



# European Innovation Scoreboard **2024** Country Profile **Cyprus**

## European Innovation Scoreboard 2024 – Country profile Cyprus

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CYPRUS

**Strong Innovator**Summary innovation index (relative to EU in 2017): **116.9**Rank: **13**Change vs 2023: **▲ 3.3** Change vs 2017: **▲ 38.9**

Cyprus is a Strong Innovator with performance at 106.3% of the EU average in 2024. Performance is below the average of the Strong Innovators (111.3%). Performance is increasing more than the EU (+10%).

Indicator	Performance relative to the EU in 2024	Performance change 2017-2024	Performance change 2023-2024
<b>SUMMARY INNOVATION INDEX</b>	<b>106.3</b>	<b>38.9</b>	<b>3.3</b>
<b>Human resources</b>	<b>106.4</b>	<b>14.5</b>	<b>5.9</b>
New doctorate graduates	34.5	11.6	0.0
Population with tertiary education	200.5	19.8	14.4
Population involved in lifelong learning	84.7	13.2	5.1
<b>Attractive research systems</b>	<b>163.4</b>	<b>74.4</b>	<b>7.0</b>
International scientific co-publications	288.6	206.7	0.0
Scientific publications among the top 10% most cited	119.5	9.3	13.0
Foreign doctorate students as a % of all doctorate students	118.4	95.7	0.3
<b>Digitalisation</b>	<b>111.3</b>	<b>74.5</b>	<b>26.7</b>
Broadband penetration	126.7	131.6	35.5
Individuals with above basic overall digital skills	89.9	17.8	17.8
<b>Finance and support</b>	<b>39.9</b>	<b>7.5</b>	<b>-11.1</b>
R&D expenditure in the public sector	39.3	9.8	0.0
Venture capital expenditures	59.8	-1.7	-34.5
Direct and indirect government support of business R&D	15.8	14.4	-0.2
<b>Firm investments</b>	<b>45.3</b>	<b>27.1</b>	<b>-11.2</b>
R&D expenditure in the business sector	18.7	15.0	-2.3
Non-R&D innovation expenditures	90.1	44.1	-24.9
Innovation expenditures per person employed	32.3	22.2	-6.5
<b>Use of information technologies</b>	<b>126.0</b>	<b>40.6</b>	<b>22.5</b>
Enterprises providing ICT training	134.5	32.4	19.1
Employed ICT specialists	117.6	48.4	25.8
<b>Innovators</b>	<b>170.6</b>	<b>118.1</b>	<b>0.0</b>
SMEs introducing product innovations	166.5	108.1	0.0
SMEs introducing business process innovations	173.9	127.8	0.0
<b>Linkages</b>	<b>225.4</b>	<b>173.9</b>	<b>7.6</b>
Innovative SMEs collaborating with others	237.3	228.0	0.0
Public-private co-publications	318.5	233.5	18.9
Job-to-job mobility of HRST	177.1	100.0	8.8
<b>Intellectual assets</b>	<b>107.4</b>	<b>9.4</b>	<b>0.0</b>
PCT patent applications	51.0	6.1	6.2
Trademark applications	206.4	0.0	0.0
Design applications	87.6	20.8	-7.9
<b>Employment impacts</b>	<b>149.9</b>	<b>49.8</b>	<b>5.3</b>
Employment in knowledge-intensive activities	167.4	24.1	14.4
Employment in innovative enterprises	135.2	73.5	-3.1
<b>Sales impacts</b>	<b>89.5</b>	<b>13.1</b>	<b>-3.7</b>
Exports of medium and high technology products	65.9	-29.2	-15.0
Knowledge-intensive services exports	103.0	16.4	-6.4
Sales of new-to-market and new-to-firm innovations	106.1	75.5	18.1
<b>Environmental sustainability</b>	<b>59.5</b>	<b>3.5</b>	<b>11.8</b>
Resource productivity	54.9	-3.0	1.4
Air emissions by fine particulates	66.3	-3.1	-7.0
Environment-related technologies	54.1	18.0	47.6

**Relative strengths**

- Public-private co-publications
- International scientific co-publications
- Innovative SMEs collaborating with others

**Relative weaknesses**

- Direct and indirect government support of business R&D
- R&D expenditure in the business sector
- Innovation expenditures per person employed

**Strong increases since 2017**

- Public-private co-publications
- Innovative SMEs collaborating with others
- International scientific co-publications

