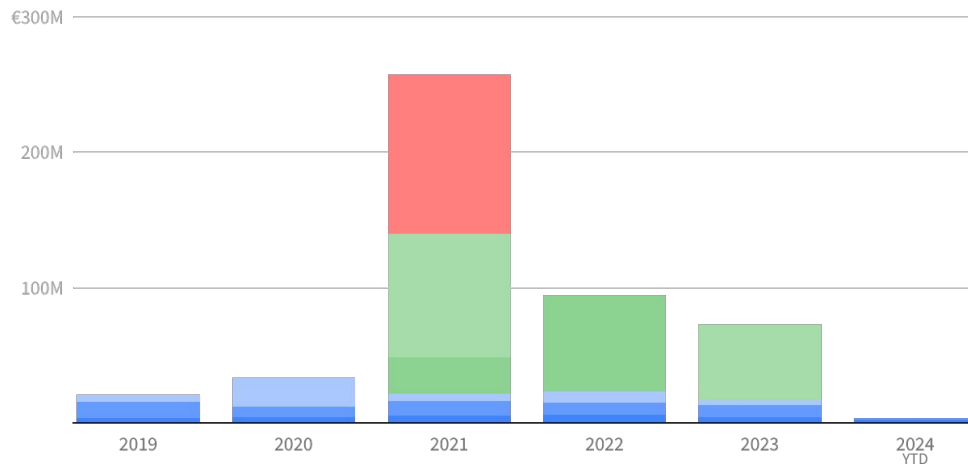
solfeg.io

Spinouts  
» [view more](#)



### VC investment by stage

■ Early stage (€0-15M) ■ Breakout stage (€15M-€100M) ■ Megarounds (€100M+)





**Ilona Gulchak**

Chairperson of the board @  
Commercialization Reactor

**“Latvia is quickly becoming a key player in the Deep Tech sector, thanks to its strong emphasis on scientific innovation and reaching global markets.**

The country is focusing on exciting areas like smart materials, biomedicine, smart energy, ICT hardware, and bioeconomics. For this growth to continue, it's crucial to continue building a supportive ecosystem that should effectively address challenges like funding, attracting talent, and connection to industry.

Events such as Deep Tech Atelier play a vital role in this by bringing together entrepreneurs, scientists, investors, and industry leaders to collaborate and drive the sector forward, as do pan-Baltic collaborative initiatives like the Baltic Deep Tech Report.”



**Anton Adamovitch**

Managing Partner @  
Commercialization Reactor

FOCUS ON



590+

Funded Startups

€13.6B

Enterprise value in 2024 YTD

4.5x

Enterprise value since 2019

» Explore the [Lithuanian Startup ecosystem](#)



Selected startups from Lithuania » [view more](#)

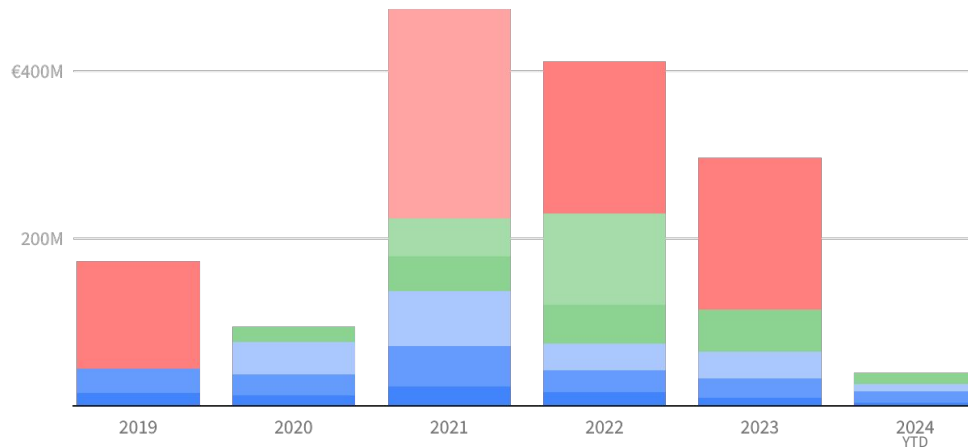


Spinouts  
» [view more](#)



VC investment by stage

■ Early stage (€0-15M) ■ Breakout stage (€15M-€100M) ■ Megarounds (€100M+)



# Methodology & definitions

## What is a startup?

Companies designed to grow fast. Generally, such companies are VC-investable businesses.

