The Global Innovation Index (GII) ranks world economies according to their innovation capabilities.

Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.

Iceland ranking in the Global Innovation Index 2023

- Iceland ranks 20th among the 132 economies featured in the GII 2023.

- Iceland ranks 19th among the 50 high-income group economies.

- Iceland ranks 12th among the 39 economies in Europe.

Iceland GII Ranking (2020-2023)

The table shows the rankings of Iceland over the past four years. Data availability and changes to the GII model framework influence year-on-year comparisons of the GII rankings. The statistical confidence interval for the ranking of Iceland in the GII 2023 is between ranks 19 and 21.

<table>
<thead>
<tr>
<th>Year</th>
<th>GII Position</th>
<th>Innovation Inputs</th>
<th>Innovation Outputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>21st</td>
<td>23rd</td>
<td>19th</td>
</tr>
<tr>
<td>2021</td>
<td>17th</td>
<td>20th</td>
<td>16th</td>
</tr>
<tr>
<td>2022</td>
<td>20th</td>
<td>24th</td>
<td>17th</td>
</tr>
<tr>
<td>2023</td>
<td>20th</td>
<td>20th</td>
<td>29th</td>
</tr>
</tbody>
</table>

This year Iceland ranks 20th in innovation inputs. This position is higher than last year.

Iceland ranks 25th in innovation outputs. This position is lower than last year.
Expected vs. observed innovation performance

The bubble chart below shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected and those below are performing below expectations.

Iceland is an innovation leader, ranking in the top 25 of the GII.

Innovation overperformers relative to their economic development

GDP per capita, PPP logarithmic scale (thousands of $)
Effectively translating innovation investments into innovation outputs

The chart below shows the relationship between innovation inputs and innovation outputs. Economies above the line are effectively translating costly innovation investments into more and higher-quality outputs.

Iceland produces less innovation outputs relative to its level of innovation investments.

Relationship between innovation inputs and outputs

Input score

Output score
Overview of Iceland’s rankings in the seven areas of the GII in 2023

The chart shows the ranking for each of the seven areas that the GII comprises. The strongest areas for Iceland are those that rank above the GII (shown in blue) and the weakest are those that rank below.

Higher rankings:
- 9th Institutions
- 10th Infrastructure
- 15th Business sophistication
- 20th pillar and the Global Innovation Index
- 24th Human capital and research
- 25th Knowledge and technology outputs

Lower rankings:
- 32nd Market sophistication

Iceland ranks highest in Institutions (9th), Infrastructure (10th), Business sophistication (15th) and Creative outputs (20th).

Iceland ranks lowest in Market sophistication (32nd), Knowledge and technology outputs (25th) and Human capital and research (24th).

The full WIPO Intellectual Property Statistics profile for Iceland can be found on this link.
Benchmark of Iceland against other country groupings for each of the seven areas of the GII Index

The charts show the relative position of Iceland (blue bar) against other country groupings (grey bars), for each of the seven areas of the GII Index.

> High-Income economies
Iceland performs above the high-income group average in all the pillars.

> Europe
Iceland performs above the regional average in all the pillars.

Knowledge and technology outputs
- Top 10 | Score: 58.96
- Iceland | Score: 39.19
- Europe | Score: 38.80
- High income | Score: 38.62

Creative outputs
- Top 10 | 56.09
- Iceland | 45.88
- High income | 40.27
- Europe | 39.87

Business sophistication
- Top 10 | 64.39
- Iceland | 57.00
- High income | 46.38
- Europe | 44.61

Market sophistication
- Top 10 | 61.93
- Iceland | 46.48
- High income | 46.42
- Europe | 43.85

Human capital and research
- Top 10 | 60.28
- Iceland | 48.98
- High income | 46.30
- Europe | 44.05

Infrastructure
- Top 10 | 62.83
- Iceland | 60.81
- High income | 55.85
- Europe | 54.69

Institutions
- Iceland | 80.91
- Top 10 | 79.85
- High income | 68.16
- Europe | 61.69
Innovation strengths and weaknesses in Iceland

The table below gives an overview of the indicator strengths and weaknesses of Iceland in the GII 2023.

