



European
Commission

European Innovation Scoreboard **2023** Country profile **United Kingdom**



Innovation

European Innovation Scoreboard 2023 – Country profile United Kingdom

European Commission

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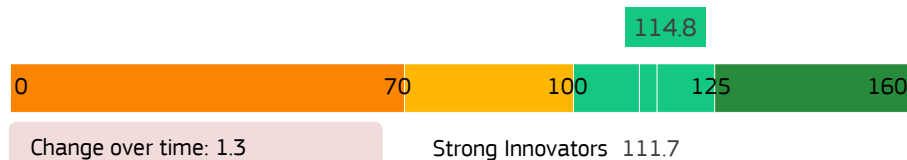
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The European Innovation Scoreboard report and annexes, and the indicators database are available at:

https://research-and-innovation.ec.europa.eu/statistics/performance-indicators/european-innovation-scoreboard_en



United Kingdom

	Performance relative to EU in 2023	Performance change 2016-2023	Performance change 2022-2023
SUMMARY INNOVATION INDEX	114.8	1.3	-2.6
Human resources	161.5	4.2	-3.4
Doctorate graduates	208.3	4.4	-8.0
Population with tertiary education	142.8	15.0	0.0
Lifelong learning	128.4	-9.9	0.0
Attractive research systems	170.6	13.4	-0.8
International scientific co-publications	158.9	70.5	0.0
Most cited publications	142.0	-3.4	-1.5
Foreign doctorate students	241.1	-1.4	0.0
Digitalisation	39.1	0.0	0.0
Broadband penetration	33.8	0.0	0.0
People with above basic overall digital skills	N/A	N/A	N/A
Finance and support	122.6	48.9	0.0
R&D expenditures in the public sector	64.1	-1.6	0.0
Venture capital expenditures	134.9	76.7	0.0
Government support for business R&D	176.0	89.1	0.0
Firm investments	76.2	-6.5	0.0
R&D expenditure in the business sector	83.5	0.0	0.0
Non-R&D Innovation expenditures	70.6	-20.7	0.0
Innovation expenditures per employee	73.6	0.0	0.0
Use of information technologies	120.2	-7.3	0.0
Enterprises providing ICT training	107.5	-29.3	0.0
Employed ICT specialists	133.3	13.8	0.0
Innovators	48.1	-58.2	0.0
Product innovators (SMEs)	91.0	-8.4	0.0
Business process innovators (SMEs)	10.5	-111.2	0.0
Linkages	206.5	19.3	0.0
Innovative SMEs collaborating with others	216.6	-13.6	0.0
Public-private co-publications	216.8	74.9	0.0
Job-to-job mobility of HRST	193.8	23.5	0.0
Intellectual assets	70.4	-20.0	-7.8
PCT patent applications	95.0	-3.3	-0.7
Trademark applications	71.2	-22.3	-8.0
Design applications	34.1	-39.3	-16.6
Employment impacts	147.3	15.2	0.0
Employment in knowledge-intensive activities	175.9	33.7	0.0
Employment in innovative enterprises	123.8	-2.3	0.0
Sales impacts	106.8	-9.9	-10.2
Medium and high-tech goods exports	67.6	-18.5	-24.0
Knowledge-intensive services exports	147.8	30.0	-1.3
Sales of innovative products	119.2	-46.3	0.0
Environmental sustainability	116.1	6.5	0.2
Resource productivity	192.0	45.1	0.0
Air emissions by fine particulate matter	84.7	2.5	0.0
Environment-related technologies	85.9	-14.6	0.5

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).

The **UNITED KINGDOM** is a **Strong Innovator** with performance at 114.8% 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

Foreign doctorate students
Public-private co-publications
Innovative SMEs collaborating with others
Doctorate graduates
Job-to-job mobility of HRST

Relative weaknesses

Business process innovators
Broadband penetration
Design applications
R&D expenditures in the public sector
Medium and high-tech goods exports

Strong increases since 2016

Government support for business R&D
Venture capital expenditures
Design applications

Strong decreases since 2016

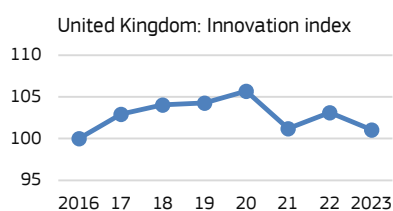
Business process innovators
Sales of innovative products
Enterprises providing ICT training

