

Deeptech News

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

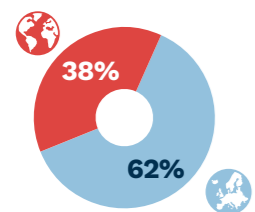
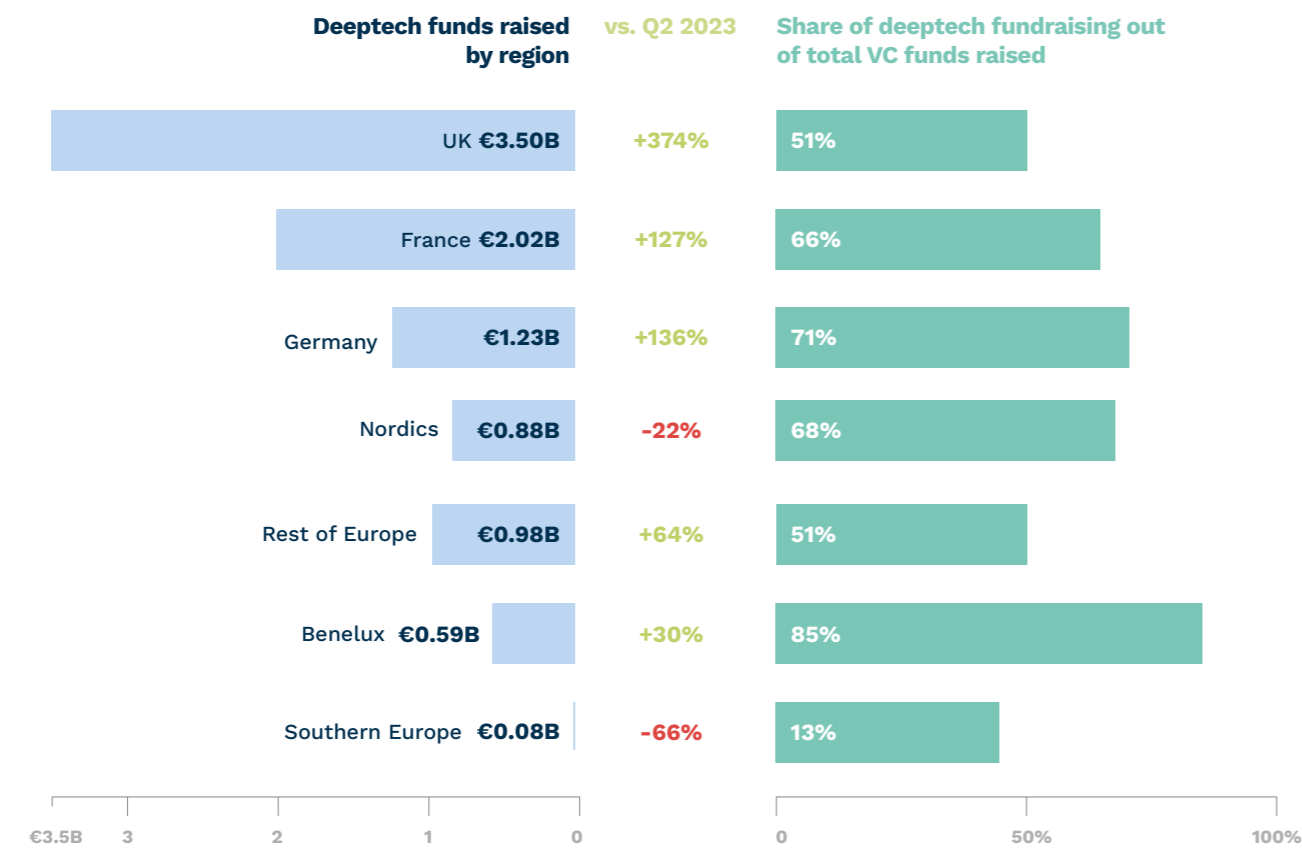
Q2/
2024

Q2/2024 In numbers

REVIEW OF ALL FUNDRAISING ANNOUNCED BY EUROPEAN DEEPTECH STARTUPS DURING THE SECOND 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.)

