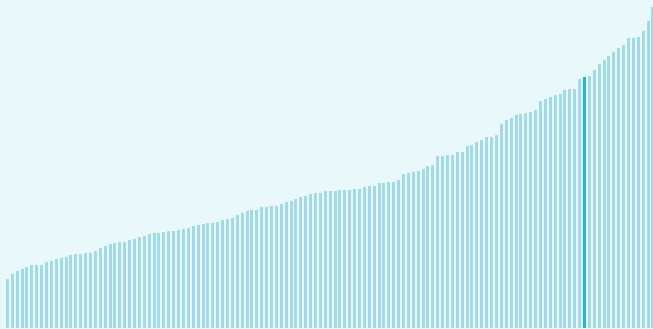




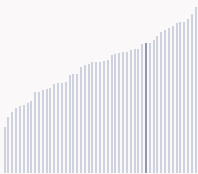
Israel ranking in the Global Innovation Index 2024

Israel ranks **15th** among the 133 economies featured in the GII 2024.

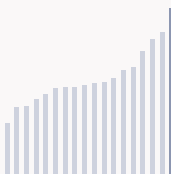
The Global Innovation Index (GII) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.



Israel ranks **14th** among the 51 high-income group economies.



Israel ranks **1st** among the 18 economies in Northern Africa and Western Asia.



> Israel GII Ranking (2020-2024)

The table shows the rankings of Israel 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 Israel in the GII 2024 is between ranks 14 and 17.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	13th	17th	13th
2021	15th	18th	12th
2022	16th	22nd	16th
2023	14th	21st	13th
2024	15th	22nd	13th

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

This year Israel ranks 22nd in innovation inputs. This position is lower than last year.

Israel ranks 13th in innovation outputs. This position is the same as last year.

Israel has 1 cluster 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 Israel, how rapidly is technology being embraced and what are the resulting societal impacts.



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

Science and innovation investment

Scientific publications	R&D investments	Venture capital		International patent filings
		Deal numbers	Deal values	
▼ -7.2% 2022 - 2023	▲ 11.2% 2021 - 2022	▼ -31.1% 2022 - 2023	▼ -51.5% 2022 - 2023	▼ -3% 2022 - 2023
▲ 2.6% 2013 - 2023	▲ 8.2% 2012 - 2022	▲ 9.6% 2013 - 2023	▲ 16.6% 2013 - 2023	▲ 1.7% 2013 - 2023

Technology adoption

Safe sanitation	Connectivity		Robots	Electric vehicles
	Fixed broadband	5G		
▲ 0.8% 2021 - 2022	▼ -1.6% 2021 - 2022	n/a	▲ 20.9% 2021 - 2022	▲ 71.6% 2022 - 2023
▲ 0.8% 2012 - 2022	▲ 1.4% 2012 - 2022		▲ 15.6% 2012 - 2022	▲ 64.9% 2013 - 2023
96.3 per 100 inhabitants in 2022	29.4 per 100 inhabitants in 2022	30 per 100 inhabitants in 2021		4.2 per 100 inhabitants in 2023

Socioeconomic impact

Labor productivity	Life expectancy	Temperature change
▲ 0.1% 2022 - 2023	▲ 0.2% 2021 - 2022	▲ 2.1°C 2023
▲ 1.8% 2013 - 2023	▲ 0.1% 2012 - 2022	n/a
115,515 USD in 2023	82.7 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.



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

> 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.



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

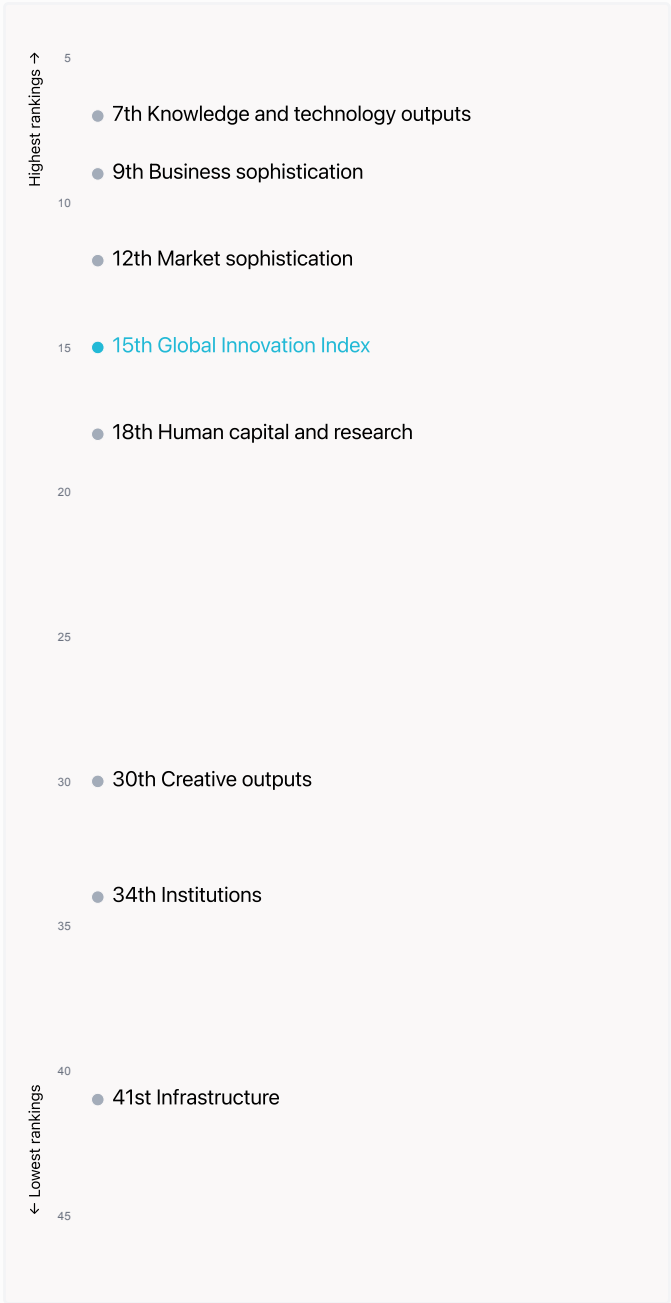
> Relationship between innovation inputs and outputs





