



European  
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# European Innovation Scoreboard **2023** Country profile **Greece**



*Innovation*

## European Innovation Scoreboard 2023 – Country profile Greece

European Commission

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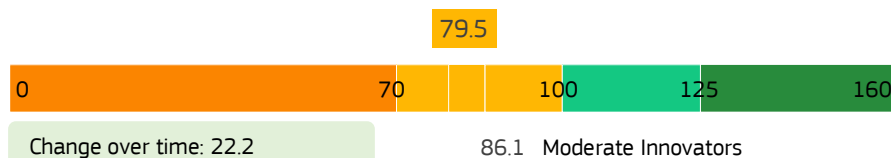
# **European Innovation Scoreboard 2023 Country profile Greece**

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The European Innovation Scoreboard report and annexes, and the indicators database are available at:  
[https://research-and-innovation.ec.europa.eu/statistics/performance-indicators/european-innovation-scoreboard\\_en](https://research-and-innovation.ec.europa.eu/statistics/performance-indicators/european-innovation-scoreboard_en)



## Greece

	Performance relative to EU in 2023	Performance change 2016-2023	Performance change 2022-2023
<b>SUMMARY INNOVATION INDEX</b>	<b>79.5</b>	<b>22.2</b>	<b>0.5</b>
<b>Human resources</b>	<b>71.5</b>	<b>6.8</b>	<b>-3.0</b>
Doctorate graduates	70.3	11.4	-11.4
Population with tertiary education	118.5	6.0	6.0
Lifelong learning	17.6	0.0	0.0
<b>Attractive research systems</b>	<b>71.0</b>	<b>14.1</b>	<b>0.3</b>
International scientific co-publications	92.1	48.5	6.6
Most cited publications	93.3	7.1	3.9
Foreign doctorate students	1.4	-2.1	-13.9
<b>Digitalisation</b>	<b>48.5</b>	<b>-6.1</b>	<b>-6.1</b>
Broadband penetration	26.4	-12.1	-12.1
People with above basic overall digital skills	78.8	0.0	0.0
<b>Finance and support</b>	<b>63.6</b>	<b>35.5</b>	<b>5.0</b>
R&D expenditures in the public sector	100.0	35.5	-6.5
Venture capital expenditures	45.0	32.4	2.0
Government support for business R&D	44.5	38.7	24.0
<b>Firm investments</b>	<b>70.5</b>	<b>23.1</b>	<b>-2.1</b>
R&D expenditure in the business sector	44.4	31.5	-0.8
Non-R&D Innovation expenditures	106.2	9.0	-6.0
Innovation expenditures per employee	66.6	27.6	0.1
<b>Use of information technologies</b>	<b>39.3</b>	<b>-2.6</b>	<b>6.1</b>
Enterprises providing ICT training	48.3	-8.9	8.9
Employed ICT specialists	30.0	3.4	3.4
<b>Innovators</b>	<b>167.3</b>	<b>106.9</b>	<b>15.1</b>
Product innovators (SMEs)	179.0	123.7	16.6
Business process innovators (SMEs)	157.0	89.0	13.5
<b>Linkages</b>	<b>117.7</b>	<b>58.1</b>	<b>-9.4</b>
Innovative SMEs collaborating with others	174.8	56.6	-16.0
Public-private co-publications	146.9	84.6	14.8
Job-to-job mobility of HRST	58.3	47.1	-14.7
<b>Intellectual assets</b>	<b>51.8</b>	<b>8.8</b>	<b>-1.5</b>
PCT patent applications	37.2	1.2	-2.9
Trademark applications	95.1	31.8	2.5
Design applications	25.8	0.3	-2.7
<b>Employment impacts</b>	<b>124.2</b>	<b>37.5</b>	<b>22.2</b>
Employment in knowledge-intensive activities	81.9	0.0	0.0
Employment in innovative enterprises	158.9	73.0	43.3
<b>Sales impacts</b>	<b>85.5</b>	<b>27.5</b>	<b>-9.7</b>
Medium and high-tech goods exports	20.6	3.8	-2.2
Knowledge-intensive services exports	103.4	25.5	-17.0
Sales of innovative products	158.0	66.6	-12.2
<b>Environmental sustainability</b>	<b>71.8</b>	<b>-2.5</b>	<b>1.8</b>
Resource productivity	88.5	55.4	16.2
Air emissions by fine particulate matter	71.8	11.6	5.0
Environment-related technologies	55.2	-57.9	-11.7

