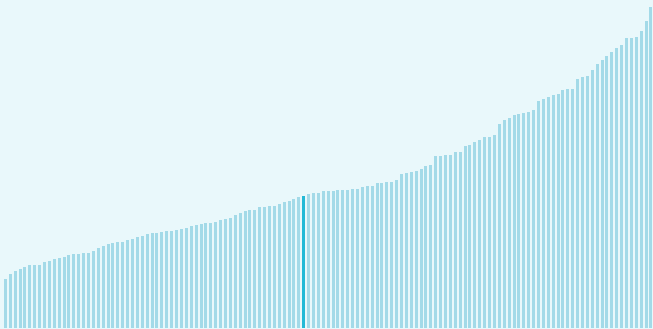


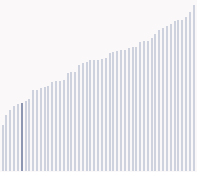
Bahrain ranking in the Global Innovation Index 2024

Bahrain ranks **72nd** among the 133 economies featured in the GII 2024.

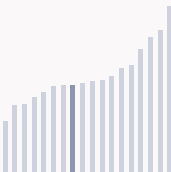
The Global Innovation Index (GII) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.



Bahrain ranks **46th** among the 51 high-income group economies.



Bahrain ranks **11th** among the 18 economies in Northern Africa and Western Asia.



> Bahrain GII Ranking (2020-2024)

The table shows the rankings of Bahrain 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 Bahrain in the GII 2024 is between ranks 64 and 83.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	79th	63rd	89th
2021	78th	63rd	99th
2022	72nd	50th	86th
2023	67th	47th	86th
2024	72nd	49th	93rd

Bahrain performs worse in innovation outputs than innovation inputs in 2024.

This year Bahrain ranks 49th in innovation inputs. This position is lower than last year.

Bahrain ranks 93rd in innovation outputs. This position is lower than last year.

Bahrain has no clusters in the top 100 S&T clusters of the Global Innovation Index.

Global Innovation Index 2024



> Global Innovation Tracker

The Global Innovation Tracker 2024 shows what is the current state of innovation in Bahrain, how rapidly is technology being embraced and what are the resulting societal impacts.



For Bahrain, 5 indicators have improved in the short-term and 4 indicators have worsened.

Science and innovation investment

Scientific publications	R&D investments	Venture capital		International patent filings
		Deal numbers	Deal values	
▼ -5.3% 2022 - 2023	n/a	▲ 50% 2022 - 2023	▼ -68.1% 2022 - 2023	▲ 28.6% 2022 - 2023
▲ 13.3% 2013 - 2023	n/a	n/a	n/a	▲ 16.2% 2013 - 2023

Technology adoption

Safe sanitation	Connectivity		Robots	Electric vehicles
	Fixed broadband	5G		
▲ 0.3% 2021 - 2022	▲ 10.6% 2021 - 2022	0% 2021 - 2022	n/a	n/a
▲ 0.3% 2012 - 2022	▼ -2.5% 2012 - 2022		n/a	n/a
92.2 per 100 inhabitants in 2022	18.7 per 100 inhabitants in 2022	100 per 100 inhabitants in 2022		n/a

Socioeconomic impact

Labor productivity	Life expectancy	Temperature change
▼ -2.5% 2022 - 2023	▲ 0.6% 2021 - 2022	▲ 2.3°C 2023
▲ 1.1% 2013 - 2023	0% 2012 - 2022	n/a
124,733 USD in 2023	79.2 years in 2022	

Notes: Not all indicators of the Global Innovation Tracker are used to calculate the Global Innovation Index. Long-term annual growth refers to the compound annual growth rate (CAGR) over the indicated period. For each variable, a one-year growth rate is set for the short run, and ten-year CAGR is set for the long run; time windows might differ when gaps exist in data availability. The end period corresponds to the most recent available observation, which may differ among countries. Temperature change is an exception: it indicates the change in degrees Celsius with respect to the average temperature in the country from 1951–1980. Figures are rounded.



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.



Relative to GDP, Bahrain's performance is below expectations for its level of development.

