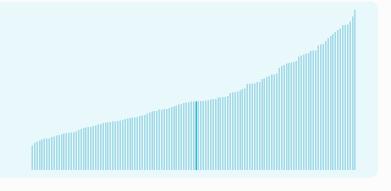


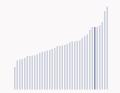
Morocco ranking in the Global Innovation Index 2024

Morocco ranks 66th 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.



Morocco ranks 6th among the 38 lower-middle-income group economies.



Morocco ranks 9th among the 18 economies in Northern Africa and Western Asia.



> Morocco GII Ranking (2020-2024)

The table shows the rankings of Morocco 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 Morocco in the GII 2024 is between ranks 57 and 71.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	75th	85th	69th
2021	77th	84th	67th
2022	67th	87th	56th
2023	70th	90th	55th
2024	66th	89th	47th

Morocco performs better in innovation outputs than innovation inputs in 2024.

This year Morocco ranks 89th in innovation inputs. This position is higher than last year.

Morocco ranks 47th in innovation outputs. This position is higher than last year.

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



> Global Innovation Tracker

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



For Morocco, 8 indicators have improved in the short-term and 1 indicator has worsened.

Science and innovation investment

Scientific publications	R&D investments	Venture	International patent filings	
		Deal numbers	Deal values	
▲ 7.2% 2022 - 2023	n/a	▲ 27.8% 2022 - 2023	n/a	▲ 20.5% 2022 - 2023
▲ 12.5% 2013 - 2023	n/a	▲ 27.7% 2013 - 2023	▲ 74.7% 2013 - 2023	▼ -1.4% 2013 - 2023

Technology adoption

Safe sanitation	Conne	ectivity	Robots	Electric vehicles
	Fixed broadband	5G		
▲ 0.2% 2021 - 2022	▲ 5.3% 2021 - 2022	n/a	▲ 2.2% 2021 - 2022	n/a
▲ 0.8% 2012 - 2022	▲ 12% 2012 - 2022		24.2% 2012 - 2022	n/a
61 per 100 inhabitants in 2022	6.4 per 100 inhabitants in 2022	n/a		n/a

Socioeconomic impact

Labor productivity	Life expectancy	Temperature change
▲ 4% 2022 - 2023	▲ 1.3% 2021 - 2022	▲ 2.6°C 2023
▲ 2.5% 2013 - 2023	▲ 0.5% 2012 - 2022	n/a
35,193 USD in 2023	75 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.

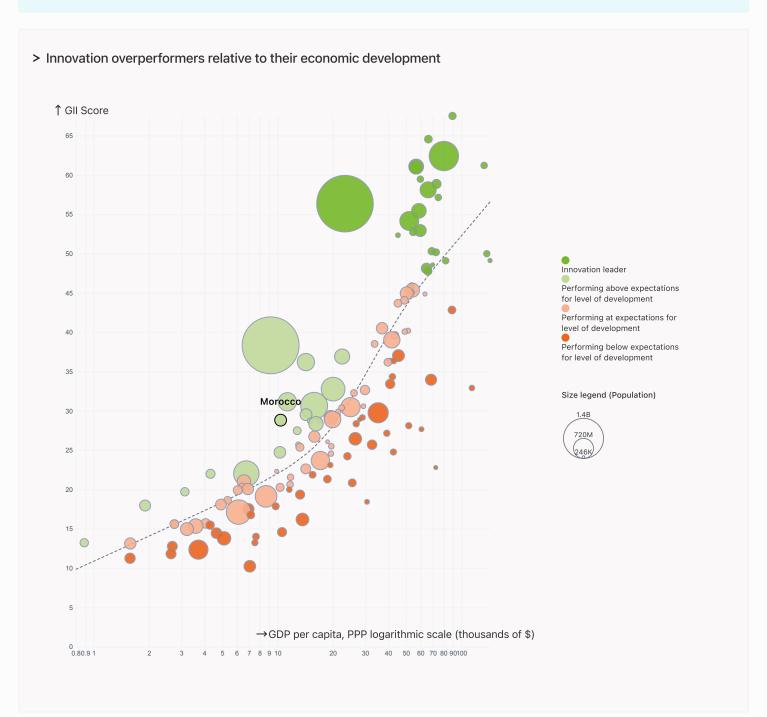


Expected vs. observed innovation performance

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, Morocco is performing above expectations for its level of development.



