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Portugal

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AI & Partners defends and extends the digital rights of users at risk around the world. By combining direct technical support, comprehensive policy engagement, global advocacy, grassroots professional services, regulatory interventions, and participating in industry groups such as AI Commons, we fight for fundamental rights in the artificial intelligence age.

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Who Are We

AI That You Can Trust

Why Us?

Stay on the right side of history. At AI & Partners, we believe AI should unlock potential—not cause harm. We've seen the fear and fallout when teams lose control of AI, but also the trust and innovation that follow when it's handled responsibly. That's why we exist: to help you build AI you can trust and stand behind—for the long run.

80%

of AI systems are unknown

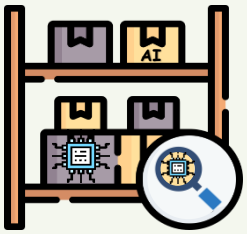
What Do We Do?

We enable safe AI usage—for your organization and your clients. Unknown AI adoption leads to confusion, risk, and reputational damage. We help you take control with tools to identify, monitor, and govern all AI systems—so you're not reacting to AI, you're leading it.

How Do We Do It?

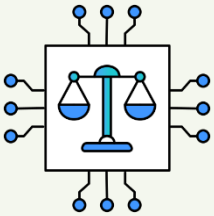
Do you know what AI systems you have? Identify all known and unknown AI systems (algorithms, LLMs, prompts, and models) from all internal and external AI vendors, automated by generating your inventory. Overall, 80% of AI inventory is unknown to our clients.

How do you guarantee ongoing safe AI use? Continuously monitor deployed AI systems for performance drift, anomalies or failures, real-world impacts, and emerging risks (e.g. data poisoning). Any malfunction of an AI system has severe implications for organisations (e.g. inability to assess online misinformation that leads to widespread public mistrust), so monitoring becomes a matter of urgency.



AI Discovery & AI Inventory

Automatically detect all AI systems, including models, algorithms, and prompts, and maintain a live, always-updated register for full visibility and compliance.



Responsible AI

Embed fairness, transparency, and control into every stage of AI use—aligning with the EU AI Act and building 'Trustworthy-by-Design'.

Model Monitoring

Continuously track your AI models after deployment to detect drift, bias, or failure—so you stay in control and prevent harm before it happens.

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Overview

Artificial Intelligence (AI) is reshaping economies and governance worldwide, and Portugal is establishing itself as a proactive advocate of ethical and human-centric AI within the European Union. Anchored in the EU's evolving regulatory landscape, Portugal has adopted a supervisory-first, alignment-driven approach that emphasizes rights-based safeguards, regulatory experimentation, and international cooperation. Rather than introducing standalone AI legislation, Portugal is leveraging strategic frameworks, Technological Free Zones (ZLTs), and soft-law instruments to promote trustworthy AI development.

At the heart of Portugal's evolving AI governance strategy is the forthcoming national AI authority, expected to be operational by 2026. Until its formal establishment, the Agency for Administrative Modernisation (AMA) represents Portugal on the EU AI Board and plays a central role in shaping compliance and awareness activities.

Portugal's governance model is underpinned by a robust and multi-actor institutional architecture. While the dedicated AI authority is forthcoming, the AMA and the Centre for Responsible AI Consortium—funded under the Recovery & Resilience Facility—are key drivers of policy implementation, capacity building, and innovation. The Consortium brings together corporates, startups, research institutions, and public entities to develop reference standards, pilot products, and postgraduate training focused on responsible AI. These efforts reflect a whole-of-society approach to embedding AI governance within national goals such as public sector modernization, digital upskilling, and inclusive economic development.

Portugal also shows strong commitment to international standards. The country aligns closely with the OECD AI Principles, UNESCO's Recommendation on the Ethics of AI, and EU-wide strategies like the Coordinated Plan on AI (2021 update) and the Digital Europe Programme.

Through these channels, Portugal ensures its domestic practices remain interoperable and globally relevant, reinforcing its image as a constructive contributor to human-centric AI governance.

Aligned with AI Portugal 2030, the country is targeting key sectors—including healthcare, energy, mobility, biodiversity, and cybersecurity—for AI-enabled transformation. Strategic clusters, Digital Innovation Hubs, and CoLABs support innovation, while sandboxes and policy instruments such as AMA's Guide to Ethical, Transparent and Responsible AI in Public Administration (2023) guide practical, accountable deployment. The Centre for Responsible AI aims to produce over 10 market-ready products and 40 postgraduate degrees, helping build a skilled, future-ready workforce.

Portugal's data and infrastructure capabilities also reinforce its AI readiness. Investments in high-performance computing, the development of secure data environments through ZLTs, and alignment with the Data Governance Act (DGA) and the EU Data Act and the European Health Data Space underscore a future-facing commitment to scalable, trustworthy data use.

Through this combination of EU-aligned oversight, innovation-driven sandboxes, and globally harmonized ethics frameworks, Portugal is building a comprehensive, adaptive model of AI governance. By prioritizing human rights, transparency, and real-world experimentation, Portugal is charting a pragmatic course toward AI that is both innovative and democratically grounded.

Specific AI Governance or Law

Portugal has no standalone AI law but implements the EU AI Act, with a national authority to be appointed by August 2026. Innovation is supported through Technological Free Zones and the Centre for Responsible AI. AI systems must respect rights under the Digital Age Human Rights Declaration (Law 27/2021).

