

Deeptech News

REVIEW OF ALL FUNDRAISING ANNOUNCED BY EUROPEAN
DEEPTech STARTUPS DURING THE THIRD QUARTER OF 2024

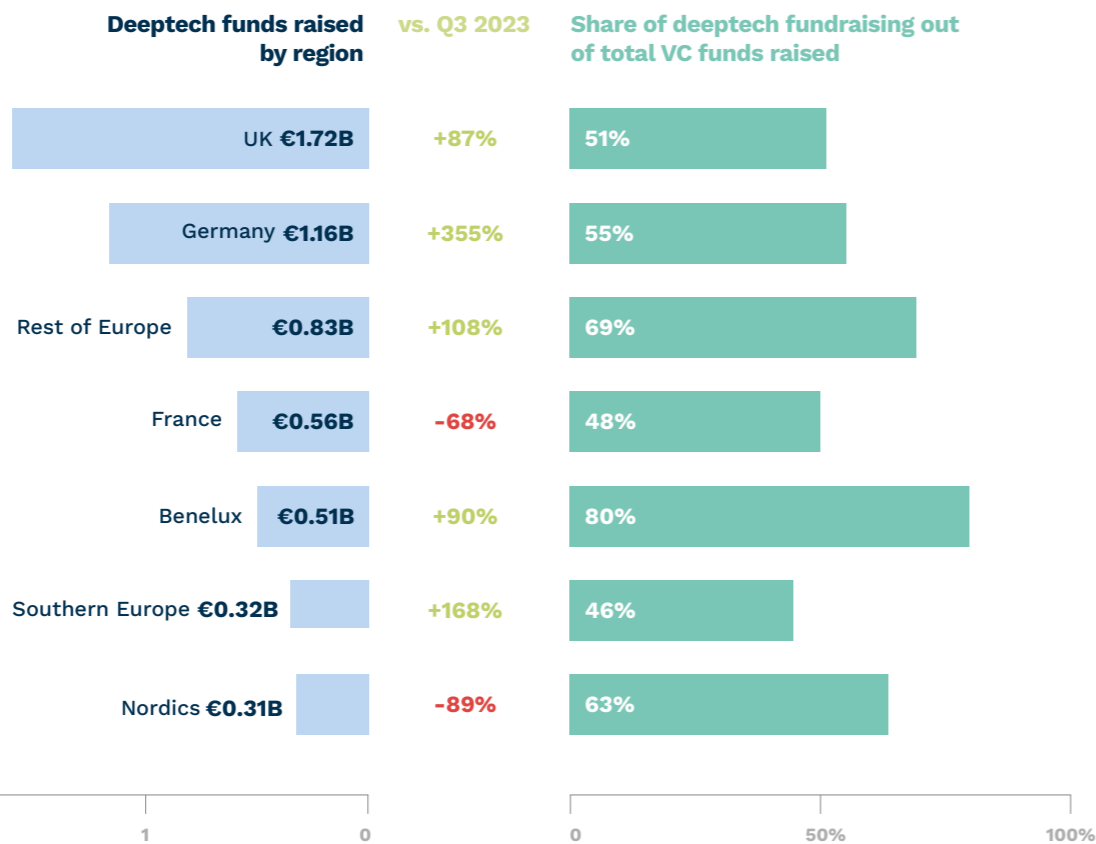
Q3/
2024

Q3/2024 In numbers

REVIEW OF ALL FUNDRAISING ANNOUNCED BY EUROPEAN DEEPTech STARTUPS DURING THE THIRD QUARTER OF 2024

A **deeptech startup** is a startup developing a complex technological asset with strong technological barriers (long R&D cycle, PhDs, research lab spinoffs, patents, complex know-how, etc.)

