

Deep Tech Portugal Outlook 2026

We have the science.
What we lack is ownership.

José Esteves • Diogo Alves • Diogo Vieira da Silva | July 2026



Portugal has potential. The challenge is turning it into scale.

The diagnosis is clear: excellence exists; ownership, scale and governance remain fragmented.

WHAT THIS REPORT ANSWERS

Where is Portugal's deep tech potential and what must change to turn it into global champions before the 2027 budget cycle.

WHAT DATA IT DRAWS ON

Sources: European Deep Tech Report 2026, Startup Portugal x Dealroom, IMD 2026 and company disclosures. The national estimate is based on triangulation of public data; methodology in the appendix.

WHAT DECISION-MAKERS SHOULD RETAIN

Portugal can win in six sovereign niches. To do so, it needs scale-up capital, the State as customer, clear intellectual property and public metrics.

Without scale and patient capital, Portugal will continue to fuel other ecosystems. The prize is to create two or three global champions, with headquarters, intellectual property and decision-making retained in Portugal through 2030.

The report answers eight decision questions

A reading map: from definition and evidence to choices on focus and execution.

01 Definition

What counts as deep tech - and what is left out?

03 Conversion

Where are patents, spin-outs and first customers lost?

05 Focus

Which six niches offer Portugal an advantage?

07 Impact

Which economic engines and returns should be measured?

02 Starting point

What scientific and industrial capabilities already exist?

04 Capital

At what stage does the funding gap emerge?

06 Territory

Which regions and infrastructures can support scale?

08 Execution

Who decides, by when, and against which metric?

01

Deep tech, defined for Portugal

Scientific and engineering advances that reach products and companies for the first time.

TAKEAWAY FOR DECISION-MAKERS

Deep tech is not a sector: it is the passage from science to defensible economic assets, with direct impact on sovereignty.



Deep tech: science turned into economic advantage

It is not just software: it starts in labs, requires patient capital and creates assets that are hard to copy.

DEEP TECH

Not just software

The advantage lies in devices, molecules, materials, satellites and qubits - not just code.

DEEP TECH

Born from science

It emerges from laboratories, theses, patents and research teams. In Europe, many new deep tech companies are spin-outs.

DEEP TECH

Capital-intensive

It requires upfront capital to build defensible intellectual property; revenue takes time, but tends to be more durable.

DEEP TECH

Strategically sovereign

It is tied to national resilience: computing, chips, space, energy, health and defense.

Sources and methodology detailed in the appendix.