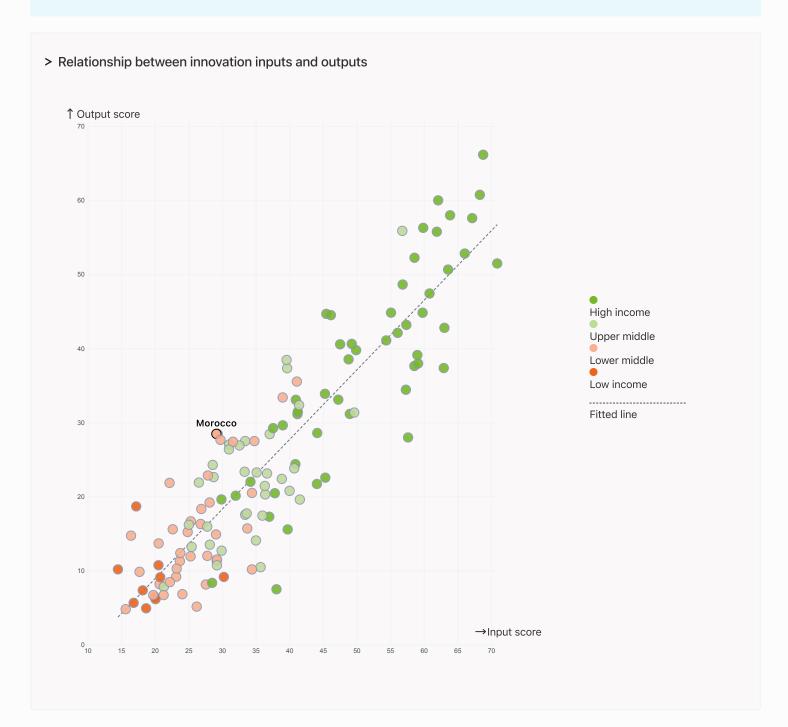


Effectively translating innovation investments into innovation outputs

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.



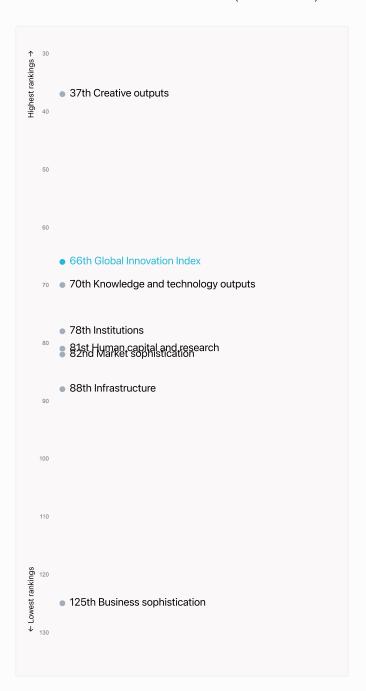
Morocco produces more innovation outputs relative to its level of innovation investments.





Overview of Morocco'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 Morocco are those that rank above the GII (shown in blue) and the weakest are those that rank below.



Highest rankings



Morocco ranks highest in Creative outputs (37th).

Lowest rankings



Morocco ranks lowest in Business sophistication (125th), Infrastructure (88th) and Market sophistication (82nd).

The full WIPO Intellectual Property

Statistics profile for Morocco can be found on this link.



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

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



Lower-Middle-Income economies

Morocco performs above the lower-middle-income group average in Institutions, Human capital and research, Infrastructure, Market sophistication, Knowledge and technology outputs, Creative outputs.