Specific AI Governance in Portugal

Rather than adopting sweeping standalone legislation, Portugal is implementing the EU AI Act directly and will adopt an implementing act by 1 August 2026 to name a national "notified authority" and market-surveillance body. Until then, Portugal's Agency for Administrative Modernisation (AMA) already represents the country on the EU AI Board. To foster innovation while preparing for compliance, Portugal relies on Technological Free Zones (Zonas Livres Tecnológicas – ZLTs). These regulatory sandboxes let companies pilot high-risk AI under real-world conditions and generate best-practice guidance for EU AI Act conformity. Portugal is also building long-term supervisory capacity through the Centre for Responsible AI Consortium, a flagship Recovery & Resilience Facility project that brings together large corporates, start-ups, research institutes and public bodies to develop reference standards, 12 pilot AI products and extensive academic training in responsible AI. Complementing these instruments is the Portuguese Declaration of Human Rights in the Digital Age (Law 27/2021), which requires AI systems to respect fundamental rights, strike a balance between security, transparency and accountability, and avoid discriminatory outcomes.

AI Ethics Guidelines and Sectoral Governance Tools

In the absence of AI-specific national legislation, Portugal currently operates under a layered regulatory model. This framework is rooted in the forthcoming EU Artificial Intelligence Act and reinforced by a range of domestic laws covering data protection, cybersecurity, consumer rights, labour relations, and product safety. At the strategic level, **AI Portugal 2030**—part of the broader Action Plan for Digital Transition—sets out national objectives focused on promoting innovation, talent development, and the responsible, transparent adoption of AI across sectors.

Several policy instruments guide AI adoption in the public sector. Notably, the **Guide to Ethical, Transparent and Responsible AI in Public Administration**, published by AMA in June 2025, offers actionable principles, checklists, and ethical risk assessment tools for deploying AI within governmental entities. These tools provide clarity for public officials and agencies seeking to align with evolving EU regulations and national standards. Meanwhile, the **National Data Protection Authority (CNPD)** has expanded its remit by issuing technical opinions and best practices related to AI and biometric technologies.

Complementing these instruments are **sector-specific legal obligations**, including the Cybersecurity Law, the Digital Operational Resilience Regulation for financial services, and consumer protection legislation such as the Consumer Rights Code and the Digital Goods and Services Law. Together, these create a dense matrix of compliance requirements for AI developers operating in Portugal. The country also aligns itself with **international normative frameworks** by endorsing the **OECD AI Principles** and **UNESCO's Recommendation on the Ethics of AI**, demonstrating its commitment to global governance standards.

Building on this foundation, **Portugal's innovation agenda is further advanced through the "Compete 2030" programme**, which succeeds the previous COMPETE 2020 initiative. As part of the transition from "Portugal 2020" to "Portugal 2030," this programme promotes digital transformation and sustainable innovation. AI-driven projects supported under COMPETE 2030 include:

- **Sustainable Stone by Portugal**, led by Solancis, which leverages AI to digitize and modernize the ornamental stone industry;
- **Bio-Waste2Carbon**, a project that converts forestry waste into renewable energy using AI, contributing to the country's green transition;
- **iCare4NextG**, which develops AI-based preventive healthcare and home assistance solutions to support ageing populations and remote care delivery.

In a significant step toward scaling AI infrastructure, the **Portuguese Government announced its participation in one of the first seven "AI Factories"** coordinated under the **EuroHPC initiative**. These factories, co-funded by national and EU resources, are part of a broader European effort to accelerate AI development through high-performance computing. The initiative brings together 17 European countries and is integrated into the **National AI Agenda**, launched in 2025. This agenda consolidates Portugal's strategic AI goals and underscores the government's commitment to technological sovereignty, research excellence, and ethical AI governance.

These initiatives collectively reflect Portugal's dynamic and multi-layered approach to AI regulation, innovation, and deployment. By combining strategic policy planning, cross-sector regulation, and international cooperation, Portugal is positioning itself as a proactive player in shaping the future of responsible AI within the EU and beyond.

Proposed AI Regulatory Authority and Future Outlook

The forthcoming national AI authority—expected to be operational in 2026—will supervise conformity assessments, impose sanctions and coordinate market-surveillance tasks across sectors. It is likewise expected to run awareness campaigns and capacity-building programmes for SMEs and public bodies. Results from the ZLT sandboxes and the Centre for Responsible AI will feed directly into secondary legislation and technical guidelines, ensuring Portugal's domestic framework evolves in lock-step with both EU requirements and local socio-economic needs. Taken together, Portugal's structured, EU-coordinated approach aims to unlock AI's economic and social value while safeguarding fundamental rights and public trust—anchoring the country's role as a responsible AI innovator within the European Union.

Discussion: Portugal's National AI Strategy

'Portugal's comprehensive approach to AI governance, deployment and innovation mirrors its EU peers but is channelled through AI Portugal 2030 and the wider INCoDe.2030 digital-skills plan. The strategy treats AI as a driver of social well-being, competitiveness and public-sector modernisation while anchoring every initiative in human-centric, trustworthy design. Below is a concise mapping of Portugal's priorities against the ten-point template.'

Research Specialisation | **Qualification** | **Education** | **Inclusion**

Analysis

Portugal's AI strategy reflects a mission-driven, ecosystem-oriented approach that prioritizes responsible innovation, foundational research, and inclusive adoption. While some countries emphasize industrial scale or sectoral digitization, Portugal distinguishes itself through a coordinated strategy that combines research excellence with regional strengths, ethical safeguards, and alignment with European frameworks such as the EU AI Act, Horizon Europe, and Digital Europe. Orchestrated through national agencies and innovation clusters, Portugal's AI agenda spans the full value chain—from compute infrastructure and talent pipelines to real-world deployment and global governance engagement. Backed by initiatives like AI Portugal 2030, the strategy sets out ten priority axes. These include: (1) targeted mission-led AI deployment in high-impact domains, (2) cluster-based innovation ecosystems, (3) responsible and auditable data use, (4) AI adoption in public administration, (5) national compute and research infrastructure, (6) SME and start-up enablement, (7) inclusive AI skills and education, (8) sustainability-aligned AI development, (9) trust-building and ethical governance, and (10) proactive global standard-setting. By leveraging Digital Innovation Hubs (DIHs), Co-LABs, and European partnerships, Portugal aims to amplify local advantages in sectors such as sustainable energy, mobility, health, and cybersecurity—while reinforcing its role as a principled contributor to EU-wide AI governance. Mission-led AI deployment in Portugal is focused on living-lab initiatives in areas where the country holds natural or industrial advantages. Pilot projects—from precision agriculture in the Alentejo to autonomous mobility corridors in Aveiro—serve as blueprints for productivity gains and quality-of-life improvements. Sectoral alignment with national priorities ensures AI is deployed not as a generic technology but as a driver of local transformation.