**Strong decreases since 2017**

- Exports of medium and high technology products
- Air emissions by fine particulates
- Resource productivity

**Strong increases since 2023**

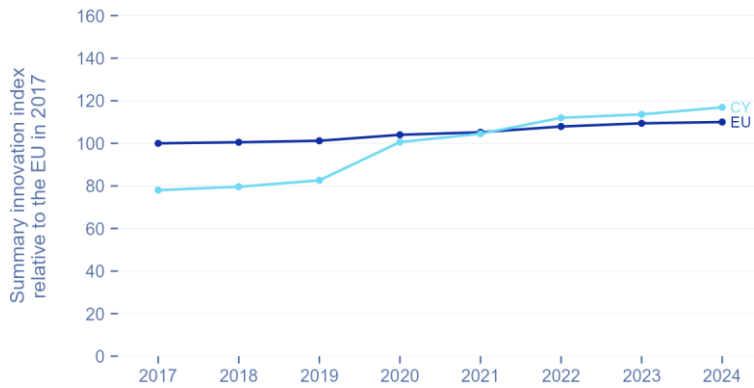
- Environment-related technologies
- Broadband penetration
- Employed ICT specialists

**Strong decreases since 2023**

- Venture capital expenditures
- Non-R&D innovation expenditures
- Exports of medium and high technology products

**Footnote:** The first data column shows scores relative to the EU in 2024, with colour codes indicating performance levels. The subsequent columns show performance changes over time, with scores relative to the EU in 2017, coloured in purple for positive change and red for negative change. As reference years differ between the first column (2024) and the last two columns (2017), scores cannot be directly compared or subtracted across these columns.

Emerging Innovators Moderate Innovators Strong Innovators Innovation Leaders



### Summary innovation index

The line chart shows the evolution of the innovation performance of Cyprus over time, relative to the performance of the EU in 2017.

**Footnote:** All performance scores (SII and dimensions below) are relative to that of the EU in 2017.

### Framework conditions

Cyprus performs above the EU average in terms of its human resources (106.4% of the EU average in 2024), the attractiveness of its research system (163.4% of the EU average in 2024) and digitalisation (111.3% of the EU average in 2024). It demonstrates strengths in international scientific collaboration, outperforming the EU average by almost three times. It also performs above the EU average in 2024 in scientific publications among the top 10% most cited, and in attracting foreign doctoral students. Over time, since 1988, when the first University (University of Cyprus) was created the Cypriot research landscape has grown into a relatively dense research ecosystem (given the size of the country) of public and private universities, research centres and centres of excellence. This is reflected in its strong performance in international scientific co-publications, highly cited scientific publications and foreign doctorate students. Key research actors in Cyprus are the three public research universities which are growing organically and are systematically building up their research capabilities.

Cyprus has the second highest percentage of population with completed tertiary education at 61.6%. However, according to the 2022 OECD PISA report, the rate of underachievement among Cypriot students in basic skills is rising and is among the highest in the EU. Compared to the EU average in 2024 (but also the EU average in 2017), Cyprus lags in the number of new STEM doctorate graduates and participation in lifelong learning. However, there has been positive growth, with a recorded increase of 11.6%-points and 13.2%-points respectively, from 2017 to 2024.

In terms of digitalisation, Cyprus's broadband infrastructure performed above the EU average in 2024 (111.3%). However, the proportion of individuals possessing above-basic overall digital skills falls below the EU average in 2024 despite a positive trend (17.8% points) over the 2017-2024 period.

Human resources



Attractive research systems



Digitalisation



### Investments

Financing R&D remains a significant challenge in Cyprus as the country is well behind the EU average in 2024 in R&D expenditures in the public sector (39.3% of the EU average in 2024), private sector R&D expenditures (18.7% of the EU average in 2024), venture capital (59.8% of the EU average in 2024), and direct government funding and tax support for business R&D (with a 15.8% of the EU average in 2024). Non-R&D innovation expenditures are also slightly below the EU average in 2024. However, R&D and innovation investments from both public and private actors have increased over the 2017-2024 period. R&D expenditure in the public sector grew by 9.8%-points and in the private sector by 15%-points. Overall, national expenditures in R&D have significantly increased over the last decade, jumping from €83 million in 2009 to more than €212 million in 2022 according to Eurostat data.

