



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

## European Innovation Scoreboard 2024 – Country profile Ireland

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IRELAND

**Strong Innovator**Summary innovation index (relative to EU in 2017): **124.5**Rank: **10**Change vs 2023: **▲ 2.1** Change vs 2017: **▲ 2.3**

Ireland is a Strong Innovator with performance at 113.2% of the EU average in 2024. Performance is above the average of the Strong Innovators (111.3%). Performance is increasing less 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>113.2</b>	<b>2.3</b>	<b>2.1</b>
<b>Human resources</b>	<b>147.4</b>	<b>1.5</b>	<b>6.2</b>
New doctorate graduates	139.4	11.6	11.6
Population with tertiary education	200.5	0	0
Population involved in lifelong learning	95.8	-13.2	5.1
<b>Attractive research systems</b>	<b>153</b>	<b>36.8</b>	<b>1.1</b>
International scientific co-publications	188	80.6	-2
Scientific publications among the top 10% most cited	118.4	-3.4	-1.1
Foreign doctorate students as a % of all doctorate students	175.3	84.3	8
<b>Digitalisation</b>	<b>128.4</b>	<b>26.7</b>	<b>15.4</b>
Broadband penetration	97.9	35.2	12.4
Individuals with above basic overall digital skills	170.8	18.4	18.4
<b>Finance and support</b>	<b>64.4</b>	<b>-41.9</b>	<b>-4.6</b>
R&D expenditure in the public sector	13.1	-21.3	-3.3
Venture capital expenditures	77.5	-20	-7.1
Direct and indirect government support of business R&D	108.9	-96.6	-3.5
<b>Firm investments</b>	<b>86.5</b>	<b>1.6</b>	<b>-2.7</b>
R&D expenditure in the business sector	50.7	-6	-9
Non-R&D innovation expenditures	40.4	-35.5	-35.3
Innovation expenditures per person employed	166.6	49.6	39
<b>Use of information technologies</b>	<b>123.1</b>	<b>-24.5</b>	<b>-13.7</b>
Enterprises providing ICT training	104.6	-46.5	-24.2
Employed ICT specialists	141.1	-3.3	-3.3
<b>Innovators</b>	<b>93.5</b>	<b>-19.5</b>	<b>-31.2</b>
SMEs introducing product innovations	97.9	-14.2	-21.2
SMEs introducing business process innovations	89.7	-24.6	-40.8
<b>Linkages</b>	<b>168.5</b>	<b>81.9</b>	<b>43.5</b>
Innovative SMEs collaborating with others	178.7	117.5	78.8
Public-private co-publications	250.8	56.2	0.3
Job-to-job mobility of HRST	N/A	N/A	N/A
<b>Intellectual assets</b>	<b>60.7</b>	<b>-14.5</b>	<b>-4.4</b>
PCT patent applications	71.9	-13.8	4.9
Trademark applications	69.2	-20.8	-8.3
Design applications	33.7	-10.3	-13.2
<b>Employment impacts</b>	<b>142.6</b>	<b>-14.6</b>	<b>27.5</b>
Employment in knowledge-intensive activities	188.8	-4.8	1.2
Employment in innovative enterprises	103.7	-23.3	51.6
<b>Sales impacts</b>	<b>128.6</b>	<b>8.7</b>	<b>1</b>
Exports of medium and high technology products	102.6	20.5	4.1
Knowledge-intensive services exports	117.8	1.5	-2
Sales of new-to-market and new-to-firm innovations	187.3	0	0
<b>Environmental sustainability</b>	<b>103.6</b>	<b>27.4</b>	<b>9.3</b>
Resource productivity	158	99.8	30.5
Air emissions by fine particulates	118.5	15.6	1.7
Environment-related technologies	33.2	-13.6	2.6

**Relative strengths**

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

**Relative weaknesses**

- R&D expenditure in the public sector
- Environment-related technologies
- Design applications

**Strong increases since 2017**

- Innovative SMEs collaborating with others
- Resource productivity
- Foreign doctorate students as a % of all doctorate students

**Strong decreases since 2017**

- Direct and indirect government support of business R&D
- Enterprises providing ICT training
- Non-R&D innovation expenditures