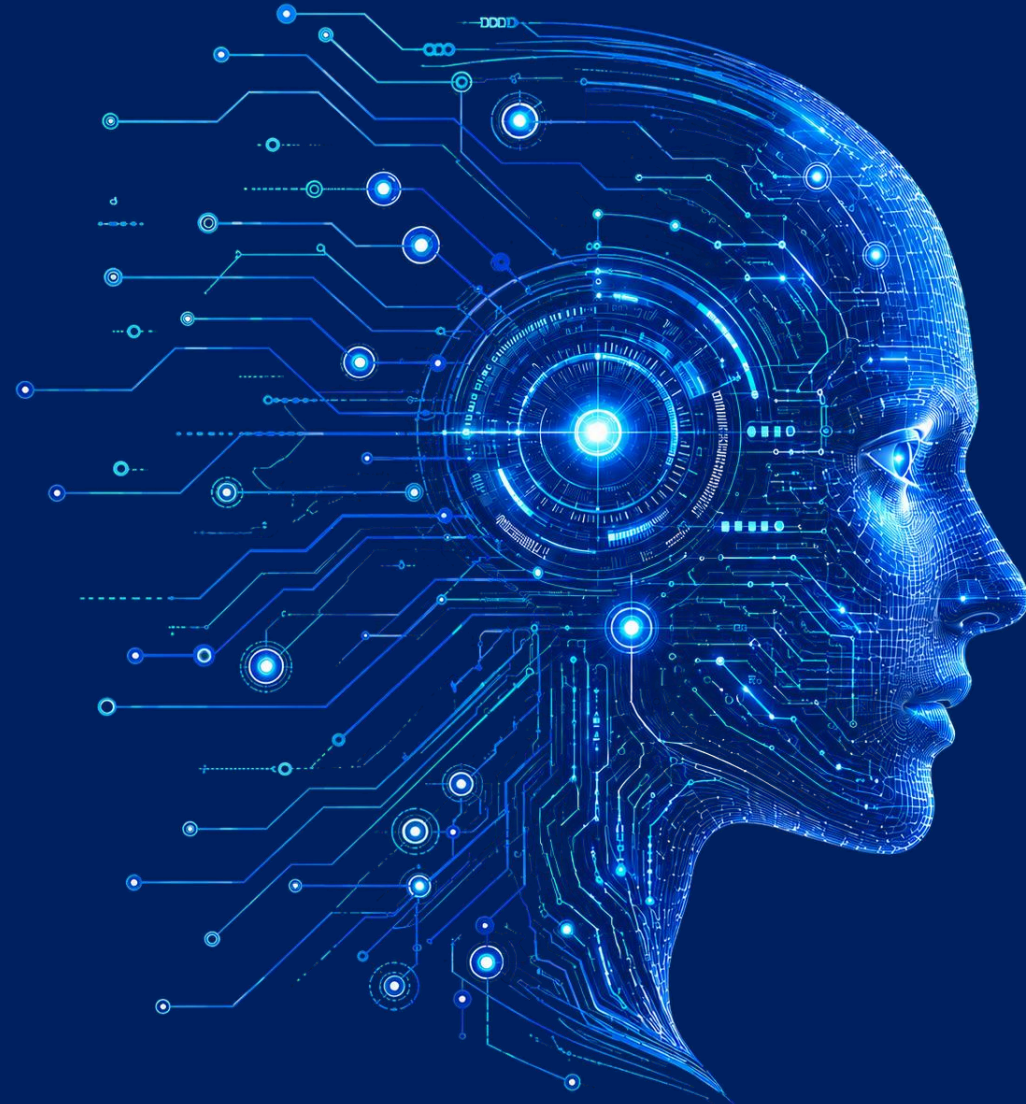
02

Talent, market and capital finally aligned

For the first time, the three preconditions for a deep tech ecosystem coincide.

TAKEAWAY FOR DECISION-MAKERS

Portugal already has talent, demand and public capital. The critical point is turning those ingredients into companies that stay and scale.



Portugal already has the three ingredients. It still needs to convert them.

Talent, European demand and public capital coincide - but still do not create global-scale champions.

Talent

Technical universities, engineers,
English fluency and a skilled diaspora.

Market

European demand for computing,
secure supply chains,
space and defense.

Capital

A maturing VC market and
European public capital: RRP, Horizon Europe,
EIC and defense funds.

The national question is no longer whether Portugal has the ingredients. It is whether it can turn them into companies that Portugal retains.

The science is strong. The path to market remains slow.

The decisive indicator is not academic reputation: it is patents, spin-outs, first customers and companies that stay in Portugal.

INL - Braga

Nanoelectronics, photonics and advanced materials.

Champalimaud • IMM • i3S

Neuroscience, cancer, molecular medicine and translational health.

INESC TEC / -ID / MN

Computing, photonics and micro/nanoelectronics.

IST & Telecommunications Institute

Engineering, AI, communications and space systems.

U. Coimbra • Aveiro • Minho

Materials, photonics, biomedical research and semiconductors.

Collaborative Laboratories

Bridge between science and industry; promising, but still maturing.

Measure conversion, not reputation: patents, spin-outs, European funding and first customers.

Participation in CERN, ESA and ESO opens access to frontier instrumentation and high-complexity contracts.

Portugal does not lead on scale, but it can lead in niches.

With around 2% of European capital, the rational strategy is to focus resources where research, industry and sovereignty intersect.

\$20.3 billion

European deep tech VC - 2025

Europe ended 2025 with a record share of deep tech in VC.

≈ \$0.4 billion

Portugal's estimated share

A small market: focus is more rational than dispersion.

33%

R&D conversion

Of new European deep tech startups are research spin-outs.

43%

sovereign demand

European funding is flowing to defense, security and resilience.

\$4-24 billion

estimated annual growth-capital gap in Europe. Portugal feels it early - just after Series A.

