

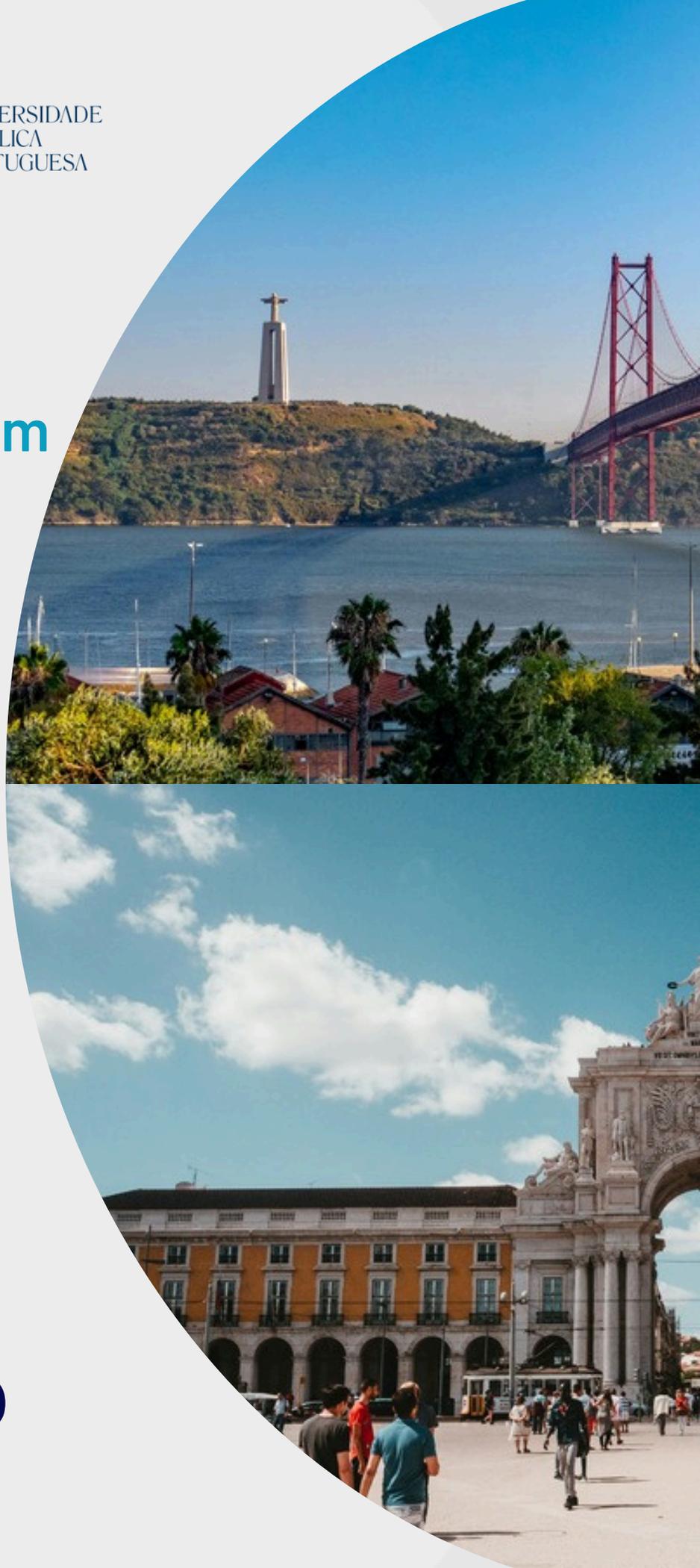


UNIVERSIDADE  
CATOLICA  
PORTUGUESA

# University and Research Leadership Forum

EVENT REPORT

# Lisbon Study Trip





Universidade Católica Portuguesa, Lisbon, Portugal

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Lisbon Study Trip

# Leadership Letters

# A Message from the GFCC Leadership

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The GFCC University and Research Leadership Forum (URLF) study trip to Lisbon, held in partnership with Universidade Católica Portuguesa (UCP) from July 8-11, 2025, was a tremendous success. Under the inspiring leadership of President Isabel Gil and her exceptional team, participants experienced first-hand how UCP exemplifies the transformational role universities play in driving place-making innovation—a concept that lies at the heart of this phase of the URLF. As visionary leaders, they are guiding UCP toward becoming a catalyst for social change and economic transformation within Portugal and beyond, fostering a thriving innovation ecosystem in Lisbon.

A distinguished group of industry, government, and academic leaders from the GFCC community joined four days of lively discussions centered around the roles universities play as innovation and economic growth engines, and as drivers of their local ecosystems. Our members witnessed in a deep, expertly curated, and highly personal way an impressive level of commitment from organizations and leaders across Lisbon to build the future. This dedication remains an inspiration our GFCC colleagues have carried back to their home institutions and regions.

Lisbon—a city steeped in historical significance and recognized as the 2023 European Capital of Innovation—provided the perfect setting for these activities. The city's legacy as a hub of exploration and its adventurous spirit served as an inspiring backdrop for the discussions on the evolving role of universities in addressing local and global challenges. From the historic Praça do Comércio to the innovative Beato Innovation District, participants experienced a city that has transformed itself over the past decade into a magnet for innovators from across Portugal, the EU, and the world.

Universities are anchors in all of our communities, especially in times of transformation and turbulence. They play well-known roles in education and training, but they also bring communities together and drive economic growth. This is crucial now more than ever, as recent technological advancements, such as those we are all watching unfold in the AI domain, are happening at an unprecedented pace. As we all recognize, universities can and should capitalize on these new opportunities for impact.

The GFCC launched the URLF in 2016 as a platform for leaders to collaborate on rethinking and reshaping the future of higher education for impact. This exciting, new phase of the URLF focused on place-making innovation is examining how universities serve as catalysts of social change and economic transformation within their communities and regional economies, particularly in the context of a rapidly evolving global digital innovation economy. Following our launch meeting at Aston University in Birmingham in November 2024, the Lisbon study trip marked the second stop on a journey that will include many other universities and cities around the globe in the years to come. Lisbon's journey offers valuable lessons in how creativity born of necessity can drive innovation.

Unlike global hubs built on massive government investment, Lisbon has turned resource constraints into strategic advantages, leveraging its unique cultural DNA, quality of life, and relatively low operating costs to attract international talent and establish itself as an emerging innovation powerhouse. The city's success in fostering a thriving ecosystem where universities, corporations, entrepreneurs, and policymakers work together demonstrates how organic collaboration—rather than top-down mandates—can catalyze transformation.

Throughout the study trip, participants explored pioneering initiatives that exemplify this collaborative model. The Unicorn Factory Lisboa at the Beato Innovation District showcases strategic placemaking that supports companies from nascent ideas to massive scale-ups. The Champalimaud Centre for the Unknown demonstrates the power of "fusion research," integrating cutting-edge biomedical research with clinical practice. Visits to innovation centers like Diverge and the Siemens Tech Hub illustrated how global companies weave themselves into local ecosystems, creating mutually beneficial relationships that drive both local and global impact.

Universidade Católica Portuguesa plays a fundamental role in this ecosystem. Through initiatives like the Católica Lisbon Entrepreneurship Centre (CLEC) and the Católica International Business Platform, UCP demonstrates a comprehensive approach that addresses both talent development and the internationalization of Portuguese companies. The university's commitment to interdisciplinary research, with 1,400 researchers across 14 research units and six units rated as excellent in the 2025 FCT assessment, underscores its position as a driver of innovation with real societal impact.

**We extend our heartfelt thanks to President Isabel Gil, Professor Miguel Athayde Marques, Professor Céline Abecassis-Moedas, Professor Nelson Ribeiro, Professor Filipe Santos, Ms. Maria João Trincão, Ms. Alexandra Lopes, Ms. Ana Sim-Sim, and the entire UCP team, as well as to all our members and local partners for their leadership, dedication, and commitment to the GFCC mission.**

Over the years, the GFCC has consistently supported cross-sector partnerships to drive innovation and prosperity. We remain committed to fostering collaboration, recognizing today's challenges demand collective solutions. The Lisbon study trip provided a platform for leaders to exchange ideas, share best practices, develop insights into strategies to harness the transformative potential of universities, and build new partnerships. The insights and connections forged during this event will continue to inspire our collective work.

In the GFCC, we are optimistic about the progress we can achieve together and hope other leaders interested in advancing an innovation economy that is sustainable and inclusive can join us.