A defining feature of Portugal's AI strategy is its cluster-driven innovation model. A distributed network of Digital Innovation Hubs, research-intensive clusters, and university–industry platforms facilitates collaboration among academia, SMEs, and multinationals. These structures offer shared testbeds, AI-on-demand services, and talent development pipelines. The ambition is to turn scientific excellence into commercial and social impact by scaling patents, deep-tech ventures, and international partnerships. Ethical, trusted, and transparent AI is a core principle. National guidelines mandate risk assessments, explainability, and privacy-by-design, dovetailing with the GDPR and the EU AI Act. Regulatory sandboxes within Technological Free Zones enable developers to validate compliance under real-world conditions prior to market deployment. The public sector plays a pivotal role both as an adopter and as a testbed. FCT-backed initiatives such as "AI for Public Administration" and SAMA 2020 calls are accelerating the prototyping of AI for justice, urban planning, and public transport. Secure access to administrative data supports the shift from reactive to anticipatory services, aligned with evidence-based policymaking goals. To meet compute demands, Portugal is investing in a new national supercomputer, which complements existing capacity at the Minho and Coimbra Advanced Computing Centres and the C4 Cloud-Competence Hub. The Quanta Lab at the International Iberian Nanotechnology Laboratory (INL) extends this infrastructure into the frontier domain of quantum-AI research. These investments ensure researchers and SMEs have access to high-performance computing for large-scale model training and experimentation.

Portugal's strategy places SMEs and start-ups at the heart of AI diffusion. Support measures such as innovation vouchers, AI-as-a-Service platforms, and sandbox environments reduce adoption friction. Start-ups like Unbabel (natural language processing) and Feedzai (AI for fintech) demonstrate the global scaling potential when local innovators are embedded in EU-wide networks. Human capital development is fundamental to Portugal's vision. INCoDe.2030 integrates AI literacy from early education to adult reskilling, combining Ciência Viva machine-learning clubs, national coding festivals, and vocational retraining in partnership with IEFP and polytechnic institutes. Special emphasis is placed on inclusion, with policies designed to close digital and gender gaps. Portugal's AI strategy is deeply aligned with the green transition. AI supports climate forecasting, biodiversity monitoring, and grid optimisation. Living-lab projects on sustainable cities and renewable energy systems embed environmental KPIs into all demonstrators, positioning AI as a tool for environmental stewardship as well as economic growth.

The governance model is both principled and collaborative. National AI guidelines, Stakeholder engagement is facilitated through national consultations, public guidelines, and experimentation zones. Portugal actively contributes to international standard-setting bodies such as the OECD and UNESCO, and aligns with the EU Coordinated Plan on AI and EuroHPC to ensure its voice shapes the next generation of interoperable and human-centric AI systems. By integrating AI into its digital, social, and sustainability strategies—while remaining closely coordinated with European frameworks—Portugal is building a future in which AI serves as a trusted enabler of inclusive economic and social progress by 2030.

Portugal's Approach to AI Regulation and Governance

'Portugal has positioned itself as a proactive participant in shaping AI governance within the European Union, building dedicated programmes and "test-bed" zones while aligning closely with EU legislation. Without passing standalone AI-specific laws, Lisbon is fostering responsible AI development through strategic initiatives, ethical principles and regulatory innovation aimed at creating a robust, human-centric AI ecosystem.'

1. Regulatory and Strategic Frameworks

Portugal's approach is anchored in direct application of the EU AI Act. The country must adopt an implementing act by 1 August 2026 to designate a national "notified authority" and at least one market-surveillance body, but it is already represented on the EU AI Board by the Agency for Administrative Modernisation (AMA). Supplementing this EU-first stance are non-binding national instruments: AI Portugal 2030 and the Action Plan for Digital Transition set policy priorities around transparency, accountability and inclusive growth, The Portuguese Declaration of Human Rights in the Digital Age (Law 27/2021) translates fundamental-rights guarantees—such as non-discrimination and explainability—into the AI context. To encourage compliance learning,

Technological Free Zones (Zonas Livres Tecnológicas, ZLTs) act as regulatory sandboxes where high-risk AI systems can be piloted under real-world conditions. Portugal has a digital healthcare system ("SNS"), which is a perfect sandbox to trial AI technologies and make sure Europe is competitive from an AI in healthcare point of view. Same goes with MBWAY (digital bank payment system, since 2015, way ahead of many countries).

2. Institutional Support and Strategic Missions

Although a permanent AI authority is still to be named, Portugal is building institutional capacity on several fronts: AMA currently coordinates Portugal's input to EU rule-making and will likely assume supervisory functions until a dedicated authority is created. The Centre for Responsible AI Consortium (funded under the Recovery & Resilience Facility) unites 54 public- and private-sector actors to develop reference standards, 12 pilot AI products and extensive postgraduate training in responsible AI.

3. Standards Development and Global Engagement

Portugal aligns national efforts with international AI ethics and standard-setting discussions. It endorses the OECD AI Principles and UNESCO's Recommendation on the Ethics of AI and contributes to European initiatives such as the Coordinated Plan on AI 2021 update and the Digital Europe Programme.

