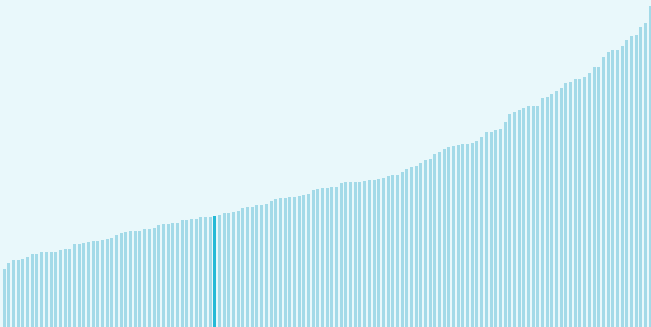




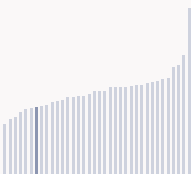
Azerbaijan ranking in the Global Innovation Index 2025

Azerbaijan ranks **94th** among the 139 economies featured in the GII 2025.

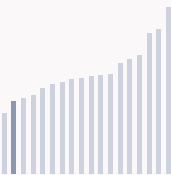
The Global Innovation Index (GII) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.



Azerbaijan ranks 30th among the 36 Upper middle-income group economies.



Azerbaijan ranks 17th among the 18 economies in Northern Africa and Western Asia.



➤ Azerbaijan GII Ranking (2020-2025)

The table shows the rankings of Azerbaijan over the past six 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 Azerbaijan in the GII 2025 is between ranks 86 and 103.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	82nd	76th	86th
2021	80th	74th	91st
2022	93rd	79th	110th
2023	89th	76th	104th
2024	95th	82nd	101st
2025	94th	76th	112nd

Azerbaijan performs worse in innovation outputs than innovation inputs in 2025.

This year Azerbaijan ranks 76th in innovation inputs. This position is higher than last year.

Azerbaijan ranks 112nd in innovation outputs. This position is lower than last year.

Azerbaijan has no clusters in the world's top innovation clusters of the Global Innovation Index.

Global Innovation Index 2025



> Global Innovation Tracker

The Global Innovation Tracker 2025 shows what is the current state of innovation in Azerbaijan, how rapidly is technology being embraced and what are the resulting societal impacts.



For Azerbaijan, 6 indicators have improved in the short-term and 2 indicators have worsened.

Science and innovation investment

	Scientific publications	R&D investments	Venture capital deal numbers	International patent filings
Short term	▲ 103.9 % 2023 - 2024	▲ 21.5 % 2022 - 2023	0 % 2023 - 2024	▼ -20 % 2023 - 2024
Long term (annual growth)	▲ 15.2 % 2014 - 2024	▼ -0.3 % 2013 - 2023	n/a	▲ 23.1 % 2014 - 2024

Technology adoption

	Safe sanitation	Connectivity		Robots	Electric vehicles
		Fixed broadband	5G		
Short term	▲ 1.7% 2023 - 2024	▲ 2.8% 2022 - 2023	n/a	n/a	n/a
Long term (annual growth)	▲ 2.1% 2014 - 2024	▲ 2.3% 2013 - 2023	n/a	n/a	n/a
Penetration	68 per 100 inhabitants in 2024	20.9 per 100 inhabitants in 2023	n/a	n/a	n/a

Socioeconomic impact

	Labor productivity	Life expectancy	Temperature change
Short term	▲ 2.4 % 2023 - 2024	▲ 0.4 % 2022 - 2023	+ 2.2 °C 2024
Long term (annual growth)	▲ 0.5 % 2014 - 2024	▲ 0.4 % 2013 - 2023	+ 1.2 °C 2014
Level	40,541.2 USD in 2024	74.4 years in 2023	n/a

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 countries. from 1951–1980. Figures are rounded.