> Innovation overperformers relative to their economic development





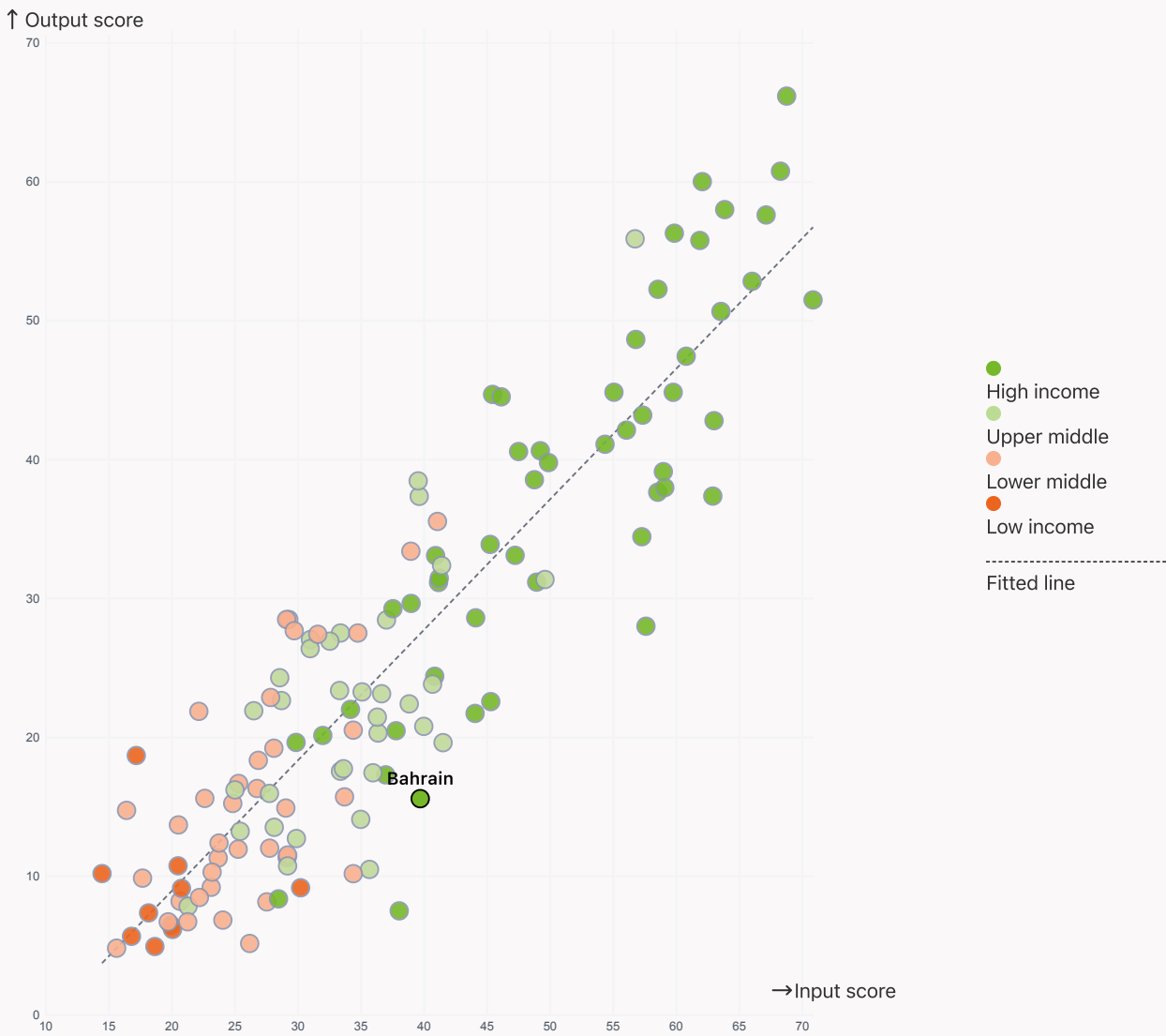
Effectively translating innovation investments into innovation outputs

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.