€9.28B raised across **376 deeptech deals** over Q2 2024 in Europe



38% of transactions had at least one non-European investor

of deals by country in Europe



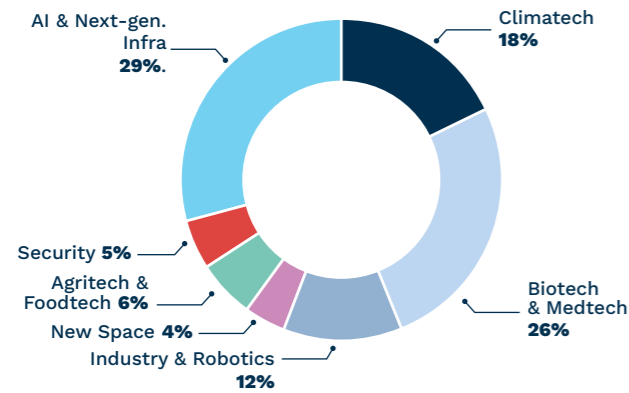
Q2/2024 In numbers

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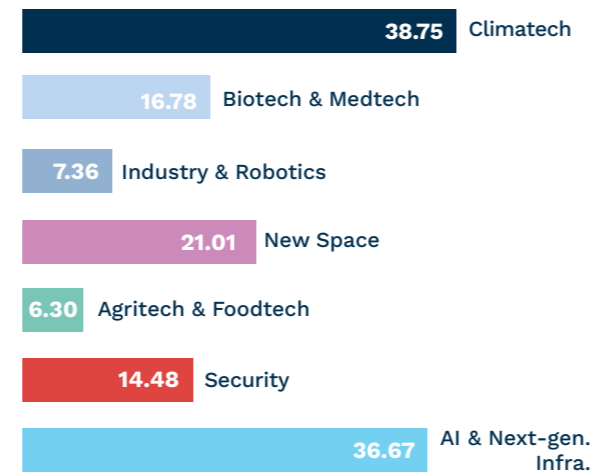
A deeptech startup is a startup developing a complex technological asset with strong technological barriers (long R&D cycle, PhDs, research lab spinoff, patents, complex know-how, etc.)