Northern Africa And Western Asia

Morocco performs above the regional average in Creative outputs.

Institutions Human capital and research Infrastructure Top 10 | Score: 61.30 Top 10 | Score: 80.81 Top 10 | Score: 58.57 NAWA | Score: 51.34 NAWA | Score: 34.27 NAWA | Score: 39.94 Morocco | Score: 43.52 Morocco | Score: 26.71 Morocco | Score: 33.87 Lower middle income | Score: 34.0 Lower middle income | Score: 22.1: Lower middle income | Score: 29.8 Market sophistication Business sophistication Knowledge and technology outputs Top 10 | Score: 63.64 Top 10 | Score: 62.12 Top 10 | Score: 57.29 NAWA | Score: 27.20 NAWA | Score: 33.58 NAWA | Score: 22.11 Morocco | Score: 27.54 Lower middle income | Score: 20.8 Morocco | Score: 20.49 Lower middle income | Score: 25.9 Morocco | Score: 14.18 Lower middle income | Score: 15.6

Creative outputs

Top 10 | Score: 56.54

Morocco | Score: 36.37

NAWA | Score: 26.23

Lower middle income | Score: 15.7



Innovation strengths and weaknesses in Morocco

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



Morocco's main innovation strengths are **Industrial designs by origin/bn PPP\$ GDP** (rank 1), **Expenditure on education,** % **GDP** (rank 20) and **Intangible asset intensity, top 15,** % (rank 22).

Strengths Weaknesses

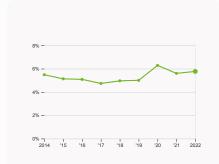
Rank	Code	Indicator name	Rank	Code	Indicator name
1	7.1.4	Industrial designs by origin/bn PPP\$ GDP	119	5.2.1	Public Research-Industry co-publications, %
20	2.1.1	Expenditure on education, % GDP	113	5.1.1	Knowledge-intensive employment, %
22	7.1.1	Intangible asset intensity, top 15, %	112	3.1.4	E-participation*
27	3.2.3	Gross capital formation, % GDP	103	5.1.5	Females employed w/advanced degrees, %
27	6.2.4	High-tech manufacturing, %	96	5.1.2	Firms offering formal training, %
30	7.1.2	Trademarks by origin/bn PPP\$ GDP	82	2.1.4	PISA scales in reading, maths and science
32	1.3.1	Policy stability for doing business [†]	75	2.3.4	QS university ranking, top 3*
33	4.1.2	Domestic credit to private sector, % GDP	57	7.2.3	Entertainment and media market/th pop. 15–69
33	6.2.1	Labor productivity growth, %	49	6.2.2	Unicorn valuation, % GDP
36	6.3.4	ICT services exports, % total trade	41	2.3.3	Global corporate R&D investors, top 3, mn USD



Morocco's innovation system

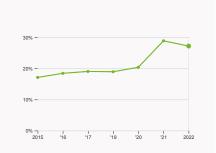
As far as practicable, the plots below present unscaled indicator data.

> Innovation inputs in Morocco



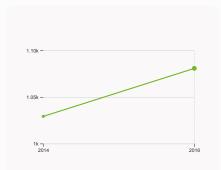
2.1.1 Expenditure on education

was equal to 5.77 % GDP in 2022, up by 0.17 percentage points from the year prior – and equivalent to an indicator rank of 20.



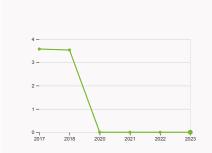
2.2.2 Graduates in science and engineering

was equal to 27.23 % of total graduates in 2022, down by 1.67 percentage points from the year prior – and equivalent to an indicator rank of 34



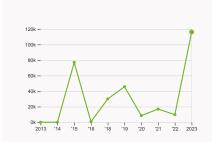
2.3.1 Researchers

was equal to 1080.71 FTE per million population in 2016, up by 5% from the year prior – and equivalent to an indicator rank of 51.