AI Portugal 2030 pledges to “speak with one voice” in global forums, acting as a bridge between domestic innovation and EU-wide policy-making.

4. Sectoral and Extended Regulatory Approaches

No sector-specific AI statute exists yet, but existing Portuguese and EU rules already influence AI deployments: Data protection: GDPR plus Portugal’s implementing Law 58/2019 and strong guidance from the Data Protection Authority (CNPD) on topics such as biometrics.

Cybersecurity: Law 46/2018 (NIS transposition) and its implementing regulations mandate security-by-design for essential-service operators.

Consumer protection: the Digital Services and Digital Goods laws, the E-Commerce Law, distance-selling rules and general advertising codes all apply to AI-enabled products.

The ZLT sandboxes supply sector-specific insights—initial pilots focus on healthcare, mobility and smart retail—feeding best practices back into policy design.

5. Fostering Innovation and Indigenous Development

Innovation policy revolves around open experimentation, R&D incentives and SME support:. ZLTs allow companies to iterate AI models under flexible supervision before commercial launch. The Centre for Responsible AI is tasked with producing “10+ market-ready products and 40 postgraduate degrees”, in trustworthy AI, with a focus on inclusion and gender balance. To boost domestic capability AI Portugal 2030 earmarks funds for start-ups, particularly in language technologies and green-transition applications.

6. AI in Public-Sector Transformation

AMA’s Guide to Ethical, Transparent and Responsible AI in Public Administration (2023) gives civil-service bodies practical check-lists for lawful AI procurement and deployment. Upcoming ZLT pilots include a public-services track, and the future national AI authority is expected to audit government algorithms for compliance with Law 27/2021 principles.

7. AI Skills, Education and Inclusion

Portugal’s digital-skills agenda integrates AI across all education levels: INCoDe 2030 and Upskill programmes expand coding and data-science training, with special bursaries for under-represented groups. The Centre for Responsible AI’s academic pillar will deliver over 40 new post-graduate courses in trustworthy AI across Portuguese universities.

8. Infrastructure, Compute and Data Foundations

While compute capacity is still emerging, Portugal participates in EU super-computing and data-space initiatives. AI Portugal 2030 pledges national investments in high-performance computing nodes and secure data-sharing frameworks that dovetail with the EU Data Act and European Health Data Space. ZLTs further provide safe environments for real-world data testing and model validation.

9.Use of AI in Public Administration

Public administrations in Portugal are poised to rely increasingly on artificial-intelligence systems for decisions that touch directly on citizens' fundamental rights. To preserve the principle of administrative legality while embracing this shift, the State must spell out clear legal frameworks, set operational boundaries, and establish robust accountability—especially when decision-making is automated.

Public procurement can become a decisive lever for ensuring that AI deployed by the public sector upholds those safeguards. By embedding binding clauses that reference and enforce the EU Artificial Intelligence Act, contracting authorities can make compliance with non-negotiable legal and ethical standards a prerequisite for winning any public tender. In parallel, many scholars argue that the European Commission's standard contractual clauses for high- and limited-risk AI systems (CCT-IA) should be formally transposed into Portuguese procurement rules to give both suppliers and contracting bodies greater legal certainty.

At a domestic level, Portugal's Administrative Procedure Code may also need targeted amendments. It has been argued that any administrative act supported by an AI system should include elements of explainability, indicators of human oversight, and clear avenues for legal redress. A change to the Code of Administrative Procedure in this regard would align national administrative law with constitutional guarantees, the GDPR, and the forthcoming AI Act.

Taken together, these measures underscore that the "digital rule of law" is not a break with Portugal's democratic legal tradition but its logical evolution. This is what Portuguese literature has been defending. By baking transparency, legality, and fundamental-rights protection into every stage of algorithmic governance— from procurement to final decision—Portugal can foster an AI ecosystem that is innovative yet firmly grounded in the rule of law.

Portugal's Approach to Fostering AI Innovation

'Portugal's comprehensive approach to AI governance, deployment and innovation mirrors its EU peers but is channelled through AI Portugal 2030 and the wider INCoDe.2030 digital-skills plan. The strategy treats AI as a driver of social well-being, competitiveness and public-sector modernisation while anchoring every initiative in human-centric, trustworthy design.

1. Unlocking economic value through targeted AI deployment

AI Portugal 2030 identifies high-impact "living-lab" missions—health, sustainable energy, biodiversity, mobility and cybersecurity—where early AI roll-outs can raise productivity and citizens' quality of life. Pilot projects range from precision agriculture on the Alentejo plains to autonomous-driving corridors in Aveiro, signalling a deliberate tilt toward sectors where Portugal holds natural or industrial advantages.

2. Catalysing innovation through strategic clustering and ecosystems

The government backs a network of Digital Innovation Hubs, Co-LABs and research-intensive clusters that pair universities with scale-ups and multinationals. These platforms provide AI-on-demand services, shared testbeds and talent pipelines—mechanisms expected to spin out more patents and deep-tech start-ups over the decade. SIFIDE (Sistema de Incentivos Fiscais à Investigação e Desenvolvimento Empresarial) is a Portuguese tax incentive program designed to encourage companies to invest in research and development in Portugal. SIFIDE-backed funds need to invest locally, and is a strong catalyst of innovation locally. It allows companies to deduct a significant percentage of their R&D expenses from their Corporate Income Tax (IRC). This reduces the tax burden for companies and encourages them to invest in innovation. Some international companies open entities in Portugal to benefit from this funding scheme, and it returns it dynamises the development of AI technologies locally.

The international Tech conference WebSummit happens every year in Lisbon, bringing c. 70,000 attendees, of which now many are AI-driven. At the same time, the conference the Europas was organised, which centered on AI, including a panel with representents of the European Commission behind the EU AI Act.