**Charles "Chad" O.  
Holliday Jr.**  
Chairman, GFCC



**The Hon. Deborah L.  
Wince-Smith**  
President, GFCC

# A Message from the UCP Leadership

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It was with great pride that Universidade Católica Portuguesa welcomed to Lisbon the Global Federation of Competitiveness Councils Research Leadership Forum and Study Tour. This distinguished gathering brought together an exceptional community of scholars, policymakers, and innovators, united by a shared commitment to advancing knowledge, fostering responsible leadership, and strengthening the foundations of global competitiveness.

Hosting this important initiative in Lisbon offered a valuable opportunity to showcase Portugal's vibrant research and innovation ecosystem, as well as our enduring dedication to dialogue, collaboration, and the pursuit of the common good. The exchange of ideas and experiences reflected the very spirit that animates our university: openness to the world, intellectual rigor, and a deep sense of responsibility toward society.

UCP was born out of a vision of doing better and doing otherwise to **impact society and nurture talent**. And this is what we have been successfully accomplishing over the past decades. The university has brought innovation to the heart of higher education in Portugal, working with stakeholders in business and industry and producing high impact scholarly work. And in this process, UCP was always inspired by the best international practices, moving to accredit internationally its degrees, recruiting global talent and working to build competitive research and academic networks.

On behalf of the university community, I extend my sincere gratitude to all participants for their presence, their insights, and their generous engagement. It is our hope that the conversations and partnerships fostered during this time will continue to inspire meaningful cooperation and lasting impact.



**Isabel Capeloa Gil**

President, Universidade  
Católica Portuguesa



Lisbon Study Trip

# Regional Context

# The Lisbon Advantage

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The GFCC's recent Lisbon study trip, in partnership with Universidade Católica Portuguesa (UCP), offered a powerful look at an innovation ecosystem defined by resilience and ingenuity. Unlike global hubs built on massive government investment, Lisbon's success story is a testament to how a city can turn resource constraints into a strategic advantage, leveraging its unique historical and cultural DNA to foster a thriving, organic innovation scene.

## **A heritage of adventure and grit**

Lisbon's innovation story is not a new one; it is rooted in a legacy of exploration and global discovery. This deep-seated "adventurous spirit" has been re-channeled from maritime voyages to entrepreneurial ventures. Rather than waiting for top-down directives, a culture of independent thinking and calculated risk-taking has flourished.

## **The urban magnet for talent**

Lisbon's innovation narrative is as much about people as it is about technology. Its vibrant culture, rich history, and attractive urban setting make it a powerful magnet for young, international talent. In fact, the city was named the number one emerging source of engineering talent by a survey of startup founders and recruiters conducted in Europe<sup>[1]</sup>. In addition, the number of foreign citizens living in Portugal has quadrupled in seven years, with a record of around 1.5 million foreigners registered at the end of 2024<sup>[2]</sup>.

The city's quality of life and relatively low cost of living create a welcoming environment for digital nomads, students, and early-stage entrepreneurs. Lisbon is consistently ranked as a top global destination for remote workers, such as ranking 5th in the Savills Executive Nomad Index (2025)<sup>[3]</sup>, which assesses quality of life, climate, and connectivity. The introduction of the Digital Nomad Visa (D8) in 2022 has further streamlined this influx, with thousands of individuals relocating through this residency option. This influx of diverse, skilled professionals injects fresh perspectives and energy into the ecosystem, creating a fertile ground for new ideas and collaborations.

<sup>[1]</sup> Sequoia Atlas by Sequoia Capital: <https://atlas.sequoiacap.com/city/lisbon/>

<sup>[2]</sup> AIMA (Agency for Integration, Migration and Asylum): <https://aima.gov.pt/media/pages/documents/fec4d6a712-1760603125/relatorio-migracoes-e-asilo-2024.pdf>

<sup>[3]</sup> <https://impacts.savills.com/social-change/executive-nomads-2025-quality-of-life-is-a-priority-in-location-choices.html>

## **An economic sweet spot for growth**

For corporations and startups, Lisbon offers a compelling value proposition. The combination of a highly skilled talent pool and a relatively low-cost operating environment makes it an ideal location for a wide range of ventures. This economic "sweet spot" has not only bred a new generation of local companies but has also drawn international firms looking to establish creative and cost-effective European bases with global reach.

In Lisbon, we saw a compelling model for global competitiveness. The city's success is a display that cross-sector--universities, industry and government--partnerships can catalyze transformation. The lessons from Lisbon show us that the most impactful innovation ecosystems are often not those with the most resources, but those with the most spirit.



**Roberto Alvarez**  
Executive Director,  
GFCC



**Elaine Rodriguez**  
Director of Operations,  
GFCC

# A Growing Economy and Emerging Hub

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Portugal is making significant strides on the global economic and innovation stage. In recent years, the country and its capital, Lisbon, have undergone a remarkable transformation, evolving into centers for economic growth and innovation. From GDP figures to strategic investments in technology and thriving urban hubs, Portugal presents a case study of a nation in full evolution.

## Economy

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- GDP per capita: 27,816 EUR (2025)
- Unemployment rate: 6.4% (2024)
- Inflation: 2.7% (2024)
- Exports (% of GDP): 46.7% (2024)
- Economic Activity: Services (77% of GVA), Manufacturing, Construction and Energy (21% of GVA), Agriculture, forestry and Fishing (2% of GVA).

## Population

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- Total Population: 10,749,635 (INE 2024)
- Active Population: 5,463,300 (INE 2024)
- Population Density: 116.6 inhabitants/km<sup>2</sup> (PORDATA 2024)
- Foreign Population: 1,543,697 (AIMA 2024)
- Largest City: Lisbon - 3 million inhabitants, Lisbon Metropolitan Area (PORDATA 2023)

Source: AICEP - Portuguese Trade & Investment Agency (<https://portugalglobal.pt/en/investment/why-portugal/facts-and-figures>)

Portugal's recent history is marked by a significant economic recovery and a reduction in the unemployment rate following the financial crisis years.

Portugal's economy experienced a significant recovery from 2015 to 2023, characterized by a turnaround in Unemployment Rates, which fell sharply from a high of 12.45% in 2015 to a low of 6.01% in 2022, before slightly increasing to 6.38% in 2024. Concurrently, GDP per Capita showed consistent growth up to 2019, experienced a temporary dip during the 2020 pandemic, but then rebounded to reach a historic high by 2024 (27,816 EUR). Finally, Inflation remained low or near zero for most of the period but mirrored the global trend of sharp increases in 2022 and 2023, primarily driven by geopolitical events and supply chain issues, before being forecasted to slow significantly to 2.7% in 2024.

Defined by a substantial services sector and a dynamic export market, Portugal's economic structure relies heavily on international trade and small businesses. In 2024, the nation's exports of manufactured goods were particularly strong, reaching €132.6 billion. This performance was driven by key sectors such as automotive parts, machinery and equipment, textiles and apparel, cork and

cork products, and agricultural products and wine<sup>[4]</sup>. Micro, Small and Medium Enterprises represented 99.9% of non-financial enterprises in Portugal in 2023.

Portugal is currently navigating the challenge of an aging population, with a median age of about 47.3 years and over a quarter of residents (24.3%) aged 65 and over according to data from INE (National Institute of Statistics). This long-standing trend of negative natural growth caused the population to shrink between 2015 and 2018. However, this decline has been entirely reversed by immigration. With the population at approximately 10.75 million in 2024, the current annual growth of about 1.0% is driven by Net Migration, which reached a decade-high of +155,701 in 2023 according to data from AIMA (Agency for Integration, Migration and Asylum).

## Education

- Students enrolled in higher education (nº): 456 032 (DGEEC 2024/2025)
- Graduates (nº): 101 213 (2024)
- 21% in Finance, Management and Law; 18% in Engineering; 10% in Math, Sciences and Technologies.
- Higher Education Institutions (nº): 288

## Infrastructures

- Road Network: 14 325 Km.
- Rail Network: 2 527 Km
- Airports: 15, of which 6 are international - Lisbon, Oporto, Faro, Beja, Funchal (Madeira) and Ponta Delgada (Azores).
- Ports: 9 - Viana do Castelo, Leixões, Aveiro, Figueira da Foz, Lisbon, Setúbal, Sines, Faro and Portimão.