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



Highest rankings



Israel ranks highest in Knowledge and technology outputs (7th), Business sophistication (9th) and Market sophistication (12th).

Lowest rankings



Israel ranks lowest in Infrastructure (41st), Institutions (34th) and Creative outputs (30th).

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



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

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



High-Income economies

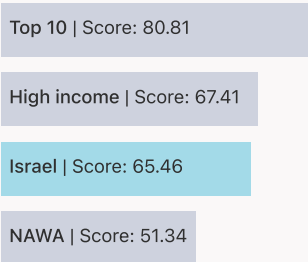
Israel performs above the high-income group average in Human capital and research, Market sophistication, Business sophistication, Knowledge and technology outputs, Creative outputs.



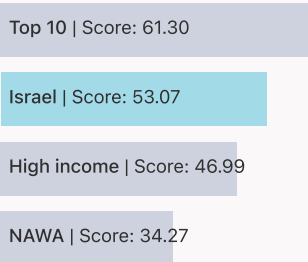
Northern Africa And Western Asia

Israel performs above the regional average in all pillars.

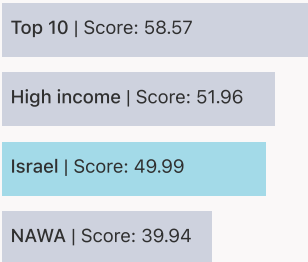
Institutions



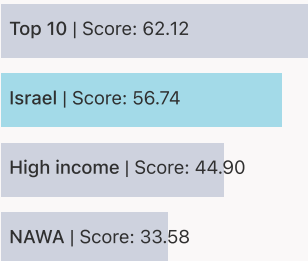
Human capital and research



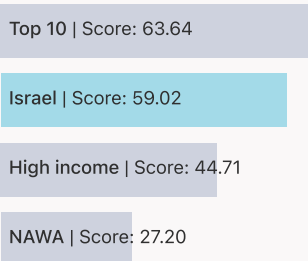
Infrastructure



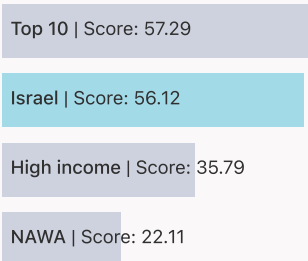
Market sophistication



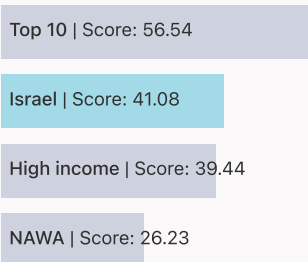
Business sophistication



Knowledge and technology outputs



Creative outputs





Innovation strengths and weaknesses in Israel

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



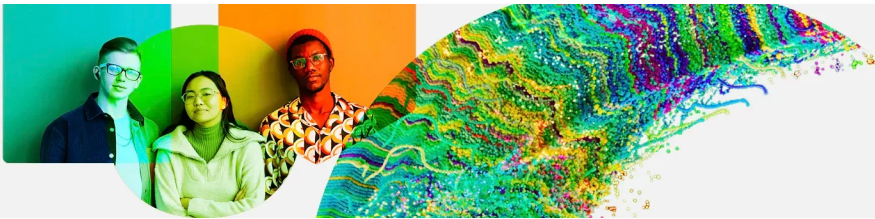
Israel's main innovation strengths are **GERD performed by business, % GDP (rank 1)**, **ICT services exports, % total trade (rank 1)** and **Gross expenditure on R&D, % GDP (rank 1)**.

Strengths

Rank	Code	Indicator name
1	5.1.3	GERD performed by business, % GDP
1	6.3.4	ICT services exports, % total trade
1	2.3.2	Gross expenditure on R&D, % GDP
1	6.2.2	Unicorn valuation, % GDP
1	4.2.4	VC received, value, % GDP
1	4.2.3	VC recipients, deals/bn PPP\$ GDP
2	7.3.3	Mobile app creation/bn PPP\$ GDP
2	5.2.2	University-industry R&D collaboration [†]
3	5.2.4	Joint venture/strategic alliance deals/bn PPP\$ GDP
7	5.2.5	Patent families/bn PPP\$ GDP