2.3.4 QS university ranking

was equal to an average score of 0 for the top three universities in 2023 with no change from the year prior – and equivalent to an indicator rank of 75.



4.2.4 VC received, value

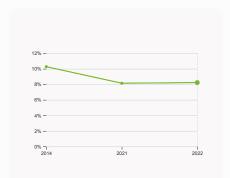
was equal to 116.19 thousand USD in 2023, up by 1091.69% from the year prior – and equivalent to an indicator rank of 71.



4.3.2 Domestic industry diversification

was equal to an index score of 0.23 in 2020, up by 126.99% from the year prior – and equivalent to an indicator rank of 85.





5.1.1 Knowledge-intensive employment

was equal to 8.23 % in 2022, up by 0.09 percentage points from the year prior – and equivalent to an indicator rank of 113.

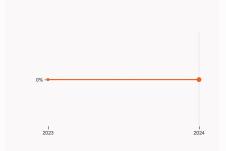


> Innovation outputs in Morocco



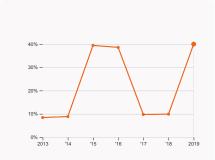
6.1.1 Patents by origin

was equal to 246 patents in 2022, down by 3.15% from the year prior – and equivalent to an indicator rank of 67.



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.



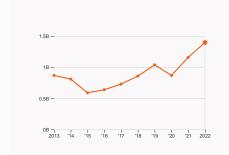
6.2.4 High-tech manufacturing

was equal to 39.95 % of total manufacturing output in 2019, up by 30.06 percentage points from the year prior – and equivalent to an indicator rank of 27.



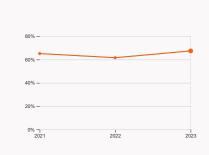
6.3.2 Production and export complexity

was equal to a score of -0.35 in 2021, up by 10.26% from the year prior – and equivalent to an indicator rank of 80.



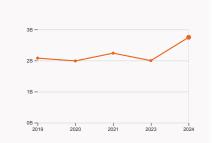
6.3.3 High-tech exports

was equal to 1.4 billion USD in 2022, up by 20.69% from the year prior – and equivalent to an indicator rank of 57.



7.1.1 Intangible asset intensity

was equal to 67.42 % for the top 15 companies in 2023, up by 5.83 percentage points from the year prior – and equivalent to an indicator rank of 22.



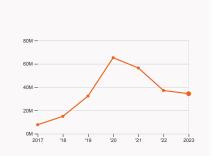
7.1.3 Global brand value

was equal to 2.75 billion USD for the brands in the top 5,000 in 2024, up by 37.5% from the year prior – and equivalent to an indicator rank of 48.



7.2.2 National feature films

was equal to 25 films in 2022, up by 212.5% from the year prior – and equivalent to an indicator rank of 66.



7.3.3 Mobile app creation

was equal to 34.38 million global downloads of mobile apps in 2023, down by 7.38% from the year prior – and equivalent to an indicator rank of 77.



Morocco's innovation top performers

7.1.1 Top 15 intangible-asset intensive companies in Morocco

Rank	Firm	Intensity, %
1	ATTIJARIWAFA BANK SA	45.70
2	LAFARGEHOLCIM MAROC	81.94
3	TAQA MOROCCO S.A.	72.78

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

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

Rank	Brand	Industry	Brand Value, mn USD
1	ATTIJARIWAFA BANK	Banking	834.1
2	MAROC TELECOM	Telecoms	663.8
3	OCP GROUP	Chemicals	486.9

Source: Brand Finance (https://brandirectory.com). Note: Rank corresponds to within economy ranks.