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

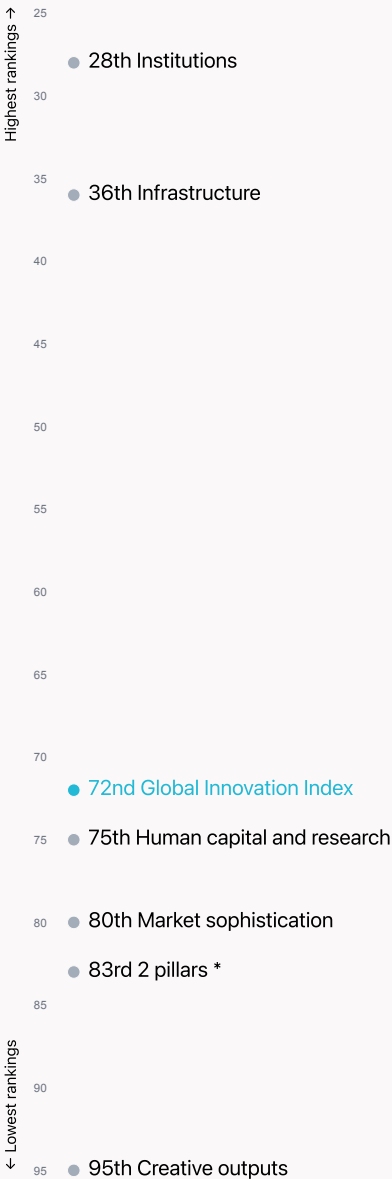
> Relationship between innovation inputs and outputs





Overview of Bahrain's rankings in the seven areas of the GII in 2024

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



* Business sophistication, Knowledge and technology outputs

Highest rankings



Bahrain ranks highest in Institutions (28th) and Infrastructure (36th).

Lowest rankings



Bahrain ranks lowest in Creative outputs (95th), Business sophistication, Knowledge and technology outputs (83rd) and Market sophistication (80th).

The full WIPO Intellectual Property Statistics profile for Bahrain can be found on [this link](#).



Benchmark of Bahrain against other economy groupings for each
of the seven areas of the GII Index

The charts shows the relative position of Bahrain (blue bar) against other economy groupings (grey bars), for each of the seven areas of the GII Index.



High-Income economies

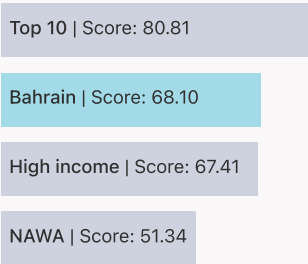
Bahrain performs above the high-income group average in Institutions.



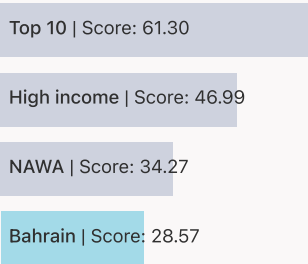
Northern Africa And Western Asia

Bahrain performs above the regional average in Institutions, Infrastructure.