Weaknesses

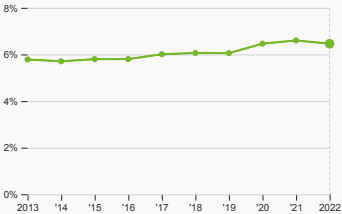
Rank	Code	Indicator name
111	7.1.2	Trademarks by origin/bn PPP\$ GDP
100	3.3.2	Low-carbon energy use, %
73	2.1.5	Pupil–teacher ratio, secondary
65	6.2.3	Software spending, % GDP
62	1.1.1	Operational stability for businesses*
61	2.2.3	Tertiary inbound mobility, %
60	4.3.1	Applied tariff rate, weighted avg., %
58	2.2.1	Tertiary enrolment, % gross
57	4.3.2	Domestic industry diversification
43	2.1.2	Government funding/pupil, secondary, % GDP/cap



Israel's innovation system

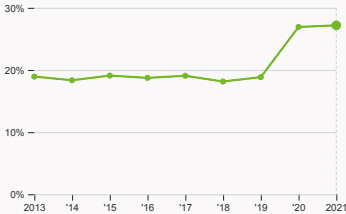
As far as practicable, the plots below present unscaled indicator data.

> Innovation inputs in Israel



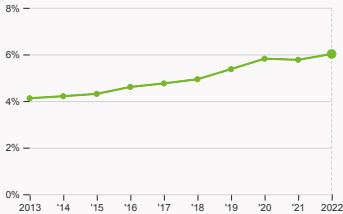
2.1.1 Expenditure on education

was equal to 6.46 % GDP in 2022, down by 0.14 percentage points from the year prior – and equivalent to an indicator rank of 9.



2.2.2 Graduates in science and engineering

was equal to 27.18 % of total graduates in 2021, up by 0.26 percentage points from the year prior – and equivalent to an indicator rank of 35.



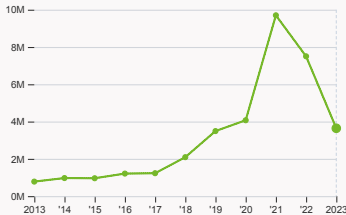
2.3.2 Gross expenditure on R&D

was equal to 6.02 % GDP in 2022, up by 0.25 percentage points from the year prior – and equivalent to an indicator rank of 1.



2.3.4 QS university ranking

was equal to an average score of 37.13 for the top three universities in 2023, up by 3.8% from the year prior – and equivalent to an indicator rank of 34.



4.2.4 VC received, value

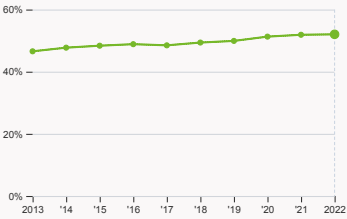
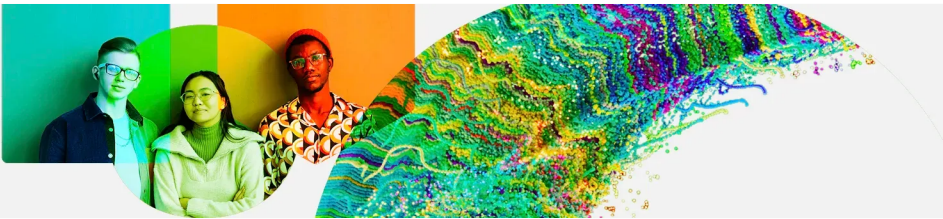
was equal to 3.64 million USD in 2023, down by 51.47% from the year prior – and equivalent to an indicator rank of 1.



4.3.2 Domestic industry diversification

was equal to an index score of 0.14 in 2020, up by 6.9% from the year prior – and equivalent to an indicator rank of 57.

Global Innovation Index 2024



5.1.1 Knowledge-intensive employment
was equal to 52.03 % in 2022, up by 0.14 percentage points from the year prior – and equivalent to an indicator rank of 7.

Global Innovation Index 2024

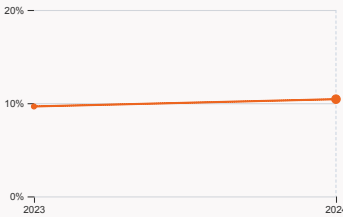


> Innovation outputs in Israel



6.1.1 Patents by origin

was equal to 1.53 thousand patents in 2022, down by 3.77% from the year prior – and equivalent to an indicator rank of 24.



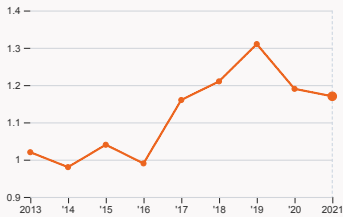
6.2.2 Unicorn valuation

was equal to 10.43 % GDP in 2024, up by 0.78 percentage points from the year prior – and equivalent to an indicator rank of 1.



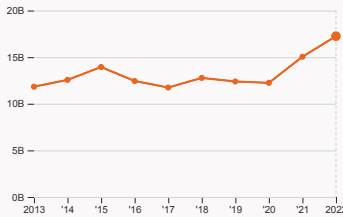
6.2.4 High-tech manufacturing

was equal to 45.29 % of total manufacturing output in 2020, up by 2.44 percentage points from the year prior – and equivalent to an indicator rank of 17.