Various industries

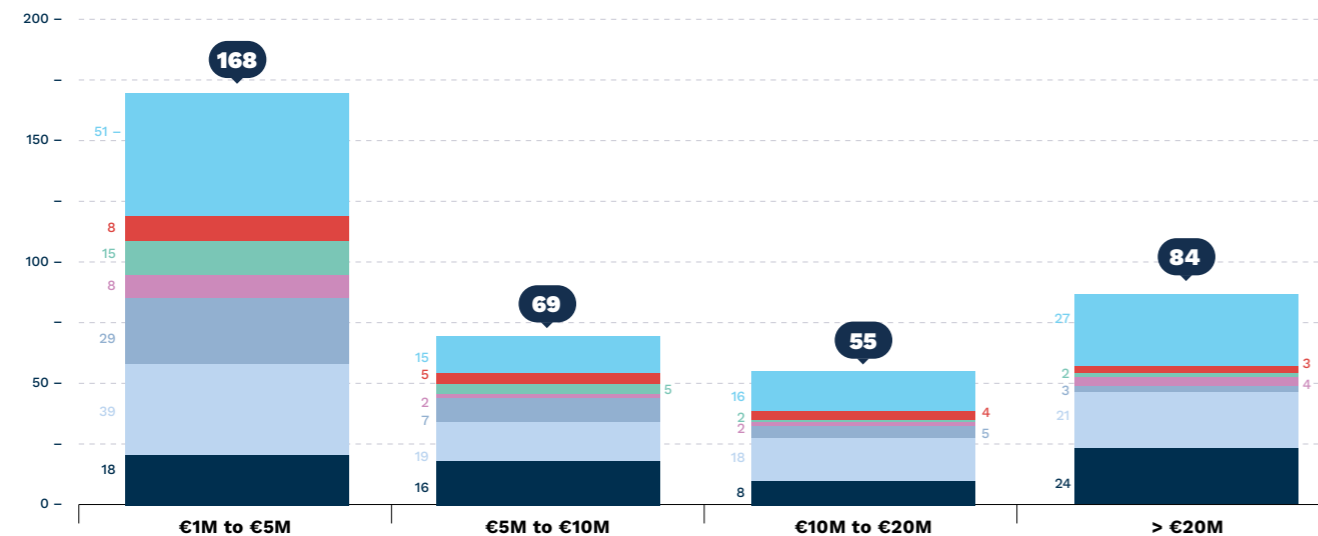
Split by number of deals, in %



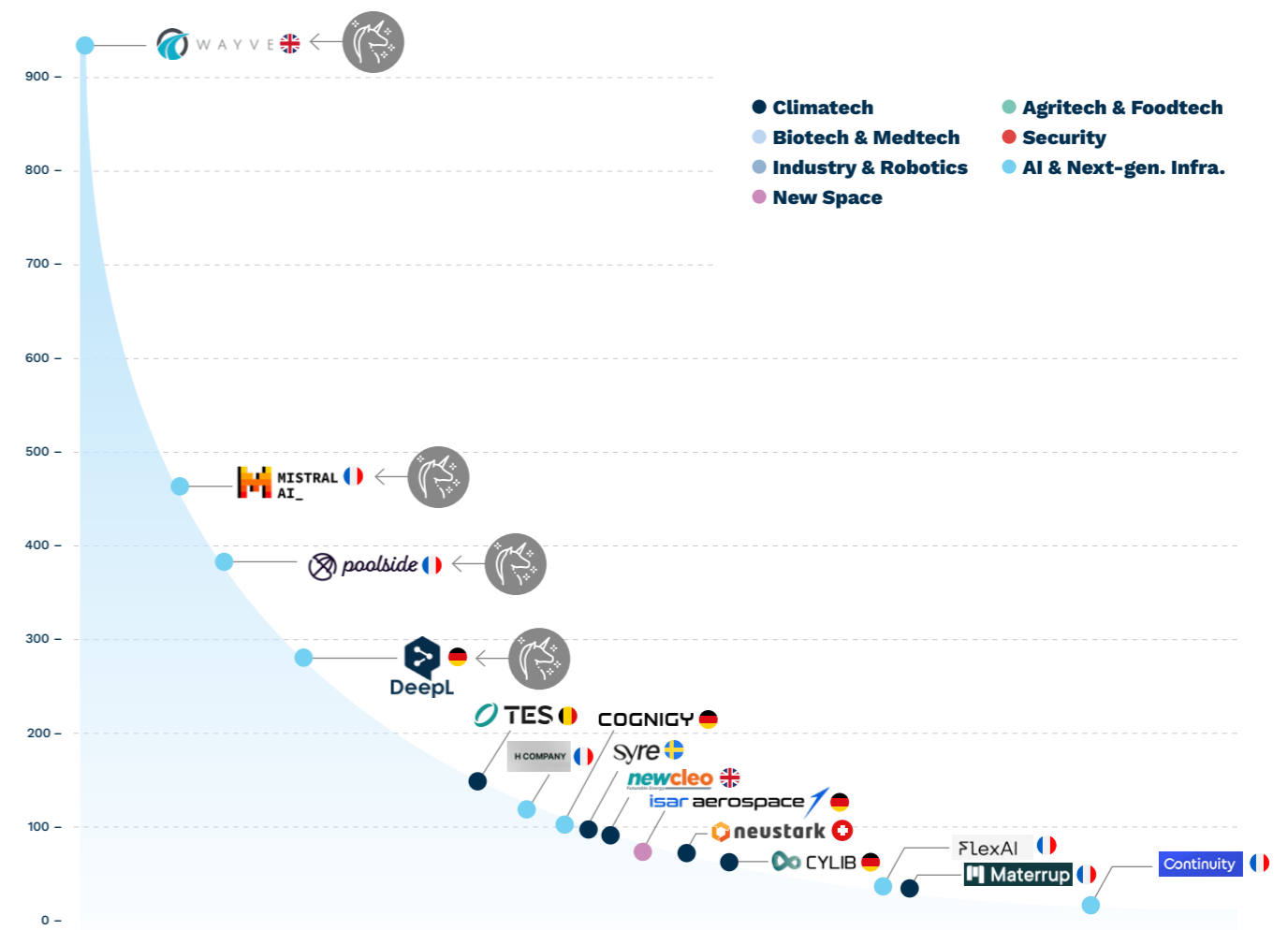
Average funding by industry, in €M



Split by round size



Deals reviews (in €M)



Selected exits



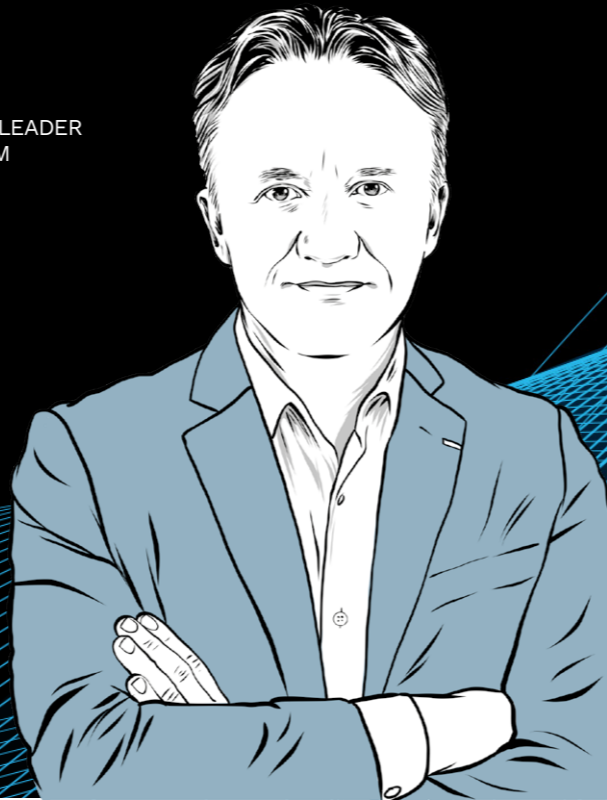
Insights

THESE COLUMNS GIVES THE FLOOR TO A SIGNIFICANT LEADER TO SHARE THEIR VIEWS ON THE **DEEPTECH** ECOSYSTEM

“

With our partners, we [INRAE] are able to provide data and solutions to envision the agriculture of tomorrow”

Philippe Mauguin, President and CEO at INRAE



What are the most promising technological innovations to reduce the carbon footprint of agriculture in Europe?