Global Innovation Index 2025



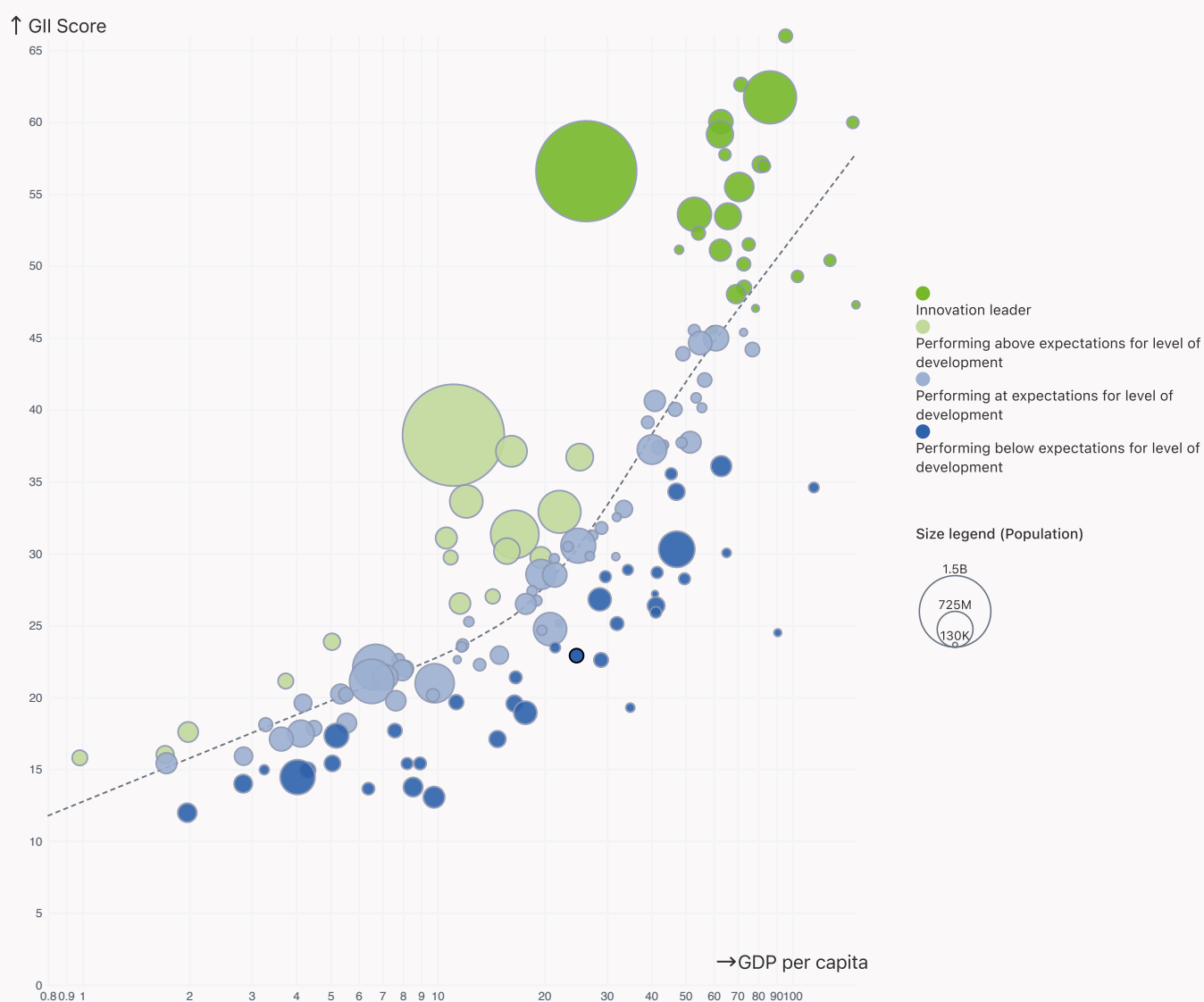
Expected vs. Observed Innovation Performance

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 Azerbaijan performs below expectations for its level of development.