Source: AICEP - Portuguese Trade & Investment Agency (<https://portugalglobal.pt/en/investment/why-portugal/facts-and-figures>)

## Universities & Research Focus

Portugal's universities are vital to its innovation ecosystem, driving research and development in diverse fields.

- Universidade Católica Portuguesa (UCP): Known for its strong programs in business, law, economics, and humanities, as well as in science and medicine, it has a country-wide reach with campuses in Lisbon, Porto, Braga, and Viseu. Features two highly-ranked business schools in Portugal's two main cities: Católica Lisbon School of Business and Economics and Católica Porto Business School. It develops significant research not only in social sciences and management, but also in political studies, biotechnology, and medicine and health. Actively engages in international partnerships and contributes to public policy discussions.

<sup>[4]</sup> <https://www.connecta-network.com/portugal-main-exports-and-imports-key-products-and-insights/>

- Instituto Superior Técnico (IST)(the engineering, science and technology school of the University of Lisbon): Largest engineering school. Research in engineering, biotech, AI, physics. Strong in patent generation.
- NOVA University Lisbon (Nova): Multidisciplinary R&D with 42 research units. Strong in social sciences, management, health, engineering. Nova SBE (School of Business and Economics) noted for partnerships with MIT Sloan, Carnegie Mellon University (CMU), and UT-Austin.
- Other Key Institutions: University of Porto, University of Coimbra, University of Minho, and University of Aveiro are prominent in biomedical sciences, materials research, engineering (including mechanical and aerospace-relevant fields) and IT.

## Leading Portuguese Companies<sup>[5]</sup>

The top 3 companies in Portugal by revenue are:

- Jerónimo Martins: A major retailer with operations across Portugal, Poland, and Colombia, specialized in food retail (supermarkets). Sales: €30.608 billion in 2023.
- Galp Energia: Active in oil and gas with growing investments in renewable energy. Achieved about €24 billion in revenue worldwide.
- EDP – Energias de Portugal: A major utility company with significant investments in renewable energy (wind, solar, hydro). Reported approximately €17 billion in global revenue in 2023.

Also notable are SONAE, recognized as Portugal's largest private employer; Mota-Engil Group, a leading international construction and infrastructure group; TAP Air Portugal, the national airline; Banco Comercial Português (BCP), one of Portugal's largest private banks; The Navigator Company, a major global producer of paper; NOS, a leading Portuguese telecommunications company; Corticeira Amorim, a global leader in cork.

## Main Cities & Economic Hubs

Portugal's economy, which saw a 1.6% year-on-year GDP growth in the first quarter of 2025 and recorded a GDP per capita of 27,816 EUR, is primarily driven by its major urban centers. Here are Portugal's main cities and their key economic characteristics:

- Lisbon: the capital and largest city, Lisbon is the unequivocal political, financial, commercial, and tourist center of Portugal. It's recognized as an "alpha-level global city." See details in the box below.
- Porto: the second-largest city, Porto is a significant economic engine in the north of Portugal, known for its industrial heritage and growing tourism. It's also recognized as a global city. Porto's key economic activities are trade and transportation, manufacturing (notably port wines), professional, scientific and technical services as well as tourism.

<sup>[5]</sup> Sources: <https://portugalglobal.pt/en/investment/why-portugal/facts-and-figures/>, <https://stockviz.com/en/ranking-of-portugal-stocks-by-revenue> and [https://en.wikipedia.org/wiki/Economy\\_of\\_Portugal](https://en.wikipedia.org/wiki/Economy_of_Portugal)

- Braga: the third-largest city, located in northwest Portugal, known for its historical and religious significance, and increasingly its economic dynamism. Braga has a strong industrial base, significant textile and footwear industry, but is also growing in importance in technology and innovation with the presence of engineering courses and research.
- Coimbra: home to the University of Coimbra, founded in 1290, the city is recognized by its student population, its health sector, and the manufacturing of paper and cardboard.
- Setúbal: an important port city south of Lisbon, historically linked to fishing and canning, and more recently, heavy industry. It is known for its historic port, automobile manufacturing and its historical fishing and fish canning industry.

## **Innovation Environment & Support Agencies**

Portugal has a supportive environment for innovation, driven by government bodies and strategic investments.

- ANI - National Innovation Agency (<https://arquivo.ani.pt/en/>): The central public agency responsible for promoting and catalyzing technological and business innovation in Portugal.
- AICEP - Portugal Trade & Invest (<https://www.portugalglobal.pt/en/>): Promotes Foreign Direct Investment (FDI) and the internationalization of Portuguese firms.
- FCT - Foundation for Science and Technology (<https://www.fct.pt/en/>): Funds research, doctoral grants, and supports university R&D.
- IAPMEI - Agency for Competitiveness and Innovation (<https://www.iapmei.pt/SOBRE-O-IAPMEI/English-version.aspx>): A public agency focused on promoting business competitiveness and growth, supporting the conception, execution, and evaluation of industrial policies aimed at strengthening innovation, entrepreneurship, and business investment. It plays a key role in supporting SMEs.
- Portugal 2030 (<https://portugal2030.pt/en/portugal-2030/o-que-e-o-portugal-2030/>): The national framework for applying €23 billion of European funds (2021-2027) to stimulate and develop the Portuguese economy. It's a Partnership Agreement between Portugal and the European Commission.

## **R&D Investment in Portugal**

Portugal has shown a consistent increase in its R&D investment over recent years, though it is still working towards the ambitious EU targets.

- R&D Intensity: Portugal invested 1.7% of its GDP in R&D in 2022 according to the World Bank and aims to reach 3% of GDP on R&D by 2030, aligning with the EU target according to FCT.
  - Total R&D Spending (2023): Business Sector: €2.834 billion (approximately 63% of national R&D).
  - Higher Education: €1.367 billion (30%).
  - State and Private Non-Profit: 4% and 3% respectively.

- Human Capital: FCT data shows that approximately 79,257 full-time equivalent R&D personnel in 2023, including 62,476 researchers. Both figures increased by roughly 6-7% year-over-year.
- Government Support: According to the latest OECD analysis, Portugal provides R&D tax relief equivalent to 0.39% of GDP, the highest rate among OECD countries.

# LISBON: THE CAPITAL CITY

## Economy & Core Sectors

- Services-Heavy & Financial Center: Strong in finance (Euronext Lisbon), Information and Communication Technology (ICT), telecoms, and creative media. The Parque das Nações area is a key hub for financial services companies.
- Portuguese Corporate Giants: The city is home to the headquarters of major national corporations, including the largest companies in Portugal by market cap:
- Energy/Utilities: EDP Group (Energias de Portugal), Galp Energia (Oil & Gas), and REN (Redes Energéticas Nacionais).
- Telecoms: NOS and Altice Portugal (MEO).
- Retail/Food: Jerónimo Martins (Pingo Doce supermarket chain).
- Transport & Logistics: Features a main port and the Humberto Delgado Airport (LIS), critical for trade and connectivity.



Lisbon, The MAAT - Museum of Art, Architecture and Technology. Photo by [Michiel Annaert](#) on [Unsplash](#)

## Global Presence & Multinational Companies

- Lisbon has become a top choice for international firms establishing European tech and innovation hubs, drawn by its talent pool and quality of life.
- Major Tech & Consulting MNCs: The city hosts significant offices for global players like Google, Microsoft, Cisco, SAP, Oracle, Siemens, and consulting firms such as Deloitte and Accenture.
- R&D and Innovation Centers: Several multinationals have established dedicated tech centers:
  - Siemens has a large Lisbon Tech Hub focusing on IT, Big Data, and AI.
  - Critical Techworks is a joint venture between BMW and Portuguese firm Critical Software, exclusively developing software for future BMW vehicles and its IT ecosystem.
  - PagerDuty chose Lisbon for its first European office, citing access to specialized talent.
  - BNP Paribas employs 9,000+ people in Portugal to develop group-wide technology and financial solutions.

## The Innovation Ecosystem

- Lisbon's startup ecosystem is a top-ranked European hub and accounts for a significant portion of Portugal's tech value.
- The city is home to approximately 348 startups, accounting for nearly half of Portugal's total.
- It hosts three Unicorns (privately held companies valued at over \$1 billion), including OutSystems.
- Over 80% of the funding raised by Lisbon-based startups in 2022 came from international investors.
- Top investment sectors include FoodTech, FinTech, and HealthTech.