Sources: European Deep Tech Report 2026; Dealroom; NATO Innovation Fund. Portugal and capital gap: own calculations.

Scale is in the US. Portugal's opportunity is focus.

The scale gap is structural. Portugal's answer is specialization.

\$144 billion

United States

Global scale; foundational AI dominates.

\$20.3 billion

Europa

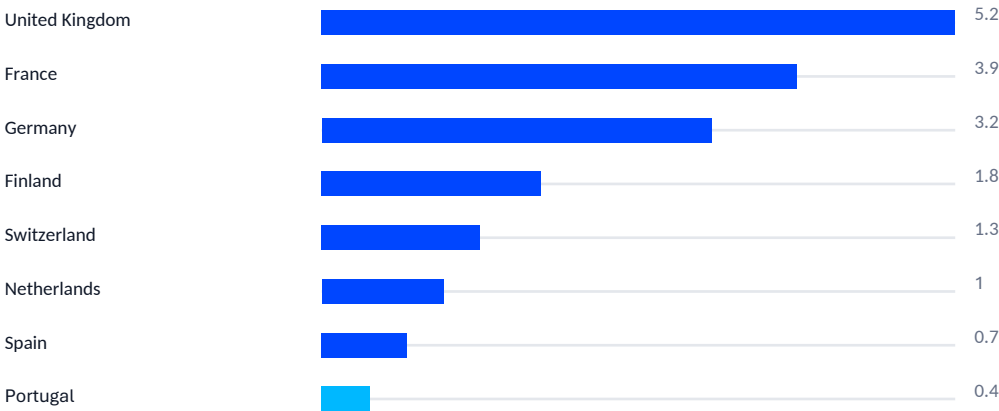
Record: 32% of European VC.

\$16 billion

China

Highest relative share of deep tech in VC.

Leading European markets - 2025 (\$ billions)



Where sovereignty and geography create an edge: focus, not volume.

Portugal is a challenging market. The opportunity is not aggregate scale: it is selective leadership in niches where it can be credible, investable and distinctive.

Source: European Deep Tech Report 2026. Portugal: estimate based on public data.

Portugal attracts. The challenge is turning attraction into ownership.

Tourism, investment and talent come to the country. Value only stays when headquarters, IP and decision-making stay here.

40th

in the IMD World Competitiveness Ranking 2026, among 70 economies. Portugal falls three places, despite climbing seven in Economic Performance (35th).

4th

tourism receipts

Attraction is strong, but it is not enough.

11th

FDI inflows (% GDP)

Foreign capital continues to arrive.

40th

global ranking

Attraction does not automatically translate into competitiveness.

Deep tech ownership turns what Portugal attracts into what Portugal retains.

Source: IMD World Competitiveness Ranking 2026; national results published by Porto Business School, an IMD partner.

03

Champions are emerging - growth capital remains scarce

Real progress at seed and Series A; beyond that, much of the capital is foreign.

TAKEAWAY FOR DECISION-MAKERS

The country is already producing champions. The bottleneck appears after Series A, when foreign capital tends to determine headquarters, IP and control.

Companies are born in Portugal. Control moves abroad.

Funding improves in the early stages, but growth capital continues to shift headquarters, ownership and decision-making power.

≈ 3×

growth in VC linked to deep tech since 2018

€479M

announced rounds in 2025

Highest in the past three years.

≈ €0.4 billion

estimated deep tech funding • 2025

Estimate for the deep tech universe.

TEKEVER 

Defense drones • unicorn

Lisboa • Ponte de Sor

Defined.ai 

AI data • scale-up

Lisbon

Sword Health 

Digital health • ≈ \$4 billion

Porto • presence in the US

Critical Manufacturing 

MES for semiconductors • acquired

Porto • acquired by ASMPT

Feedzai 

AI fraud detection • unicorn

Lisbon • global operations

Neuraspace 

Space traffic • growth

Coimbra

After Series A, Portugal lacks enough domestic capital for capital-intensive rounds. Companies raise less, sell early or accept foreign capital that shifts control.

Sources: Startup Portugal, Dealroom, official releases and business press.