> Innovation overperformers relative to their economic development



Global Innovation Index 2025



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.



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

> Relationship between innovation inputs and outputs



Global Innovation Index 2025



Overview of Azerbaijan's rankings in the seven areas of the GII in 2025

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



Highest Rankings

Azerbaijan ranks highest in Institutions (41st), Market sophistication (72nd) and Human capital and research (88th).



Lowest Rankings

Azerbaijan ranks lowest in Business sophistication (111st), Knowledge and technology outputs (110th) and Creative outputs (108th).



The full WIPO Intellectual Property Statistics profile for Azerbaijan can be found on <https://www.wipo.int/edocs/statistics-country-profile/en/az.pdf>

Global Innovation Index 2025



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



Upper middle-income economies

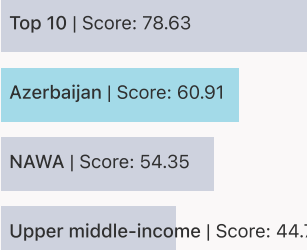
Azerbaijan performs above the Upper middle-income group average in Institutions, Market sophistication.



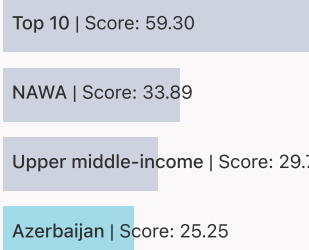
Northern Africa and Western Asia

Azerbaijan performs above the regional average in Institutions.

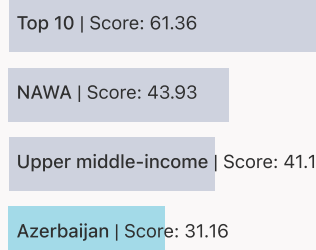
Institutions



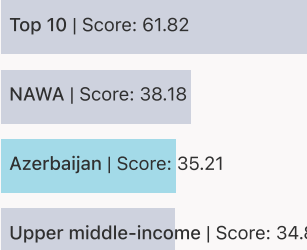
Human capital and research



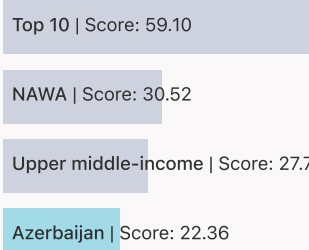
Infrastructure



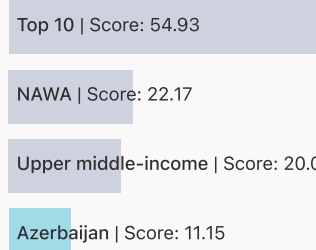
Market sophistication



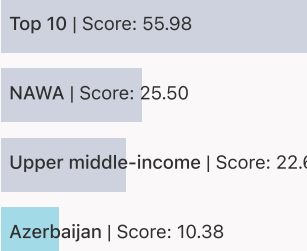
Business sophistication



Knowledge and technology outputs



Creative outputs



Global Innovation Index 2025



Innovation strengths and weaknesses in Azerbaijan

The table below gives an overview of the indicator strengths and weaknesses of Azerbaijan in the GII 2025.



Azerbaijan's best-ranked innovation strengths are **Entrepreneurship policies and culture[†]** (rank 2), **Finance for startups and scaleups[†]** (rank 12) and **Policy stability for doing business[†]** (rank 20).

Strengths

Rank	Code	Indicator name
2	1.3.2	Entrepreneurship policies and culture [†]
12	4.1.1	Finance for startups and scaleups [†]
20	1.3.1	Policy stability for doing business [†]
20	2.1.5	Pupil–teacher ratio, secondary
30	5.2.4	State of cluster development [†]
36	2.2.2	Graduates in science and engineering, %
36	5.2.2	University–industry R&D collaboration [†]
45	1.1.1	Operational stability for businesses*
55	6.2.1	Labor productivity growth, %
57	6.1.1	Patents by origin/bn PPP\$ GDP