European and national programmes RESTART, FP7, H2020 and Horizon Europe have funded the Cypriot research ecosystem over the last decade and supported its growth in scientific outputs. Between 2017-2024, direct and indirect government support of business R&D increased by 14.4 %-points. Looking ahead, the Cypriot government has

earmarked resources (ESIF, ERDF, RRF, and national funding) for R&I interventions in the current programming period. In particular, the Cohesion Policy Programme ‘Thalia 2021-2027’ and the Recovery and Resilience Plan 2021-2026 ‘Cyprus Tomorrow’ are expected to mobilise €2.4 billion to support Cyprus’ economy, industry and innovation.

In terms of the use of information technologies, Cyprus scores above the EU average in 2024 and continues to grow in the proportion of enterprises providing ICT skills training and the share of ICT specialists in total employment.

**Finance and support**



**Firm investments**



**Use of information technologies**



**Innovation activities**

Cyprus shows notable strengths in several areas related to innovation among SMEs, including product innovation (166.5% of the EU average in 2024), business process innovations (173.9% of the EU average in 2024) and collaboration between innovators and other companies (237.3% of the EU average in 2024) derived from the Community Innovation Survey (CIS) 2020.

The ICT sector in particular contributes significantly to R&D activities and acts as an enabler of innovation adoption across industries (Deputy Ministry of Research Innovation and digital strategy, 2023). However, the lack of national opportunities in venture and equity capital put these activities at risk. In terms of cooperation, the evaluation of RESTART 2016-2020 pointed out that while specific programmes were conceived under RESTART to promote cooperation between the business sector and the research community with the aim of strengthening the local R&I ecosystem, their success was limited and SMEs/start-ups secured a limited amount of funding (around 27% under RESTART). Nonetheless, there are indications that some Cypriot SMEs have a high research-intensive profile and a good track record in the EU Framework Programmes (Technopolis group, 2020).

Overall, the low business and public sector R&D expenditure activity is coupled with low PCT patent applications and design applications per billion GDP. For both indicators, Cyprus scores below the EU average in 2024 in contrast to trademark applications, for which Cyprus scores well above the EU average in 2024 (206.4% of the EU). However, both PCT patent and design applications have grown with respectively, 6.1 and 20.8 %-points between 2017-2024.

**Innovators**



**Linkages**



**Intellectual assets**



**Impacts**

Cyprus demonstrates strong performance in employment in knowledge-intensive activities in business industries (167.4% of the EU average in 2024) and innovative enterprises (135.2% of the EU average in 2024), performing well above the EU average in 2024. Between 2017 and 2024, employment for knowledge-intensive activities increased by 24.1%-points while employment for innovative enterprises increased by 73.5%-points. Cyprus also performs around the EU average in knowledge-intensive services exports and sales of new-to-market and firm innovations. It however faces challenges in exporting medium and high-tech products, ranking below the EU average in 2024 (65.9%). There is a continued emphasis on diversifying services exports, especially in ICT and professional services, which continue to show positive trends (European Commission, 2024). Cyprus’ structural characteristics as an economy dominated by the services sector (tourism, financial and maritime services), which is less R&D intensive, along with low business R&D activities and incremental innovations, help explain the persistently low performance in high-tech exports of products.

Concerning eco-innovation, according to the eco-innovation index 2022, Cyprus belongs to the catching-up group ranking 20th and thus lags behind the eco innovation leaders and average eco-innovators. Resource productivity and air emissions are also well below the EU average in 2024. Cyprus also scores below the EU average in 2024 in developing environment-related technologies, which is in line with the overall low patenting activities. Between 2017 and 2024, resource productivity and air emissions by fine particulate matter in the manufacturing sector worsened by respectively -3.0 and -3.1%-points while the number of environmental-related inventions increased by 18.0%-points.

Employment impacts



Sales impacts



Environmental sustainability



## Structural differences

### Performance and structure of the economy

The GDP per capita in Cyprus exhibits strong growth with a higher average annual GDP growth rate of 3.8% compared to the EU's 1.9%. According to the European Semester report, the economy is expected to continue to grow in 2024 and 2025. Cyprus' economic activity is dominated by the services sector, which contributes to almost 80% of GDP according to Eurostat data and employs more than 49.3% of the labour force in services and 34.7% in knowledge-intensive services. Conversely, the country's employment share in manufacturing (6.6% compared to the EU's 15.8%) and high and medium high-tech sectors (15.3% compared to the EU's 37.9%) lies below the EU average indicating a reduced focus on high-tech industries. The turnover share for SMEs in Cyprus is higher at 18.3% compared to the EU average of 12.6%. In contrast, large enterprises in Cyprus have a significantly lower turnover share of 23.0% compared to the EU average of 49.6%. Additionally, the share of value added by foreign-controlled enterprises in Cyprus is 6.6%, which is notably lower than the EU average of 13.3%.