The French President Emmanuel Macron visited Lisbon in February 2025, days after the AI Summit in Paris. Conversations at the Tech Hub “Unicorn Factory” covered topics on how we could create a strong Europe with a strong AI: being competitive, while setting the gold standard of a good AI.

Portugal plays a key role in Europe when it comes to bringing together the brains behind the future of AI in Europe.

3. Enabling trusted and responsible data use

Portugal’s strategy foregrounds auditability, transparency and privacy-by-design. National guidance on ethics and safety requires explainable models and risk assessments, dovetailing with GDPR and the forthcoming EU AI Act.

4. Scaling AI in the public sector

A series of FCT-funded “AI for Public Administration” projects and SAMA 2020 calls allow ministries to prototype AI for justice, urban planning and transport. The aim is to shift public services from reactive to anticipatory, fuelled by secure access to administrative data and evidence-based policymaking.

5. Advancing compute and research infrastructure

Portugal is installing a new national supercomputer to complement the Minho and Coimbra Advanced Computing Centres and the C4 Cloud-Competence hub, giving researchers and SMEs high-performance compute for large-scale language and vision models. The INL’s Quanta Lab extends this backbone into quantum-AI research.

6. Empowering SMEs and start-ups

AI-as-a-Service portals, innovation vouchers and sandbox regimes lower the entry barrier for SMEs. Start-ups such as Unbabel (NLP) and Feedzai (fintech AI) showcase how Portuguese firms can scale globally when plugged into the DIH network and EU single market.

7. Developing a future-ready workforce

INCoDe.2030 integrates AI literacy from primary school through lifelong learning. Actions include Ciência Viva machine-learning clubs, nationwide coding festivals and retraining schemes run with IEFP and polytechnic institutes, with a special focus on inclusion and gender balance.

8. Aligning AI innovation with sustainability goals

Portugal harnesses AI to accelerate the green transition—optimising energy grids, forecasting climate risks and monitoring marine biodiversity. Living-lab initiatives on sustainable cities and renewable-energy networks embed environmental KPIs into every demonstrator.

9. Building public trust and ethical AI

Guidelines for Ethical, Transparent and Responsible AI in Public Administration set out explainability, non-discrimination and human oversight requirements. Regulatory sandboxes in Technological Free Zones let developers validate compliance under real-world conditions before market launch.

10. Shaping global AI governance and standards

Portugal aligns tightly with EU rule-making, participates in the OECD AI network and supports UNESCO's Recommendation on AI Ethics. Through early engagement in the EU Coordinated Plan on AI and EuroHPC, Lisbon positions itself as a constructive voice for interoperable, human-centric standards worldwide.

11. Portugal's AI Startup Scene Is Attracting International Investment

In 2024–2025, Portugal has seen a significant uptick in international venture capital investment in AI startups, particularly in Lisbon and Porto. Notable examples include Feedzai (fintech AI, raised $200M+ to date) and Sword Health (AI-powered digital therapeutics, now a unicorn). According to Sifted and EU-Startups, Lisbon is now ranked among the top 10 European cities for AI startup activity.

12. AI for Climate and Ocean Science: Portugal's Unique Strength

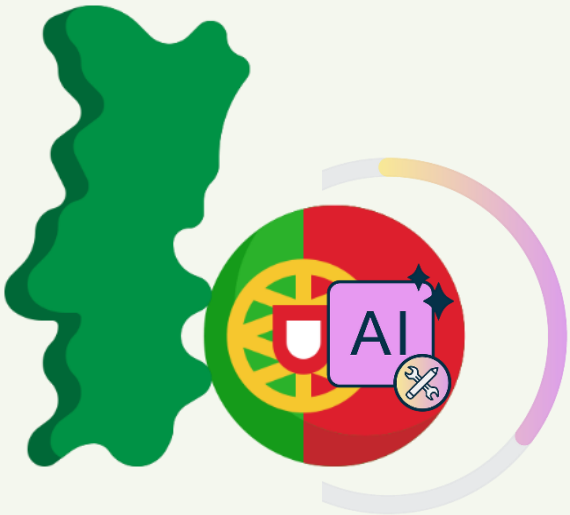
Portugal is leveraging AI for marine and climate science, with projects like the Atlantic International Research Centre (AIR Centre) using AI for ocean monitoring, climate risk prediction, and sustainable fisheries management. This positions Portugal as a leader in "blue AI" within the EU. France and Portugal work closely to advance Ocean Science, as the visit by the French President showed.