Weaknesses

Rank	Code	Indicator name
131	5.3.4	FDI net inflows, % GDP
127	3.2.3	Gross capital formation, % GDP
120	4.2.2	Venture capital (VC) received, deal count/bn PPP\$ GDP
111	4.2.5	VC investor co-participation/bn PPP\$ GDP
104	5.2.3	University industry & international engagement, top 5*
93	7.2.2	National feature films/mn pop. 15–69
85	5.1.4	GERD performed by business, % GDP
82	4.2.1	Market capitalization, % GDP
53	6.2.2	Unicorn valuation, % GDP
44	2.3.3	Global corporate R&D investors, top 3, mn USD

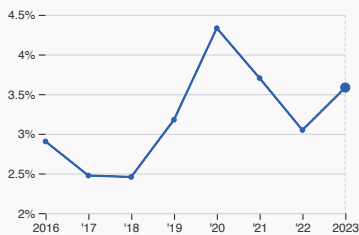
Global Innovation Index 2025



Azerbaijan's innovation system

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

> Innovation inputs in Azerbaijan



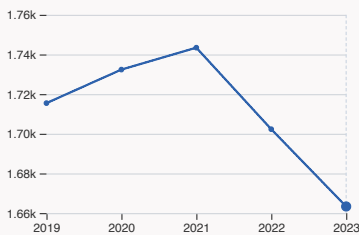
2.1.1 Expenditure on education

was equal to 3.58 % GDP in 2023, up by 0.54 percentage points from the year prior – and equivalent to an indicator rank of 94.



2.2.2 Graduates in science and engineering

was equal to 26.48 % of total graduates in 2023, up by 1.19 percentage points from the year prior – and equivalent to an indicator rank of 36.



2.3.1 Researchers

was equal to 1663.34 FTE per million population in 2023, down by 2.29% from the year prior – and equivalent to an indicator rank of 47.



2.3.2 Gross expenditure on R&D

was equal to 0.18 % GDP in 2023, up by 0.03 percentage points from the year prior – and equivalent to an indicator rank of 89.



2.3.4 QS university ranking

was equal to an average score of 3.83 for the top three universities in 2024, up by 53.2% from the year prior – and equivalent to an indicator rank of 79.



4.3.2 Domestic industry diversification

was equal to an index score of 0.157 in 2022, down by 1.46% from the year prior – and equivalent to an indicator rank of 63.

Global Innovation Index 2025

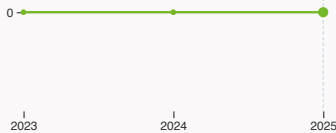


> Innovation outputs in Azerbaijan



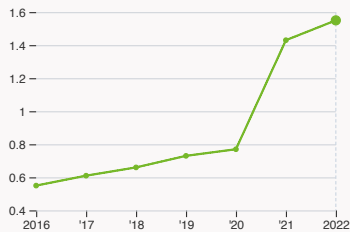
6.1.1 Patents by origin

was equal to 235 patents in 2023, up by 11.9% from the year prior – and equivalent to an indicator rank of 57.



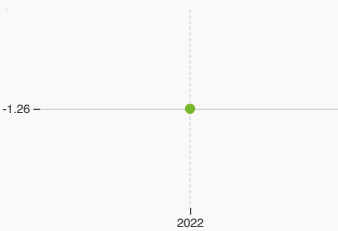
6.2.2 Unicorn valuation

The country does not have unicorns in 2025.



6.2.4 High-tech manufacturing

was equal to 1.55 high-tech manufacturing output in billion USD in 2022, up by 8.39% from the year prior – and equivalent to an indicator rank of 76.



6.3.2 Production and export complexity

was equal to a score of -1.26 in 2022 – and equivalent to an indicator rank of 122.



6.3.3 High-tech exports

was equal to 57.61 million USD in 2023, up by 11.95% from the year prior – and equivalent to an indicator rank of 116.



7.2.2 National feature films

films.