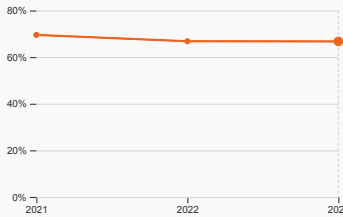
6.3.2 Production and export complexity

was equal to a score of 1.17 in 2021, down by 1.68% from the year prior – and equivalent to an indicator rank of 21.



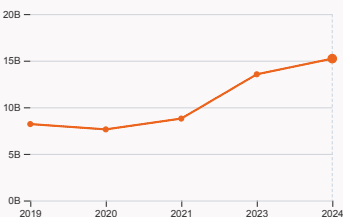
6.3.3 High-tech exports

was equal to 17.25 billion USD in 2022, up by 14.69% from the year prior – and equivalent to an indicator rank of 17.



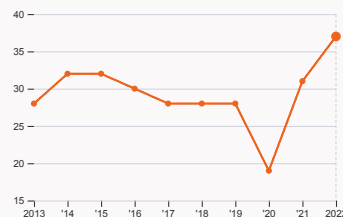
7.1.1 Intangible asset intensity

was equal to 66.74 % for the top 15 companies in 2023, down by 0.07 percentage points from the year prior – and equivalent to an indicator rank of 23.



7.1.3 Global brand value

was equal to 15.22 billion USD for the brands in the top 5,000 in 2024, up by 12.41% from the year prior – and equivalent to an indicator rank of 42.



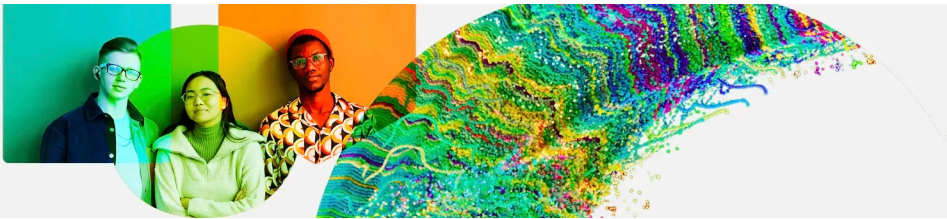
7.2.2 National feature films

was equal to 37 films in 2022, up by 19.35% from the year prior – and equivalent to an indicator rank of 17.



7.3.3 Mobile app creation

was equal to 3.6 billion global downloads of mobile apps in 2023, down by 0.83% from the year prior – and equivalent to an indicator rank of 2.



Israel's innovation top performers

2.3.3 Global corporate R&D investors from Israel

Rank	Firm	Industry	R&D	R&D Growth	R&D Intensity
			[mn EUR]	[%]	[%]
278	TEVA PHARMACEUTICAL INDUSTRIES	Pharmaceuticals & Biotechnology	786	-13	6
455	WIX.COM	Software & Computer Services	448	13	34
467	ELBIT SYSTEMS	Aerospace & Defence	436	11	8
559	NICE	Software & Computer Services	340	14	17

Source: European Commission's Joint Research Centre (<https://iri.jrc.ec.europa.eu/scoreboard/2022-eu-industrial-rd-investment-scoreboard>).
Note: European Commission's Joint Research Centre ranks the top 2,500 firms by R&D investment annually.

2.3.4 QS university ranking of Israel's top universities

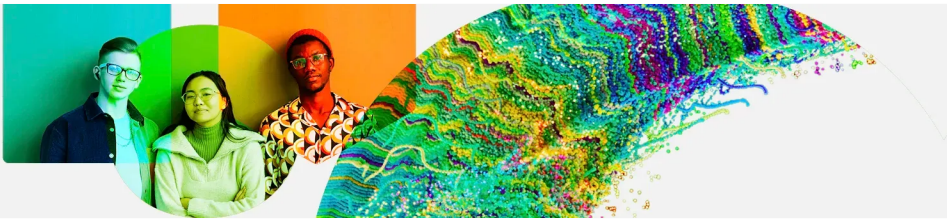
Rank	University	Score
215	TEL AVIV UNIVERSITY	43.90
251	THE HEBREW UNIVERSITY OF JERUSALEM	39.30
392	TECHNION - ISRAEL INSTITUTE OF TECHNOLOGY	28.20

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".

6.2.2 Top Unicorn Companies in Israel

Rank	Unicorn Company	Industry	City	Valuation, bn USD
1	WIZ	Enterprise Tech	Tel Aviv	10
2	STARKWARE	Enterprise Tech	Netanya	8
3	MOON ACTIVE	Media & Entertainment	Tel Aviv	5

Source: CBInsights, Tracker – The Complete List of Unicorn Companies: <https://www.cbinsights.com/research-unicorn-companies>



7.1.1 Top 15 intangible-asset intensive companies in Israel

Rank	Firm	Intensity, %
1	TEVA PHARMACEUTICAL INDUSTRIES LIMITED	89.80
2	CHECK POINT SOFTWARE TECHNOLOGIES LTD.	67.64
3	ELBIT SYSTEMS LTD.	79.27

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 Israel with highest global brand value

Rank	Brand	Industry	Brand Value, mn USD
1	BANK LEUMI	Banking	2,013.7
2	BANK HAPOLIM	Banking	1,739.7
3	MIZRAHI-TEFAHOT BANK	Banking	1,314.2

