

### **BREAKTHROUGH TECHNOLOGIES** OF THE NEXT DECADE



**European Deep Tech startups** raised \$17.7B in 2022, 22% less than 2021 total, but still +60% more than 2020.

**Next Frontier AI, Future** Computing, Novel Energy and Space Tech raised \$4.4B in 2022. This is their highest total ever and double the amount of 2020.\*

### **NEXT FRONTIER AI**

**AI-First Biology Autonomous Driving Generative Al AI-Programming** No/Low Code Software New AI/ML Tech Stack **Speech Recognition** Conversational Al **Privacy-Preserving Al** 



Explainable Al **Neuromorphic Advanced AI Computing Chips Generative Design AI-Aided Engineering** Quantum Chemistry Al for Chemical and **Biotech Fields** 



## **ENERGY**

**NOVEL** 

**Nuclear Fission New Battery Chemistries & Supercapacitors Grid Scale Energy Storage Nuclear Fusion** 

Hydrogen



## COMPUTING

AR & VR

**FUTURE** 

**Quantum Computers Photonic Integrated Circuits & Photonics IP Quantum Cryptography Brain-Computer** Interfaces **Quantum Chemistry Quantum Sensing** 



# TECH

OneWeb

**Earth Observation** Launch Vehicles **Communication & Connectivity Satellites Materials for Space In-Space Operations** Space Exploration **Spacecraft Parts** 

**Tech Segments in Europe (2022)** 

**VC Investment Next Frontier Deep** 

Down in 23/Q1, but Generative Al is gaining Momentum\*\*

Global AI Venture Funding is

\$1.6B **Novel Energy** \$1.1B **Next Frontier Al** \$0.9B **Future Computing** \$0.7B **Space Tech** 

\$9.5B \$5.4B \$8.2B 22/Q3 22/Q4 23/Q1

Models (LLM) and other future technologies.

Computing and Climate Tech and Energy.

**KEY TAKEAWAYS** 

Digital Sovereignty and Innovation Leadership in Next Frontier Technologies will determine the future of the European Tech Scene and Europe as a whole. We need European solution in Climate Tech and Energy, Quantum, and Al Large Language

There will be thousands of startups utilizing AI Foundation Models, such as LLM, for downstream business cases in the future. Investors will need to understand, how the

underlying models have been trained and how bias is handled and accounted for. Hardware and hybrid is the new software - It is becoming more of a commodity. This will be a decisive factor in Next Frontier Deep Tech, especially Space Tech, Future

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