Iceland’s main innovation strengths are Electricity output, GWh/mn pop. (rank 1), National feature films/mn pop. 15-69 (rank 1) and Generic top-level domains (TLDs)/th pop. 15-69 (rank 1).

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank</td>
<td>Code</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>1</td>
<td>3.2.1</td>
</tr>
<tr>
<td>1</td>
<td>7.2.2</td>
</tr>
<tr>
<td>1</td>
<td>7.3.1</td>
</tr>
<tr>
<td>1</td>
<td>6.3.1</td>
</tr>
<tr>
<td>1</td>
<td>6.1.4</td>
</tr>
<tr>
<td>1</td>
<td>4.2.3</td>
</tr>
<tr>
<td>3</td>
<td>5.2.3</td>
</tr>
<tr>
<td>4</td>
<td>1.1.1</td>
</tr>
<tr>
<td>5</td>
<td>7.3.2</td>
</tr>
<tr>
<td>5</td>
<td>3.1.2</td>
</tr>
<tr>
<td>5</td>
<td>2.1.3</td>
</tr>
<tr>
<td>6</td>
<td>5.1.1</td>
</tr>
</tbody>
</table>
→ Iceland’s innovation system

As far as practicable, the plots below present unscaled indicator data.

> Innovation inputs in Iceland

2.1.1 Expenditure on education, % GDP
was equal to 7.56% GDP in 2019, with no change from the year prior – and equivalent to an indicator rank of 6.

2.2.2 Graduates in science and engineering, %
was equal to 18.17% of total tertiary graduates in 2020, down by 2.04 percentage points from the year prior – and equivalent to an indicator rank of 87.

2.3.1 Researchers, FTE/mn pop.
was equal to 6,875.17 FTE/mn pop. in 2021, up by 15.17% from the year prior – and equivalent to an indicator rank of 7.

2.3.2 Gross expenditure on R&D, % GDP
was equal to 2.8% GDP in 2021, up by 0.33 percentage points from the year prior – and equivalent to an indicator rank of 13.

2.3.4 QS university ranking, top 3
was equal to an average score of 0 for the top 3 universities in 2022, equivalent to an indicator rank of 71.

3.1.1 ICT access
was equal to a score of 9.7 in 2021, up by 0.1% from the year prior – and equivalent to an indicator rank of 8.
4.2.4 VC received, value, % GDP was equal to 0.00277% GDP in 2022, down by 0.0081 percentage points from the year prior – and equivalent to an indicator rank of 11.

4.3.2 Domestic industry diversification was equal to an index score of 0.277 in 2020, up by 1.45% from the year prior – and equivalent to an indicator rank of 91.

5.1.1 Knowledge-intensive employment, % was equal to 52.19% in 2022, down by 0.04 percentage points from the year prior – and equivalent to an indicator rank of 6.
6.1.1 Patents by origin
was equal to 0.096 Thousands in 2021, up by 12.94% from the year prior – and equivalent to an indicator rank of 20.

6.1.5 Citable documents H-index
was equal to an index value of 394 in 2022, up by 6.49% from the year prior – and equivalent to an indicator rank of 43.

6.2.2 Unicorn valuation, % GDP
was equal to 0 % GDP in 2023 – and equivalent to an indicator rank of 48.

6.2.3 Software spending, % GDP
was equal to 0.316% GDP in 2022, up by 0.042 percentage points from the year prior – and equivalent to an indicator rank of 39.

6.2.4 High-tech manufacturing, %
was equal to 14.09% of total manufacturing output in 2020, down by 0.06 percentage points from the year prior – and equivalent to an indicator rank of 80.