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

Global Innovation Index 2024



Israel

GII 2024 rank

15

Output rank
13

Input rank
22

Income
High

Region
NAWA

Population (mn)
9.3

GDP, PPP\$ (bn)
537.1

GDP per capita, PPP\$
54,771.4

Score / Value Rank

Score / Value Rank

Institutions 65.5 34 ◇

1.1 Institutional environment	70.1	35	◇
1.1.1 Operational stability for businesses*	64	62	○ ◇
1.1.2 Government effectiveness*	76.3	24	
1.2 Regulatory environment	72.2	26	◇
1.2.1 Regulatory quality*	73.5	24	
1.2.2 Rule of law*	70.9	28	◇
1.3 Business environment	54	49	◇
1.3.1 Policy stability for doing business†	🕒 59.4	43	◇
1.3.2 Entrepreneurship policies and culture†	48.6	29	

Human capital and research 53.1 18

2.1 Education	58.1	46	◇
2.1.1 Expenditure on education, % GDP	6.5	9	◆
2.1.2 Government funding/pupil, secondary, % GDP/cap	20.9	43	○
2.1.3 School life expectancy, years	🕒 15	49	◇
2.1.4 PISA scales in reading, maths and science	465.5	37	◇
2.1.5 Pupil–teacher ratio, secondary	🕒 14.5	73	○ ◇
2.2 Tertiary education	34.8	59	○ ◇
2.2.1 Tertiary enrolment, % gross	🕒 59	58	○ ◇
2.2.2 Graduates in science and engineering, %	27.2	35	
2.2.3 Tertiary inbound mobility, %	🕒 3.4	61	○ ◇
2.3 Research and development (R&D)	66.3	8	
2.3.1 Researchers, FTE/mn pop.	n/a	n/a	
2.3.2 Gross expenditure on R&D, % GDP	6	1	◆◆
2.3.3 Global corporate R&D investors, top 3, mn USD	61.3	23	
2.3.4 QS university ranking, top 3*	37.6	34	

Infrastructure 50 41 ◇

3.1 Information and communication technologies (ICTs)	84.8	28	
3.1.1 ICT access*	92.7	56	◇
3.1.2 ICT use*	89.3	20	
3.1.3 Government's online service*	86.1	21	
3.1.4 E-participation*	70.9	37	
3.2 General infrastructure	45.4	28	
3.2.1 Electricity output, GWh/mn pop.	7,968.8	20	
3.2.2 Logistics performance*	68.2	25	◇
3.2.3 Gross capital formation, % GDP	26.3	41	
3.3 Ecological sustainability	19.8	67	○ ◇
3.3.1 GDP/unit of energy use	17.2	19	
3.3.2 Low-carbon energy use, %	6.3	100	○ ◇
3.3.3 ISO 14001 environment/bn PPP\$ GDP	1.7	57	

Market sophistication 56.7 12

4.1 Credit	43.4	32	
4.1.1 Finance for startups and scaleups†	62.6	23	
4.1.2 Domestic credit to private sector, % GDP	70.2	46	◇
4.1.3 Loans from microfinance institutions, % GDP	n/a	n/a	
4.2 Investment	66.3	6	◆◆
4.2.1 Market capitalization, % GDP	63	32	
4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP	0.9	8	
4.2.3 VC recipients, deals/bn PPP\$ GDP	0.7	1	◆◆
4.2.4 VC received, value, % GDP	0.01	1	◆◆
4.3 Trade, diversification and market scale	60.5	51	
4.3.1 Applied tariff rate, weighted avg., %	1.7	60	○
4.3.2 Domestic industry diversification	🕒 84.1	57	○
4.3.3 Domestic market scale, bn PPP\$	537.1	47	

Business sophistication 59 9

5.1 Knowledge workers	79.2	4	◆◆
5.1.1 Knowledge-intensive employment, %	52	7	
5.1.2 Firms offering formal training, %	n/a	n/a	
5.1.3 GERD performed by business, % GDP	5.6	1	◆◆
5.1.4 GERD financed by business, %	45	37	◇
5.1.5 Females employed w/advanced degrees, %	🕒 24.7	20	
5.2 Innovation linkages	64.3	6	◆◆
5.2.1 Public Research–Industry co-publications, %	2.9	26	◇
5.2.2 University–industry R&D collaboration†	🕒 96.6	2	◆◆
5.2.3 State of cluster development†	🕒 62	38	◇
5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP	0.2	3	◆◆
5.2.5 Patent families/bn PPP\$ GDP	5.3	7	◆◆
5.3 Knowledge absorption	33.6	47	◇
5.3.1 Intellectual property payments, % total trade	0.8	45	
5.3.2 High-tech imports, % total trade	10	39	
5.3.3 ICT services imports, % total trade	2.1	27	
5.3.4 FDI net inflows, % GDP	5.1	20	
5.3.5 Research talent, % in businesses	n/a	n/a	