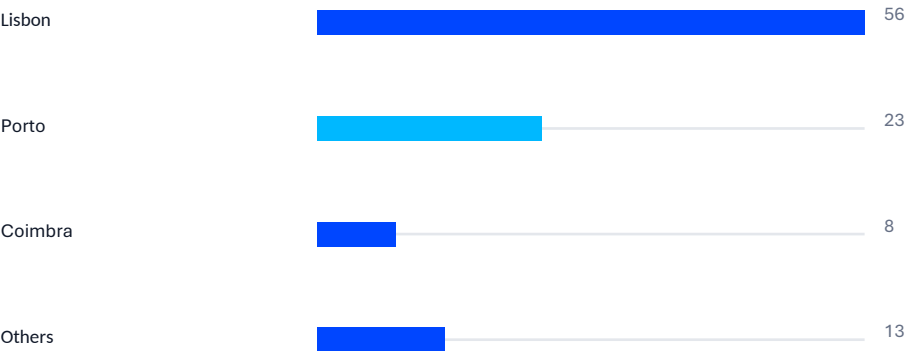
Portuguese capital disappears when real scale begins.

The challenge is not just launching: it is funding the stage when technology needs capital, customers and time to mature.

Deep tech VC by market, 2025 (\$ billions)



Estimated share of deep tech funding by hub



From Series A onward, the weakness is not talent; it is balance-sheet capacity. Without growth capital, companies are exposed to early sale, headquarters relocation or loss of intellectual property.

Sources: European Deep Tech Report 2026 and Dealroom. Distribution by hub estimated from public data.