Morocco

GII 2024 rank

Output rank 47	Input rank 89	Income Lower middle	_	gior AWA Rank	=	Population (mn) 37.7	GDP, PPP\$ (bn) 385.3	GDP per cap 10,408 Score / Value	3.3	
			43.5	78		Business sophistication		14.2	125	5 0 ¢
1.1 Institutional envir	onment		47.6	79		5.1 Knowledge workers		8.6	[12:	3]
1.1.1 Operational stabil	lity for businesses*		54.7	85		5.1.1 Knowledge-intensive emp	oloyment, %	8.2	113	. 0
1.1.2 Government effect	ctiveness*		40.5	79		5.1.2 Firms offering formal trai	ning, %	8.8	96	00
1.2 Regulatory enviro	onment		38.9	75	•	5.1.3 GERD performed by busi	ness, % GDP	n/a	n/a	
1.2.1 Regulatory quality	y*		39.6	77	•	5.1.4 GERD financed by busine	ess, %	n/a	n/a	
1.2.2 Rule of law*			38.2	78		5.1.5 Females employed w/adv	anced degrees, %	3 .1	103	3 0
1.3 Business environ	ment		44.1	72		5.2 Innovation linkages		16.4	100)
1.3.1 Policy stability for	r doing business [†]		66.4	32	• •	5.2.1 Public Research-Industry	co-publications, %	0.5	119	0
1.3.2 Entrepreneurship	policies and culture ⁺		21.8	66		5.2.2 University-industry R&D	collaboration [†]	30.2	98	
Ruman capital a	and research		26.7	81		5.2.3 State of cluster develop	ment [†]	42.9	74	
						5.2.4 Joint venture/strategic a	lliance deals/bn PPP\$ GDP	0.007	94	
2.1 Education				77		5.2.5 Patent families/bn PPP\$	GDP	0.06	64	•
2.1.1 Expenditure on ed			5.8	20	• •	5.3 Knowledge absorption		17.6	106	3
	ding/pupil, secondary, % GDP/cap		n/a	n/a		5.3.1 Intellectual property pays	ments, % total trade	0.3	87	
2.1.3 School life expec			14.6	56	•	5.3.2 High-tech imports, % tot	al trade	7.2	86	
	ading, maths and science		356.5	82	0	5.3.3 ICT services imports, %	total trade	0.9	88	
2.1.5 Pupil-teacher rat				100		5.3.4 FDI net inflows, % GDP		1.5	86	
2.2 Tertiary educatio			30.5			5.3.5 Research talent, % in bu	sinesses	© 7	66	
2.2.1 Tertiary enrolmer	, ,		46.2			✓ Knowledge and techno	logy outputs	20.5	70	
	ence and engineering, %		27.2				0 , 1			
2.2.3 Tertiary inbound				81		6.1 Knowledge creation		13.5		
2.3 Research and dev				83		6.1.1 Patents by origin/bn PPP			67	-
2.3.1 Researchers, FTE			1 ,080.7			6.1.2 PCT patents by origin/bn			59	•
2.3.2 Gross expenditur				n/a	0.0	6.1.3 Utility models by origin/b		-	-	
	R&D investors, top 3, mn USD		0	41	0 0	6.1.4 Scientific and technical a		13.5		
2.3.4 QS university ran	nking, top 3*		0	75	0 ♦	6.1.5 Citable documents H-ind	ex	11.3		
⇔ Infrastructure			33.9	88		6.2 Knowledge impact	1. 0/	32.2		
3.1 Information and c	communication technologies (IC	CTs)	59.9	89		6.2.1 Labor productivity growt		1.8		0.0
3.1.1 ICT access*		,	95.4	45	•	6.2.2 Unicorn valuation, % GD		0	49	0 ◊
3.1.2 ICT use*			77.1	70	•	6.2.3 Software spending, % G		_	62	-
3.1.3 Government's on	lline service*		41.7	106		6.2.4 High-tech manufacturing	3, %	2 00.0		
3.1.4 E-participation*			25.6	112	0	6.3 Knowledge diffusion		15.7		
3.2 General infrastru	cture		27	82		6.3.1 Intellectual property rece		0.01 34.2		
3.2.1 Electricity output	t, GWh/mn pop.		1,131.7	95		6.3.2 Production and export co				
3.2.2 Logistics perforn	mance*		n/a	n/a					57 36	-
3.2.3 Gross capital for	mation, % GDP		30.1	27	• •	6.3.4 ICT services exports, % 6.3.5 ISO 9001 quality/bn PPP		3.2	72	•
3.3 Ecological sustain	nability		14.6	95			\$ GDP			
3.3.1 GDP/unit of energ	gy use		13.6	38		Creative outputs		36.4	37	•
3.3.2 Low-carbon ener	rgy use, %			94		7.1 Intangible assets		58.6	11	•+
3.3.3 ISO 14001 enviro	onment/bn PPP\$ GDP		0.8	79		7.1.1 Intangible asset intensity,	top 15, %	67.4	22	•+
<u>I</u> Market sophistic	cation		27.5	82		7.1.2 Trademarks by origin/bn	PPP\$ GDP	53	30	•+
i market depriletit	341011		27.0	02		7.1.3 Global brand value, top 5	,000, % GDP	1.7	48	
4.1 Credit			23.4	75		7.1.4 Industrial designs by orig	in/bn PPP\$ GDP	10.8	1	•+
4.1.1 Finance for startu	ups and scaleups [†]		32.3	62		7.2 Creative goods and servi	ces	4.6	99	
4.1.2 Domestic credit t	to private sector, % GDP		88	33	• •	7.2.1 Cultural and creative serv	vices exports, % total trade	0.4	64	
4.1.3 Loans from micro	ofinance institutions, % GDP		0.6	39		7.2.2 National feature films/mr	pop. 15–69	1	66	
4.2 Investment				63		7.2.3 Entertainment and media	market/th pop. 15–69	1.2	57	0
4.2.1 Market capitaliza			49.2			7.2.4 Creative goods exports,	% total trade	0.1	95	
	VC) investors, deals/bn PPP\$ GDI	Р	0.06			7.3 Online creativity		23.7	76	
4.2.3 VC recipients, de			0.05			7.3.1 Top-level domains (TLDs)/th pop. 15-69	1.2	91	
4.2.4 VC received, value	ue, % GDP		0.0003	71		7.3.2 GitHub commits/mn pop.	15-69	7.2	67	
4.3 Trade, diversifica	ation and market scale		50.1	81		7.3.3 Mobile app creation/bn P	PP\$ GDP	62.6	77	
4.3.1 Applied tariff rate	e, weighted avg., %		2.9	80						
4.3.2 Domestic industr	ry diversification		6 65.7	85						
4.3.3 Domestic market	t scale, bn PPP\$		385.3	55						