7.3.3 Mobile app creation

was equal to 12.14 million global downloads of mobile apps in 2024, down by 24.64% from the year prior – and equivalent to an indicator rank of 86.

Global Innovation Index 2025



Azerbaijan's innovation top performers

Data not available for 2.3.3 Global corporate R&D investors, 6.2.2 Top Unicorn Companies, 7.1.1 Top 15 intangible-asset intensive companies and 7.1.3 Global brand value, top 5,000.

Disclaimer: This section contains only the top performers per country. For the complete list, please visit the GII Innovation Ecosystems and Data Explorer website.

2.3.4 QS university ranking of Azerbaijan’s top universities

Rank	University	Score
951-1000	BAKU STATE UNIVERSITY	11.50
1001-1200	AZERBAIJAN STATE UNIVERSITY OF ECONOMICS	10.70
1001-1200	AZERBAIJAN STATE OIL AND INDUSTRY UNIVERSITY	7.70

Source: QS Quacquarelli Symonds Ltd (<https://www.topuniversities.com/university-rankings/world-university-rankings/2024>).
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'.

5.2.3 University industry and international engagement, top 5 universities

Rank	University	Score
1	BAKU STATE UNIVERSITY	28.50
2	AZERBAIJAN STATE OIL AND INDUSTRY UNIVERSITY	24.85

Source: Times Higher Education (THE), World University Rankings 2025.
Note: Rank corresponds to within economy ranks. The score is calculated as the average of the International Outlook score (encompassing international staff, students, and co-authorship) and the industry score (reflecting industry income and patent citations). The 2025 ranking corresponds to data from the academic year that ended in 2022.