Knowledge and technology outputs 56.1 7 ◆◆

6.1 Knowledge creation	53.1	12	
6.1.1 Patents by origin/bn PPP\$ GDP	3	24	
6.1.2 PCT patents by origin/bn PPP\$ GDP	3.6	7	
6.1.3 Utility models by origin/bn PPP\$ GDP	-	-	
6.1.4 Scientific and technical articles/bn PPP\$ GDP	26.5	24	
6.1.5 Citable documents H-index	46.1	17	
6.2 Knowledge impact	59.4	5	◆◆
6.2.1 Labor productivity growth, %	2.1	24	◆
6.2.2 Unicorn valuation, % GDP	10.4	1	◆◆
6.2.3 Software spending, % GDP	0.2	65	○ ◇
6.2.4 High-tech manufacturing, %	🕒 45.3	17	
6.3 Knowledge diffusion	55.9	7	◆◆
6.3.1 Intellectual property receipts, % total trade	0.6	27	◇
6.3.2 Production and export complexity	72.4	21	
6.3.3 High-tech exports, % total trade	10.5	17	
6.3.4 ICT services exports, % total trade	18	1	◆◆
6.3.5 ISO 9001 quality/bn PPP\$ GDP	17.6	14	◆

Creative outputs 41.1 30 ◇

7.1 Intangible assets	29	65	○ ◇
7.1.1 Intangible asset intensity, top 15, %	66.7	23	
7.1.2 Trademarks by origin/bn PPP\$ GDP	9.6	111	○ ◇
7.1.3 Global brand value, top 5,000, % GDP	2.8	42	◇
7.1.4 Industrial designs by origin/bn PPP\$ GDP	1.2	53	
7.2 Creative goods and services	44.8	11	
7.2.1 Cultural and creative services exports, % total trade	3.1	7	◆
7.2.2 National feature films/mn pop. 15–69	6.4	17	
7.2.3 Entertainment and media market/th pop. 15–69	37.9	21	
7.2.4 Creative goods exports, % total trade	1.2	39	
7.3 Online creativity	61.4	16	
7.3.1 Top-level domains (TLDs)/th pop. 15–69	14.8	36	◇
7.3.2 GitHub commits/mn pop. 15–69	83.4	7	
7.3.3 Mobile app creation/bn PPP\$ GDP	86	2	◆◆

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 Israel.



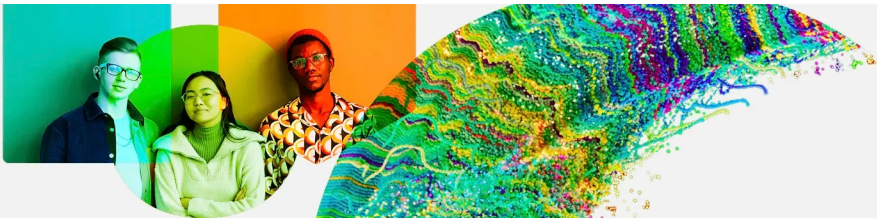
Israel has missing data for five indicators and outdated data for ten indicators.

Missing data for Israel

Code	Indicator name	Economy Year	Model Year	Source
2.3.1	Researchers, FTE/mn pop.	n/a	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
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
5.3.5	Research talent, % in businesses	n/a	2022	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 Israel

Code	Indicator name	Economy Year	Model Year	Source
1.3.1	Policy stability for doing business [†]	2022	2023	World Economic Forum, Executive Opinion Survey (EOS)
2.1.3	School life expectancy, years	2021	2022	UNESCO Institute for Statistics
2.1.5	Pupil–teacher ratio, secondary	2021	2022	UNESCO Institute for Statistics
2.2.1	Tertiary enrolment, % gross	2021	2022	UNESCO Institute for Statistics
2.2.3	Tertiary inbound mobility, %	2021	2022	UNESCO Institute for Statistics
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
5.2.2	University–industry R&D collaboration [†]	2022	2023	World Economic Forum, Executive Opinion Survey (EOS)
5.2.3	State of cluster development [†]	2022	2023	World Economic Forum, Executive Opinion Survey (EOS)
6.2.4	High-tech manufacturing, %	2020	2021	United Nations Industrial Development Organization