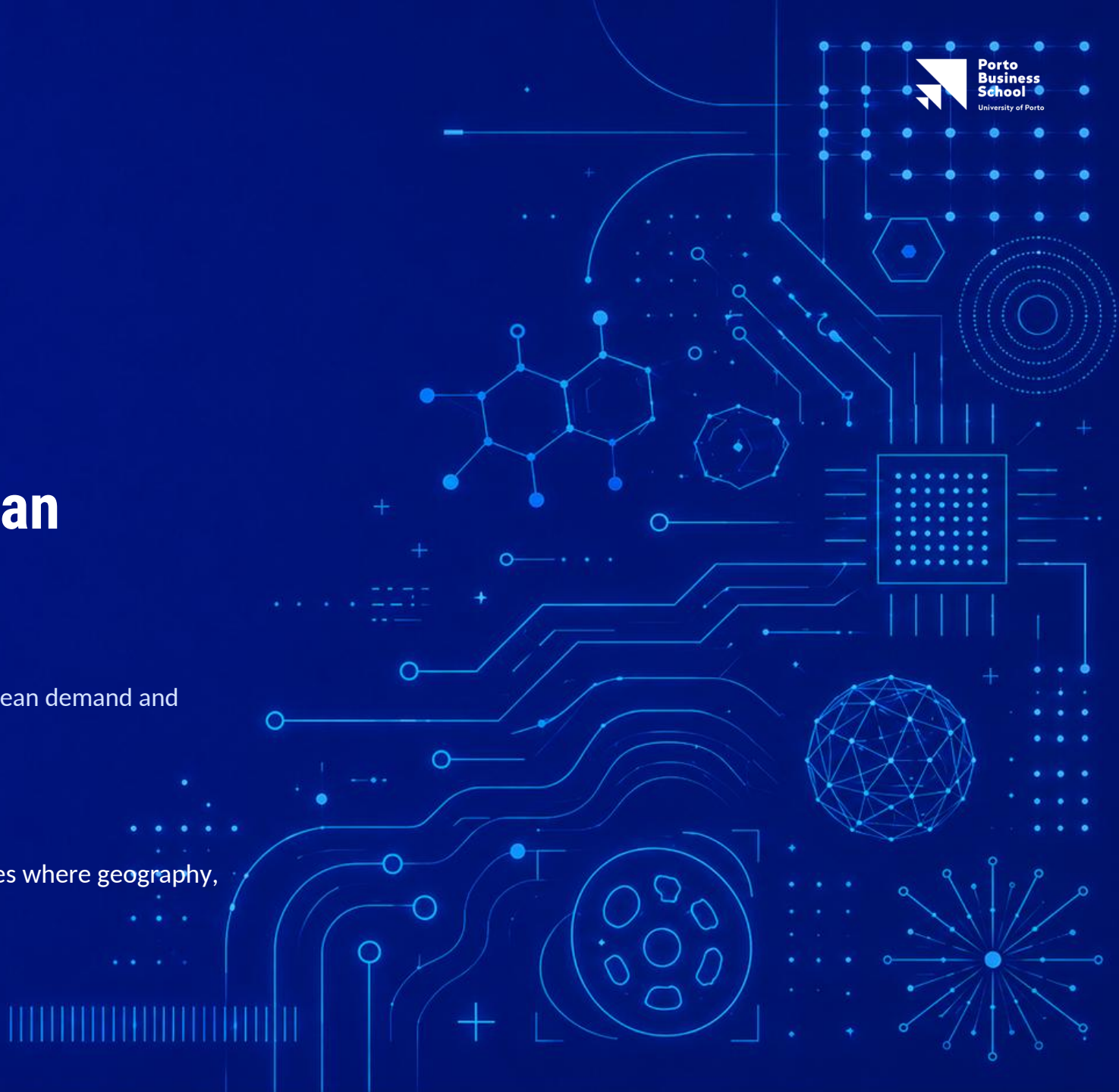
04

Six niches where Portugal can win

Concentrate capital, policy and public procurement where European demand and local assets intersect.

TAKEAWAY FOR DECISION-MAKERS

The strategy is not to spread bets. It is to concentrate resources where geography, science, industry and European demand overlap.



Six niches selected against five criteria.

The focus combines scientific capability, demand, Portuguese advantage, sovereignty and a path to scale.

01



Space & Atlantic

ORBIT & OCEAN

Neuraspace · Spin.Works · Omnidea

02



Dual-use defense

SENSORS & AUTONOMY

TEKEVER

03



AI & language

APPLIED INTELLIGENCE

Feedzai · Sword · Defined.ai · Smartex

04



Semiconductors & nano

CHIPS & PHOTONICS

INL · Critical Manufacturing

05



Health & bio

BIO & MEDTECH

Sword · IMM · Champalimaud · i3S

06



Blue & green economy

ENERGY & OCEAN

WindFloat · Sines H2 · Faber

SELECTION CRITERIA

SCIENTIFIC BASE

EUROPEAN DEMAND

PT ADVANTAGE

SOVEREIGNTY

SCALE ≤ 10 YEARS

The priority is not to cover everything: it is to concentrate capital, policy and public procurement where the five criteria reinforce one another.

Selection based on five strategic criteria; examples are illustrative and non-exhaustive.

Deep tech can become a truly national policy.

From the North to the Azores, each region has distinct assets: laboratories, industry, energy, ocean or digital infrastructure.

01

Porto & North

ENGINEERING & HEALTH

INESC TEC · Critical Manufacturing · Sword Health

02

Braga & Minho

NANO & COMPUTING

INL · Deucalion

03

Lisbon & Tagus

AI & DEFENSE

Feedzai · TEKEVER · Defined.ai

04

Coimbra & Central

SPACE & MATERIALS

Neuraspace · U. Coimbra · Aveiro

05

Alentejo & Sines

COMPUTING & ENERGY

Start Campus · Sines H2 · Microsoft

06

Azores & Atlantic

SPACE & SEA

Santa Maria · submarine cables · spaceport

Deep tech is an economic agenda for the whole country: each region has a sovereign asset to convert - and a real risk of wasting it.

The Atlantic is an economic advantage, not just a geographic one.

Space, defense, maritime surveillance and technological autonomy are areas where Portugal's location can become a market advantage.

TEKEVER

LISBON • PONTE DE SOR

Maritime surveillance and ISR drone systems used across Europe, the clearest path to a Portuguese defense champion.

Neuraspace

COIMBRA

AI-based space traffic management and collision prevention, a sovereign capability for an increasingly congested orbit.

Atlantic infrastructure

AZORES • SANTA MARIA

Spaceport ambitions, ground stations and submarine cable landings position Portugal as a European gateway.

Geography and geopolitics align: sensors, autonomy and operations in extreme environments are precisely where Portuguese engineering can differentiate.

Portugal is strong in applied AI. The next leap is infrastructure.

Portugal's wins today are in applied AI. The deeper opportunity is to move down the stack - computing, chips and qubits.