## Innovation Infrastructure:

- **Leading Universities:** Universidade Católica Portuguesa (UCP), Instituto Superior Técnico (IST), and NOVA University anchor cutting-edge research and talent.
- **Co-working Spaces & Incubators:** Aihub, Startup Lisboa, and Beta-i. The city council is fostering expansion into new zones like the Beato Creative Hub.
- **Major Events:** The annual Web Summit is a premier global gathering, which has significantly raised Lisbon's profile as a tech destination, bringing thousands of founders and investors.

## Government Support:

- Lisbon City Hall collaborates with the central government to attract startup grants, research clusters, and Foreign Direct Investment (FDI).
- The government offers competitive incentives, including R&D tax credits (SIFIDE), digital transition subsidies, and utilizes EU structural funds to drive local innovation and growth. Programs also support stock options and visa routes (like D2 and D8) to attract talent

While this section briefly highlights Portugal's momentum, a deeper examination of the structural drivers behind this growth can be found in the "2025 UCP REPORT: Portugal as a Prime Investment Destination"<sup>[6]</sup>. This report complements the data above by analyzing how the country's leadership in renewable energy, modern digital infrastructure, and multipolar innovation ecosystem are fostering long-term resilience. It serves as a valuable resource to understand that Portugal's remarkable recent economic performance is the result of structural strengths rather than an anomaly. The country has transformed into a resilient economy defined by budget surpluses, declining debt, and a "safe haven" status within Europe. This success is supported by two competitive pillars: world-class infrastructure and a dynamic innovation ecosystem.

<sup>[6]</sup>[https://www.researchgate.net/publication/397608886\\_Portugal\\_as\\_a\\_Prime\\_Investment\\_Destination\\_Infrastructure\\_Innovation\\_at\\_the\\_Core](https://www.researchgate.net/publication/397608886_Portugal_as_a_Prime_Investment_Destination_Infrastructure_Innovation_at_the_Core)



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Research and Innovation Of



Lisbon Study Trip

# Welcome & Discussion Sessions

# Welcome Dinner at Praça do Comércio

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The Lisbon study trip started with a welcoming Dinner hosted by Universidade Católica Portuguesa at Pousada de Lisboa, located in the historic Praça do Comércio. This magnificent, waterfront square served as a highly significant backdrop, representing Lisbon's ceremonial heart and symbolizing the city's resilience and architectural heritage following the 1755 earthquake.

The Lisbon study trip started with a welcoming Dinner hosted by Universidade Católica Portuguesa at Pousada de Lisboa, located in the historic Praça do Comércio. This magnificent, waterfront square served as a highly significant backdrop, representing Lisbon's ceremonial heart and symbolizing the city's resilience and architectural heritage following the 1755 earthquake.



Lisbon, Praça do Comércio. Photo by [Frank Nürnberger](#) on [Unsplash](#)

The evening provided an opportunity for early networking and set a high-profile tone, underscored by the presence of distinguished speakers who set the stage for the discussions in the following days and highlighted the institutional collaborations that supported the event and are behind the development of Lisbon's innovation ecosystem:

**Prof. Miguel Athayde Marques**, Vice-President, Universidade Católica Portuguesa and Professor of Management, Católica Lisbon School of Business & Economics.

**Prof. Nelson Ribeiro**, Vice-President for Transformation, Collaboration and International Affairs, Universidade Católica Portuguesa.

**Dr. Filipe Anacoreta Correia**, Deputy Mayor of Lisbon's City Hall.

# Innovation Ecosystems, Universities, and Cities In A Global Context

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## Panel session: Innovation in Portugal – Historical Perspective, Current Situation, and Emerging Opportunities

### MODERATOR:

**Prof. Nelson Ribeiro**, Vice-President for Transformation, Collaboration and International Affairs, Universidade Católica Portuguesa.

### PRESENTERS:

**Prof. Miguel Athayde Marques**, Vice-President, Universidade Católica Portuguesa and Professor of Management, Católica Lisbon School of Business & Economics, Portugal.

**Prof. Catarina Duff Burnay**, Dean of Faculty of Human Sciences, member of the Board of the Research Centre for Communication and Culture (CECC), Universidade Católica Portuguesa, Portugal.

**Dr. João Cortez**, Director of Research and Innovation Office, Portugal

### DISCUSSANTS:

**Eng. Rui Pereira**, Co-Founder and Vice President of Partners & Alliances, OutSystems, Portugal

**Dr. Michinari Hamaguchi**, Director General of SCARDA, AMED; GFCC Distinguished Fellow, Japan

**Mr. Christopher Geiger**, Vice President of Internal Audit and Enterprise Risk, Lockheed Martin, USA

**Prof. Jim Metson**, Professor Emeritus, University of Auckland; GFCC Senior Fellow, New Zealand

Portugal's innovation ecosystem revealed a nation leveraging its strategic advantages and strong academic core to become a globally attractive hub for talent, technology, and investment. Three main threads emerged during the discussions, painting a detailed picture of growth, institutional commitment, and future ambition.

### Foundations of Growth

The foundational elements contributing to Portugal's success are clearly defined. Addressing demographic challenges, the nation is successfully attracting international talent, with international students now making up about 17% of all students in higher education. Lisbon is a primary center, demonstrating its appeal as a vibrant, high-quality-of-life location to draw 38% of its master's students from abroad.

This growth is reinforced by strategic governmental policies, which include residence visas for entrepreneurs and "Golden visas" focused specifically on job creation and R&D investment.

Furthermore, the legacy and infrastructure created by the 1998 Lisbon World Exposition (Expo '98) laid a critical foundation. This event regenerated vast industrial sites and built key infrastructure (like the Lisbon Arena and Vasco da Gama Bridge), which now enables major global tech and business events such as the Web Summit.

### **UCP as a Research and Innovation Catalyst**

Universidade Católica Portuguesa (UCP) is actively positioning itself as an integral part of this national ecosystem, focusing on societal impact and talent development. The university maintains a robust research capacity, fielding 1,400 researchers across 14 research units, with six units rated as excellent in the 2025 Foundation for Science and Technology (FCT)<sup>[7]</sup> assessment, all while placing a strong emphasis on interdisciplinary work.

Beyond its academic output, UCP drives strategic innovation through problem-based research. It targets major global issues like the ageing population, food security, and health, utilizing Green, AI, and Digital solutions. This commitment is highlighted by key initiatives such as the INSURE Hub<sup>[8]</sup> and the CBQF (Centre for Biotechnology)<sup>[9]</sup>. The university's dedication to industry translation is further evidenced by deep private-sector collaboration, resulting in 89 active patents and over 225 projects with non-academic partners in the last five years, successfully translating concepts into market-ready products like Functional Tuna<sup>[10]</sup>.



From left to right: Prof. Miguel Athayde Marques, Prof. Catarina Duff Burnay, and Dr. João Cortez at Universidade Católica Portuguesa in Lisbon, Portugal (July/2025)

<sup>[7]</sup> <https://www.fct.pt/en/>

<sup>[8]</sup> <https://www.ucp.pt/insurehub>

<sup>[9]</sup> <https://cbqf.esb.ucp.pt/>

<sup>[10]</sup> <https://tunafuncional.pt/en/>

## Global Recognition in Creative Industries

The scope of discussion broadened with Catarina Duff Burnay's presentation on the Media and Audiovisual sectors, showcasing how Portuguese creative companies are achieving global recognition. This demonstrates the nation's creative excellence, home to globally relevant innovators in content and technology, such as Nuno Bernardo's beActive Entertainment<sup>[11]</sup> (a pioneer in Transmedia storytelling).

In addition to content, Portugal is demonstrating technological leadership in this domain. Domestically developed technology is being adopted worldwide, including Sound Particles<sup>[12]</sup> (sound design software used in Hollywood) and Mediaprobe<sup>[13]</sup> (developing new, rigorous standards for media measurement and audience insight).

## Comparative Models and Future Hurdles

The discussions among global leaders provided comparative models that underscored Portugal's success in navigating key challenges common to innovation ecosystems. A central finding was the importance of organic collaboration versus top-down mandates; international examples illustrated that attempts to force the creation of innovation hubs with heavy-handed mandates can fail. In contrast, Portugal's model highlights that success is far more likely when there is genuine, sustained collaboration among business, academia, and government sectors.



