

Portugal's Quiet Climb in Deep Tech and Bio Innovation

April 2025

With advantageous visa programs, substantial government support, and funding from the European Union, Portugal is emerging as a cost-effective innovation hub for biotechnology, space technology, and ocean sciences. Deep tech is undeniably a significant driving force behind Portugal's economy, paralleling trends seen in other European nations.



Deep Tech

The term "*Deep Tech*" refers to technologies that are highly sophisticated, grounded in scientific principles, engineering solutions, and necessitating extensive technological expertise. This category of technology is distinct from mainstream consumer-focused innovations, which are often labelled as "*shallow tech*."

From an investment perspective, Deep Tech encompasses companies that are actively pushing the boundaries of existing technology. Understanding this concept reveals that such endeavours require immense levels of commitment and time dedicated to research and development (R&D). For many investors, the mere mention of R&D can trigger anxiety, traditionally leading them to shy away from such high-risk ventures.

However, these two terms signify two of the four critical components necessary for elevating global technological capabilities. For those familiar with the works of science fiction pioneers like Isaac Asimov, it may seem surprising that the fantastical ideas envisioned decades ago are becoming increasingly feasible. Many concepts in areas such as artificial intelligence, biotechnology, and quantum computing have progressed to the point where they are not only

possible but are actively in development today. The mobile phone, once a dream of science fiction, is now commonplace but pales in comparison to the potential of deep tech innovations.

A third essential ingredient for success in Deep Tech is a specialised skill set. This goes beyond merely having the brightest students in academia; it requires individuals who are deeply passionate and highly skilled in their specific fields, sometimes numbering fewer than a handful globally.

Despite the challenges associated with investing in Deep Tech, there is a significant advantage: these companies, once they reach the market, are often well-protected from serious competition due to the extensive time and effort required to develop their technologies.

Portugal's Direction of Travel

The fourth critical component necessary for success in any Deep Tech field is substantial funding. This is where Portugal's strategic approach comes into play.

In the current geopolitical landscape, which has led to a general decline in investment across Europe, Portugal has quietly pursued a path that it hopes will lead to brighter economic prospects. By avoiding entanglement in the political chaos affecting other European governments, Prime Minister Luís Montenegro has been able to maintain focus on identifying and facilitating the next significant advancements in the tech sector.

At the Web Summit in Lisbon last November, Portugal unveiled a €100 million fund dedicated to investing in Deep Tech startups. Amid the financial challenges facing the European Union, it was noteworthy that the European Investment Fund swiftly committed €90 million to three Portuguese venture capital funds.

While these long-term speculative investments may seem exceedingly risky, the deep tech investment category has been experiencing remarkable growth. Indeed, projections for 2024 indicate that this sector will attract the largest investments by far.

Deep Tech is an intriguing field with the potential to transform many industries, including artificial intelligence, space technology, robotics, biotechnology, and health care. Interestingly, Portugal has positioned itself as a leader in Deep Tech investment, surpassing both the United States and the United Kingdom. However, it faces fierce competition from established players like Sweden and Switzerland, with Switzerland currently holding the top position in this sector.

Bio Innovation

While closely related to Deep Tech, bio innovation represents a distinct and specialised area, particularly concerning marine technology, also known as Blue Tech. This field aims to expand beyond traditional fisheries and waterways, an area Portugal has long sought to develop as part of its domestic biotechnology industry.

Similar to its initiatives in Deep Tech, Portugal's drive for bio innovation has garnered €28 million in EU funding, specifically targeting small to medium-sized enterprises (SMEs) engaged in economic activities related to the sea and waterways. The country aims to cultivate high-value industries focused on sustainably utilising ocean resources for alternative chemicals, pharmaceuticals, cosmetics, and biomaterials.

Venture capitalists are naturally on the lookout for startups within this domain, while these startups must demonstrate to potential investors that their business models are marketable and capable of delivering scientific or technological breakthroughs, all while contributing to environmental sustainability.

Despite the excitement surrounding biomedicines and marine technologies, the number of companies operating in the Marine Tech sphere remains limited. This is why Portugal is eager to advance its '*Blue Value Accelerator*' program, essentially a governmental venture capital initiative. Additionally, the country is working towards establishing a public-private '*blue*' investment bank to provide critical lines of credit to these emerging companies.

Conclusion

There has been a significant shift in investor understanding and acceptance regarding the time required for genuine technological or scientific breakthroughs to materialise. Both Deep Tech and Blue Tech/bio innovation signify a monumental transition in this perception. One can only speculate on the advancements that might have been realised if investor programs had been initiated 30 to 40 years earlier.

KCS Group International – Strategic Intelligence & Corporate Security

KCS Group International is a leading provider of security and intelligence services, operating in some of the world's most difficult environments on complex cases of fraud, theft, corruption or market dynamics. We gather intelligence through the discreet use of human sources to level the playing field and help our clients identify and deal with any risks, weaknesses and threats which could impact on their business, financially or reputationally.

Our key areas of expertise include: Corporate Intelligence Services – New market or sector entry research – Know your customer screening.

In addition, we offer a unique service in the areas of Cyber Security and Cyber Risk. This covers penetration testing, vulnerability assessments, intelligence gathering and cyber security audits – providing unparalleled analysis, contingency planning and implementation.

To find out more or to arrange a meeting to discuss your business needs, please email the team at info@kcsgroup.com or call (00 44) 20 7245 1191 – www.kcsgroup.com