Agriculture, and more generally the entire agricultural production system and the agri-food chain, must reduce its emissions to achieve the EU's carbon neutrality ambition by 2050, a goal set within the framework of the Green Deal. With GHG emissions estimated at over 10% of total emissions in Europe in 2021 and its impact on biodiversity, agriculture has a significant environmental footprint. It is also part of the solution to restore biodiversity and achieve carbon neutrality, particularly through its ability to maintain landscapes (grazing livestock, hedgerows), store carbon in soils, and produce bioenergies. Within the framework of the necessary agro-ecological transition, INRAE scientists develop research and innovation programmes to reduce the carbon and biodiversity footprints of agriculture. Promising innovations include the reduction of methane emissions from cattle through genetics and breeding,

as well as minimising pesticides, fertilisers and water use through crop diversification, biocontrol, advanced plant genetics and robotics. Working together with all stakeholders (farmers, agricultural technical institutes, agri-food industry, public agencies), we aim at maintaining or increasing productivity while reducing the global impact of agriculture on the environment.

How can scientific research help agriculture better prepare for and adapt to climate change?

As the world's leading fundamental and applied research organisation specialised in agriculture, food and the environment, INRAE's mission is to develop cutting-edge high-risk research and create innovations that often combine levers originating from different research programmes, and to ensure that these innovations are made available to all end-users. We have the capacity to take risks to develop and test innovations through fundamental research, with laboratory tests and field trials as close as possible to real farming

Summary of...

Philippe Mauguin

+30 years experience in the agricultural ecosystem in management positions

Former President of the Institut national de l'origine et de la qualité

Former Director of Agriculture and Bioenergies of ADEME

Former adviser on agriculture, forestry and food to Prime Minister Lionel Jospin

National Order of the French Legion of Honour

Graduate from the Institut National Agronomique Paris-Grignon and the National School of Rural Engineering, Water Resources and Forestry

conditions using our network of 75 experimental units covering more than 7,000 hectares in metropolitan and overseas French territories. Together with agricultural technical institutes, training and development actors, businesses of all sizes (start-ups, SMEs, large companies, cooperatives...), we offer data and solutions to prepare tomorrow's agriculture. We also provide our expertise to public policy makers to facilitate transitions. Our research, conducted at the highest level of excellence and with multidisciplinary approaches by the 12 000 staff of INRAE, in partnership with universities and other academic partners (CNRS, CEA, INRIA...) in France but also in Europe and worldwide, positions us at the forefront to provide concrete solutions to climate change challenges.

What are Europe's main dependencies in agriculture and how does scientific research help strengthen food sovereignty?

Like other Western countries, Europe is mainly dependent for its agriculture on fertilisers (notably nitrogen and phosphates) and pesticides for crops as well as on soybean, that contributes to "imported deforestation", for animal feed. To reduce this dependency, INRAE priorities include, for instance, the development of associations between nitrogen-fixing plants and other crops to reduce nitrogen inputs or the production of protein crops to replace Brazilian soybean. However, agriculture is not a sector like any other, nor does it produce

goods like any other. European food sovereignty will also rely on the transformation of its food system. We will need to rebalance our diets in the medium term with less but higher quality animal protein produced in our territories and ensuring a better remuneration to farmers. Retailing, from producers to consumers, is at stake in this new agricultural and food model and is the topic of a number of research projects at INRAE, particularly within Living Labs. European food sovereignty will also depend on the sustainable food sovereignty of other continents to face the ~ 9 billion people world population in 2050. In order to contribute to this overall goal, INRAE engaged with the CIRAD in the TSARA initiative 2 years ago, aiming to contribute to food security in Africa. TSARA brings together more than 25 African scientific institutions and is supported by several international organisations such as the World Bank.

How does INRAE facilitate the transfer of technologies towards the creation of businesses and start-ups?

INRAE is a targeted-research organisation that combines the excellence of fundamental research with the production of innovations. To increase the impact of research on the research-development-innovation chain, we use three main drivers: partnership, transfer and entrepreneurship. Innovation through partnership research, fostering co-construction and co-realisation, is one of the priorities of INRAE's 2030 strategic

plan. We work with more than 450 socioeconomic partners: private companies (start-ups, SMEs and large companies), cooperatives, agricultural technical institutes, interprofessional bodies, etc. This competence is recognised through the Carnot label awarded to five institutes led by INRAE and dedicated to foster innovation with industrial partners (3BCAR, France Futur Elevage, Qualiment, Plant2Pro, Eau & Environment). INRAE supports research chairs and joint laboratories (ANR LabComs, Associated partnership laboratories, Joint technological units) with private partners. INRAE also leads several industrial demonstrators associating numerous private partners such as Toulouse White Biotechnology, MetaGenoPolis, or Ferments of the Future, Agricultural robotics and Biocontrol and biostimulation launched more recently in the frame of the France 2030 funding plan. As for transfer, INRAE is involved in pre-maturation and maturation of innovations derived from its research, in partnership with the French SATT (technology transfer acceleration companies) network, and grants more than 500 licenses. Overall, INRAE explores all means to bring the latest research results to the attention of socioeconomic actors and to foster the development of concrete solutions. Finally, INRAE supports the creation of start-ups resulting from its research results, and facilitates access of its research teams to transfer (scientific competitions) or partnership (InnoTech programme), to initiate or strengthen the links with start-ups and SMEs in AgTech, FoodTech, Biotech, and GreenTech.