€5.42B raised accross **289 deeptech deals** over Q3 2024 in Europe



of deals by country in Europe



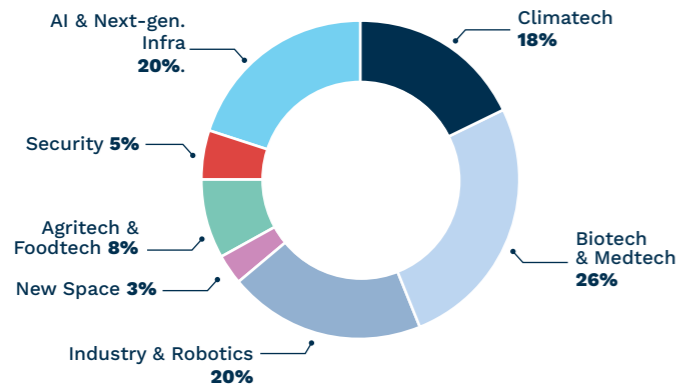
Q3/2024 In numbers

REVIEW OF ALL FUNDRAISING ANNOUNCED BY EUROPEAN DEEPTECH STARTUPS DURING THE THIRD QUARTER OF 2024

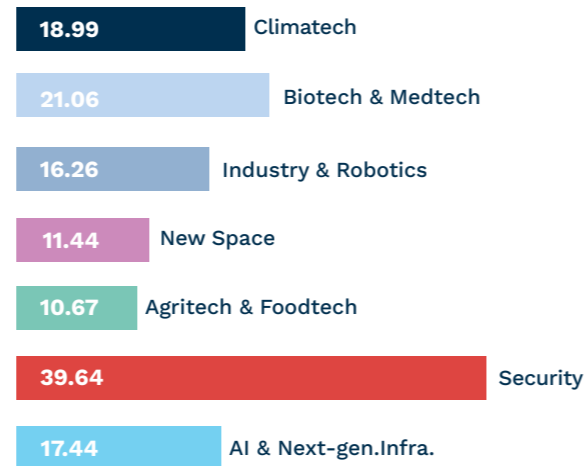
A **deeptech startup** is a startup developing a complex technological asset with strong technological barriers (long R&D cycle, PhDs, research lab spinoff, patents, complex know-how, etc.)