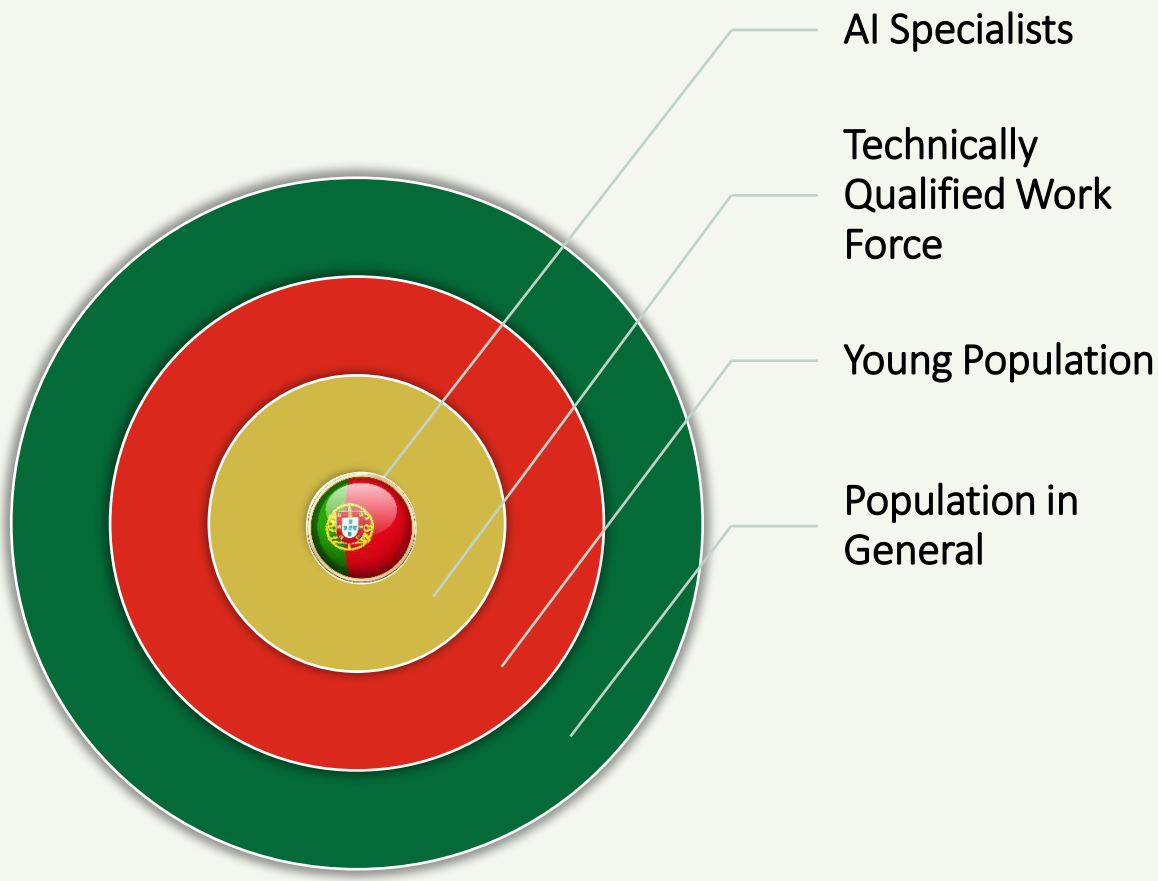
13. AI Talent Pipeline: Portugal's Brain Gain

Portugal is experiencing a "brain gain" in AI, with top Portuguese researchers returning from abroad to lead AI labs (e.g., at NOVA School of Science and Technology and Instituto Superior Técnico). The Web Summit and the new European Innovation Council (EIC) Tech Champions program are attracting global AI talent to Portugal.

In sum, Portugal couples mission-oriented deployment with robust ethical guardrails and EU-level coordination, aiming to translate AI research excellence into broad-based economic and social dividends by 2030.

Figure 1: Portugal Action Plan





Digital Decade 2025: Country Report

'In response to the 2024 recommendation, Portugal has set an ambitious objective: 75% of enterprises adopting AI by 2030. Given the current pace of development, achieving this target poses a considerable challenge.'

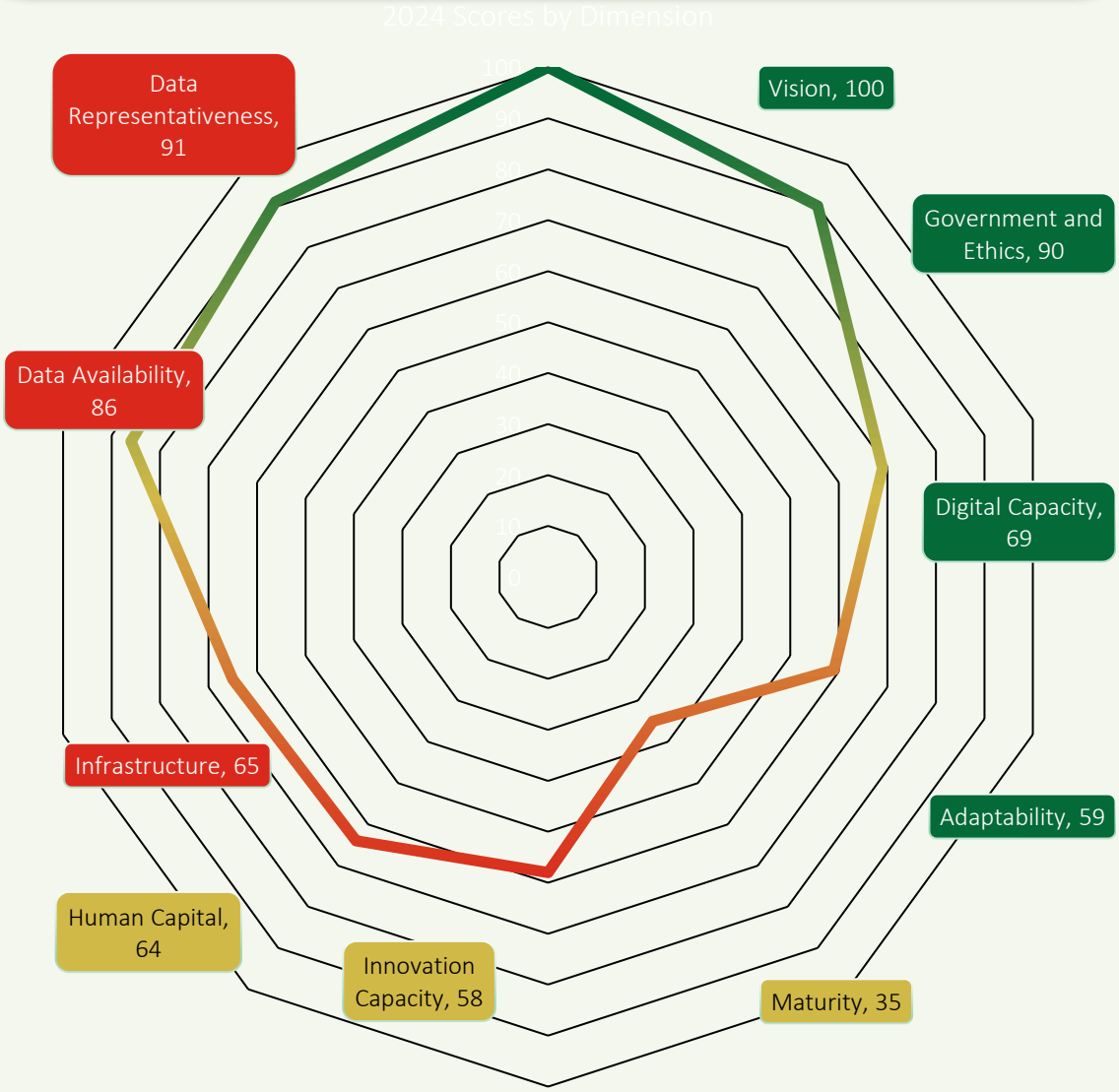
Nonetheless, both the updated roadmap and the National Digital Strategy underscore the importance of advancing AI capabilities. A key new initiative in the revised roadmap is the creation of a national large language model named "Amalia." This model is designed to (i) reinforce digital sovereignty; (ii) account for the diverse variants of the Portuguese language; and (iii) embed elements of Portugal's cultural and historical identity. Importantly, Amalia will also allow for greater control over training data and ensure appropriate management of sensitive information. Another major AI-related effort includes Portugal's involvement in the European AI Factories, which will give Portuguese stakeholders—particularly companies—access to the Mare Nostrum 5 supercomputer in Barcelona. Both the Amalia initiative and Portugal's AI Factory participation are supported under the Recovery and Resilience Facility (RRF), through the 'More Digital Science' component added in the May 2025 revision of the national plan. This initiative, alongside participation in the European AI Factories, positions Portugal as a key contributor to the EU AI ecosystem.

