



European Innovation Scoreboard **2024** Country Profile **Iceland**

European Innovation Scoreboard 2024 – Country profile Iceland

European Commission

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ICELAND

Strong InnovatorSummary innovation index (relative to EU in 2017): **110.6**Rank: **16**

Change vs 2023: ▼ -1 Change vs 2017: ▲ 6.8

Iceland is a Strong Innovator with performance at 100.5% of the EU average in 2024. Performance is below the average of the Strong Innovators (132.1%). Performance is increasing less than the EU (+10%).

Indicator	Performance relative to the EU in 2024	Performance change 2017-2024	Performance change 2023-2024
SUMMARY INNOVATION INDEX	100.5	6.8	-1
Human resources	120.4	-0.5	-11.1
New doctorate graduates	60.7	-23.1	-34.7
Population with tertiary education	101.6	11.4	19.2
Population involved in lifelong learning	212.6	22.5	-10.2
Attractive research systems	178.6	22.5	0.5
International scientific co-publications	288.6	0	0
Scientific publications among the top 10% most cited	99.8	5.3	-13.6
Foreign doctorate students as a % of all doctorate students	202.4	81.4	31.9
Digitalisation	146.5	0	0
Broadband penetration	N/A	N/A	N/A
Individuals with above basic overall digital skills	175	0	0
Finance and support	117.2	53.3	0
R&D expenditure in the public sector	100	-1.6	-9.8
Venture capital expenditures	77.2	42	12.4
Direct and indirect government support of business R&D	187.8	145.8	0
Firm investments	88	12.6	-2.3
R&D expenditure in the business sector	130.6	36.1	-6.7
Non-R&D innovation expenditures	82.4	0	0
Innovation expenditures per person employed	47.8	0	0
Use of information technologies	92.6	16.5	9.8
Enterprises providing ICT training	N/A	N/A	N/A
Employed ICT specialists	91.2	16.1	9.7
Innovators	106.2	-4.3	0
SMEs introducing product innovations	111.2	-25.8	0
SMEs introducing business process innovations	102.2	16.5	0
Linkages	222.2	-4	0
Innovative SMEs collaborating with others	185.5	-10.7	0
Public-private co-publications	487.6	-1.7	-1.7
Job-to-job mobility of HRST	143.7	0	0
Intellectual assets	61.2	-24.4	-2
PCT patent applications	80.6	-17.1	-13.3
Trademark applications	70.9	-75.1	-3.5
Design applications	19.4	6	14
Employment impacts	129.5	2.2	5.8
Employment in knowledge-intensive activities	138.2	21.7	12.1
Employment in innovative enterprises	122.3	-15.8	0
Sales impacts	28.3	-5.4	-7.7
Exports of medium and high technology products	0	0	0
Knowledge-intensive services exports	50.3	-15.6	-22.4
Sales of new-to-market and new-to-firm innovations	39.3	0	0
Environmental sustainability	42.3	14.1	8
Resource productivity	31.3	36.8	22.5
Air emissions by fine particulates	52.3	-1.5	4.8
Environment-related technologies	38.8	18.2	1.1

Relative strengths

- Public-private co-publications
- International scientific co-publications
- Population involved in lifelong learning

Relative weaknesses

- Exports of medium and high technology products
- Design applications
- Resource productivity

Strong increases since 2017

- Direct and indirect government support of business R&D
- Foreign doctorate students as a % of all doctorate students
- Venture capital expenditures

Strong decreases since 2017

- Trademark applications
- SMEs introducing product innovations
- New doctorate graduates

Strong increases since 2023

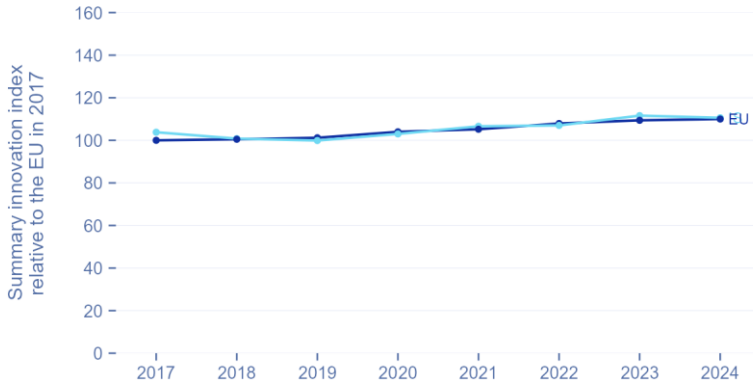
- Foreign doctorate students as a % of all doctorate students
- Resource productivity
- Population with tertiary education