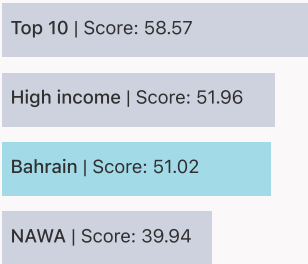
Institutions



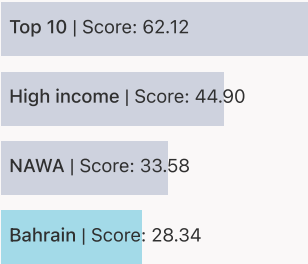
Human capital and research



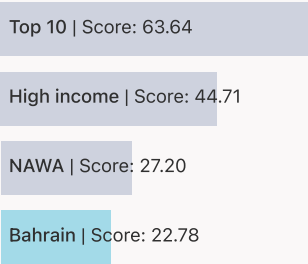
Infrastructure



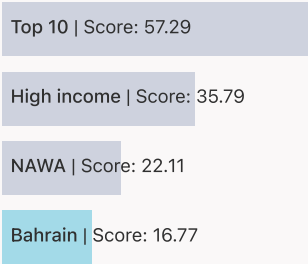
Market sophistication



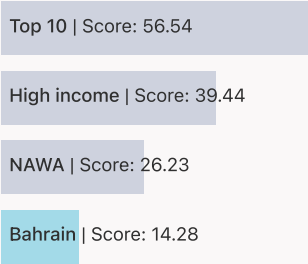
Business sophistication

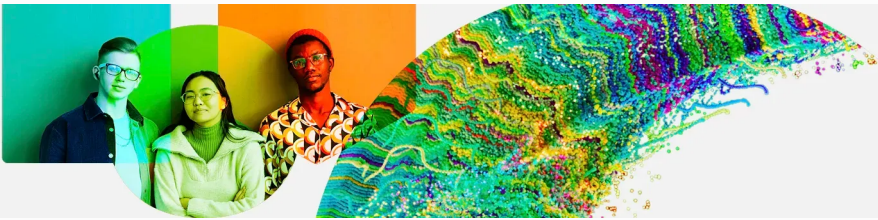


Knowledge and technology outputs



Creative outputs





Innovation strengths and weaknesses in Bahrain

The table below gives an overview of the indicator strengths and weaknesses of Bahrain in the GII 2024.



Bahrain’s main innovation strengths are **ICT access*** (rank 1), **Electricity output, GWh/mn pop.** (rank 3) and **ICT use*** (rank 7).

Strengths

Rank	Code	Indicator name
1	3.1.1	ICT access*
3	3.2.1	Electricity output, GWh/mn pop.
7	3.1.2	ICT use*
7	1.3.1	Policy stability for doing business†
19	5.2.4	Joint venture/strategic alliance deals/bn PPP\$ GDP
21	3.2.3	Gross capital formation, % GDP
25	2.2.3	Tertiary inbound mobility, %
28	6.3.4	ICT services exports, % total trade
28	2.2.1	Tertiary enrolment, % gross
32	5.3.4	FDI net inflows, % GDP

Weaknesses

Rank	Code	Indicator name
131	3.3.2	Low-carbon energy use, %
128	5.3.2	High-tech imports, % total trade
123	3.3.1	GDP/unit of energy use
122	2.1.1	Expenditure on education, % GDP
121	7.1.4	Industrial designs by origin/bn PPP\$ GDP
120	7.1.2	Trademarks by origin/bn PPP\$ GDP
116	6.3.1	Intellectual property receipts, % total trade
75	7.1.3	Global brand value, top 5,000, % GDP
49	6.2.2	Unicorn valuation, % GDP
41	2.3.3	Global corporate R&D investors, top 3, mn USD



Bahrain's innovation system

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

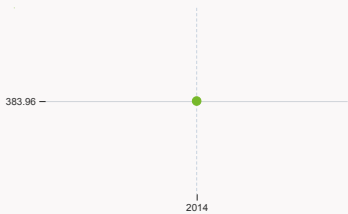
> Innovation inputs in Bahrain



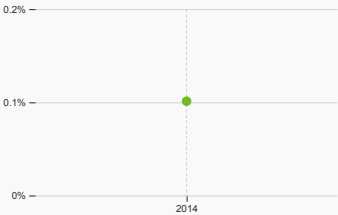
2.1.1 Expenditure on education
was equal to 1.99 % GDP in 2022, down by 0.23 percentage points from the year prior – and equivalent to an indicator rank of 122.



2.2.2 Graduates in science and engineering
was equal to 16.36 % of total graduates in 2022, up by 0.58 percentage points from the year prior – and equivalent to an indicator rank of 95.



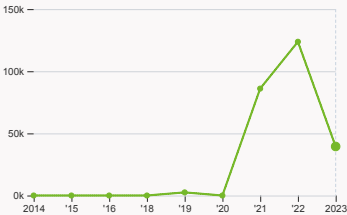
2.3.1 Researchers
was equal to 383.96 FTE per million population in 2014 – and equivalent to an indicator rank of 81.



2.3.2 Gross expenditure on R&D
was equal to 0.1 % GDP in 2014 – and equivalent to an indicator rank of 102.

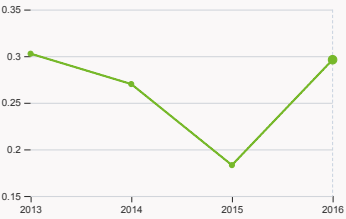


2.3.4 QS university ranking
was equal to an average score of 15.57 for the top three universities in 2023, down by 12.53% from the year prior – and equivalent to an indicator rank of 59.