Azerbaijan

94

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$
112	76	Upper middle	Northern Africa and Western Asia	10.3	253.1	24,698.1
Score / Value Rank				Score / Value Rank		
 Institutions				 Business sophistication		
1.1 Institutional environment				5.1 Knowledge workers		
1.1.1 Operational stability for businesses*				5.1.1 Knowledge-intensive employment, %		
1.1.2 Government effectiveness*				5.1.2 Females employed w/advanced degrees, %		
1.2 Regulatory environment				5.1.3 Youth demographic dividend, %		
1.2.1 Regulatory quality*				5.1.4 GERD performed by business, % GDP		
1.2.2 Rule of law*				5.1.5 GERD financed by business, %		
1.3 Business environment				5.2 Innovation linkages		
1.3.1 Policy stability for doing business [†]				5.2.1 Public research–industry co-publications, %		
1.3.2 Entrepreneurship policies and culture [†]				5.2.2 University–industry R&D collaboration [†]		
 Human capital and research				5.2.3 University industry & international engagement, top 5*		
2.1 Education				5.2.4 State of cluster development [†]		
2.1.1 Expenditure on education, % GDP				5.2.5 Patent families/bn PPP\$ GDP		
2.1.2 Government funding/pupil, secondary, % GDP/cap				5.3 Knowledge absorption		
2.1.3 School life expectancy, years				5.3.1 Intellectual property payments, % total trade		
2.1.4 PISA scales in reading, maths and science				5.3.2 High-tech imports, % total trade		
2.1.5 Pupil–teacher ratio, secondary				5.3.3 ICT services imports, % total trade		
2.2 Tertiary education				5.3.4 FDI net inflows, % GDP		
2.2.1 Tertiary enrolment, % gross				5.3.5 Research talent, % in businesses		
2.2.2 Graduates in science and engineering, %				 Knowledge and technology outputs		
2.2.3 Tertiary inbound mobility, %				6.1 Knowledge creation		
2.3 Research and development (R&D)				6.1.1 Patents by origin/bn PPP\$ GDP		
2.3.1 Researchers, FTE/mn pop.				6.1.2 PCT patents by inventor origin/bn PPP\$ GDP		
2.3.2 Gross expenditure on R&D, % GDP				6.1.3 Utility models by origin/bn PPP\$ GDP		
2.3.3 Global corporate R&D investors, top 3, mn USD				6.1.4 Scientific and technical articles/bn PPP\$ GDP		
2.3.4 QS university ranking, top 3*				6.1.5 Citable documents H-index		
 Infrastructure				6.2 Knowledge impact		
3.1 Information and communication technologies (ICTs)				6.2.1 Labor productivity growth, %		
3.1.1 ICT access*				6.2.2 Unicorn valuation, % GDP		
3.1.2 ICT use*				6.2.3 Software spending, % GDP		
3.1.3 Government's online service*				6.2.4 High-tech manufacturing, %		
3.2 General infrastructure				6.3 Knowledge diffusion		
3.2.1 Electricity output, GWh/mn pop.				6.3.1 Intellectual property receipts, % total trade		
3.2.2 Logistics performance*				6.3.2 Production and export complexity		
3.2.3 Gross capital formation, % GDP				6.3.3 High-tech exports, % total trade		
3.3 Ecological sustainability				6.3.4 ICT services exports, % total trade		
3.3.1 GDP/unit of energy use				6.3.5 ISO 9001 quality/bn PPP\$ GDP		
3.3.2 Low-carbon energy use, %				 Creative outputs		
3.3.3 ISO 14001 environment/bn PPP\$ GDP				7.1 Intangible assets		
 Market sophistication				7.1.1 Intangible asset intensity, top 15, %		
4.1 Credit				7.1.2 Trademarks by origin/bn PPP\$ GDP		
4.1.1 Finance for startups and scaleups [†]				7.1.3 Global brand value, top 5,000, % GDP		
4.1.2 Domestic credit to private sector, % GDP				7.1.4 Industrial designs by origin/bn PPP\$ GDP		
4.1.3 Loans from microfinance institutions, % GDP				7.2 Creative goods and services		
4.2 Investment				7.2.1 Cultural and creative services exports, % total trade		
4.2.1 Market capitalization, % GDP				7.2.2 National feature films/mn pop. 15–69		
4.2.2 Venture capital (VC) received, deal count/bn PPP\$ GDP				7.2.3 Entertainment and media market/th pop. 15–69		
4.2.3 Late-stage VC deal count, % global VC				7.2.4 Creative goods exports, % total trade		
4.2.4 VC investors, deal count/bn PPP\$ GDP				7.3 Online creativity		
4.2.5 VC investor co-participation/bn PPP\$ GDP				7.3.1 Top-level domains (TLDs)/th pop. 15–69		
4.3 Trade, diversification and market scale				7.3.2 GitHub commits/mn pop. 15–69		
4.3.1 Applied tariff rate, weighted avg., %				7.3.3 Mobile app creation/bn PPP\$ GDP		
4.3.2 Domestic industry diversification						
4.3.3 Domestic market scale, bn PPP\$						

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.

Global Innovation Index 2025



Data Availability

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



Azerbaijan has missing data for seven indicators and outdated data for six indicators.

Missing data for Azerbaijan

Code	Indicator name	Economy year	Model year*	Source
3.2.2	Logistics performance*	n/a	2023	World Bank, Logistics Performance Index 2023
4.1.3	Loans from microfinance institutions, % GDP	n/a	2023	International Monetary Fund, Financial Access Survey (FAS)
5.1.1	Knowledge-intensive employment, %	n/a	2024	International Labour Organization
5.1.2	Females employed w/advanced degrees, %	n/a	2024	International Labour Organization
5.3.5	Research talent, % in businesses	n/a	2023	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
7.1.1	Intangible asset intensity, top 15, %	n/a	2024	Brand Finance
7.1.3	Global brand value, top 5,000, % GDP	n/a	2025	Brand Finance; International Monetary Fund

*Model year corresponds to the most frequent data year (the year that appears most often across all economies in the GII).