Portugal has already launched several initiatives that lay the groundwork for a stronger AI ecosystem. The Centre for Responsible AI is a prominent example—bringing together startups, research institutions, and industry players to foster collaboration, share expertise, and develop AI solutions tailored to market needs. Another important RRP-funded effort, the 'Interface mission' (RE-C05-i02), is focused on enhancing academia–industry cooperation, particularly through support for infrastructure that enables technology and knowledge transfer.

Within this investment, three Collaborative Laboratories (Data CoLAB, DTx, Vortex) have been funded specifically for their focus on data and AI, while 17 collaborative labs and 16 Interface Centres are working on sector-specific AI applications. In line with the 2024 recommendation on AI, cloud, and data analytics, Portugal was advised to (i) introduce targeted measures to promote the uptake of these technologies, and (ii) strengthen collaboration among the public sector, private companies, and academia to align technological capabilities with actual business demands. Portugal has taken steps in this direction by integrating AI innovation and data infrastructure priorities into existing funding mechanisms and pursuing new policy actions in 2024. However, the impact of these actions remains uncertain, and academic–business cooperation is still underdeveloped. Despite this, promising platforms such as the AI Factory initiative and forthcoming collaborative hubs may help bridge this gap.

Government AI Readiness by Oxford Insights

Western Europe ranks as the highest-performing region in this year's Government AI Readiness Index, with five countries in the global top 10. France leads the regional ranking with a score of 79.36, narrowly ahead of the United Kingdom (78.88), followed closely by the Netherlands (77.23), Germany (76.90), and Finland (76.48). With an average regional score of 69.56, Western Europe outperforms the global average (47.59) across all three pillars of Government, Technology, and Data & Infrastructure. The region's standout strength is the Data & Infrastructure pillar, where it averages 81.91, more than 21 points above the global benchmark (59.62), reflecting its advanced digital infrastructure and high-quality data environment. Although a few microstates such as San Marino, Liechtenstein, and Andorra fall slightly below the global average in the Government pillar, Western Europe's dominance at the top of the index underscores its continued leadership in AI readiness.



Government

Portugal posts a Government-pillar score of 79.47, reflecting an active institutional push to operationalise the EU AI Act and embed trustworthy-AI principles across the public sector. The country must adopt an implementing act by 1 August 2026 to designate both a "notified authority" and a market-surveillance body, but it already participates in the EU AI Board through the Agency for Administrative Modernisation (AMA). Regulatory experimentation is anchored in Technological Free Zones (Zonas Livres Tecnológicas, ZLTs), which let organisations pilot high-risk AI systems under real-world conditions. Fundamental-rights safeguards stem from the Portuguese Declaration of Human Rights in the Digital Age (Law 27/2021), while AMA's Guide to Ethical, Transparent and Responsible AI in Public Administration (2023) gives civil-service bodies concrete check-lists for lawful deployment. Together, these measures underpin a government model that couples EU alignment with local oversight and capacity-building.

Technology Sector

A Technology-pillar score of 52.49 signals a maturing yet uneven innovation ecosystem. Portugal's AI market is expanding "remarkably", fuelled by start-ups, SMEs and multinationals experimenting with chatbots, biometrics and sector-specific solutions. The Centre for Responsible AI Consortium—a Recovery & Resilience Facility flagship that unites two unicorns, 25 start-ups, eight research centres and major industry players—aims to produce market-ready AI products and postgraduate training, strengthening domestic R&D pipelines. Generative-AI adoption is accelerating across life-sciences, finance and public services, yet scaling hurdles remain around venture funding, talent retention and technology transfer from labs to industry. Continued support for ZLT sandboxes and cluster-based collaboration will be critical to narrow the gap with higher-scoring Western-European peers.

