



European Innovation Scoreboard 2023 - Country profile Ireland

European Commission

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 $\label{eq:common Policy Centre} \mbox{Directorate } \mbox{G-Common Policy Centre}$

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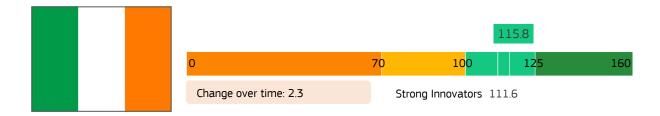
European Innovation Scoreboard 2023 Country profile Ireland

The report was prepared by

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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



to decid	Performance	Performance	Performance
Ireland		change 2016-	_
	in 2023	2023	2023
SUMMARY INNOVATION INDEX	115.8	2.3	3.9
Human resources	156.4	1.1	
Doctorate graduates	144.5	11.4	
Population with tertiary education	217.3	3.6	
Lifelong learning	99.0	-19.8	
Attractive research systems	159.3	32.9	
International scientific co-publications	190.9	108.5	0.6
Most cited publications	116.0	-13.4	
Foreign doctorate students	207.2	68.4	15.1
Digitalisation	122.3	10.5	10.3
Broadband penetration	95.6	20.6	
People with above basic overall digital skills	158.9	0.0	
Finance and support	64.8	-29.4	-13.2
R&D expenditures in the public sector	14.1	-37.1	
Venture capital expenditures	72.7	11.5	-19.8
Government support for business R&D	114.8	-61.8	0.1
Firm investments	75.9	-7.9	-15.9
R&D expenditure in the business sector	54.9	-18.5	-5.4
Non-R&D Innovation expenditures	12.2	-62.9	-64.7
Innovation expenditures per employee	148.3	52.8	18.0
Use of information technologies	128.6	-24.5	-13.6
Enterprises providing ICT training	104.6	-46.5	-24.2
Employed ICT specialists	153.3	-3.4	-3.4
Innovators	115.8	-18.8	29.4
Product innovators (SMEs)	107.8	-30.9	4.2
Business process innovators (SMEs)	122.8	-5.9	56.2
Linkages	180.8	82.6	5.2
Innovative SMEs collaborating with others	201.4	100.5	6.8
Public-private co-publications	247.4	84.2	4.2
Job-to-job mobility of HRST	N/A	N/A	N/A
Intellectual assets	57.3	-14.4	-4.6
PCT patent applications	64.0	-17.5	1.8
Trademark applications	70.6	-16.9	-5.6
Design applications	33.0	-8.5	-12.0
Employment impacts	151.5	-13.1	29.0
Employment in knowledge-intensive activities	208.4	0.0	0.0
Employment in innovative enterprises	104.8	-25.4	56.5
Sales impacts	138.8	16.6	24.2
Medium and high-tech goods exports	99.9	18.1	-3.9
Knowledge-intensive services exports	161.9	2.2	-0.3
Sales of innovative products	169.2	32.2	98.1
Environmental sustainability	109.0	25.6	9.3
Resource productivity	151.8	99.8	32.0
Air emissions by fine particulate matter	129.4	15.0	2.3
Environment-related technologies	37.2	-11.8	2.3
The second column shows performance relativ	ve to that of th	ne FU in 2023	Colours next to

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).

IRELAND is a **Strong Innovator** with performance at 115.8% of the EU average. Performance is above the average of the Strong Innovators. Performance is increasing at a rate lower than that of the EU (8.5%-points). The country's performance lead over the EU is becoming smaller.