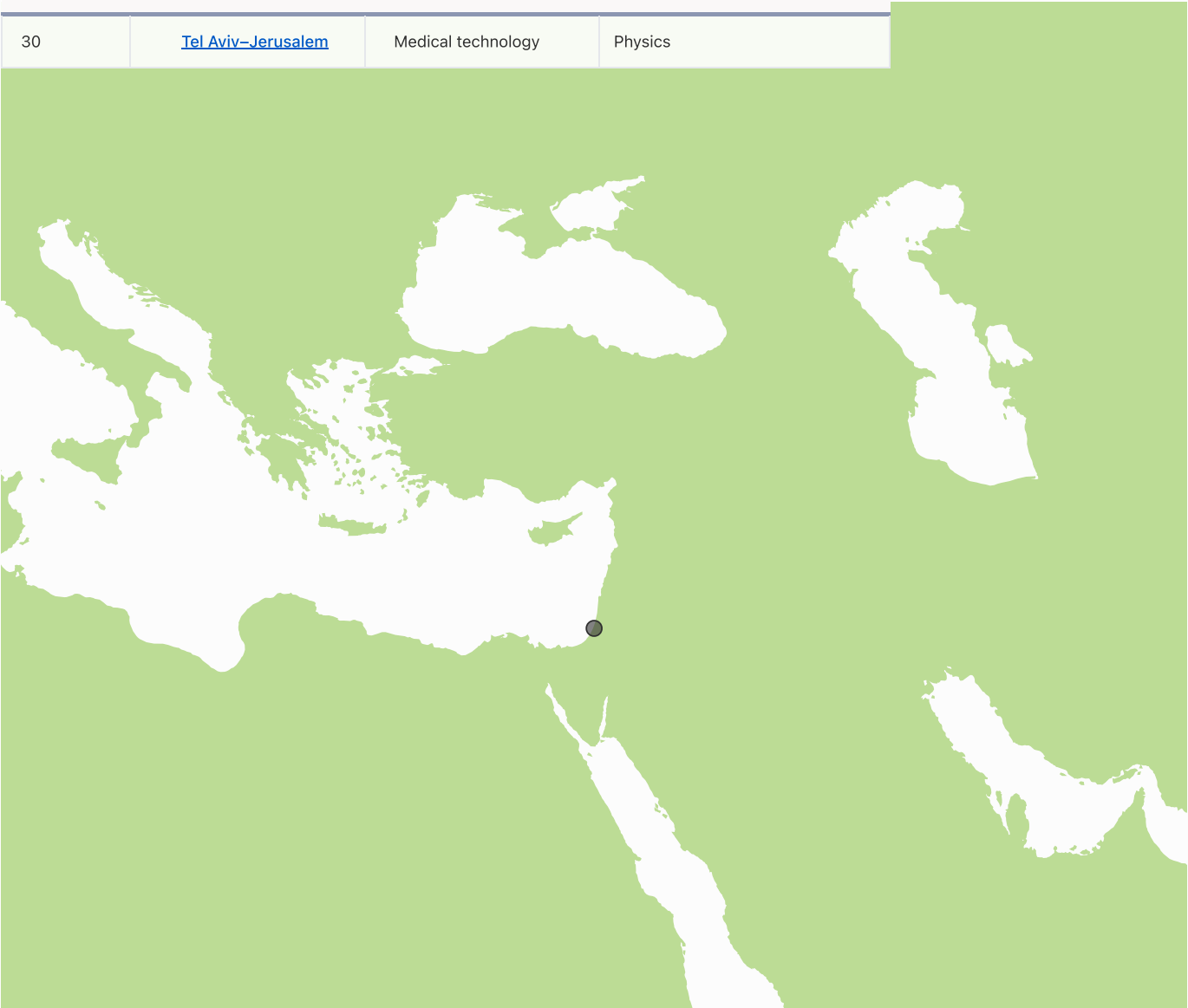
Top science and technology clusters in Israel



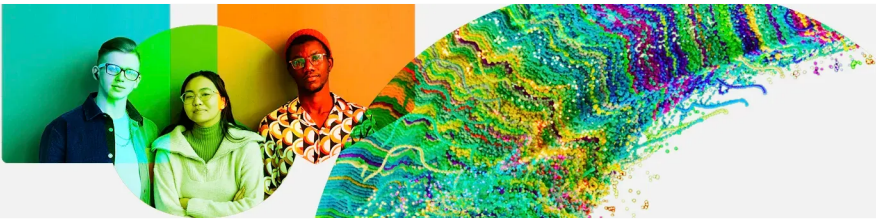
Israel has 1 cluster in the top 100 S&T clusters of the Global Innovation Index, the same number as in 2023.

The table and map below give an overview of the top science and technology clusters in Israel.

Rank	Cluster name	Top patent field	Top academic subject
30	Tel Aviv–Jerusalem	Medical technology	Physics