Outdated data for Azerbaijan

Code	Indicator name	Economy year	Model year*	Source
1.3.1	Policy stability for doing business [†]	2021	2024	World Economic Forum, Executive Opinion Survey (EOS)
5.1.4	GERD performed by business, % GDP	2018	2023	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.5	GERD financed by business, %	2018	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.2.2	University–industry R&D collaboration [†]	2021	2024	World Economic Forum, Executive Opinion Survey (EOS)
5.2.4	State of cluster development [†]	2021	2024	World Economic Forum, Executive Opinion Survey (EOS)
7.2.2	National feature films/mn pop. 15–69	2022	2023	OMDIA; United Nations, World Population Prospects

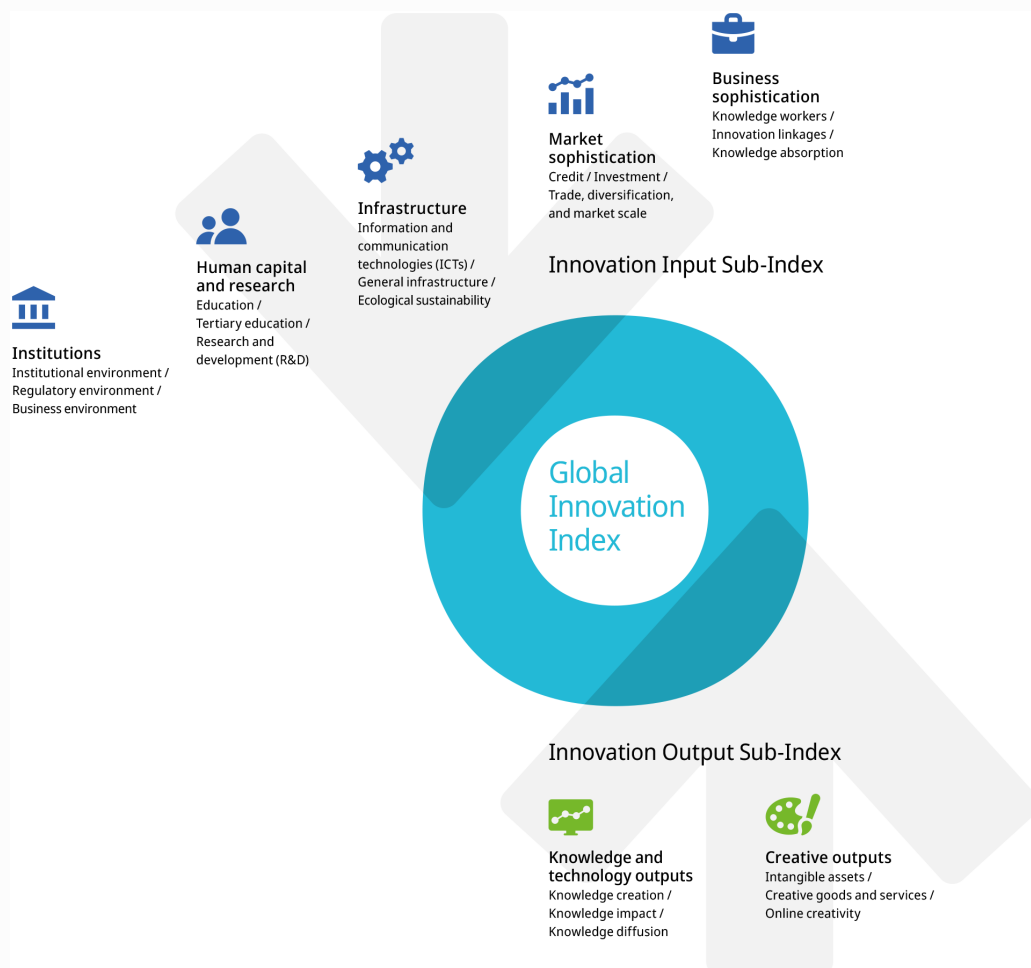
*Model year corresponds to the most frequent data year (the year that appears most often across all economies in the GII).

Global Innovation Index 2025



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 140 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.