STRONGEST TODAY	Applied & generative AI	Portugal has already built AI solutions. The next challenge is to control more of the value chain.
INSTALLED INFRASTRUCTURE	Computing & HPC	EuroHPC Deucalion and Sines add computing capacity.
EUROPEAN TAILWIND	Semiconductors & photonics	Research at INL and INESC; Critical Manufacturing reaches global factories.
EARLY BUT STRATEGIC	Quantum	IST and university groups, with EuroQCI building national capacity.

Infrastructure attracts. The advantage appears when Portugal builds companies, software, data and IP on top of it.

Sines can host European AI, but hosting is not controlling.

Data centers and cables create capacity; the economic prize lies in the companies, software and intellectual property built on top of it.

1.2 GW

Start Campus across six buildings by 2031

~€8.5 billion

maximum announced investment

\$10 billion

Microsoft commitment signaled

EU

bid for an
AI gigafactory
Portugal and Spain
compete for strategic
capacity.

Sines' deep-water port - renewable energy and transatlantic cables - has attracted hyperscale capital and puts sovereign computing within national reach.

Hosting compute is not the same as owning the companies and IP built on it. The prize is the latter, not the former.

Sources: Start Campus; European Commission; Government of Portugal; business press.

Deep tech can reshape eight engines of Portugal's economy.

The impact extends beyond the technology sector: to industry, the ocean, defense, tourism, universities, wages, talent and regional cohesion.

01 Reinvented industries

Textiles, footwear, agrifood and metalworking move up the value chain with sensors, AI and advanced materials.

03 Defense & security

Portugal can move from customer to sovereign supplier in dual-use areas.

05 Universities that create companies

Industrialized transfer turns public science into spin-outs, patents and skilled employment.

07 Talent retained and recovered

Each national champion is an anchor that slows brain drain and recycles experienced operators.

02 Ocean economy

Underwater robotics, precision aquaculture and maritime surveillance turn the EU's largest EEZ into a technology asset.

04 Higher-value tourism

AI, data and immersive experiences increase revenue per visitor - from volume to value.

06 Premium labor market

Competitive engineering salaries create reasons to stay - and to return.

08 Regional cohesion

From Braga to Sines and the Azores, deep tech brings wealth where real estate and tourism do not reach.