Q2/2024 France focus

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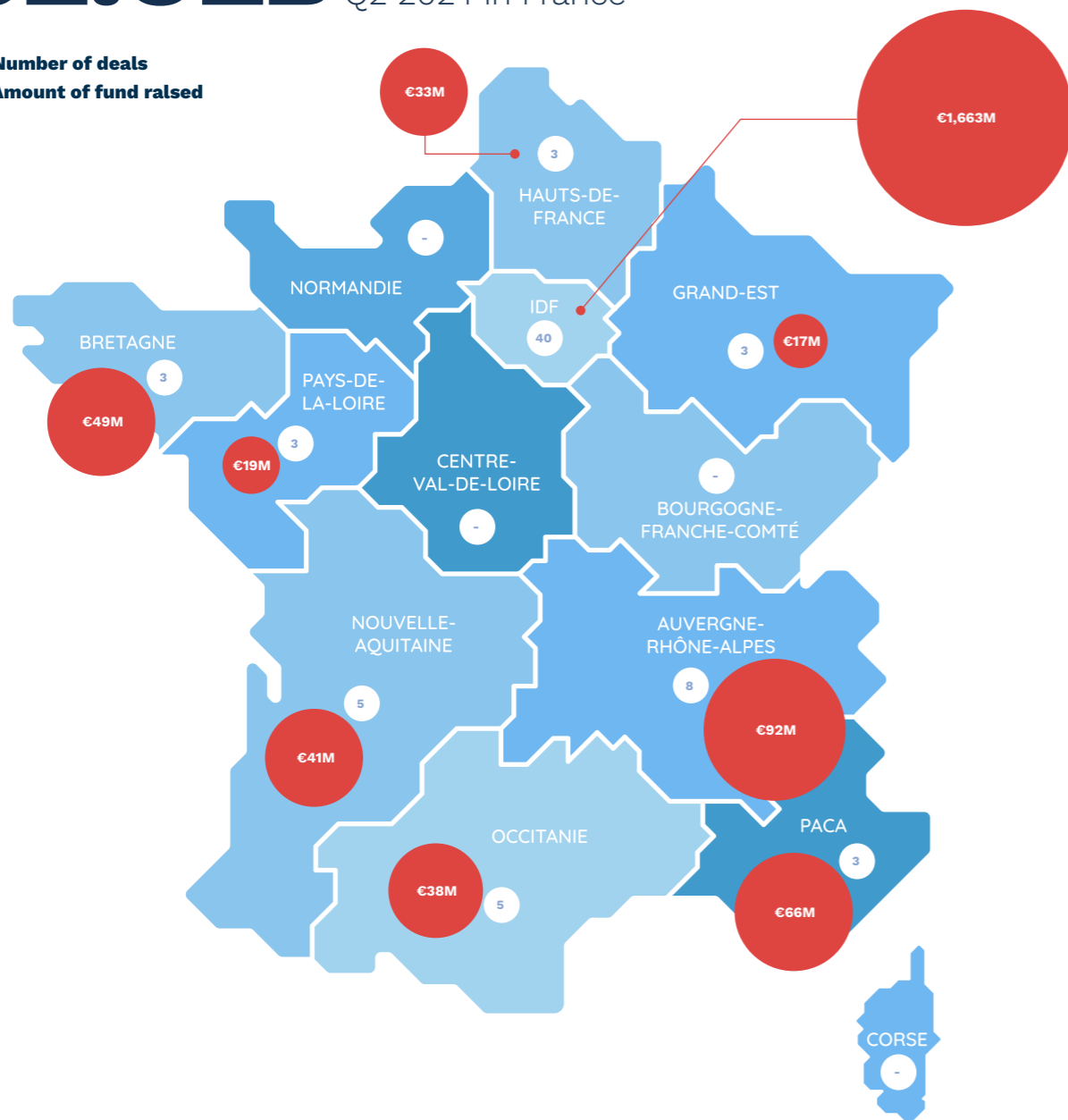
Not to be missed



The acceleration of the deeptech innovation wave was highlighted during the 8th edition of VivaTech, Europe's largest startup event. Beyond the growing number of deeptech startups, the event featured a dedicated session on the European ecosystem organised by Bpifrance and a specific evening focused on industrialisation. This evening included interventions from political figures (Roland Lescure, Marina Ferrari), ecosystem leaders (Bruno Bonnell, Nicolas Dufourcq, Paul-François Fournier), investment funds (Michel de Lempdes, Christophe Gegout), and entrepreneurs (Mathilde Grivet, Tristan Maurel).