Various industries

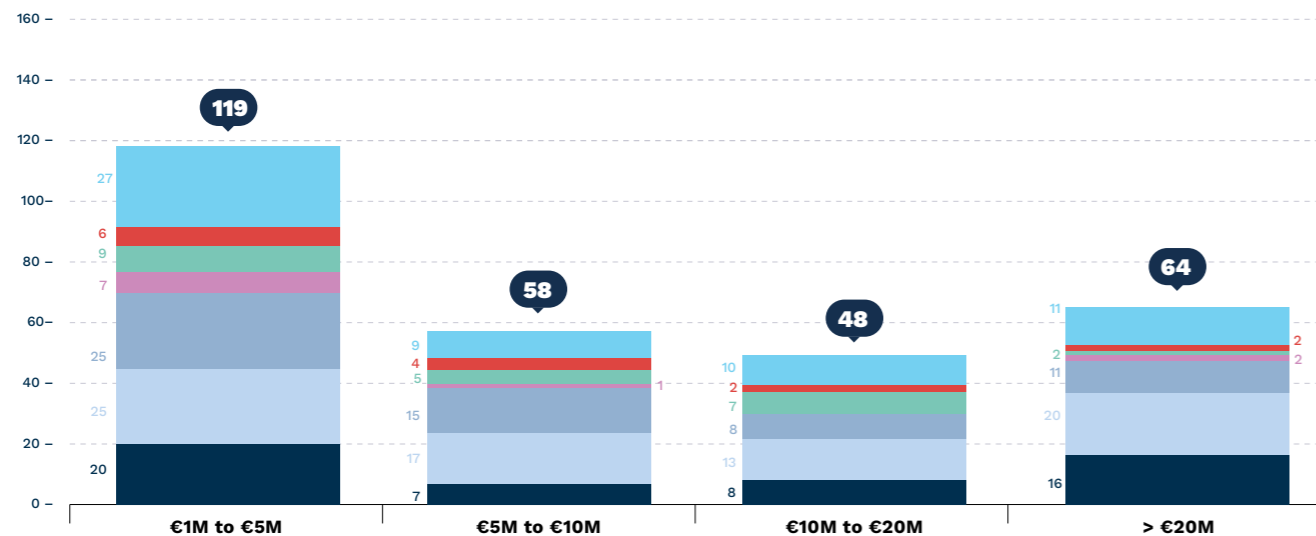
Split by number of deals, in %



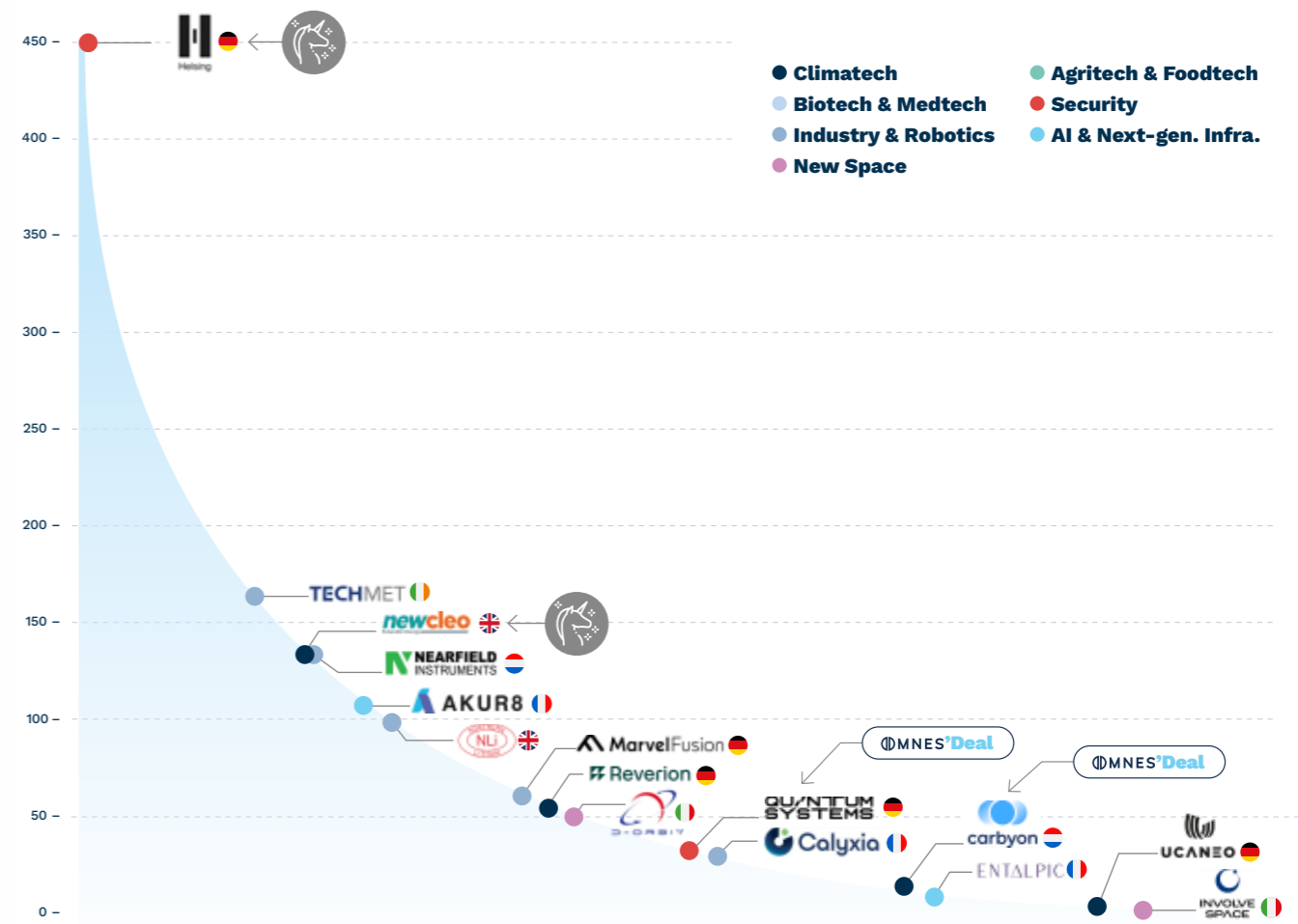
Average funding by industry, in €M



Split by round size



Deal review (in €M)



Selected exits

Unity
Acquired by Merck

Exscientia
Acquired by Recursion Pharma

bigrep
Acquired by Noonee

GRAPHCORE
Acquired by SoftBank

SILO AI
Acquired by AMD

Insights

THIS COLUMN GIVES THE FLOOR TO A SIGNIFICANT LEADER TO SHARE THEIR VIEWS ON THE **DEEPTECH** ECOSYSTEM

“**Quantum technology is an area of great interest for us, particularly due to its potential to revolutionize simulation activities.**”

Yves Caseau, Group Chief Digital and Information Officer at Michelin



How does Michelin integrate AI solutions into its activities, particularly in new materials and process optimisation?

At Michelin, AI is a fundamental component of our innovation strategy, deeply embedded in both R&D and manufacturing. In R&D, AI enhances our ability to conduct numerical simulations and predictive modelling, which notably accelerates the design of new tyre models. This technology allows us to efficiently explore complex multi-parameter spaces, notably with deep learning algorithms to upgrade performances on 3D models. It acts as an oracle to improve the speed and accuracy of scientific calculations. AI is particularly valuable in developing new materials, helping us predict performance and optimise compositions for sustainability, thanks notably to the integration of bio-sourced inputs. In manufacturing, we use digital twins to create virtual replicas of our production systems. These digital models enable us to simulate and optimise processes in real-time, reducing material waste and

energy consumption. This not only enhances efficiency but also supports our sustainability goals. Additionally, AI-driven predictive maintenance and quality control systems help us maintain high standards by predicting equipment failures and ensuring product quality through advanced computer vision techniques. It is worth noting that AI is used at three levels at Michelin: (1) for high-stakes activities, such as recipes, Michelin develops its own AI, hosted on their own servers and used exclusively by their employees, (2) for certain proprietary but less sensitive topics, some parts can be outsourced to partners, including startups (acquisitions, storage, analysis, etc.), (3) for «standard» IT, Michelin uses secure off-the-shelf cloud solutions. Overall, AI empowers us to innovate continuously, improve operational efficiency, and contribute to a more sustainable future.

What is Michelin's perspective on quantum technologies for simulation activities?

Quantum technology is an area of great interest for us, particularly due to its potential to revolutionize

Summary of...