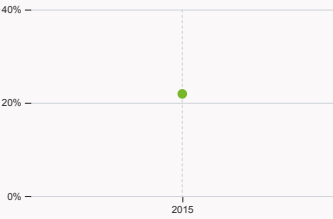
4.2.4 VC received, value
was equal to 39.43 thousand USD in 2023, down by 68.12% from the year prior – and equivalent to an indicator rank of 34.

Global Innovation Index 2024



4.3.2 Domestic industry diversification

was equal to an index score of 0.3 in 2016, up by 61.75% from the year prior – and equivalent to an indicator rank of 99.



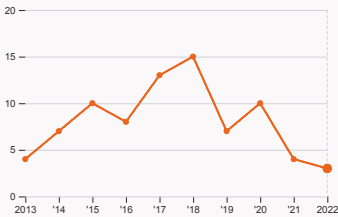
5.1.1 Knowledge-intensive employment

was equal to 21.9 % in 2015 – and equivalent to an indicator rank of 70.

Global Innovation Index 2024

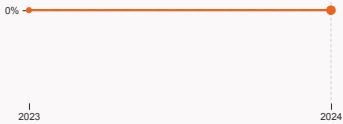


> Innovation outputs in Bahrain



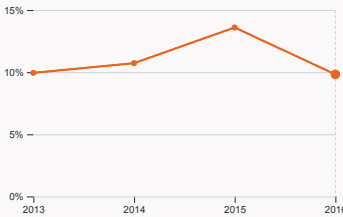
6.1.1 Patents by origin

was equal to 3 patents in 2022, down by 25% from the year prior – and equivalent to an indicator rank of 121.



6.2.2 Unicorn valuation

was equal to 0 % GDP in 2024 with no change from the year prior – and equivalent to an indicator rank of 49.



6.2.4 High-tech manufacturing

was equal to 9.82 % of total manufacturing output in 2016, down by 3.77 percentage points from the year prior – and equivalent to an indicator rank of 88.



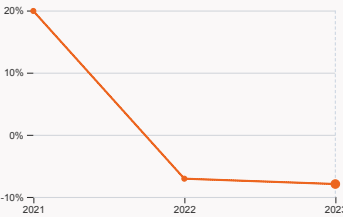
6.3.2 Production and export complexity

was equal to a score of 0.45 in 2021, down by 6.25% from the year prior – and equivalent to an indicator rank of 43.



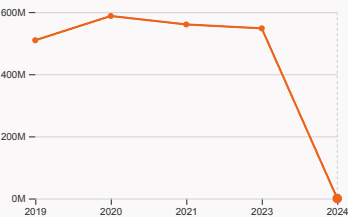
6.3.3 High-tech exports

was equal to 348.83 million USD in 2022, up by 2.18% from the year prior – and equivalent to an indicator rank of 79.



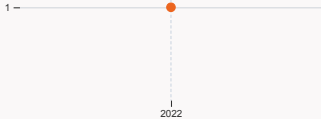
7.1.1 Intangible asset intensity

was equal to -7.92 % for the top 15 companies in 2023, down by 0.86 percentage points from the year prior – and equivalent to an indicator rank of 72.



7.1.3 Global brand value

was equal to 0 million USD for the brands in the top 5,000 in 2024, down by 100% from the year prior – and equivalent to an indicator rank of 75.



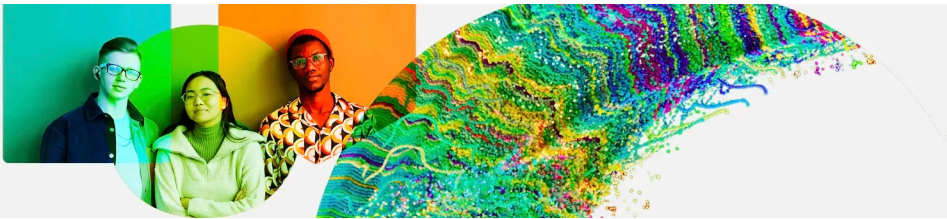
7.2.2 National feature films

was equal to 1 film in 2022 – and equivalent to an indicator rank of 70.



7.3.3 Mobile app creation

was equal to 5.66 million global downloads of mobile apps in 2023, up by 35.73% from the year prior – and equivalent to an indicator rank of 86.