*Prof. Jim Metson, Eng. Rui Pereira, Dr. Michinari Hamaguchi, Mr. Christopher Geiger at Universidade Católica Portuguesa in Lisbon, Portugal (July/2025).*

<sup>[11]</sup> <https://www.beactivemedia.com/>

<sup>[12]</sup> <https://soundparticles.com/>

<sup>[13]</sup> <https://www.mediaprobe.com/>

A critical takeaway was the effectiveness of Portugal's comprehensive view of innovation beyond tech, recognizing that startups and innovative growth span the full breadth of the economy, including creative and service sectors. This approach was supported by Portugal's success in fields like Transmedia storytelling and advanced sound technology, demonstrating that they are successfully embracing a broader definition of innovation. Regarding the universally acknowledged challenge of the translation gap—the difficulty in bridging early-stage research and market-ready commercial products—Portugal has shown promising results. The evidence of numerous patents and market-ready products, such as Functional Tuna, indicates that the ecosystem is successfully addressing the need for support during the crucial proof-of-concept phase.

Collectively, these presentations and discussions showed that Portugal's success is not accidental, but the result of a deliberate, interconnected strategy where academic excellence, government policy, and ambitious entrepreneurs converge to create a recognized and resilient global innovation hub.

## Panel session: Innovation Ecosystems Around the World – Learning from GFCC Members’ Experiences

### MODERATOR:

**Prof. Sir Ian Greer**, President and Vice-Chancellor, Queen’s University of Belfast, NI

### PRESENTERS:

**Prof. Frank Bloomfield**, Deputy Vice Chancellor of Research and Innovation, University of Auckland, New Zealand

**Dr. Mike Caine**, Pro Vice-Chancellor Research & Enterprise, Aston University, UK

**Mr. Chad Evans**, Executive Vice President, Council on Competitiveness; Treasurer, GFCC, USA

**Dr. Paul Roben**, Associate Vice Chancellor, Innovation and Commercialization, University of California San Diego, USA

### DISCUSSANTS:

**Prof. Nelson Ribeiro**, Vice-President for Transformation, Collaboration and International Affairs, Universidade Católica Portuguesa, Portugal.

**Ms. Ida Semurni Abdullah Ali**, Chief Operating Officer, Malaysian Industry-Government Group for High Technology (MIGHT), Malaysia

**Prof. David Mullins**, Vice-Chancellor’s Professorial Fellow, Harper Adams University, UK

**Mr. Hirotaka Yamada**, Director of the Paris Office, Japan Science and Technology Agency, Japan

**Prof. Ted Zoller**, T.W. Lewis Clinical Professor of Strategy and Entrepreneurship, Kenan-Flagler Business School at University of North Carolina at Chapel Hill, USA



Dr. Paul Roben, Prof. Sir Ian Greer, Dr. Mike Caine, Prof. Frank Bloomfield, Mr. Chad Evans at Universidade Católica Portuguesa in Lisbon, Portugal (July/2025)

This panel, moderated by Prof. Sir Ian Greer, featured international perspectives from GFCC members, showcasing successful innovation ecosystems in San Diego, Auckland, and Birmingham. The session provided comparative insights into the collaborative strategies that drive regional economic transformation, offering direct relevance for future efforts in Lisbon and Portugal.

### **The Role of Universities as Ecosystem Catalysts**

The core takeaway was the central role universities play in transitioning regional economies toward innovation. Presenters from the University of Auckland, Aston University, and UC San Diego demonstrated how universities move beyond their traditional teaching roles to become economic anchor institutions. They are responsible for generating the talent, research, and intellectual property that fuels regional growth.

The discussions showcased specific turning points where universities actively intervened to shape economic outcomes. This intervention included aligning academic programs with regional workforce needs (e.g., in tech, health, or advanced manufacturing) to strengthen the talent pipeline. In addition, universities focused on IP commercialization by building robust innovation and commercialization offices (like the one at UC San Diego) to translate fundamental research into market-ready products and startup companies. This effort is often supported by creating physical hubs, such as innovation districts and research parks, to physically co-locate academia, industry, and startups.



Panel session at Universidade Católica Portuguesa in Lisbon, Portugal (July/2025)

## **Building Effective Institutional Frameworks and Coalitions**

Another strong theme was the need for cross-sector collaboration and effective governance structures to translate a shared vision into actionable results. Success in San Diego, Auckland, and Birmingham was explicitly attributed to effective implementation of the Triple Helix model: a strong, organic partnership between academia, industry, and public sector entities.

Presenters emphasized that effective ecosystems rely on neutral, convening forces (often the university itself) to build cross-sector coalitions and foster a "shared mindset" for regional competitiveness. The panel also highlighted specific institutional arrangements that helped translate vision into action, such as dedicated commercialization funding from government or regional mechanisms focused on de-risking early-stage technology, and shared leadership through co-chaired boards that fully integrate industry and government priorities into university strategy.

## **Leveraging Global Connections for Local Impact**

The discussion, featuring international representatives from Malaysia, Japan, and the USA, underscored that innovation is intrinsically a global endeavor, necessitating active international partnerships. This segment focused on two complex, critical issues: managing global talent flow and leveraging corporate resources for technology maturation.



Panel session at Universidade Católica Portuguesa in Lisbon, Portugal (July/2025)

The panel addressed the challenge of talent retention. For instance, the Malaysian example showed that despite successful efforts to provide youth with high-demand skills, the country faces an outflow as skilled young people are often attracted to other competitive Southeast Asian countries. The discussion explored the strategies necessary for creating compelling local ecosystems that encourage this valuable talent to stay and contribute locally.

Another focus was on the corporate role in technology spin-in –the process where an external technology or startup is integrated into the company to accelerate innovation and boost the company’s existing capabilities – and acceleration. This concept goes beyond simply attracting mature startups; it involves how large companies can actively help local tech development by bringing in promising new technology and accelerating its maturity through corporate resources and industrial application. These efforts are complemented by strong global research connections, which shape local research quality and foster participation in major international consortia and funding programs, ensuring local research remains world-class and globally relevant.



Lisbon Study Trip

# Site Visits & Round Tables

# Lisbon's Entrepreneurship Ecosystem

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## Tour of the Unicorn Factory at Beato Innovation District

**Dr. José Mota Leal**, Beato Innovation District Project Director, Unicorn Factory

The visit to the Unicorn Factory Lisboa at the Beato Innovation District illustrates that creating a fertile environment for billion-dollar startups requires a comprehensive, strategically governed, and creatively executed approach. The Unicorn Factory serves as Lisbon's municipality flagship initiative, dedicated to supporting the entire growth journey with clear developmental pathways while supporting all stages from nascent ideas to massive scale-ups.

**The core mission of the Unicorn Factory is to position Lisbon as a leading European innovation center by ensuring a continuous pipeline of high-growth companies. Its main features are:**

- **Holistic Support:** The Factory provides comprehensive support programs across all maturity stages. Startup Lisboa focuses on nurturing nascent tech startups with mentoring and networks, while Acceleration programs help later-stage scale-ups overcome growth challenges, develop leadership skills, and expand internationally.
- **Talent and Internationalization:** A central focus is attracting global talent by assisting international startups and scale-ups with establishing operations in Lisbon, leveraging the city's talent pool and high quality of life. Startups are encouraged to design their products and strategies for the international market from the outset.
- **Creative Resource Management:** A critical success factor was the creativity required to launch and sustain this effort, particularly in funding the large innovation districts. Lisbon achieved this by repurposing spaces and orchestrating public-private partnerships, demonstrating resourcefulness in the face of scarce initial funding.

**The Factory enhances its mission through targeted support structures and engagement with the broader community:**

- **Vertical Hubs:** Innovation hubs designed to foster specific industries are key to creating critical mass in high-growth areas, including:
  - **AIHub:** dedicated to innovation and growth within the AI vertical.
  - **Greenhub:** a center for green technology solutions
  - **Gaminghub:** space for gaming studies and startups
  - **Web3hub:** an ecosystem for the technological advancements in Web 3
  - **Engineershub:** collaborative space for the engineering sector

- **Active Facilitation:** The Factory acts as an ecosystem facilitator, connecting founders with essential resources like investment, world-class mentors across all verticals, and strategic partners.
- **Public Integration:** A unique strategy pursued is to open the innovation district to the public. By integrating lifestyle amenities, such as trendy restaurants and cultural events, they are creating



GFCC delegation during visit to Beato Innovation District in Lisbon, Portugal (July/2025)

- a vibrant mixed-use development and strategically raising public awareness to promote a wider culture of entrepreneurship.