Strong increases since 2022

Environment-related technologies

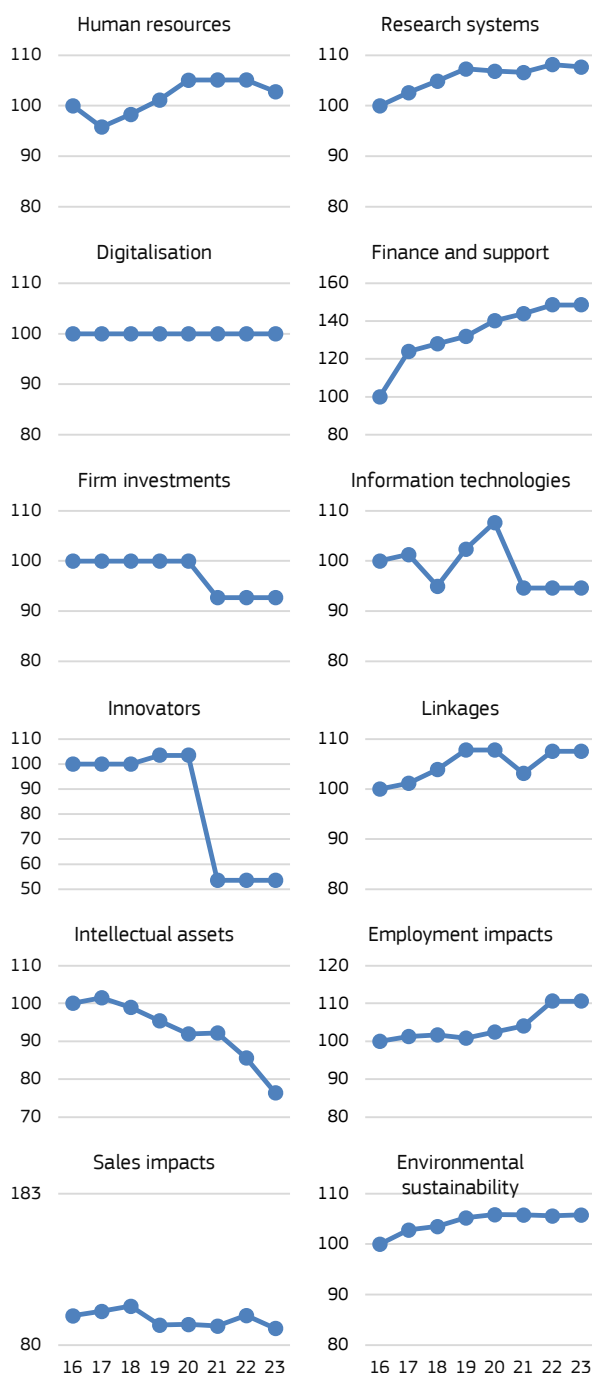
Strong decreases since 2022

Medium and high-tech goods exports
Design applications
Trademark applications



The graph on the left shows the evolution of **innovation performance over time** against the performance of the country in 2016. Innovation performance showed growth from 2016 to 2019 but declined in 2021. There was a slight increase in 2022, followed by a decrease in 2023. Overall, there was a 2% improvement in innovation performance between 2016 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 increased most strongly for Finance and support. Performance declined for Firm investments, Information technologies, Innovators, Intellectual assets and Sales impacts.




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

Structural differences with the EU are shown below:

- The United Kingdom has higher per capita income, but a slower growing economy. Business services takes up a larger share of the economy, with large enterprises accounting for a larger share of turnover.
- Entrepreneurial Activity, Buyer sophistication, and Top R&D spenders add positively to the innovation climate, Enterprise births and FDI net inflows add negatively.
- Information on Innovation profiles is not available.
- Entrepreneurial training and government procurement are above the EU average as drivers of research and innovation.
- The United Kingdom performs strongly in climate change indicators, with above-average recycling rates and greenhouse gas emission reductions.

	UK	EU
Performance and structure of the economy		
GDP per capita (PPS)	33,810	32,600
Average annual GDP growth (%)	2.5	4.4
Employment share Manufacturing (NACE C) (%)	9.5	16.4
of which High and Medium high-tech (%)	17.8	38.0
Employment share Services (NACE G-N) (%)	41.2	41.1
of which Knowledge-intensive services (%)	44.0	35.8
Turnover share SMEs (%)	29.9	34.1
Turnover share large enterprises (%)	53.2	49.6
Foreign-controlled enterprises – share of value added (%)	n/a	11.8
Business and entrepreneurship		
Enterprise births (10+ employees) (%)	0.8	1.0
Total Entrepreneurial Activity (TEA) (%)	9.9	6.8
FDI net inflows (% GDP)	1.9	2.1
Top R&D spending enterprises per 10 mln. population	23.9	20.3
Buyer sophistication (1 to 7 best)	4.7	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)	76.0	64.0
Basic school entrepreneurial education and training	3.6	3.3
Govt. procurement of advanced tech. products	3.8	3.5
Rule of law (-2.5 to 2.5 best)	1.5	1.0
Climate change indicators		
Circular material use rate	16.4	11.8
Greenhouse gas emissions intensity of energy consumption	82.0	82.8
Eco-Innovation Index	n/a	100.0
Demography		
Population size	66.8	447.1
Average annual population growth (%)	0.4	-0.1
Population density	182.1	108.8



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

Studies and reports