Yves Caseau

Group Chief Digital and Information Officer at Michelin

Former Executive Vice-President in charge of Technology, Services, and Innovation and CIO at Bouygues Telecom

Former Groupe Head of Digital at Axa

Graduated from École Normale Supérieure (ENS) in Paris and Collège des Ingénieurs, holds a PhD in Computer Science from Paris-Sud University

Global thought leader on organization theory, social networks, and computer-mediated communication

Published more than 40 papers on various scientific innovations

simulation activities. While our R&D teams are not yet in urgent need of quantum solutions, we recognize the transformative potential of quantum computing in areas like matrix multiplication and molecular chemistry simulations. These capabilities could significantly enhance our ability to simulate complex chemical processes and material interactions, creating a more sustainable process by reducing computational resources and the CO₂ emissions associated with traditional methods. We are closely monitoring advancements in quantum technology and are prepared to integrate these solutions into our operations as they become more viable and accessible, around 2027-2028.

What are the new cyber threats related to GenAI and connected devices, linked to Michelin's digitalization?

The digital transformation of our manufacturing processes indeed brings new cybersecurity challenges. The integration of GenAI and connected devices introduces potential vulnerabilities that we must address proactively.

One of the primary concerns is the risk of data leakage, especially as we deploy AI systems that handle sensitive information. To mitigate these risks, we focus on implementing robust network segmentation and dynamic firewalls. These measures help us control access and protect our systems from unauthorized intrusions. Additionally, we are vigilant about the security of our AI models, ensuring that they are not only effective but also secure from external threats. Our approach involves a multi-layered security architecture that safeguards data integrity and prevents unauthorized access, thereby maintaining the trust of our stakeholders. To ensure the safe use of generative AI, we adapt our usage based on the need: for core business issues, we use open-source LLMs on our proprietary clouds, while for less critical issues, we can use off-the-shelf tools.

How does Michelin collaborate with deeptech startups?

Collaboration with deeptech startups is a vital component of our innovation strategy.

We actively engage with startups to integrate cutting-edge technologies into our operations, particularly in areas where we seek to enhance our capabilities beyond our core competencies. For example, we work with startups specializing in AI and computer vision to incorporate their solutions into our manufacturing and quality control processes. This partnership approach allows us to remain agile and at the forefront of technological advancements. Our goal is to transform Michelin into a software-driven company, leveraging digital solutions to optimise our R&D, manufacturing, supply chain, and marketing efforts. By doing so, we open Michelin to new opportunities for collaboration with digital actors while ensuring that we protect and enhance our core expertise.

Q3/2024 France focus

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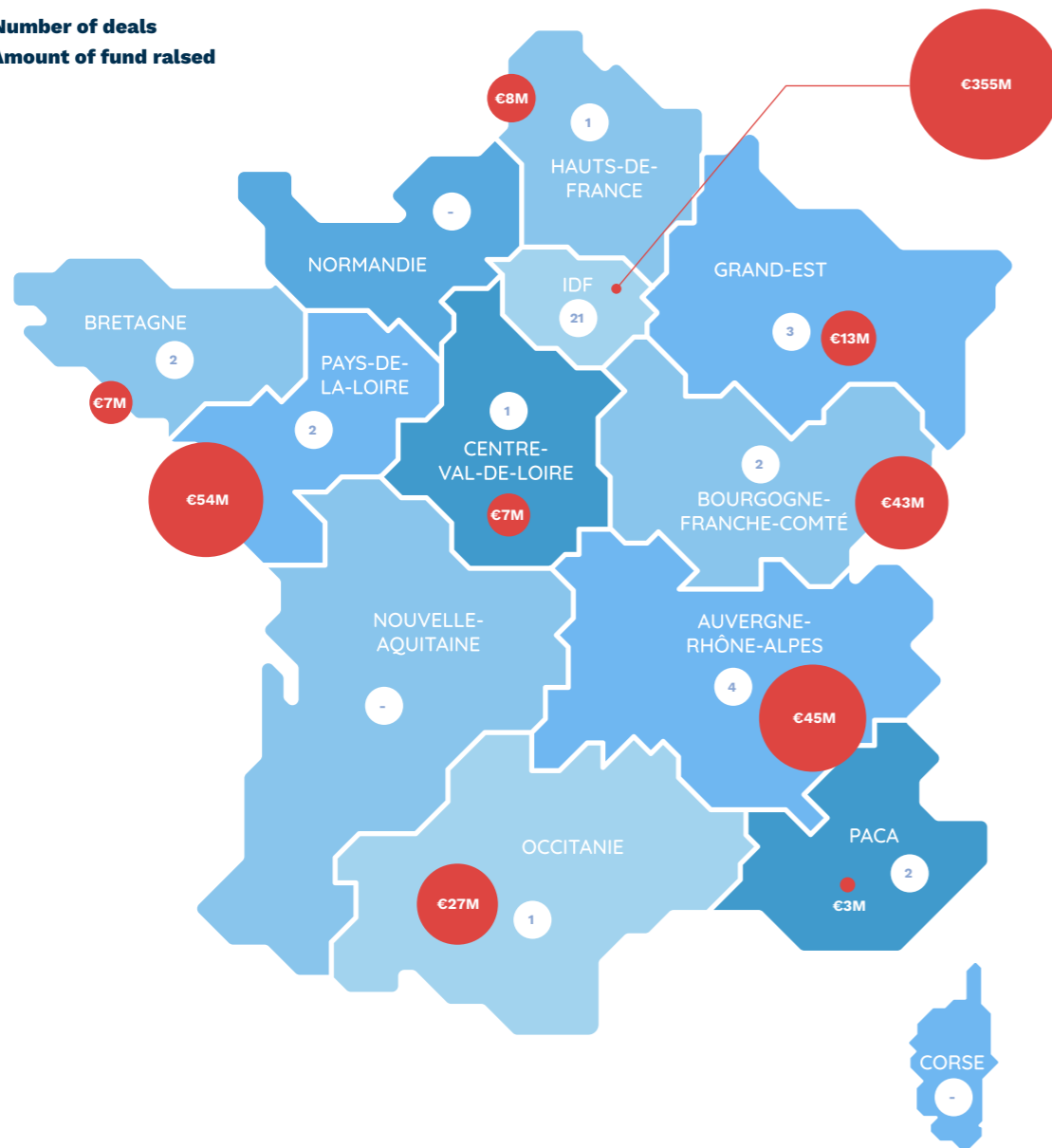
Not to be missed