6.3.1 Intellectual property receipts, % total trade
was equal to 3.12% total trade in 2021, down by 1.97 percentage points from the year prior – and equivalent to an indicator rank of 1.
6.3.3 High-tech exports
was equal to 239,162,318 USD in 2021, up by 65.43% from the year prior – and equivalent to an indicator rank of 52.

7.1.1 Intangible asset intensity, top 15, %
was equal to 54.98% in 2022, down by 3.37 percentage points from the year prior – and equivalent to an indicator rank of 43.

7.1.3 Global brand value, top 5,000
was equal to 0.21 bn USD in 2023 – and equivalent to an indicator rank of 59.

7.2.1 Cultural and creative services exports
was equal to 38,552,000 USD in 2021, down by 27.12% from the year prior – and equivalent to an indicator rank of 62.

7.2.2 National feature films/mn pop. 15–69
was equal to 37.91 films/mn pop. 15–69 in 2021, up by 24.092% from the year prior – and equivalent to an indicator rank of 1.

7.3.4 Mobile app creation/bn PPP$ GDP
was equal to 45,937.12 Apps/bn PPP$ GDP in 2022, down by 12.53% from the year prior – and equivalent to an indicator rank of 83.
> Iceland's innovation top performers

> 7.1.1 Top 15 intangible-asset intensive companies in Iceland

<table>
<thead>
<tr>
<th>Rank</th>
<th>Firm</th>
<th>Intensity, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MAREL HF</td>
<td>79.93</td>
</tr>
<tr>
<td>2</td>
<td>OSSUR HF</td>
<td>86.78</td>
</tr>
<tr>
<td>3</td>
<td>SILDAR/INSLAN HF</td>
<td>86.17</td>
</tr>
</tbody>
</table>

Note: Brand Finance only provides within economy ranks.

> 7.1.3 Top 5,000 companies in Iceland with highest global brand value

<table>
<thead>
<tr>
<th>Rank</th>
<th>Brand</th>
<th>Industry</th>
<th>Brand Value, mn USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ICELANDAIR</td>
<td>Airlines</td>
<td>210.2</td>
</tr>
</tbody>
</table>

Note: Rank corresponds to within economy ranks.
## Global Innovation Index 2023

### Iceland

<table>
<thead>
<tr>
<th>Output rank</th>
<th>Input rank</th>
<th>Income Region</th>
<th>Population (mn)</th>
<th>GDP, PPP$ (bn)</th>
<th>GDP per capita, PPP$</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>20</td>
<td>High</td>
<td>0.4</td>
<td>24.9</td>
<td>68,487.0</td>
</tr>
</tbody>
</table>

### 1.1 Institutional environment
- **80.9** (Value Rank 9)
  - **84.4**
  - **86.8**
  - **82.0**
  - **88.3**
  - **81.9**
  - **91.1**
  - **13.0**
  - **70.0**
  - **70.0**
  - **n/a**

### Human capital and research
- **49.0** (Value Rank 24)
  - **70.5**
  - **7.6**
  - **22.3**
  - **19.4**
  - **481.3**
  - **9.3**
  - **34.6**
  - **84.3**
  - **18.2**
  - **8.5**

### Infrastructure
- **60.8** (Value Rank 10)
  - **90.1**
  - **95.7**
  - **98.1**
  - **87.5**
  - **79.1**
  - **62.0**
  - **52,600.5**
  - **68.2**
  - **22.7**
  - **30.4**
  - **3.2**

### Market sophistication
- **46.5** (Value Rank 32)
  - **18.6**
  - **n/a**
  - **100.0**
  - **0.0**
  - **66.4**
  - **n/a**
  - **0.6**
  - **0.4**
  - **0.0**
  - **54.4**
  - **1.5**
  - **72.6**
  - **24.9**

### Business sophistication
- **57.0** (Value Rank 15)
  - **63.5**
  - **52.2**
  - **2.0**
  - **26.5**
  - **57.6**
  - **63.7**
  - **45.5**
  - **0.6**
  - **0.1**
  - **2.3**
  - **49.9**
  - **4.3**
  - **1.6**
  - **4.0**
  - **2.0**
  - **5.3**