Strong decreases since 2023

- New doctorate graduates
- Knowledge-intensive services exports
- Scientific publications among the top 10% most cited

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 Iceland 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

Iceland has experienced an overall decrease of 0.5%-points in human resources compared to 2017, performing at 120.4% of the EU average in 2024 on this dimension. The decrease in performance is primarily due to a substantial 23.1%-point decline in new doctorate graduates compared to 2017, and decreasing further since 2023. Iceland performs at an impressive 212.6% of the 2024 EU average on population involved in lifelong learning, registering a 22.5%-point increase since 2017 from an already high base. The country also possesses a slightly higher than the EU share of population with tertiary education, standing at 101.6% with an increase of 11.4%-points since 2017.

Iceland boasts attractive research systems showing 178.6% performance on this dimension compared to the EU average in 2024, and registering a steady increase of 22.5%-points since 2017. This improvement is largely driven by a significant 81.4%-point rise in the proportion of foreign doctorate students and an increase of 5.3%-points in the international recognition of scientific publications in terms of citations. Finally, Iceland has a remarkable performance on population with above basic digital skills, performing at 175% of the EU average.

Human resources



Attractive research systems



Digitalisation



Investments

Overall financial support for R&D saw a 53.3%-point increase since 2017, with Iceland performing at 117.2% of the EU average in 2024 on this dimension, and this despite a slight 1.6%-point decrease in R&D expenditure in the public sector. The growth on this dimension is primarily driven by a 145.8%-point increase in direct and indirect government support for business R&D, standing at 187.8% of the EU level in 2024 on this indicator, and a 42%-point rise in venture capital expenditures on R&D.

Firm investments, however, remain below the EU average despite an overall positive trend on this dimension and a 12.6%-point increase since 2017. R&D expenditure in the business sector increased by 36.1%-points since 2017 and represent 130.6% of the EU performance in 2024, but non-R&D innovation expenditures and innovation spending per person employed stand below the EU averages in 2024, at 82.4% and 47.8% respectively.

Finally, Iceland performs at 92.6% of the EU average in 2024 on the use of information technologies, despite a 16.1%-point increase in the employment of ICT specialists in 2017, with a 9.7%-point growth in 2023.

Finance and support



Firm investments



Use of information technologies



Innovation activities

Iceland registered a decline on all the dimensions in this category. However, the country performs above the EU average on SMEs introducing product and process innovations (at 106.2% of the EU level in 2024 on the Innovators dimension), and more than double the EU performance on linkages (222.2% of the EU average in 2024). Public-private co-publications are responsible for much of this increase, at 487.6% of the EU average in 2024, supported by the efficient framework for industry-science cooperation. Despite this strong performance, Iceland saw a 10.7%-point decrease compared to 2017 in the number of innovative SMEs collaborating with others. Firms seem to be focused on introducing more of process innovations rather than new products, as Iceland registered a 25.8%-point decrease in SMEs introducing product innovations contrasted with a 16.5%-point increase in SMEs introducing business process innovations.

Iceland performs below the EU average on intellectual assets, at 61.2% of the 2024 EU level, registering a 24.4%-point decrease compared to 2017. This decline is driven by a significant 75.1%-point fall in trademark applications and a 17.1%-point decrease in patent applications since 2017, albeit a slight 6.0%-point increase in design applications.

Innovators



Linkages



Intellectual assets



Impacts

Iceland performs at 129.5% of the EU level in 2024 on employment impacts dimension, despite a 15.8%-point decrease in employment in innovative enterprises compared to 2017. The country’s performance on sales impacts represents roughly a third of the EU performance, with a 15.6%-point decline in knowledge-intensive services exports, contributing strongly to its weak performance on this dimension. Iceland registered a positive trend in environmental sustainability, but its performance is low, standing at 42.3% of the EU average in 2024. In fact, the country showed continuous improvement in its resource productivity (+36.8%-points) and environment-related technologies (+18.2%-points) since 2017.

Iceland also stands at 0% of the EU average in the export of medium and high-technology products, suggesting the country is the lowest ranking among EU Member States and neighbouring countries in this domain since 2017. This could be contrasted with the relative focus on knowledge-intensive services for a country with a highly educated workforce.