Bahrain's innovation top performers

2.3.4 QS university ranking of Bahrain’s top universities

Rank	University	Score
582	APPLIED SCIENCE UNIVERSITY - BAHRAIN	20.30
751-760	AHLIA UNIVERSITY	15.70
951-1000	UNIVERSITY OF BAHRAIN	10.70

Source: QS Quacquarelli Symonds Ltd (<https://www.topuniversities.com/university-rankings/world-university-rankings/2023>).
Note: QS Quacquarelli Symonds Ltd annually assesses over 1,200 universities across the globe and scores them between [0,100].
Ranks can represent a single value "x", a tie "x=" or a range "x-y".

7.1.1 Top 15 intangible-asset intensive companies in Bahrain

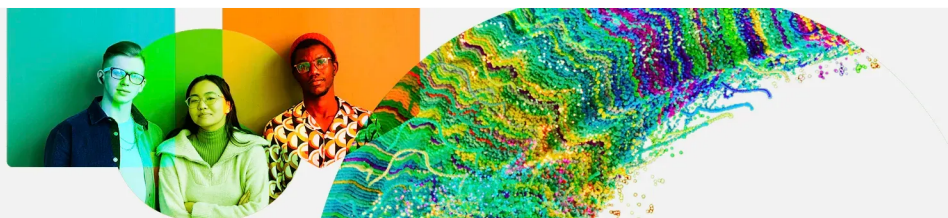
Rank	Firm	Intensity, %
1	NATIONAL BANK OF BAHRAIN BSC	52.70
2	BAHRAIN TELECOMMUNICATIONS COMPANY BSC	63.42
3	BANK OF BAHRAIN AND KUWAIT B.S.C.	24.02

Source: Brand Finance (<https://brandirectory.com/reports/gift-2022>).
Note: Brand Finance only provides within economy ranks.

Bahrain

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NOTES: ● indicates a strength; ○ a weakness; ◆ an income group strength; ◇ an income group weakness; * an index; † a survey question, ● that the economy's data is outdated. Square brackets [] indicate the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level; n/a represents missing values; a dash - indicates an indicator which is not relevant to this economy and thus not considered for DMC thresholds.



Data availability

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



Bahrain has missing data for nine indicators and outdated data for eleven indicators.

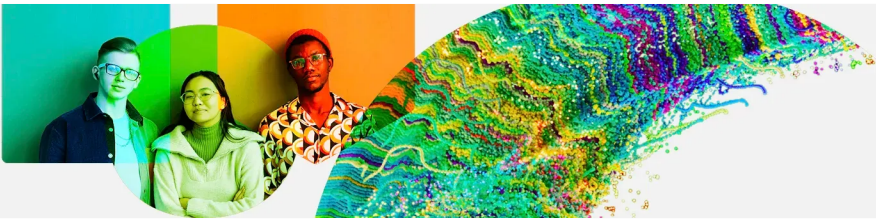
Missing data for Bahrain

Code	Indicator name	Economy Year	Model Year	Source
1.3.2	Entrepreneurship policies and culture [†]	n/a	2023	Global Entrepreneurship Monitor
2.1.4	PISA scales in reading, maths and science	n/a	2022	OECD, PISA
4.1.1	Finance for startups and scaleups [†]	n/a	2023	Global Entrepreneurship Monitor
4.1.3	Loans from microfinance institutions, % GDP	n/a	2022	International Monetary Fund, Financial Access Survey (FAS)
5.1.2	Firms offering formal training, %	n/a	2023	World Bank Enterprise Surveys
5.1.5	Females employed w/advanced degrees, %	n/a	2023	International Labour Organization
5.3.1	Intellectual property payments, % total trade	n/a	2022	World Trade Organization Global Services Trade Data Hub
6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	2022	World Intellectual Property Organization; International Monetary Fund
7.2.1	Cultural and creative services exports, % total trade	n/a	2022	World Trade Organization Global Services Trade Data Hub

