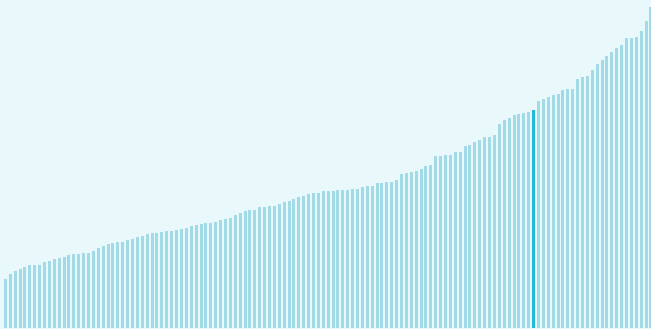




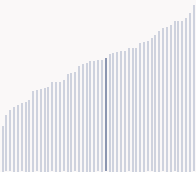
New Zealand ranking in the Global Innovation Index 2024

New Zealand ranks **25th** among the 133 economies featured in the GII 2024.

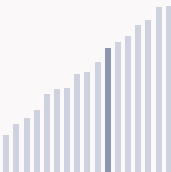
The Global Innovation Index (GII) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.



New Zealand ranks **24th** among the 51 high-income group economies.



New Zealand ranks **7th** among the 17 economies in South East Asia, East Asia, and Oceania.



> New Zealand GII Ranking (2020-2024)

The table shows the rankings of New Zealand 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 New Zealand in the GII 2024 is between ranks 25 and 31.

Year	GII Position	Innovation Inputs	Innovation Outputs
2020	26th	19th	33rd
2021	26th	19th	32nd
2022	24th	23rd	28th
2023	27th	24th	31st
2024	25th	21st	34th

New Zealand performs worse in innovation outputs than innovation inputs in 2024.

This year New Zealand ranks 21st in innovation inputs. This position is higher than last year.

New Zealand ranks 34th in innovation outputs. This position is lower than last year.

New Zealand 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 New Zealand, how rapidly is technology being embraced and what are the resulting societal impacts.



For New Zealand, 7 indicators have improved in the short-term and 5 indicators have worsened.

Science and innovation investment

Scientific publications	R&D investments	Venture capital		International patent filings
		Deal numbers	Deal values	
▼ -14.3% 2022 - 2023	▲ 4% 2019 - 2021	▼ -34.5% 2022 - 2023	▲ 9.6% 2022 - 2023	▼ -8.2% 2022 - 2023
▲ 1.4% 2013 - 2023	▲ 4.8% 2011 - 2021	▲ 19.6% 2013 - 2023	▲ 7.8% 2013 - 2023	▼ -0.9% 2013 - 2023

Technology adoption

Safe sanitation	Connectivity		Robots	Electric vehicles
	Fixed broadband	5G		
▲ 0.1% 2021 - 2022	▲ 2.3% 2021 - 2022	n/a	▲ 2.7% 2021 - 2022	▲ 53.8% 2022 - 2023
▲ 0.1% 2012 - 2022	▲ 2.2% 2012 - 2022		▲ 8.4% 2012 - 2022	▲ 101.2% 2013 - 2023
88.7 per 100 inhabitants in 2022	35.9 per 100 inhabitants in 2022	17.5 per 100 inhabitants in 2022		2.8 per 100 inhabitants in 2023

Socioeconomic impact

Labor productivity	Life expectancy	Temperature change
▼ -2.2% 2022 - 2023	▲ 0.7% 2021 - 2022	▲ 1.1°C 2023
▲ 0.5% 2013 - 2023	▲ 0.2% 2012 - 2022	n/a
96,633 USD in 2023	82.8 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.