When startups are successful, they develop into scaleups (>50 people), grownups (>500 people) and result in big companies. Only companies founded since 1990 are included in this report.

## What is a startup?

## What is a unicorn?

Unicorns are (former) startups that reached US\$ 1B valuation or exit at one point in time.

## What is a Unicorn?

## Underlying Data

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

The data on which this report builds is available via [app.dealroom.co](https://app.dealroom.co). For more info please visit [dealroom.co](https://dealroom.co) or contact [support@dealroom.co](mailto:support@dealroom.co).

## Venture Capital, Investors

Domestic investors refer to Baltics investors. Europe investors includes the entire European continent, the UK and Russia, but excludes Turkey and Portugal.

Investment are referred to by their round labels such as Seed, Series A, B, C, ... late stage, and growth equity. VC investments exclude debt, non-equity funding, lending capital and grants.

## Regional Breakdown

In this report, the nations that are considered as part of the Baltics include: Estonia, Lithuania, and Latvia.

While many startups founded in the Baltics relocate beyond their borders, most maintain business-critical ties to their homelands.

In order to take this reality into account, this report includes both Baltic-based startups, which maintain their main center of business (HQ) in their country of origin, and Baltic-founded startups, which relocated their HQ outside of the Baltics.





**Early-stage Deep Tech & AI VC from the Baltics.**

Iron Wolf Capital is a leading early-stage Deep Tech and AI-focused VC fund based in Vilnius, Tallinn, and London. We invest in teams across the Baltics and the Baltic diaspora with disruptive technologies and global mindsets.

With more than 20 investments over the last 5 years, we are one of the most active investors in the Baltics and beyond.

Iron Wolf Capital manages a €21M VC fund and supports its portfolio companies with a unique blend of operational and investment experience, as well as a network across several continents.



**Global startup & venture capital intelligence platform.**

Dealroom.co is the foremost data provider on startup, early-stage and growth company ecosystems in Europe and around the globe.

Founded in Amsterdam in 2013, we now work with many of the world's most prominent investors, entrepreneurs and government organizations to provide transparency, analysis and insights on venture capital activity.

startup estonia

**A governmental initiative, which connects different sectors with the startup community.**

Every idea begins with neurons firing in the brain. These networks of cells connect, communicate, and generate the spark of creativity. That spark evolves into ideas that gradually attract and influence others, creating a flow that moves and shapes the world of tomorrow.

We work with the startup community to make sure these sparks get noticed and nourished. Startup Estonia is a governmental initiative within the Estonian Business and Innovation Agency and is funded by the European Regional Development Fund.



**A modern Baltic law firm with a wall-less attitude.**

We are committed to providing our clients with the highest level of service, transparency, and professionalism, as well as diversity and inclusion. We come with a mindset of a full-scope legal service with large teams across all business law areas.

This makes us well-versed in local and international regulations and well-suited to assist clients with a variety of matters. Tech startups particularly require a deep understanding of the emerging complexities of large language models and visual AI across biotech and other industries. We ensure that these ventures get all the support they need throughout the lifecycle of their business.



**An award-winning science commercialization platform and an early-stage deep tech fund.**

Since 2009, CR has operated globally from Latvia, fostering 100+ science-intensive startups through a talent transformation program followed by guided matchmaking of scientists and entrepreneurs into a deep tech venture creation.

CR' "Creation-to-Capital Cycle" program has been acknowledged as the best Program in the EU by the EIT Deep Tech Talent Initiative.



startup estonia