Clara Chappaz, former head of the French Tech Mission, was appointed Secretary of State for Artificial Intelligence and Digital Affairs on September 21, 2024, as part of the Barnier government. Her role will focus on integrating AI into the traditional digital portfolio, now under the Ministry of Higher Education and Research.

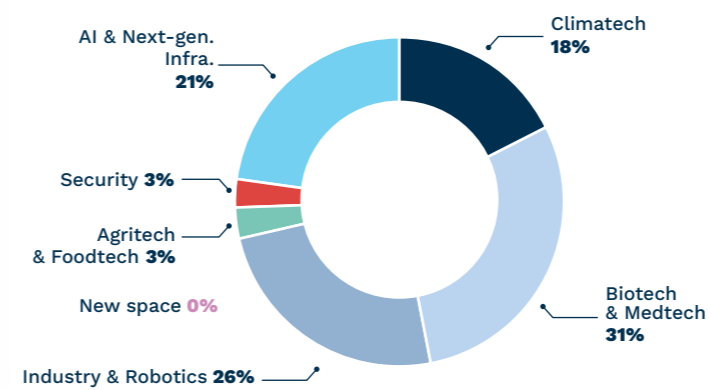
€0.56B raised across **39 deeptech deals** over Q3 2024 in France

○ Number of deals
● Amount of fund raised

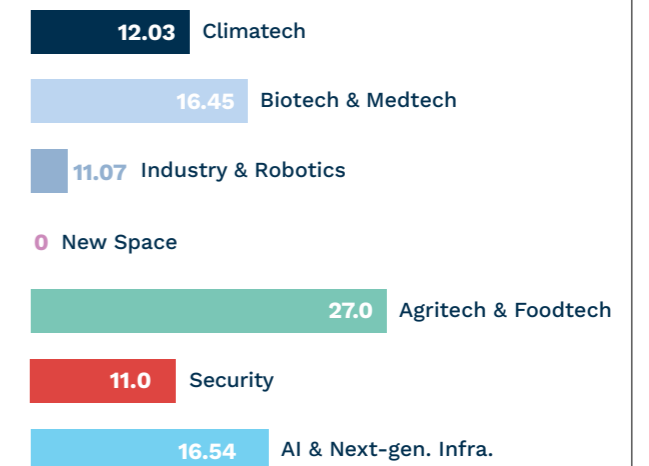


Various industries

Split by number of deals, in %



Average funding by industry, in €M



5 selected deals

- AKUR8** (€108M Series C) - Machine learning-powered insurance pricing and reserving platform for insurers
- EnerDigit** (€40M Series A) - Solutions to analyze and control energy consumption in real time for manufacturers
- VELA** (€40M Series A) - 100% wind-powered maritime transport with a sail
- Calyxia** (€32M Series B) - Provider of data management, network management, and claims management for insurers
- ENTALPIC** (€8M Seed) - AI-driven discovery platform for sustainable industries