### Knowledge and technology outputs
- **39.2** (Value Rank 25)
  - **49.9**
  - **4.3**
  - **0.3**
  - **14.0**
  - **4.3**
  - **3.6**
  - **0.3**
  - **2.4**
  - **3.9**
  - **4.8**

### Creative outputs
- **45.9** (Value Rank 20)
  - **33.4**
  - **55.0**
  - **64.2**
  - **0.7**
  - **0.3**
  - **36.6**
  - **0.4**
  - **37.9**
  - **96.3**
  - **64.2**
  - **98.5**

---

**NOTES:**  ● indicates a strength; ○ a weakness;  ● an income group strength; ○ an income group weakness; * an index;  ❄ a survey question,  ● indicates that the economy's data are older than the base year; see appendices for details, including the year of the data, at https://www.wipo.int/gii-ranking. Square brackets [ ] indicate that the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level.
Data availability

The following tables list indicators that are either missing or outdated for Iceland.

Iceland has missing data for seven indicators and outdated data for two indicators.

<table>
<thead>
<tr>
<th>Code</th>
<th>Indicator name</th>
<th>Economy Year</th>
<th>Model Year</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3.2</td>
<td>Entrepreneurship policies and culture</td>
<td>r/a</td>
<td>2022</td>
<td>Global Entrepreneurship Monitor</td>
</tr>
<tr>
<td>4.1.1</td>
<td>Finance for startups and scaleups</td>
<td>r/a</td>
<td>2022</td>
<td>Global Entrepreneurship Monitor</td>
</tr>
<tr>
<td>4.2.1</td>
<td>Market capitalization, % GDP</td>
<td>r/a</td>
<td>2020</td>
<td>World Federation of Exchanges; World Bank</td>
</tr>
<tr>
<td>5.1.2</td>
<td>Firms offering formal training, %</td>
<td>r/a</td>
<td>2019</td>
<td>World Bank Enterprise Surveys</td>
</tr>
<tr>
<td>6.1.3</td>
<td>Utility models by origin/brn PPP$ GDP</td>
<td>r/a</td>
<td>2021</td>
<td>World Intellectual Property Organization; International Monetary Fund</td>
</tr>
<tr>
<td>6.3.2</td>
<td>Production and export complexity</td>
<td>r/a</td>
<td>2020</td>
<td>Harvard University, Growth Lab</td>
</tr>
<tr>
<td>7.2.3</td>
<td>Entertainment and media market with pop. 15-69</td>
<td>r/a</td>
<td>2022</td>
<td>PwC, GEMO; United Nations, World Population Prospects; International Monetary Fund</td>
</tr>
</tbody>
</table>

Outdated data for Iceland

<table>
<thead>
<tr>
<th>Code</th>
<th>Indicator name</th>
<th>Economy Year</th>
<th>Model Year</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.1</td>
<td>Expenditure on education, % GDP</td>
<td>2019</td>
<td>2021</td>
<td>UNESCO Institute for Statistics</td>
</tr>
<tr>
<td>4.3.1</td>
<td>Applied tariff rate, weighted avg., %</td>
<td>2019</td>
<td>2020</td>
<td>World Bank</td>
</tr>
</tbody>
</table>
The Global Innovation Index (GII) is published by the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations.

Recognizing that innovation is a key driver of economic development, the GII aims to provide an innovation ranking and rich analysis referencing around 130 economies. Over the last decade, the GII has established itself as both a leading reference on innovation and a “tool for action” for economies that incorporate the GII into their innovation agendas.

The Index is a ranking of the innovation capabilities and results of world economies. It measures innovation based on criteria that include institutions, human capital and research, infrastructure, credit, investment, linkages; the creation, absorption and diffusion of knowledge; and creative outputs.

The GII has two sub-indices: the Innovation Input Sub-Index and the Innovation Output Sub-Index, and seven pillars, each consisting of three sub-pillars.