Data & Infrastructure

With a score of 80.83, Portugal exhibits strong digital foundations and a forward-looking data-governance agenda. National policy aligns with EU instruments such as the Data Governance Act, the forthcoming Data Act and sectoral data-spaces—including early work on the European Health Data Space. ZLTs provide secure environments for real-world data testing, while AI Portugal 2030 earmarks investment for high-performance computing nodes and cloud uptake to ensure adequate compute capacity. These initiatives, coupled with robust broadband penetration and an expanding open-data culture, create favourable conditions for large-scale, data-driven AI projects across the economy.

Conclusion

Portugal's artificial intelligence ecosystem is navigating a pivotal transformation—anchored in ethical governance, EU regulatory alignment, and an expanding landscape for innovation. With firm institutional commitments, including the forthcoming national AI authority and strategic instruments such as AI Portugal 2030, the Technological Free Zones (ZLTs), and the Declaration of Human Rights in the Digital Age, Portugal is laying a robust foundation for responsible and inclusive AI deployment that balances social safeguards with economic advancement.

Portugal scores strongly on digital infrastructure and data governance, supported by strategic alignment with the EU Data Act, the European Health Data Space, and national investments in supercomputing and secure data-sharing environments. Initiatives such as the ZLTs—real-world regulatory sandboxes—and national programs for high-performance computing position Portugal to scale AI deployment across priority sectors including healthcare, energy, biodiversity, mobility, and public services. The country's rights-based, human-centric model reflects a deliberate effort to ensure AI systems are transparent, explainable, and consistent with democratic values.

Still, structural challenges remain. Portugal's moderate technology sector score points to the need for greater commercial translation of AI research and stronger linkages between academia and industry. While initiatives like the Centre for Responsible AI Consortium are expanding domestic capability—with goals to produce market-ready AI products and over 40 new postgraduate degrees—scaling remains uneven. Enhancing venture funding, talent retention, and support for SMEs will be critical to accelerating AI innovation and adoption, particularly outside established research clusters.

To realise its strategic vision, Portugal must deepen regional ecosystem coordination and support a broader base of indigenous AI capabilities. Focused investments in digital skills via the INCoDe.2030 initiative, along with inclusive training and reskilling programmes, are key to building a future-ready workforce. Continued backing of innovation hubs, CoLABs, and cross-sector sandboxes will also help unlock AI's transformative potential in both economic and societal terms. Portugal's strong engagement in international governance—via the OECD, UNESCO, and EU initiatives like the Coordinated Plan on AI—further enhances its ability to shape globally aligned AI norms. With a policy agenda that tightly links AI to sustainability, civic trust, and inclusion, Portugal is well-positioned to influence emerging standards for interoperable and responsible AI.

If supported by continued cross-sector coordination, agile regulatory development, and targeted public-private investment, Portugal can establish itself not only as a committed EU-aligned regulator, but as an influential regulatory innovator, capable of piloting forward-looking models of human-centric, explainable, and rights-based AI that resonate across jurisdictions. Portugal may also explore complementarity with horizontal AI governance instruments like the AI Liability Directive (proposal) and sector-specific rules (e.g., Medical Device Regulation) to ensure legal consistency and reduce uncertainty in risk allocation for AI deployment.

Appendix: Expert Views

Luis Espirito Santo

PhD Researcher in Machine Learning and Computational Creativity

> *"Despite insufficient public investment and ongoing brain drain, Portugal is emerging as an AI hub - driven by private funding, dedicated communities, and highly skilled people - though not without social cost."*

Biography

Luís Espírito Santo is pursuing a joint PhD in Machine Learning and Computational Creativity at the University of Coimbra and Vrije Universiteit Brussel. He explores the theoretical foundations of AI—how learning systems generate creativity, reason, and adapt. An experienced organiser of AI related events in Lisbon, and frequent presenter at international AI conferences, he has contributed to research in computational creativity, generative AI, and deep learning applied to music and biometrics. He will soon join Fujitsu in Tokyo to work on AI model efficiency. Passionate about interdisciplinary research, Luís advocates for responsible AI grounded in philosophy, logic, and formal learning theory.

John Fattal

NaturalEdge.ai

"Portugal is at the forefront of using AI to solve humanity's biggest challenges. From ocean monitoring to climate prediction, we're building technology that matters."

Biography

John Fattal is the founder of NaturalEdge.ai, an AI-powered content creation platform. With over 8 years of experience leading AI and engineering teams, he has built chatbots and AI agents for major green energy companies, including OVO, the UK's second-largest energy provider. John specialises in AI and Engineering strategy during high-stakes organisational transitions, having led technical integrations and team restructuring at Bulb and StepStone, working directly with private equity firm KKR during complex merger processes. His expertise spans from hands-on AI development to executive-level technical leadership in scaling startups and established enterprises. Based in Portugal, John contributes to the European AI ecosystem through thought leadership and practical AI implementation, bridging the gap between cutting-edge technology and real-world business value.

Mariëtte Abrahams

Qina

*"This is an area that **Qina** is focused on in the growing area of personalised health by combining the needs of multiple stakeholders in a new ecosystem with the goal of improving public health with nutrition as a key lever."*

Biography

Mariëtte Abrahams PhD MBA is the CEO and Founder of Qina, a personalised health & nutrition innovation consultancy & platform that operates at the intersection of food, health, technology and society. Mariëtte has worked in the clinical and medical nutrition industry for over 25 years. She leverages her combined expertise in nutrition, business and research to help companies create personalised health solutions that are beneficial to health and rooted in science.

Adrian Topp

Mayfield & Lindsay

> *"Portugal's AI ecosystem blends talent, innovation, and EU alignment—making it a launchpad for responsible, high-impact global solutions"*

Biography

Adrian Topp is an international operations executive and transformation leader with over 30 years of experience in the telecommunications and technology sectors. He has held senior leadership roles across Europe, Africa, the Middle East, Asia, and the Americas, driving large-scale operational change, cost optimisation, and service excellence for global operators and vendors.

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