**Strong increases since 2023**

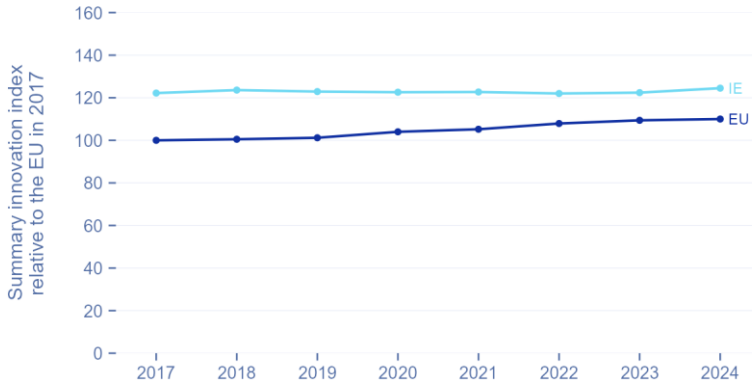
- Innovative SMEs collaborating with others
- Employment in innovative enterprises
- Innovation expenditures per person employed

**Strong decreases since 2023**

- SMEs introducing business process innovations
- Non-R&D innovation expenditures
- Enterprises providing ICT training

**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 Ireland 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.

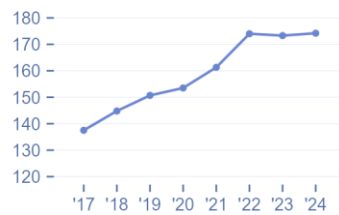
### Framework conditions

Ireland’s framework conditions are improving, marked by a growing number of new doctorate graduates, including an increasing proportion of foreign students, and a rising availability of individuals with digital skills. With its recognised universities and institutes, and as an English-speaking, friendly and safe environment, Ireland is an attractive destination for foreign students seeking quality education. Ireland ranks first in the EU for population with tertiary education (200.5% of the EU average in 2024) and third for new doctorate graduates (139.4% of the EU average in 2024), highlighting its strong educational credentials. Ireland is also actively collaborating on publications with international entities; however, its research outputs are less frequently cited among the top 10% globally (-3.4%-points since 2017). Despite having a broadband penetration rate lower than the EU average, Ireland ranks third in the EU for individuals with digital skills (170.8% of the EU level in 2024), with an increase for both indicators in recent years.

#### Human resources



#### Attractive research systems



#### Digitalisation



### Investments

Financing R&D remains a significant challenge for both the Irish government and businesses. Investment in R&D has been on a declining trend since 2017, with a further decrease observed in the past year. Public sector R&D expenditure ranks as the second lowest in the EU this year (at 13.1% of the EU average), and business sector R&D expenditure is well below the EU average (50.7% of the EU level in 2024). This trend underscores the ongoing struggle to secure adequate funding for innovation initiatives across sectors. However, direct and indirect government support of business R&D is above the EU average (108.9%), especially due to attractive R&D tax credits (which has recently increased from 25% to 30%). Interestingly, there has been an increase in innovation expenditures per person employed since 2017 (+49.6%-points), with Ireland currently ranking second in the EU (166.6% of the EU average in 2024).

#### Finance and support



#### Firm investments



#### Use of information technologies



### Innovation activities

Since 2017, Ireland has seen a decline in both product and process innovations, as well as in intellectual assets, though patents have recently increased in the last year. Albeit its decline in R&D expenditures, Ireland produces more innovation outputs relative to its level of innovation investments (GII 2023). Ireland performs below the EU average on several indicators, including the percentage of SMEs introducing product and business process innovations (97.9% and 89.7% of the EU average in 2024, respectively), as well as in patent (71.9%), trademark (69.2%), and design applications (33.7%). Despite these challenges, there has been notable progress with increased collaboration between SMEs and more public-private partnerships. Initiatives like the Disruptive Technologies Fund focus on advancing AI and blockchain technologies.

**Innovators**



**Linkages**



**Intellectual assets**



### Impacts

Since 2017, Ireland has experienced fluctuating employment impacts, with recent signs of improvement following a decline. Innovation has driven sales growth, particularly in the exports of medium and high technology products (+20.5%-points since 2017). Ireland's strong export sector, especially in pharmaceuticals, medical devices, and technology, underpins its competitiveness. Currently, Ireland ranks first in the EU for knowledge-intensive services exports (at 117.8% of the EU average) and sales of innovations (187.3% of the EU average). Facilitating knowledge transfer remains a priority, as evidenced by initiatives like the KTI programme, which supports the commercialisation of state-funded research from all third-level institutions nationwide. Ireland's commitment to environmental sustainability is demonstrated by increased resource productivity and a progressive reduction in air emissions. However, despite these efforts, Ireland currently ranks second last in environment-related technologies (33.2% of EU average in 2024). Nonetheless, the country's focus on sustainability continues to evolve.