Relative strengths

Public-private co-publications
Population with tertiary education
Employment in knowledge-intensive
activities

Foreign doctorate students Innovative SMEs collaborating with others

Relative weaknesses

Non-R&D Innovation expenditures R&D expenditures in the public sector Design applications Environment-related technologies R&D expenditure in the business sector

Strong increases since 2016

International scientific co-publications
Innovative SMEs collaborating with others
Resource productivity

Strong decreases since 2016

Non-R&D Innovation expenditures Government support for business R&D Enterprises providing ICT training

Strong increases since 2022

Sales of innovative products Employment in innovative enterprises Business process innovators

Strong decreases since 2022

Non-R&D Innovation expenditures Enterprises providing ICT training Lifelong learning



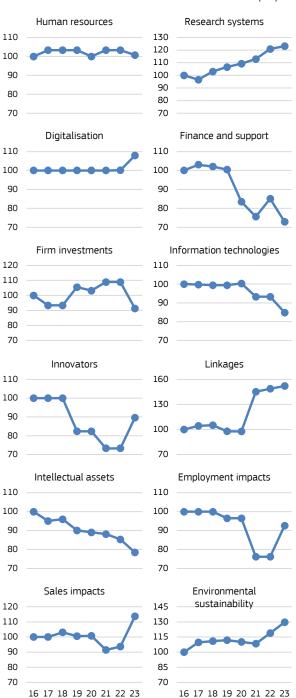
The graph on the left shows the evolution of **innovation performance over time** against the performance of the country in 2016. Innovation performance, after an initial increase, dropped below its 2016 level in 2021 and then increased strongly in both 2022 and 2023.

The graphs below show the evolution of innovation performance in the different **innovation dimensions** against the performance of the country in 2016. Performance improved strongly for Linkages and declined for Finance and support, Firm investments, Information technologies, Innovators, Intellectual assets and Employment impacts.

Structural differences with the EU are shown below:

- Ireland has a higher per capita income and a much faster growing economy. Business services takes up a larger share of the economy, with large enterprises accounting for a larger share of turnover.
- Entrepreneurial activity, FDI net inflows and top R&D spenders add positively to the innovation climate, enterprise births add negatively.
- Information on Innovation profiles is not available.
- Governance and policy framework indicators are close to the EU average.
- Ireland shows a weak performance on Climate change related indicators with a much lower share of material resources coming from recycled waste materials and a below average score on environmental innovation.

Score on environmental innovation.		
	ΙE	EU
Performance and structure of the economy		
GDP per capita (PPS)	71,600	32,600
Average annual GDP growth (%)	11.3	4.4
Employment share Manufacturing (NACE C) (%)	11.4	16.4
of which High and Medium high-tech (%)	36.3	38.0
Employment share Services (NACE G-N) (%)	46.2	41.1
of which Knowledge-intensive services (%)	42.2	35.8
Turnover share SMEs (%)	26.6	34.1
Turnover share large enterprises (%)	56.5	49.6
Foreign-controlled enterprises – share of value added (%)	50.0	11.8
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	0.8	1.0
Total Entrepreneurial Activity (TEA) (%)	12.5	6.8
FDI net inflows (% GDP)	4.2	2.1
Top R&D spending enterprises per 10 mln. population	78.7	20.3
Buyer sophistication (1 to 7 best)	4.3	3.7
Innovation profiles		
In-house product innovators with market novelties	n/a	12.2
In-house product innovators without market novelties	n/a	12.8
In-house business process innovators	n/a	16.5
Innovators that do not develop innovations themselves	n/a	6.5
Innovation active non-innovators	n/a	4.1
Non-innovators with potential to innovate	n/a	17.2
Non-innovators without disposition to innovate	n/a	30.7
Governance and policy framework		
Corruption Perceptions Index (0 to 100 best)	74.3	64.0
Basic school entrepreneurial education and training	3.4	3.3
Govt. procurement of advanced tech. products	3.5	3.5
Rule of law (-2.5 to 2.5 best)	1.5	1.0
Climate change indicators		
Circular material use rate	1.8	11.8
Greenhouse gas emissions intensity of energy consumption	81.6	82.8
Eco-Innovation Index	90.9	100.0
Demography		
Population size	5.0	
Average annual population growth (%)	1.0	
Population density	70.9	108.8



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

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

Studies and reports