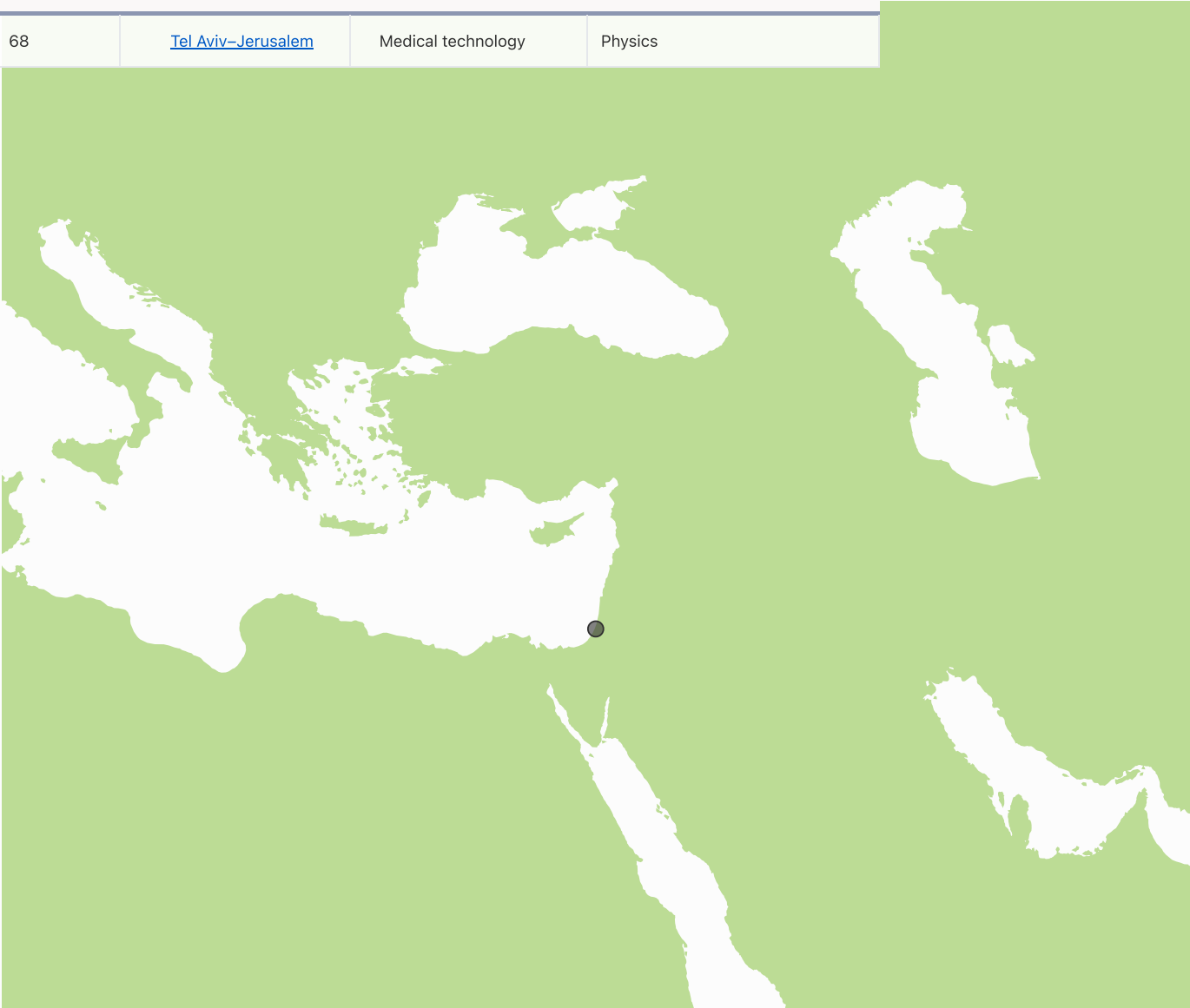


Global Innovation Index 2024



The table and map below give an overview of the top science and technology clusters by intensity in Israel.

Rank	Cluster name	Top patent field	Top academic subject
68	Tel Aviv–Jerusalem	Medical technology	Physics

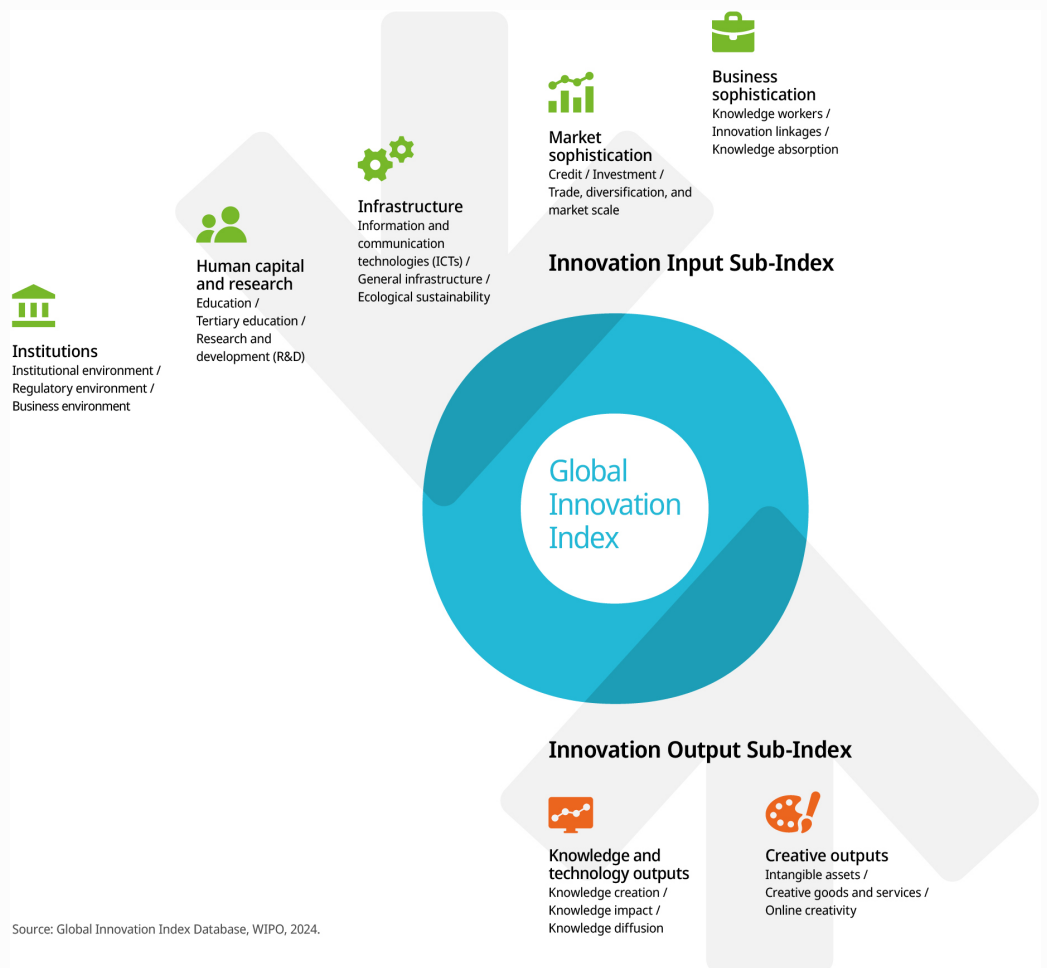


Global Innovation Index 2024



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.