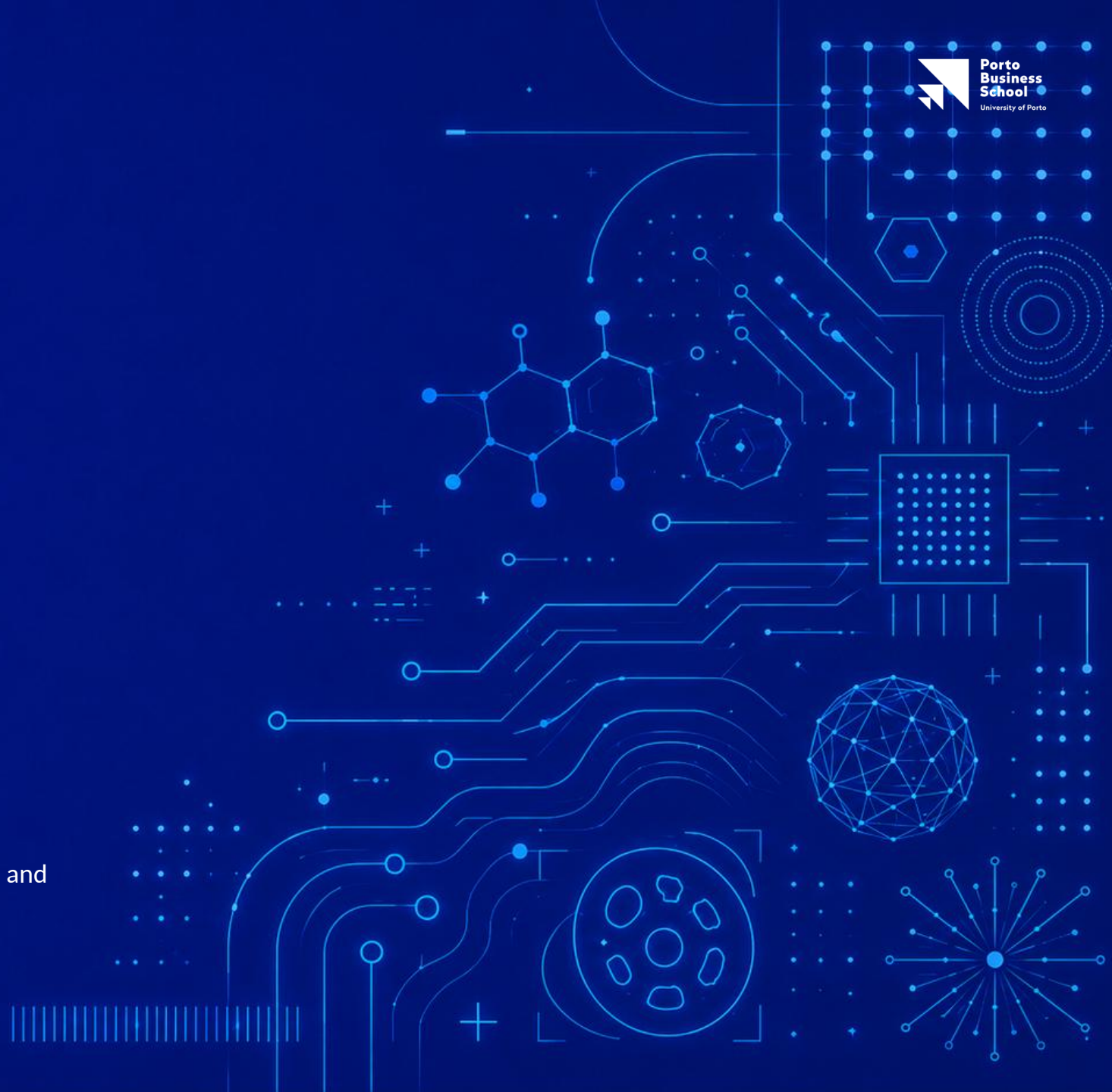
05

The four bottlenecks

Structural bottlenecks, not isolated execution failures.

TAKEAWAY FOR DECISION-MAKERS

The bottlenecks are systemic. Scale-up capital, transfer, talent and the State as customer must move forward together.



Four bottlenecks require four coordinated decisions.

Scale-up capital, technology transfer, talent return and public procurement must move forward as a single system.

The scale-up gap	Unlock scale-up	Channel pension funds, insurers and public capital into a co-investment vehicle.
Slow lab-to-market	Industrialize transfer	Standardize founder-friendly IP terms and fund proofs of concept.
Brain drain	Recycle the flywheel	Bring operators back as mentors, business angels, board members and founders.
Risk-averse demand	Buy from startups	Use sandboxes and public procurement to create first reference customers.

Not acting has a price - but the cost must be measured.

The signals are clear; exact values require an annual, consistent and auditable baseline.

HQ

Some Portuguese scale-ups operate with headquarters or decision structures in other jurisdictions.

TALENT

The share of emigrants with higher education has increased in several destinations; measurement varies by country.

IP

Without public metrics on patents and licenses, the economic value retained cannot be measured

DECISION-MAKING

When HQ and IP move out, control declines over strategy, reinvestment and taxation

The problem is not only emigration or company sales. It is the absence of consistent metrics on HQ, IP, skilled employment, taxes and reinvestment.

Measure first: an annual account of value created, retained and transferred.

Sources: Startup Portugal, Dealroom and the Portuguese Emigration Observatory.

Five decisions with owners, milestones and metrics.

A 12-24 month roadmap turns diagnosis into verifiable execution.

DECISION • OWNER	12-24 MONTH MILESTONE • METRIC
1 Launch scale-up vehicle - BPF + institutional investors	12-24 months: first close Metric: private € mobilized
2 Make the State Customer Zero - Defense, Health and public companies	12-24 months: 5 pilots Metric: contracts and revenue
3 Standardize IP and spin-outs - Universities, TTOs, ANI and FCT	12-24 months: national model Metric: licenses and spin-outs
4 Increase European funding capture - ANI/PERIN, AICEP and ministries	12-24 months: task force Metric: success rate and € secured
5 Publish annual dashboard - Startup Portugal + data partners	12-24 months: first report Metric: HQ, IP, employment and capital

Sources and methodology

Main sources used in the analysis.