### Business and entrepreneurship

Cyprus demonstrates a higher rate of enterprise births and total entrepreneurial activity compared to the EU. The start-ups ecosystem is also particularly active in the ICT sector and a broad range of digital technologies (Deputy Ministry of Research Innovation and digital strategy, 2023). In the recent past, Innovative Entrepreneurship represented one of the strategic pillars of Cyprus' Strategic framework for R&I 'Innovate Cyprus' during the period 2019-2023 with the objective to develop a favourable environment for technological development and innovative entrepreneurship. Within its Recovery and Resilience Plan, Cyprus commits to increasing research and development funding for businesses, with a focus on small and medium businesses and start-ups.

The country faces challenges with foreign direct investment (FDI) net inflows, showing a negative value, and hence outflows exceeding inflows compared to the positive EU average. At the same time buyer sophistication in Cyprus shows that the purchasing decisions of Cypriot buyers are around the average between considerations on sophisticated performance attributes and price representing the EU average.

### Innovation profiles

No data is available regarding the innovation profiles of Cyprus.

### Governance and policy framework

Cyprus faces governance challenges compared to the EU average, especially in the Corruption Perceptions Index score and the rule of law score which are lower than the EU average. Reforms are however foreseen in justice and anti-corruption policies within Cyprus' Recovery and Resilience Plan. Government procurement of advanced technology products is below the EU average as well as innovation procurement as a share of total public procurement. Basic-school entrepreneurial education and training in Cyprus are slightly below the EU average.

## **Climate change**

Cyprus faces significant challenges related to climate change compared to the EU average. The circular material use rate in Cyprus is considerably below the EU average, and according to the European Semester report, Cyprus risks missing its packaging recycling targets by 2025. The greenhouse gas emissions intensity of energy consumption is also higher than the EU average, associated with challenges in phasing out fossil fuels. However, more actions are planned in the updated National Energy and Climate Action Plan published in 2023.

In terms of eco-innovation, Cyprus is part of the catching-up performance group, following the eco-innovation leaders and average innovators in 2022. According to the eco-innovation Index in 2022, the country's strongest performance areas are academic publications and water productivity, while the weakest areas are patents and the total number of R&D personnel and researchers.

## **Demography**

Cyprus, with a population of approximately 907,137, shows a significantly higher average annual population growth rate (1.4%) compared to the EU average in 2017 (0.3%). Its population density (97.2 people per square kilometre) is slightly lower than the EU average (109 people per square kilometre).



## Structural indicators

The table below presents some structural differences between Cyprus and the EU.

	CY	EU
<b>Performance and structure of the economy</b>		
GDP per capita	94.3	100
Average annual GDP growth (2021-2023 average)	3.8	1.9
Employment share Manufacturing	6.6	15.8
Employment share High and Medium high-tech	15.3	37.9
Employment share Services	49.3	39.8
Employment share Knowledge-intensive services	34.7	28.6
Turnover share SMEs	18.3	12.6
Turnover share large enterprises	23	49.6
Foreign-controlled enterprises – share of value added	6.6	13.3
<b>Business and entrepreneurship</b>		
Enterprise births	1	0.8
Total Entrepreneurial Activity	9.2	6.8
FDI net inflows	-25.1	1.9
Buyer sophistication	3.8	3.6
<b>Governance and policy frameworks</b>		
Corruption Perceptions Index	52.7	64
Basic-school entrepreneurial education and training	2.4	2.6
Government procurement of advanced technology products	3.1	3.4
Rule of law	0.6	1
Innovation procurement as a share of total public procurement	1.4	9.2
<b>Climate change</b>		
Circular material use rate	3.3	11.5
Greenhouse gas emissions intensity of energy consumption	98.7	82.8
Eco-Innovation Index	94.7	121.5
<b>Demography</b>		
Population size (in millions)	0.9	447
Average annual population growth (2021-2023 average)	1.4	0.3
Population density	97.2	109

## References

The country's relative strengths and weaknesses for each indicator, compared to other EU Member States and neighbouring countries, can be found in [Annex B](#).

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This report provides the Country profile from the 2024 European Innovation Scoreboard for Cyprus

*Studies and reports*