Outdated data for Bahrain

Code	Indicator name	Economy Year	Model Year	Source
2.1.2	Government funding/pupil, secondary, % GDP/cap	2015	2020	UNESCO Institute for Statistics
2.3.1	Researchers, FTE/mn pop.	2014	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
2.3.2	Gross expenditure on R&D, % GDP	2014	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.2.1	Electricity output, GWh/mn pop.	2021	2022	International Energy Agency
4.1.2	Domestic credit to private sector, % GDP	2015	2022	International Monetary Fund; World Bank and OECD GDP estimates.
4.3.2	Domestic industry diversification	2016	2021	United Nations Industrial Development Organization (UNIDO), Industrial Statistics Database (INDSTAT) Rev.3 and 4
5.1.1	Knowledge-intensive employment, %	2015	2022	International Labour Organization

Global Innovation Index 2024



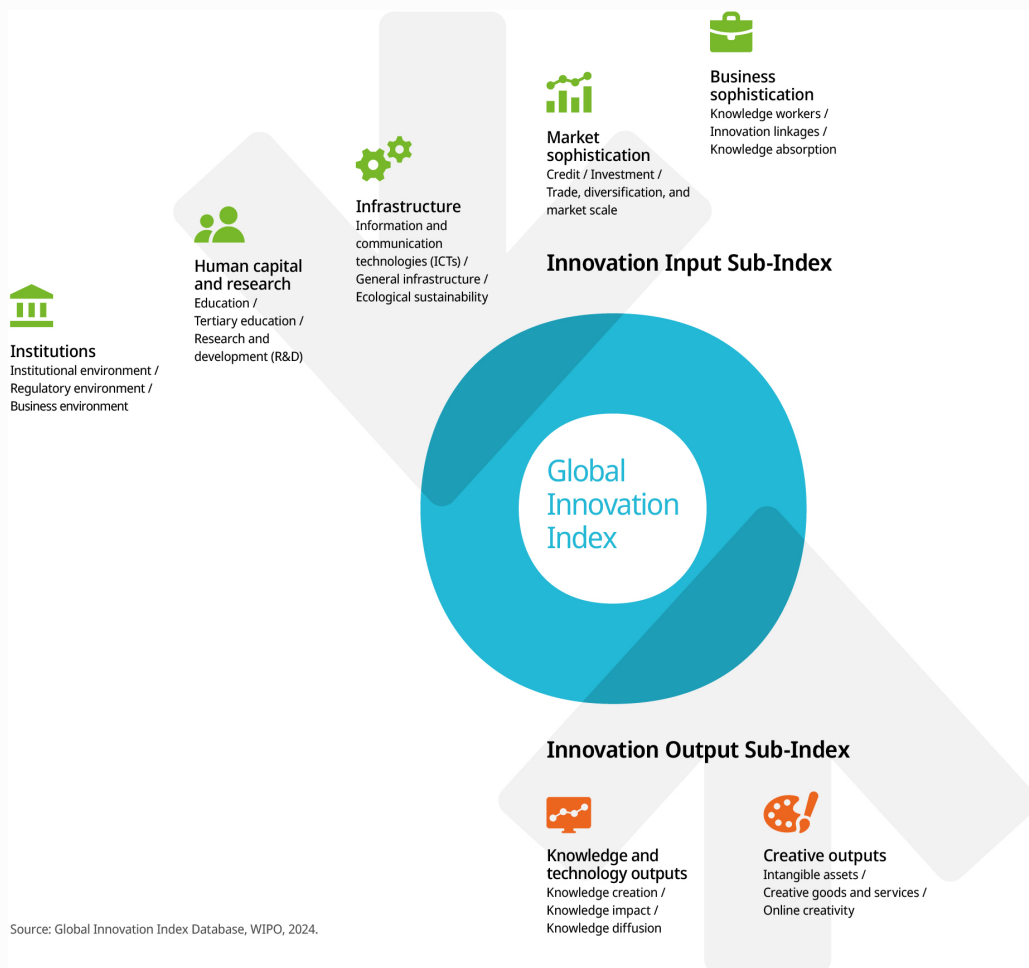
Code	Indicator name	Economy Year	Model Year	Source
5.1.3	GERD performed by business, % GDP	2014	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.4	GERD financed by business, %	2014	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.3.5	Research talent, % in businesses	2014	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
6.2.4	High-tech manufacturing, %	2016	2021	United Nations Industrial Development Organization

Global Innovation Index 2024



About the Global Innovation Index

- 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.