MARKET, CAPITAL & COMPETITIVENESS

European Deep Tech Report 2026 - Lakestar, Walden Catalyst and Dealroom.

Defence, Security & Resilience in Europe 2026 - Dealroom and NATO Innovation Fund.

IMD World Competitiveness Ranking 2026 - IMD and Porto Business School.

Portugal Startup Ecosystem Platform - Startup Portugal × Dealroom.

Portugal's Startup Ecosystem 2025 - Startup Portugal and Informa D&B.

National estimates - triangulation of public data; scope in the appendix.

Methodology: national figures result from triangulation of public sources. Scope, assumptions and capital scenarios are presented in the appendix.

COMPANIES, INFRASTRUCTURE & TALENT

TEKEVER and Sword Health - official releases and business press.

Microsoft and Start Campus in Sines - public disclosures and business press.

EuroHPC / Deucalion - EuroHPC Joint Undertaking.

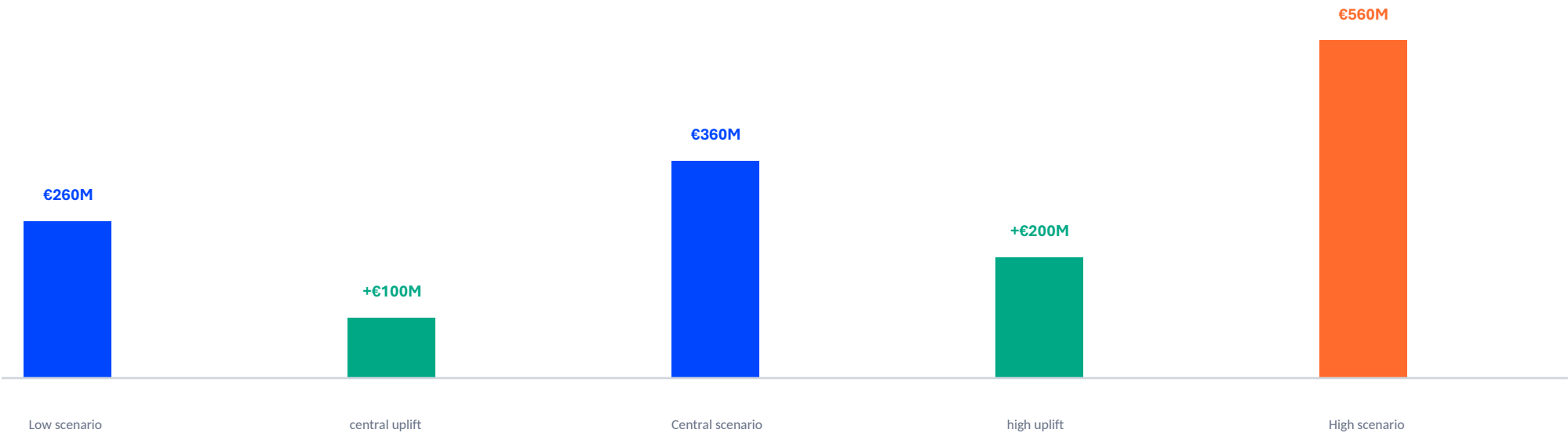
THE World University Rankings by Subject 2026 - data compiled in the European report.

Portuguese Emigration Observatory - Portuguese Emigration 2025 and country factsheets.

Profiles and official releases of the companies shown.

Capital estimate methodology

Portuguese VC linked to deep tech in 2025. The scenario range depends mainly on TEKEVER's undisclosed round.



TEKEVER is the swing factor: €150M in the low scenario, €250M in the central and €440M in the high. The central scenario, around €360M, falls within the published range of €0.35-0.45 billion. The scope excludes grants and debt.

Sources: Dealroom, TEKEVER public disclosures and own calculations. The total is not comparable with the €479M of announced rounds across all sectors.

We have the science. What we lack is ownership.

Deep Tech Portugal • 2026

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Independent perspective document, prepared from public sources available in 2026. Methodology, scope and assumptions are presented in the appendix.