The second column shows performance relative to that of the EU in 2023. Colours next to the column show matching colour codes: dark green: above 125% of the performance of the EU in 2023; light green: between 100% and 125%; light orange: between 70% and 100%; dark orange: below 70%. The next columns show performance change over time between 2016 and 2023 and between 2022 and 2023, with scores relative to those of the EU in 2016. Positive (negative) performance changes are shown in green (red).

**GREECE** is a **Moderate Innovator** with performance at 79.5% of the EU average. Performance is below the average of the Moderate Innovators. Performance is increasing at a rate higher than that of the EU (8.5%-points). The country's performance gap to the EU is becoming smaller.

### Relative strengths

- Product innovators
- Innovative SMEs collaborating with others
- Employment in innovative enterprises
- Sales of innovative products
- Business process innovators

### Relative weaknesses

- Foreign doctorate students
- Lifelong learning
- Medium and high-tech goods exports
- Design applications
- Broadband penetration

### Strong increases since 2016

- Product innovators
- Business process innovators
- Public-private co-publications

### Strong decreases since 2016

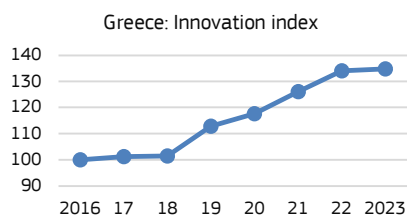
- Environment-related technologies
- Broadband penetration
- Enterprises providing ICT training

### Strong increases since 2022

- Employment in innovative enterprises
- Government support for business R&D
- Product innovators