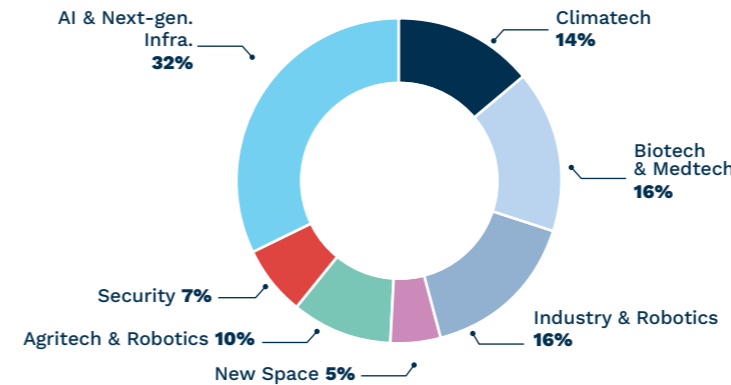
€2.02B raised across **73** deeptech deals over Q2 2024 in France

○ Number of deals
● Amount of fund raised

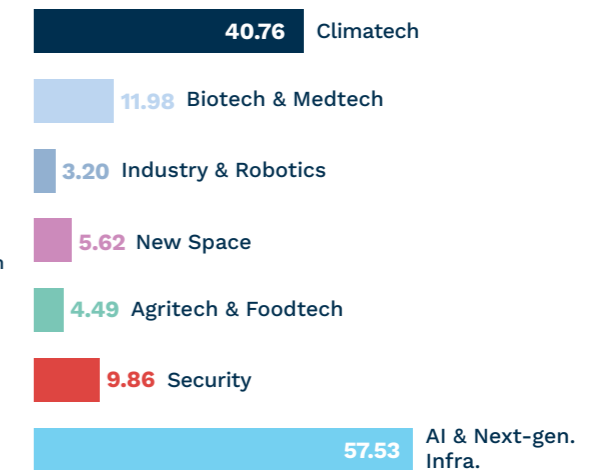


Various industries

Split by number of deals, in %



Average funding by industry, in €M



5 selected deals

- MISTRAL AI** (€468M Series B) AI startup providing developers and businesses access to generative AI solutions
- poolside** (€374M Series A) AI platform offering foundation concepts and infrastructure
- H COMPANY** (€111M Seed) AI models for the technology sector helping in data analysis
- FlexAI** (€29M Seed) Unlocking the future of machine intelligence by rearchitecting the compute infrastructure
- Materrup** (€26M Series A) Local, low-carbon cement made from uncalcined clay

Q2/2024 Germany focus

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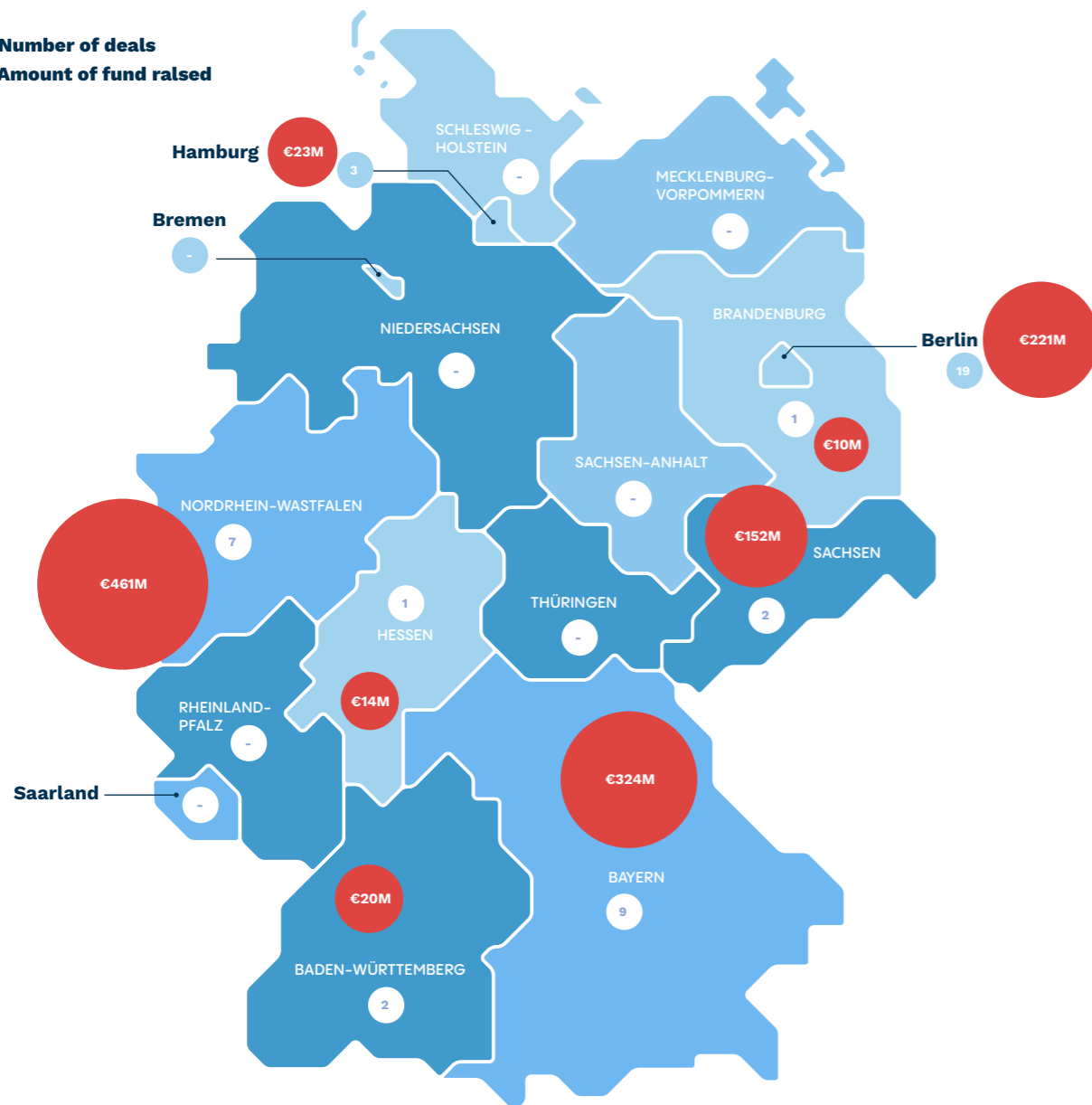
Not to be missed