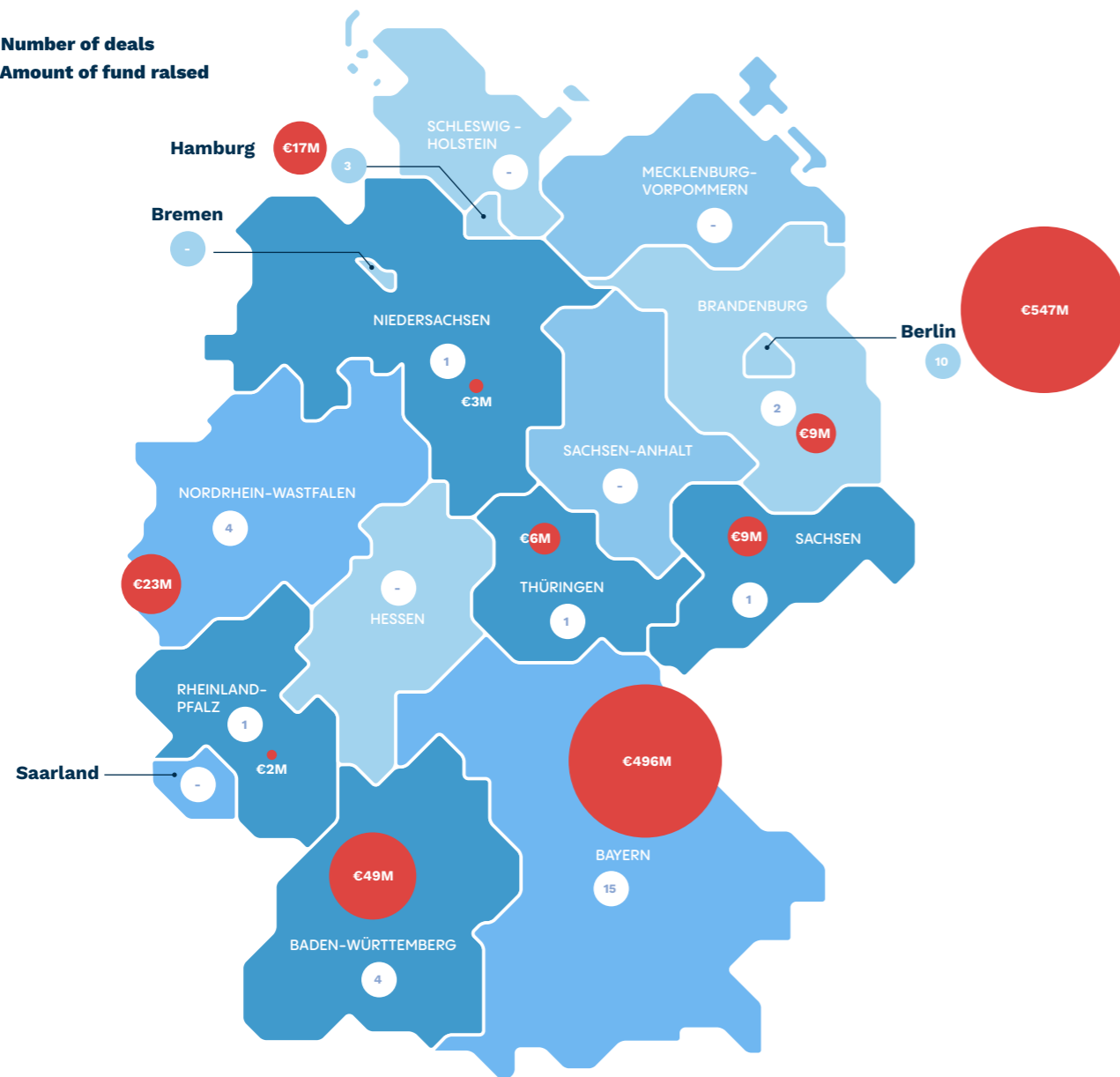
Q3/2024 Germany focus

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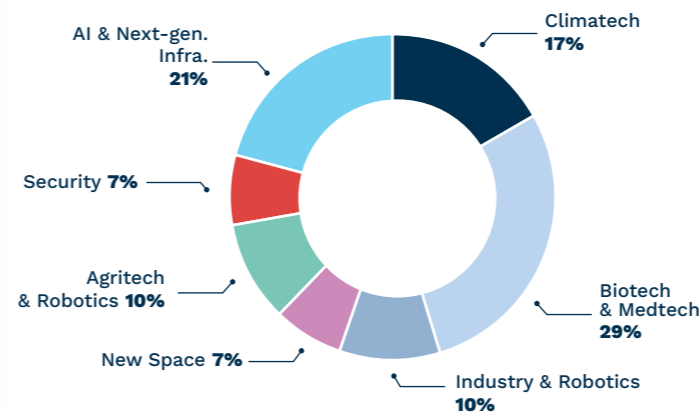
€1.16B raised across **42 deeptech deals** over Q3 2024 in Germany