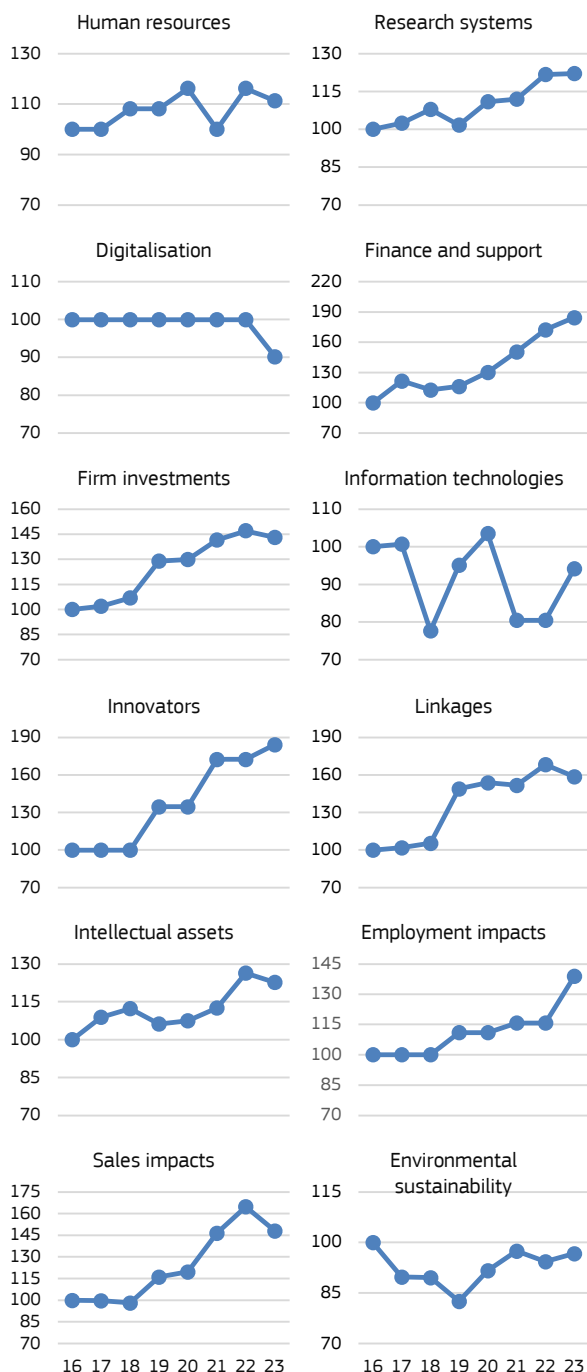
### Strong decreases since 2022

- Knowledge-intensive services exports
- Innovative SMEs collaborating with others
- Job-to-job mobility of HRST



The graph on the left shows the evolution of **innovation performance over time** against the performance of the country in 2016. Innovation performance increased strongly over time between 2018 and 2022 leading to an overall improvement of 35%. In 2023 performance did almost not change.

The graphs below show the evolution of innovation performance in the different **innovation dimensions** against the performance of the country in 2016. Performance increased most strongly for Finance and support and Innovators. Performance declined Digitalisation, Information technologies and Environmental sustainability.





Performance is measured relative to that of the country in 2016 (=100).

**Structural differences** with the EU are shown below:

- Greece has lower per capita income but a faster growing economy. Business services takes up a larger share of the economy, with SMEs accounting for a larger share of turnover.
- Enterprise births and FDI net inflows add positively to the innovation climate, top R&D spenders add negatively.
- Greece has higher shares of In-house product innovators with and without market novelties and In-house business process innovators.
- Entrepreneurial training and government procurement are below the EU average.
- Greece shows a mixed performance on Climate change related indicators, with below average performance on the circular material use rate and environmental innovation, but a stronger reduction in greenhouse gas emissions.

	EL	EU
<b>Performance and structure of the economy</b>		
GDP per capita (PPS)	21,100	32,600
Average annual GDP growth (%)	7.8	4.4
Employment share Manufacturing (NACE C) (%)	9.7	16.4
of which High and Medium high-tech (%)	16.8	38.0
Employment share Services (NACE G-N) (%)	45.8	41.1
of which Knowledge-intensive services (%)	28.8	35.8
Turnover share SMEs (%)	39.4	34.1
Turnover share large enterprises (%)	33.3	49.6
Foreign-controlled enterprises – share of value added (%)	5.8	11.8
<b>Business and entrepreneurship</b>		
Enterprise births (10+ employees) (%)	2.3	1.0
Total Entrepreneurial Activity (TEA) (%)	7.5	6.8
FDI net inflows (% GDP)	2.3	2.1
Top R&D spending enterprises per 10 mln. population	5.6	20.3
Buyer sophistication (1 to 7 best)	3.3	3.7
<b>Innovation profiles</b>		
In-house product innovators with market novelties	19.9	12.2
In-house product innovators without market novelties	23.3	12.8
In-house business process innovators	21.1	16.5
Innovators that do not develop innovations themselves	7.3	6.5
Innovation active non-innovators	1.0	4.1
Non-innovators with potential to innovate	12.1	17.2
Non-innovators without disposition to innovate	15.3	30.7
<b>Governance and policy framework</b>		
Corruption Perceptions Index (0 to 100 best)	50.3	64.0
Basic school entrepreneurial education and training	3.1	3.3
Govt. procurement of advanced tech. products	2.6	3.5
Rule of law (-2.5 to 2.5 best)	0.3	1.0
<b>Climate change indicators</b>		
Circular material use rate	4.0	11.8
Greenhouse gas emissions intensity of energy consumption	76.4	82.8
Eco-Innovation Index	83.6	100.0
<b>Demography</b>		
Population size	10.6	447.1
Average annual population growth (%)	-1.2	-0.1
Population density	82.4	108.8



This report provides the Country profile from the 2023 European Innovation Scoreboard for Greece.

*Studies and reports*