Black Semiconductor has received huge support from the German federal government and the State of North-Rhine-Westphalia, **which have committed +€200M in public funding to drive** the development of a new generation of graphene-based chips.

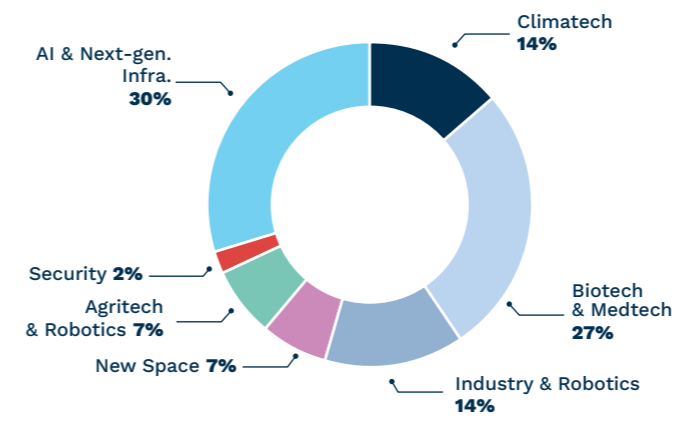
€1.23B raised across **44 deeptech deals** over Q2 2024 in Germany

○ Number of deals
● Amount of fund raised

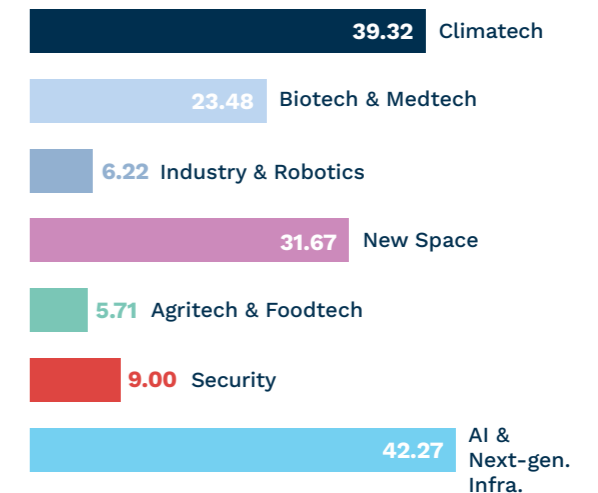


Various industries

Split by number of deals, in %



Average funding by industry, in €M



5 selected deals

- DeepL** (€277M Series C) - Deep-learning company that specialises in language translation
- COGNIGY** (€93M Series C) - Enterprise conversational AI platform designed to automate customer and employee support processes
- isar aerospace** (€65M Series C) - Micro-launcher to provide access to space for small and medium satellites
- CYLIB** (€55M Series A) - Transfers waste from end of life batteries or production scrap into marketable products
- black semiconductor** (€26M Series A) - Microchips manufacturer with integrated electronic-photonic circuits using graphene technology