○ Number of deals
● Amount of fund raised

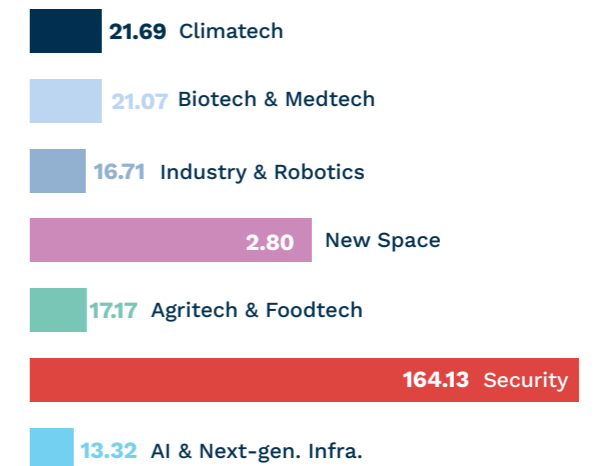


Various industries

Split by number of deals, in %



Average funding by industry, in €M



5 selected deals

- Helsing** (€450M Series C) - AI defense company that specializes in the creation of AI-powered military solutions and components
- MarvelFusion** (€63M Series B) - Developer of fusion energy technology used to offer environment-friendly and safe energy
- Reverion** (€56M Series A) - Highly efficient, reversible, carbon-negative power plants
- QUANTUM SYSTEMS** (€36M Series B) - Unmanned aerial systems, drones, UAV DMNES Deal
- UCANEO** (€7M Seed) - Developer of carbon removal technology designed to capture carbon dioxide from the air

Q3/2024 Italy focus

REVIEW OF ALL FUNDRAISING ANNOUNCED BY NORDICS
DEEPTECH STARTUPS DURING THE THIRD QUARTER OF 2024

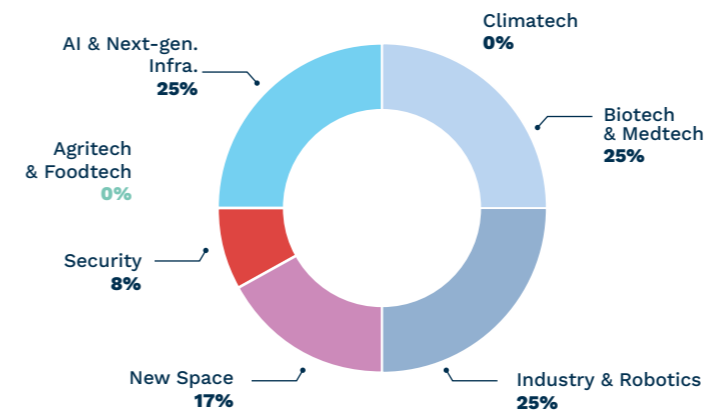
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€164M raised across **12 deeptech deals** over Q3 2024 Italy

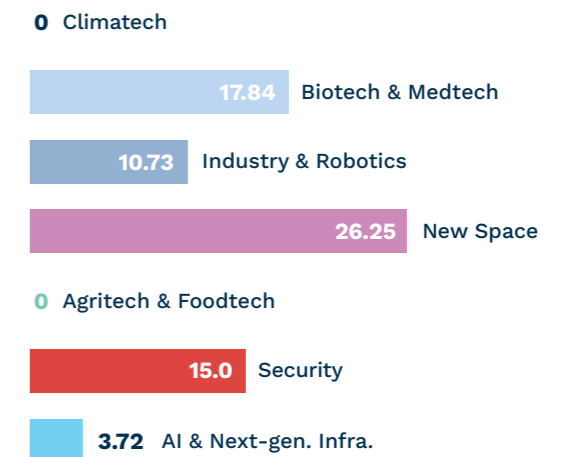


Various industries

Split by number of deals, in %



Average funding by industry, in €M



5 selected deals

- €50M Series C** - In-space transportation company, providing solutions for moving, precise deployment and removing satellites
- €25M Series D** - Fabrication and commercial exploitation of electronic and MEMS devices on stretchable supports for apps
- €8M Seed** - Hardware manufacturing company that specializes in femtosecond laser writing techniques and quantum chips
- €3M Seed** - Solutions for space-based activities via a customizable and cost-effective stratospheric pseudo satellite
- €1M Seed** - Development of scalable and minuscule quantum computers at room temperature