Employment impacts



Sales impacts



Environmental sustainability



Structural differences

Performance and structure of the economy

Iceland's GDP per capita is 130% of the EU average. This indicates a relatively higher standard of living and economic productivity in Iceland compared to the EU average. In terms of employment, the share of knowledge-intensive services in Iceland is 36.9%, which is higher than the EU average of 28.6%. This reflects a strong presence of high-skill, knowledge-based jobs in the Icelandic economy. Additionally, the turnover share of SMEs in Iceland is also higher at 17.2%, compared to the EU average of 12.6%, highlighting the importance of small and medium-sized enterprises in Iceland's economic landscape. However, the turnover share of large enterprises in Iceland is 29.3%, which is significantly lower than the EU average of 49.6%. This suggests that large enterprises contribute less to the overall economic turnover in Iceland compared to the EU average. In the high-tech sector, the employment share of high and medium high-tech industries in Iceland is 19.8%, which is notably lower than the EU average of 37.9%. This indicates that Iceland has a smaller proportion of its workforce employed in high-tech industries compared to the EU average, instead focussing on knowledge-intensive services.

Business and entrepreneurship

Iceland's economic indicators reveal a mixed performance compared to EU averages. Enterprise births in Iceland are at 0.5, lower than the EU average of 0.8, suggesting that the rate of new business formation in Iceland is below the EU norm. Additionally, FDI net inflows in Iceland stand at 0.6, significantly below the EU average of 1.9, indicating lower levels of foreign direct investment relative to other EU countries.

On a more positive note, Iceland excels in R&D spending by top enterprises (27 vs 8.4). This highlights a strong commitment to research and development among Iceland's leading companies. Furthermore, buyer sophistication in Iceland is rated at 4.1, higher than the EU average of 3.6, suggesting that Icelandic buyers are more discerning and likely to demand higher-quality goods and services.

Innovation profiles

No data available

Governance and policy framework

Iceland performs well in terms of governance and procurement indicators compared to EU averages. The Corruption Perceptions Index for Iceland is 73.3, significantly higher than the EU average of 64. This indicates that Iceland's public sector is perceived to be less corrupt than the average in the EU, reflecting strong governance and transparency.

The Rule of Law index for Iceland is 1.7, compared to the EU average of 1. This higher score suggests that Iceland has a robust legal framework and effective enforcement of laws, contributing to a well-functioning and just society.

In terms of government procurement of advanced technology products, Iceland scores 3.6, slightly above the EU average of 3.4. This indicates a proactive approach by the Icelandic government in acquiring and utilising advanced technologies, which can drive innovation and efficiency in public services.

Climate change

Iceland's greenhouse gas emissions intensity of energy consumption score of 44 implies a superior environmental performance compared to the EU average score of 82.8. This reflects Iceland's significant reliance on renewable energy sources, which are inherently cleaner and contribute less to climate change compared to fossil fuels.

Demography

Iceland's population size stands at approximately 377,599 people. The country has experienced an average annual population growth rate of 2.5% over 2021-2023, which is significantly higher than the EU average of 0.3%. This growth reflects ongoing demographic changes within Iceland. In terms of population density, Iceland is notably sparse, with only about 3.7 people per square kilometre. In contrast, the EU average population density is much higher at 109 people per square kilometre. This low population density is a result of Iceland's vast geographical area relative to its small population.

Structural indicators

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

	IS	EU
Performance and structure of the economy		
GDP per capita	130	100
Employment share Manufacturing	9.1	15.8
Employment share High and Medium high-tech	19.8	37.9
Employment share Services	38.6	39.8
Employment share Knowledge-intensive services	36.9	28.6
Turnover share SMEs	17.2	12.6
Turnover share large enterprises	29.3	49.6
Business and entrepreneurship		
Enterprise births	0.5	0.8
FDI net inflows	0.6	1.9
Top R&D spending enterprises	27	8.4
Buyer sophistication	4.1	3.6
Governance and policy frameworks		
Corruption Perceptions Index	73.3	64
Government procurement of advanced technology products	3.6	3.4
Rule of law	1.7	1
Climate change		
Greenhouse gas emissions intensity of energy consumption	44	82.8
Demography		
Population size (in millions)	0.4	447
Average annual population growth (2021-2023 average)	2.5	0.3
Population density	3.7	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](#).

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

Studies and reports