The Factory maintains a strategic approach to portfolio management to ensure a robust and resilient ecosystem.

- **Selective Process:** The team is highly selective, evaluating not just the disruption and scalability of the company and its solutions, but the crucial element of the founding team's skill set. For Early-Stage companies, the focus is on finding founders who are more invested than just having an idea.
- **Staged Support:** The Factory strategically manages its portfolio by supporting companies at different stages of maturity:
  - New Startups are nurtured from the earliest ideas.
  - Scale-ups (later stage) must already have secured some investment and be generating income.
- Long-term strategy includes supporting companies that are already growing fast and attracting startups from all over the world.

- Long-Term Vision: This strategic selectivity is supported by the local government, with the Mayor's direct involvement – who chairs the Unicorn Factory Board – committed to a long-term strategy, willing to take calculated risks, and streamlining regulations for starting and scaling businesses. The Factory also emphasizes the importance of initiatives to create an entrepreneurial mindset from early education with initiatives such as “My First Startup” (a competition where elementary school aged kids bring their ideas to life) and “Innovation Summer School” (a program for high school students to experience the innovation process and meet startup founders).

The Unicorn Factory Lisboa distinguishes itself by integrating strategic capital, creative resource management, strong governance, public engagement, and a global mindset, serving as a powerful model for developing the next generation of high-growth companies.

## Panel session: Building Globally Connected and Competitive Innovation Ecosystems

### MODERATOR:

**Prof. Céline Abecassis-Moedas**, Pro-Rector for Innovation and Entrepreneurship at Universidade Católica Portuguesa, Portugal

### PRESENTERS:

**Dra. Margarida Ramalho**, Co-Founder and Executive Director, Católica International Business Platform

**Dr. Pierre Gein**, Executive Director of the Católica Lisbon Entrepreneurship Centre (CLEC)

### DISCUSSANTS:

**Prof. Razvan Bologa**, Innovation Coordinator, Bucharest University of Economic Studies – ASE, Romania

**Ms. Marzhan Melanich**, Executive Director, Kazakhstan Growth Forum, Kazakhstan

**Prof. Frank Bloomfield**, Deputy Vice Chancellor of Research and Innovation, University of Auckland, New Zealand

This panel explored how academic institutions drive entrepreneurial growth and connect local ecosystems to the global stage. The discussion primarily highlighted the dual, strategic approach of the Universidade Católica Portuguesa (UCP) while gathering critical lessons from international GFCC members.

UCP's approach to fostering innovation focuses simultaneously on internal talent development and external corporate engagement. The Católica Lisbon Entrepreneurship Centre (CLEC) serves as the main vehicle for integrating entrepreneurship into the academic experience. Its mission focuses on the supply side of the ecosystem: empowering students with essential knowledge, skills, and an entrepreneurial mindset through practical learning, mentorship, and access to pre-acceleration programs. CLEC also drives research and institutional change, promoting interdisciplinary work and actively striving to make the University's structure more agile for technology transfer. This is exemplified by its role in the ELEVATE European Innovation Project and running a PhD program in Technological Change & Entrepreneurship, in partnership with institutions like Carnegie Mellon University.

In contrast, the Católica International Business Platform is a specialized body dedicated to the demand side—boosting the international scale and competitiveness of Portuguese companies. It facilitates knowledge co-creation by bringing corporate, institutional, and academic leaders together on internationalization strategies, developing "Learn & Share cases" based on the experience of successful companies. In addition, the Platform provides thought leadership and

community through executive programs like the "CEO Future Ready Academy" and the "Gen Z Academy," the latter exposing recent graduates to fundamental management concepts and practices for global growth. The discussion stressed the scale imperative: while innovation is vital for startups, Portuguese companies are often small globally, meaning the focus must be on supporting them to "grow and keep themselves in startup mode" for continued agility.

International discussants provided context by comparing the Lisbon model with challenges faced in other regions, emphasizing that openness is a critical differentiator.

Prof. Bologna noted the visibility challenge in Romania; despite having strong technical competence in areas like cybersecurity, the country lacks global visibility. This directly highlighted Lisbon's strength in having an articulated plan that prioritizes openness and connectivity, which effectively makes size a less restrictive factor.

Similarly, Ms. Melanich from Kazakhstan detailed regional challenges related to investment and talent gaps. Their ecosystem is heavily dominated by government investment, leading to low overall investment in innovation (less than 1% of GDP). A key hurdle is the weak connection with universities and the persistent challenge of retaining promising founders who frequently relocate to Europe and the USA for further development.

Finally, Prof. Bloomfield from Auckland affirmed Lisbon's success factors, highlighting the critical role of the city partnering directly with large innovation companies. He praised Lisbon's clear vision, ambition, and long-term plan, noting the effective strategy of promoting multiple use of sites (e.g., restaurants, events) to foster a vibrant ecosystem beyond just dedicated office space.



Panel session during visit to Beato Innovation District in Lisbon, Portugal (July/2025)

The session affirmed that achieving global competitiveness requires a sustained, multi-pronged approach rooted in the academic sector. The Lisbon model—characterized by strategic institutional centers (such as CLEC and the Católica International Business Platform), an explicit focus on internationalization, and a clear commitment to openness and ambitious long-term planning—provides a potent template for regions seeking to transform their economies and build globally connected innovation hubs.

UCP's dual approach to innovation is strategically designed to address both the supply side (talent development and agile research) and the demand side (internationalizing local Portuguese companies). By doing so, it directly works to resolve regional challenges highlighted by international peers, such as talent retention and global visibility. This comprehensive, dual strategy provides a template for how universities can contribute to local innovation ecosystem development and growth.

## Panel session: From Vision to Value: Building Innovation Hubs that Reshape Local Economies and Endure

### MODERATOR:

**Mr. Chad Evans**, Executive Vice President, Council on Competitiveness; Treasurer, GFCC, USA

### DISCUSSANTS:

**Prof. Céline Abecassis-Moedas**, Pro-Rector for Innovation and Entrepreneurship at Universidade Católica Portuguesa, Portugal

**Mr. Khalid Al Habsi**, Carbon Sequestration Lead, Abdulwahab Office, Oman

**Dr. Paul Roben**, Associate Vice Chancellor, Innovation and Commercialization, University of California San Diego, USA

**Prof. Hidetoshi Tahara**, Vice-President Start-up Ecosystem, Hiroshima University, Japan



Panel session during visit to Beato Innovation District in Lisbon, Portugal (July/2025)

This interactive session brought together leaders from academia, government, and the private sector—including representatives from Oman, USA, Japan, and Portugal—to discuss the critical conditions for building innovation hubs that transform economic trajectories. Building on the experiences of the innovation ecosystems represented in the session, the conversation provided actionable insights focused on sequencing, talent, and governance.

A clear consensus emerged that universities should prioritize driving socioeconomic prosperity and solving big problems through their innovation ecosystems, rather than focusing primarily on generating research money. In addition, research universities should also implement steps to become known for being “easy to work with” which will naturally attract significant private investment. The big question is how to do that.

Focusing on implementation, discussants explored a bottom-up approach to building innovation hubs that prioritize local relevance as the foundation for scaling. This strategy suggests focusing efforts first on addressing pressing regional issues, then expanding successful solutions to tackle national problems, and finally positioning validated innovations to address global challenges—in short, start with a very clear local focus and expand from there. This maximizes impact and secures critical local buy-in by delivering tangible, immediate benefits to the community before attempting larger, more complex international endeavors.

Furthermore, the approach must be tailored to context; Hiroshima University, for example, emphasized adapting its strategy to its specific environment by focusing innovation around peace and science, while noting a challenge in biotech due to human resource limitations. Even established programs have gaps: the Universidade Católica Portuguesa (UCP), which is a partner of the Unicorn Factory, identified that its innovation ecosystem is currently missing pre-incubation/prototyping support but compensates with a 5-stage program for acceleration.

Universities also often suffer from an "image problem," being seen as exclusionary by nature. Instead of focusing inward, universities must look at improving the quality of life and demonstrating tangible and positive impact on socio-economic realities. The panel concluded on a positive note: a generational change in aspirations is evident, with new SMEs (which dominate Portugal and New Zealand) demonstrating a willingness to use startups for renewal.

## Visit to Diverge (Grupo Nabeiro's Innovation Center)

In the afternoon, participants visited Diverge, the innovation center of Grupo Nabeiro, located in the modern Park of Nations, which is home to the iconic Delta Cafés brand. Diverge operates on a culture of audacity, questioning the status quo to generate value through innovation and intellectual property.