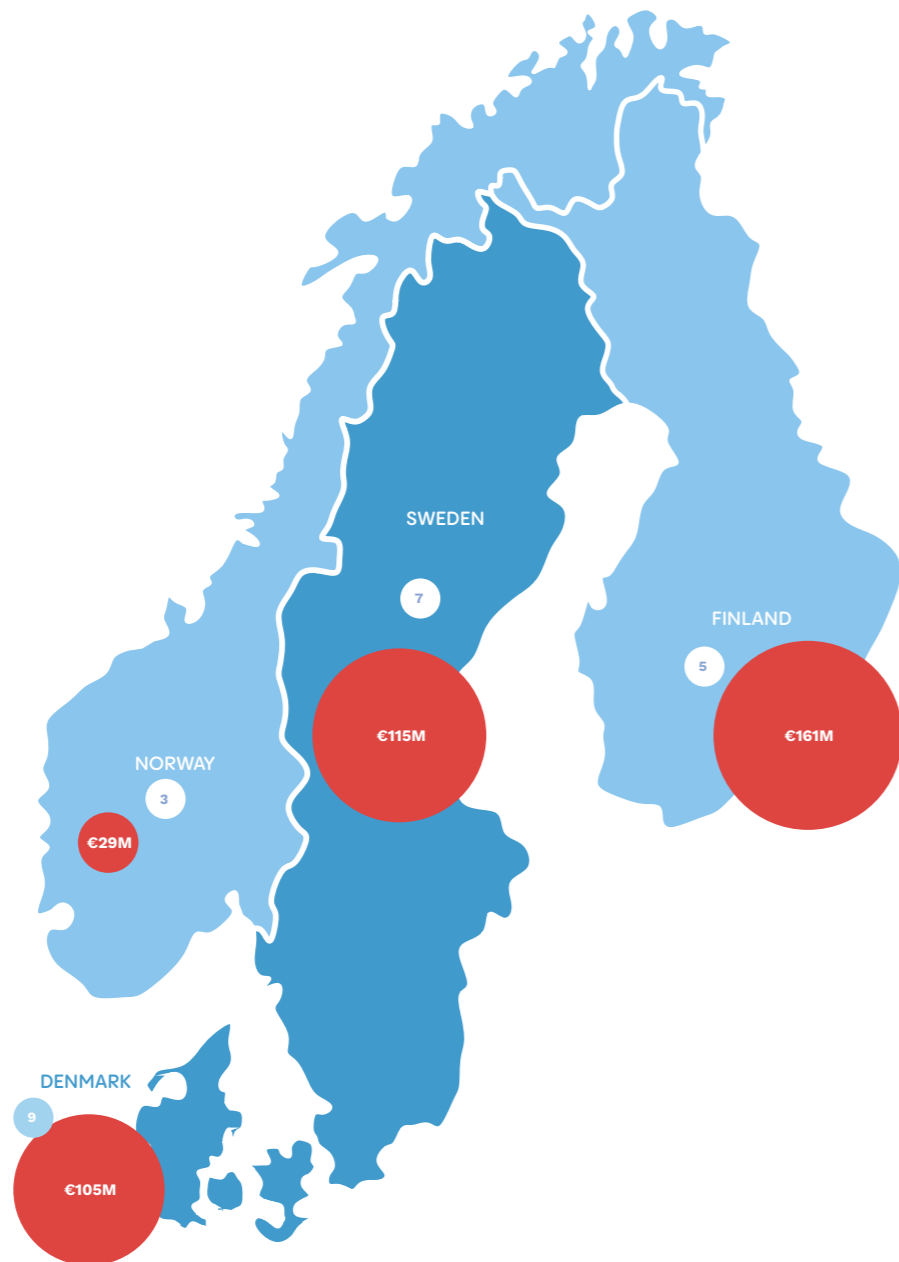
Q3/2024 Nordics focus

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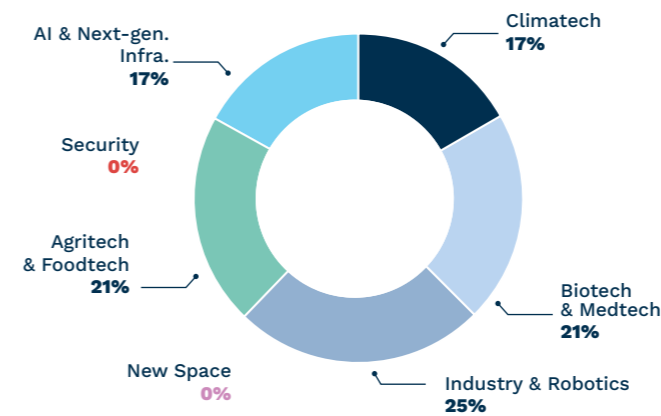
€0.31B raised across **24 deeptech deals** over Q3 2024 in the Nordics

○ Number of deals
● Amount of fund raised

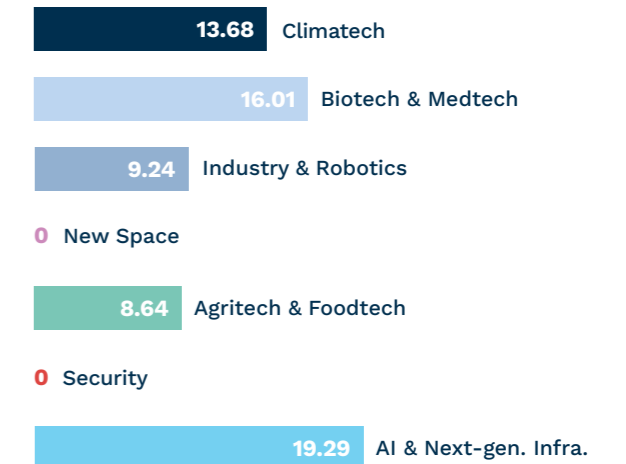


Various industries

Split by number of deals, in %



Average funding by industry, in €M



5 selected deals

- Qagain** €39M Series A Carbon utilization company that focuses on transforming carbon emissions into valuable chemicals
- QMill** €37M Seed Quantum algorithm creator
- Heimdall Power** €23M Series B Software and sensors designed for monitoring overhead power lines
- Dynelectro** €11M Series A Green energy technology company that focuses on reducing CO₂ emissions by transforming fossil fuels into green fuels
- Qkvantify** €10M Seed Quantum computing and HPC software solutions that address hard computational challenges