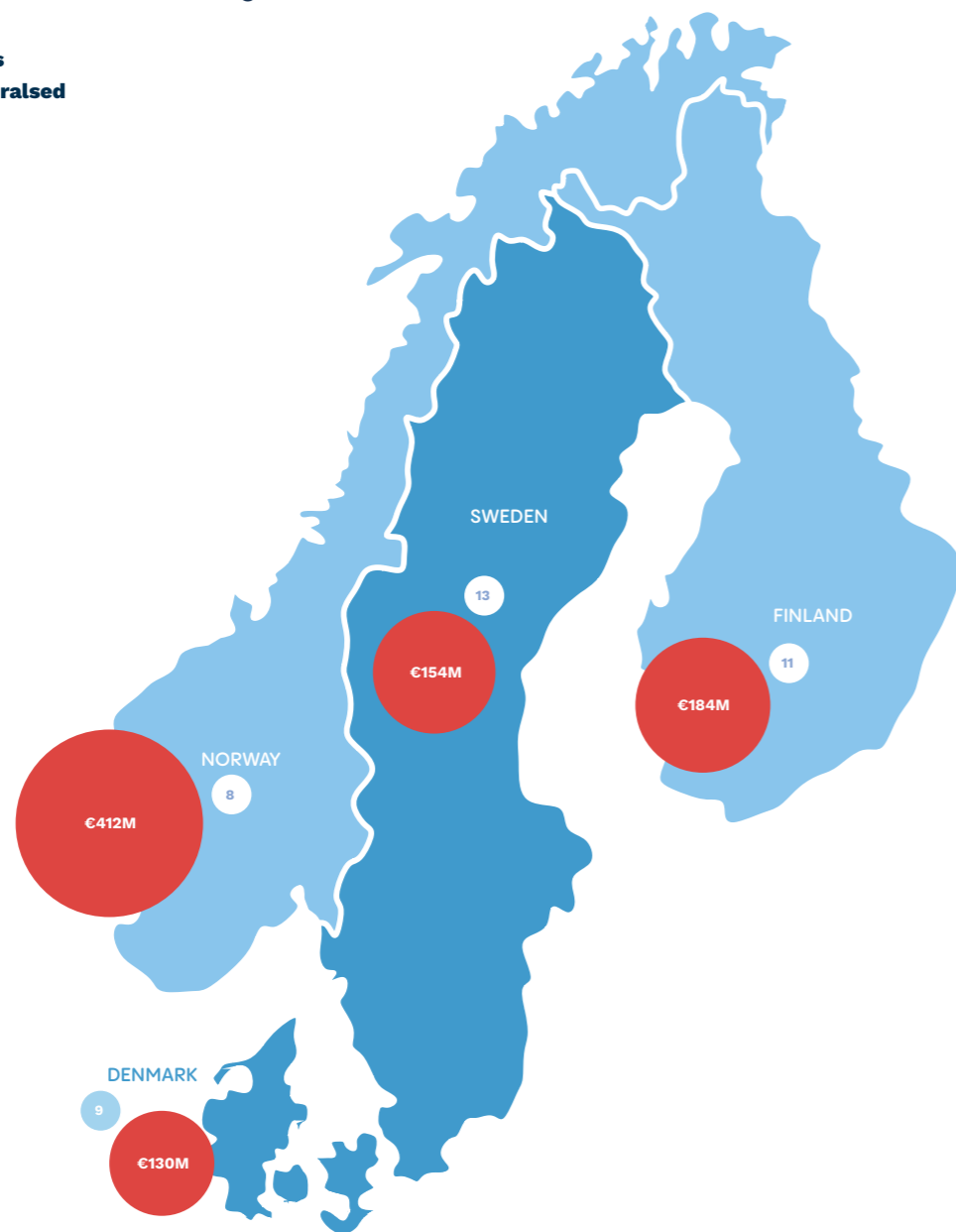
Q2/2024 Nordics focus

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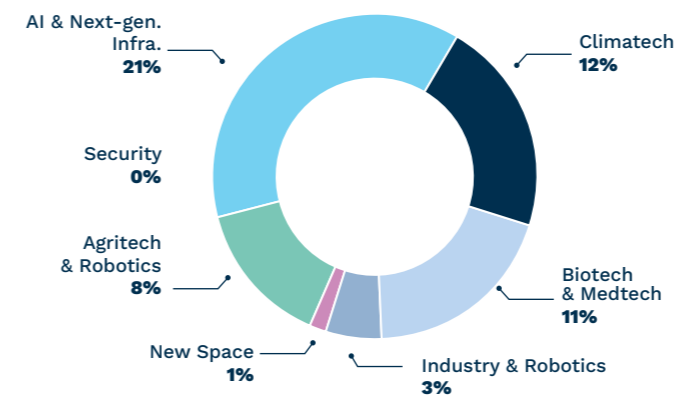
€0.88B raised across **41 deeptech deals** over Q2 2024 in the Nordics

○ Number of deals
● Amount of fund raised

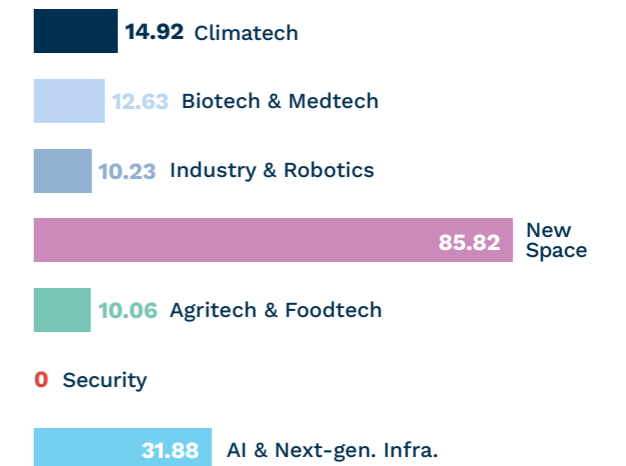


Various industries

Split by number of deals, in %



Average funding by industry, in €M



5 selected deals

- Syre** €92M Series A Textile-to-textile recycling
- ICEYE** €86M Series E Synthetic Aperture Radar satellite imaging company
- NIL TECHNOLOGY** €29M Series C Optical solutions company designing, developing, and manufacturing optical elements and components
- ONEGO** €27M Series A Precision fermentation company to manufacture real egg protein that is entirely animal-free
- BASE MARK** €22M Series B Making driving safer with augmented reality software