GFCC delegation during visit to Diverge in Lisbon, Portugal (July/2025)

The visit provided a firsthand experience of how Diverge is actively reimagining products and processes within the company. Attendees were specifically shown the center's latest innovations in coffee pods and coffee machines. A unique and interactive element of the visit was the participation in a test group of a new coffee flavor, allowing participants to engage directly with the product development process. The session also included an engaging conversation with the leaders driving innovation at this visionary Portuguese company, focusing on how they approach reimagining products, processes, and corporate purpose. The entire visit underscored Grupo Nabeiro's commitment to continuous innovation and offered direct engagement with their intellectual property creation process.

## Visit to Siemens Tech Hub and Panel session: Weaving Local Innovation Ecosystems into the Fabric of Global Companies

### MODERATOR:

**Mr. Chad Evans**, Executive Vice President, Council on Competitiveness; Treasurer, GFCC, USA

### DISCUSSANTS:

**Dr. Sofia Tenreiro**, Chief Executive Officer (CEO), Siemens Portugal

**Prof. Azlinda Azman**, Board member, Malaysian Industry-Government Group for High-Technology (MIGHT), Malaysia

**Mr. Hélio Jesus**, Innovation Head, Siemens Portugal

**Mr. Christopher Geiger**, Vice President of Internal Audit and Enterprise Risk, Lockheed Martin, USA

The session provided insights into the innovation strategy of Siemens Portugal and outlined the essential ingredients a region needs to attract and anchor large, global R&D operations.

Siemens' presentation showcased how the global giant, a top patent holder in Europe and worldwide, leverages its Portuguese operations to foster innovation by connecting the physical and digital worlds. Siemens' innovation use cases presented spanned consumer goods, technology, and energy, all with a clear focus on this convergence.

They demonstrated practical AI tools that translate real-world data into actionable insights. Examples included a tool that uses Google Maps photos of a building to estimate energy consumption savings by applying new technologies, an analysis for which consultancy companies previously charged a significant amount. Another example highlighted an AI tool applied to contact centers that drastically improves efficiency, for example, by searching company databases to find the answer to a customer email inquiry in seconds.



GFCC delegation during visit to Siemens Innovation Hub in Lisbon, Portugal (July/2025)

The panel then discussed the essential ingredients that allow a city or region to successfully attract and anchor large, global R&D operations. A key challenge highlighted by insights gained from the Malaysian experience (Malaysian Industry-Government Group for High Technology – MIGHT) is that talent alignment is paramount. Specifically, the experience in attracting R&D operations reveals the importance of higher education institutions developing talent that directly matches the needs of major corporations looking to establish innovation hubs.

To close this gap—such as the need for 15,000 skilled engineers in Malaysia by 2030—universities must allow industry to collaborate in curriculum development. Malaysia is addressing this through several government-backed initiatives, including the 2u2i (two years at university, two years in industry) program and the "Teaching Factory" concept which expose students to a real-world, production plant environment. This approach provides students with higher employability and supplies the "future-ready talent" the market absorbs. Additionally, research must always be impactful and genuinely contribute to society.

The session concluded with the sharing of lessons on what practices local ecosystems should adopt to strengthen ties with global companies. The most effective practice for embedding global R&D is ensuring a clear, mutually beneficial relationship. In this arrangement, the corporation gains specialized talent and local knowledge, and the ecosystem gains investment, mentorship, and global access.

# Innovation In Health Sciences

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## Visit to the Champalimaud Centre for the Unknown

**Dr. João Silveira Botelho**, Vice-President, Champalimaud Foundation, Portugal

Dr. Botelho welcomed the GFCC group and introduced the Foundation's pioneering vision for advancing biomedical science and clinical innovation. Starting from a large endowment left by António de Sommer Champalimaud, a Portuguese banker and industrialist, upon his death in 2005, the Foundation has quickly built a globally relevant center that integrates cutting-edge research, patient care, and international collaboration to address complex health challenges.

The Foundation became a world reference in research and cancer treatment. It was António Champalimaud's will, which established the large sum for biomedical sciences and appointed the first president, that set the institution in motion. In 2008, two main focus areas were defined: neuroscience, identified as the least funded scientific area globally, and cancer, the most funded area with the least impressive results.

### **The Champalimaud Centre for the Unknown (CCU)**

The physical embodiment of this vision is the Champalimaud Centre for the Unknown (CCU), which is regarded as a piece of art as much as a building. Construction started in 2008 and was completed by October 2010. The center quickly gained international recognition; in 2012, The Scientist magazine elected the CCU as the best place outside the US for researchers to develop their post-doctoral work.



Aerial View of the Champalimaud Foundation, Lisbon, Portugal. Credit: © 2026 Fundação Champalimaud.

## Integrated Research and Clinical Innovation

The center operates on a philosophy of extending life and giving autonomy, rather than focusing solely on cure. This is achieved through "fusion research" or "bed to bench", a direct collaboration between clinicians and researchers. Recognizing that communication between these two groups can be difficult due to different professional languages, the center provided researchers with fundamentals of medicine to allow them to effectively communicate with doctors.

The Foundation directs its integrated efforts across two primary, high-impact areas:

- **Cancer Focus:** The primary goal is integration and collaboration between research and clinical services. Research facilities are located side-by-side with clinical service facilities, allowing for constant interaction. This ensures research remains focused on application and better outcomes for patients. For example, the center has developed a radiotherapy treatment with complete precision that provides effective treatment in only a single one-hour session, completely replacing surgery for certain cases. Furthermore, the center is conducting research in cell manipulation and production for pancreatic cancer, one of the hardest forms of cancer to treat, showing promising initial results to extend patients' lifespans.
- **Neuroscience Focus:** The research in this area is concentrated on increasing patient autonomy by recovering brain function. This is pursued through a deep understanding and manipulation of brain circuits.



GFCC delegation during visit to Champalimaud Foundation in Lisbon, Portugal (July/2025)

purposefully designed to promote interdisciplinary collaboration, discovery, and translational impact. The visit to the treatment centers demonstrated a strong focus on patient comfort (including specialized beds, lighting, scents, and sounds), which the Foundation views as critical for achieving better clinical results and enhancing the overall patient experience.

In addition to its core research and clinical work, the Foundation created an Annual Vision Award for breakthroughs in vision treatment. This initiative was created because António Champalimaud was nearly blind when he died. The award recognizes groups that have contributed to the fight against blindness and visual impairment, particularly through innovations or new technologies that impact the quality of life for the blind and visually impaired, primarily in developing regions.

Following Dr. Botelho's presentation, participants toured the Champalimaud Centre for the Unknown (CCU), the Foundation's landmark facility dedicated to innovation in biomedical science. The tour provided insight into the center's architectural design and building, research infrastructure, state-of-the-art equipment and facilities, and integrated clinical spaces—all

## Panel session: Frontiers of Health Innovation

### **MODERATOR:**

**Prof. António Medina de Almeida**, Dean, Católica Medical School, Portugal

### **PRESENTER:**

**Dr. Michinari Hamaguchi**, Director General of SCARDA, AMED; GFCC Distinguished Fellow, Japan

### **DISCUSSANTS:**

**Dr. Mike Caine**, Pro Vice-Chancellor Research & Enterprise, Aston University, UK

**Prof. Ana Mineiro**, Dean, Católica School of Health Sciences and Nursing, Portugal

**Prof. Raquel Oliveira**, Deputy Director Católica BioMedical Research and Prof. Católica Medical School, Portugal

**Dr. Marija Garcia**, Head of Pre-award Grant Management, Católica BioMedical Research, Portugal

**Dr. Minoru Tobiume**, Supervisor, SCARDA, AMED, Japan

This session explored the emerging frontiers in health innovation and identified clear opportunities for global collaboration. Moderated by Prof. António Medina de Almeida (Dean, Católica Medical School), the session began with a presentation by Dr. Michinari Hamaguchi on his view on partnerships and global science. The subsequent discussion focused on identifying key trends and strategic areas where international partners can join forces—not only to collaborate, but to co-develop initiatives and build globally relevant ventures and solutions.

The discussion on global science emphasized that modern solutions now require convergence, where different scientific fields must combine their efforts. It was stressed that resilience and sustainability are essential pathways to achieving well-being, placing patient-centered research at the core of all innovation. Referencing historical issues, it was noted that the explosion of the global population has led to a series of pandemics with insufficient countermeasures.