Data availability

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



Morocco has missing data for six indicators and outdated data for six indicators.

Missing data for Morocco

Code	Indicator name	Economy Year	Model Year	Source
2.1.2	Government funding/pupil, secondary, % GDP/cap	n/a	2020	UNESCO Institute for Statistics
2.3.2	Gross expenditure on R&D, % GDP	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.2.2	Logistics performance*	n/a	2023	World Bank, Logistics Performance Index 2023 (https://lpi.worldbank.org/); and World Bank 2023, Connecting to Compete 2023: Trade Logistics in the Global Economy The Logistics Performance Index and its Indicators.
5.1.3	GERD performed by business, % GDP	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.4	GERD financed by business, %	n/a	2021	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	2022	World Intellectual Property Organization; International Monetary Fund

Outdated data for Morocco

Code	Indicator name	Economy Year	Model Year	Source
2.3.1	Researchers, FTE/mn pop.	2016	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
3.1.1	ICT access*	2021	2022	World Intellectual Property Organization; International Telecommunication Union ITU DataHub (accessed May 1st, 2024)
4.3.2	Domestic industry diversification	2020	2021	United Nations Industrial Development Organization (UNIDO), Industrial Statistics Database (INDSTAT) Rev.3 and 4
5.1.5	Females employed w/advanced degrees, %	2022	2023	International Labour Organization
5.3.5	Research talent, % in businesses	2016	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
6.2.4	High-tech manufacturing, %	2019	2021	United Nations Industrial Development Organization



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.