**Employment impacts**



**Sales impacts**



**Environmental sustainability**



## Structural differences

### Performance and structure of the economy

Ireland has the second highest GDP per capita in the EU, behind Luxembourg, with one of the highest growth rates. While Ireland's employment shares align with the EU average, it has a higher proportion in knowledge-intensive services. The country leads the EU with the highest number of foreign-controlled enterprises, attributable to factors such as a low corporate tax rate and a skilled workforce. As the sole native English-speaking EU Member State, Ireland also serves as a gateway for multinational companies, offering favourable access to the EU market.

### Business and entrepreneurship

Business and entrepreneurship are thriving in Ireland, with a strong enterprise birth rate that surpasses the EU average. Ireland offers, via agencies such as Enterprise Ireland, a supportive business environment to start-ups and SMEs – ranking third in the EU in terms of overall entrepreneurial activity. The country has a significant number of enterprises investing large sums in R&D, ranking second in the EU. However, despite having their headquarters in Ireland, the majority of these enterprises' R&D expenditures are allocated to activities conducted outside of Ireland (CSO 2023).

Ireland also attracts significant FDI, particularly from technology and pharmaceutical companies, exceeding the EU average. IDA Ireland plays a key role in attracting foreign investment, marketing Ireland as a prime location for business and offering incentives and support programmes to multinational corporations.

### Innovation profiles

Data regarding innovation activities is not available for Ireland. Nevertheless, Ireland offers a supportive business and research environment, with key entities like Science Foundation Ireland, Enterprise Ireland, and the DETE through the Disruptive Technology Innovation Fund (DTIF) playing important roles.

### Governance and policy framework

Ireland is a parliamentary democracy. Corruption is perceived as low and rule of law as high. Ireland places a significant emphasis on entrepreneurial education and training in its basic-school systems. Government procurement of advanced technology products in Ireland is comparable to the EU average. Innovation procurement is the highest of all EU Member States, facilitated by initiatives such as the Public Service Innovation Fund scheme.

### Climate change

Ireland lags the EU in terms of circular material use. While its greenhouse gas emissions are comparable to the EU average, its eco-innovation index is lower. To address these issues, Ireland offers grants and loans to help firms become more sustainable, with the aim of achieving net-zero emissions by 2050. Ireland's Climate Action Plan 2024 outlines the current strategies to achieve these goals.

### Demography

Ireland is an island with a population of around 5 million inhabitants. Its population is growing rapidly, at the highest rate in the EU. As a mostly rural country, Ireland has a relatively low population density.

## Structural indicators

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

	IE	EU
<b>Performance and structure of the economy</b>		
GDP per capita	222.3	100
Average annual GDP growth (2021-2023 average)	2.9	1.9
Employment share Manufacturing	11.2	15.8
Employment share High and Medium high-tech	38.5	37.9
Employment share Services	43	39.8
Employment share Knowledge-intensive services	34.3	28.6
Turnover share SMEs	11.5	12.6
Turnover share large enterprises	56.4	49.6
Foreign-controlled enterprises – share of value added	56.6	13.3
<b>Business and entrepreneurship</b>		
Enterprise births	1.6	0.8
Total Entrepreneurial Activity	12.5	6.8
FDI net inflows	8	1.9
Top R&D spending enterprises	51.2	8.4
Buyer sophistication	4.4	3.6
<b>Governance and policy frameworks</b>		
Corruption Perceptions Index	76	64
Basic-school entrepreneurial education and training	3.3	2.6
Government procurement of advanced technology products	3.5	3.4
Rule of law	1.5	1
Innovation procurement as a share of total public procurement	17.2	9.2
<b>Climate change</b>		
Circular material use rate	1.8	11.5
Greenhouse gas emissions intensity of energy consumption	81.6	82.8
Eco-Innovation Index	110.4	121.5
<b>Demography</b>		
Population size (in millions)	5.1	447
Average annual population growth (2021-2023 average)	2.6	0.3
Population density	73.2	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](#).

CSO statistical publication, 04 May 2023 - Business Expenditure on Research and Development 2021-2022

Government of Ireland, Climate Action Plan 2024

Revenue Ireland, R&D Corporation Tax Credit. Available at: <https://www.revenue.ie/en/companies-and-charities/reliefs-and-exemptions/research-and-development-rd-tax-credit/index.aspx>

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

*Studies and reports*