A stark comparison was used to illustrate the power of integrated collaboration: while developing a single drug in Japan typically takes 14 years and costs €83 billion, the COVID-19 vaccine was developed in just two years due to tight collaboration between academia and industry working under one roof.

This context of aggressive, integrated innovation directly relates to the UCP's Biomedical Research Center (CBR), the research unit of Católica Medical School, which was founded in 2021. As a new research center, its leadership group had the unique opportunity to build from scratch and use a more aggressive and innovative approach to research. CBR's strategy is three-pronged: betting on people (hiring research groups with proven track records and recruiting international talent); searching for identity (creating a non-thematic lab structure to actively promote internal collaboration); and forming strategic partnerships (with the largest private hospital, with the city council to boost health and science literacy, and the Champalimaud Foundation). An additional approach is that the medical school deliberately employs a mix of full-time professors and professional researchers to enhance the blend of theory and practice.



Panel session at Champalimaud Foundation in Lisbon, Portugal (July/2025)

Despite its innovative foundation, CBR still faces a big challenge: while it is easier to secure funding for research with a clear deliverable, sustained financial support is also crucial for earlier, pre-profitable research stages.

The ensuing discussion, featuring international experts from the UK and Japan, highlighted other critical enablers and complex roadblocks for future success in medical research.

On the positive side, key enablers were identified. The co-location model—advocating for a single building that integrates education, research, and clinical practice—was strongly highlighted as the path forward. Other important factors cited to accelerate health innovation included streamlining international Intellectual Property (IP) systems and prioritizing the "bench to bed" approach. The experts stressed the necessity of collaboration across multiple dimensions: between companies and academia, and between countries to leverage global expertise across national borders.

However, the discussion also brought up relevant roadblocks. For instance, establishing collaboration between industry and research is often hindered by a language barrier, where the same word can carry different meanings—a problem that requires time and deliberate effort to build mutual trust and effective collaboration. Another significant barrier to integration between research and medical practice stems from a key difference in professional perspective: researchers seek certainties and conclusive data, while doctors must operate in a high-stakes environment, needing to make important decisions about a course of action regardless of diagnostic completeness. Addressing these cultural and perceptual differences through sustained communication is essential to achieving and accelerating medical breakthroughs.



Lisbon Study Trip

# Key Insights

# Key Insights from the Lisbon Study Trip

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The GFCC study trip to Lisbon affirmed a fundamental fact: regional economic and social transformation is fundamentally catalyzed by the deliberate, synchronous collaboration of academia, industry, and government, complemented by intentional investment in key strategic areas. Set in the 2023 European Capital of Innovation, the Lisbon Study Trip delivered a powerful case study and generated many actionable global insights on this model.

## 1. The University's Pivotal Role as an Economic Anchor

Universities are fundamental engines of growth, moving beyond traditional teaching to become indispensable economic anchor institutions.

- **Driving Innovation Beyond the Classroom:** Institutions like the Universidade Católica Portuguesa (UCP) are actively making progress in translating research into market-ready products and creating intellectual property, by effectively addressing the global "translation gap."
- **Talent as the Core Asset:** Universities are key to attracting and retaining international talent. Portugal's success, with international students making up 17% of its higher education population (with an even a higher percentage in Lisbon), underscores that high quality of life combined with strategically aligned academic programs is a magnet for global entrepreneurs and talent.
- **A "Quadruple Helix" for Success:** International models consistently demonstrated that success hinges on a strong, organic, and sustained Quadruple Helix partnership (academia, industry, government, and civil society/public), rejecting top-down mandates in favor of shared vision and genuine collaboration.

## 2. Lisbon's Model: Ambition, Openness, and Strategic Placemaking

Lisbon's emergence as a global hub is the result of a long-term, calculated strategy that embraces a systemic definition of innovation.

- **Embracing a Broad Innovation Scope:** Portugal's success is not limited to tech entrepreneurship; it includes the Creative and Food Industries, for example, demonstrating that place-based innovation should leverage current strengths and encompasses the full breadth of the economy.
- **The Power of Ecosystem Facilitation:** Initiatives like the Unicorn Factory Lisboa at the Beato Innovation District serve as flagships for strategic placemaking. By repurposing sites, integrating public engagement (restaurants, events), and providing holistic, staged support to high-growth companies, the city creates a vibrant, mixed-use environment that fosters a public culture of entrepreneurship.
- **Focus on Global Connectivity:** The Lisbon model prioritizes openness and internationalization—actively recruiting global talent and designing products for international markets from the outset—making size a non-restrictive factor in global competition.

### 3. Innovation in Health and Corporate Integration

Sessions focused on specific settings—such as the corporate environment and life sciences research—offered critical lessons on bridging the gap between research and real-world application.

- **Integrated Biomedical Science:** The Champalimaud Centre for the Unknown demonstrated the power of "fusion research" or "bed to bench" methodology, where clinicians and researchers are physically co-located and intentionally trained to communicate. This integration accelerates translational impact in complex areas like cancer and neuroscience.
- **Anchor Global R&D Locally:** Attracting global companies like Siemens requires a region to ensure clear talent alignment, meaning higher education institutions must collaborate with industry on curriculum development to supply "future-ready talent."
- **Corporate Mindset Shift:** To embed innovation, large companies must adopt a culture where risk is seen as an opportunity and prioritize data sharing and transparency across all corporate units to boost collaborative innovation.

The success stories shared from Lisbon and around the world underscore that sustainable value creation and economic growth for cities are achieved through an approach rooted in: long-term cross-sector commitment; strong academic leadership (focused on talent generation and research translation); place-based innovation that leverages local and regional strengths; and intentional investment in key infrastructure and sectors. Realizing this vision requires coordination, governance, and strong leadership to build a shared vision and secure genuine commitment from all sectors of society.



GFCC delegation during study trip in Lisbon, Portugal (July/2025)



Lisbon Study Trip

# The GFCC

# About the GFCC

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The Global Federation of Competitiveness Councils (GFCC) is a network of leaders and organizations committed to enhancing sustainable growth through competitiveness strategies, amplifying and accelerating their evolution and best practices worldwide. The GFCC has pioneered the development of global competitiveness principles and members continue to co-create cross-border thinking and action on the field.

The GFCC is a global organization founded in 2010. Our network spans more than 30 countries across every continent and is composed of two key groups: members who secure their place through yearly dues, and distinguished experts who are invited to join as fellows.

By connecting businesses, civil society organizations, universities and government agencies, the GFCC enables shared learning and access to world-class expertise for transformation. With a hands-on approach and focus on collaboration, the GFCC helps its members build and deploy strategies.

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# Membership

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## **Albania**

Albanian Council on Competitiveness and Innovation

## **Australia**

Adelaide University  
Australian Advisory Board on Competitiveness  
Monash University  
The Principals Funds Management PTY LTD  
Western Sydney University

## **Brazil**

Brazilian National Confederation of Industries (CNI)

## **Bulgaria**

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## **Canada**

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## **Greece**

Council on Competitiveness of Greece— CompeteGR  
Delphi Economic Forum  
Piraeus Bank

## **Japan**

Japan Science and Technology Agency  
Tsukuba Global Innovation Promotion Agency (TGI)

## **Kazakhstan**

Center for Research & Consulting LLC  
Kazakhstan Growth Forum

## **Lebanon**

American University of Beirut

## **Malaysia**

Malaysian Industry-Government Group for High  
Technology (MIGHT)  
Universiti Teknologi Petronas

## **New Zealand**

Auckland University of Technology  
University of Auckland

## **Oman**

National Competitiveness Office

## **Portugal**

Universidade Católica Portuguesa

## **Romania**

Bucharest University of Economic Studies

## **Saudi Arabia**

Ministry of Investment for Saudi Arabia (MISA)

## **UK**

Centre for Competitiveness  
Aston University  
Harper Adams University  
Queen's University Belfast

## **Ukraine**

Kyiv National Economic University named after  
Vadym Hetman

## **USA**

Academy of Art University  
Arizona State University  
Council on Competitiveness  
Georgetown University  
Lockheed Martin Corporation  
University of Arizona  
University of California San Diego  
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## **Zimbabwe**

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# GFCC Fellows

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Nkem Khumbah  
Susan McCalmont  
James Metson  
Mark Minevich  
Michael Nelson  
Peter Smith  
Ted Zoller

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