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

> Innovation overperformers relative to their economic development





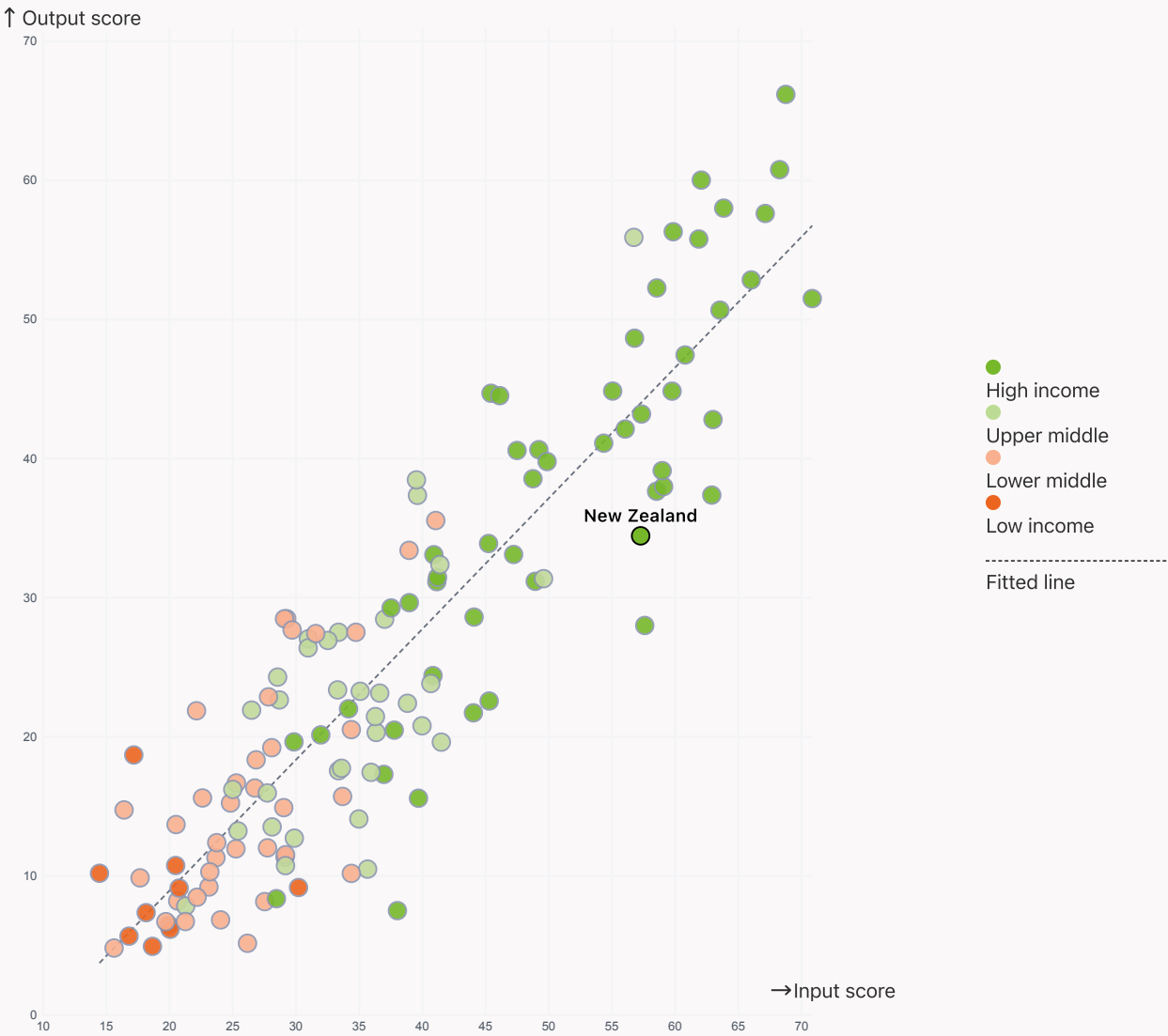
Effectively translating innovation investments into innovation outputs

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.



New Zealand produces less innovation outputs relative to its level of innovation investments.

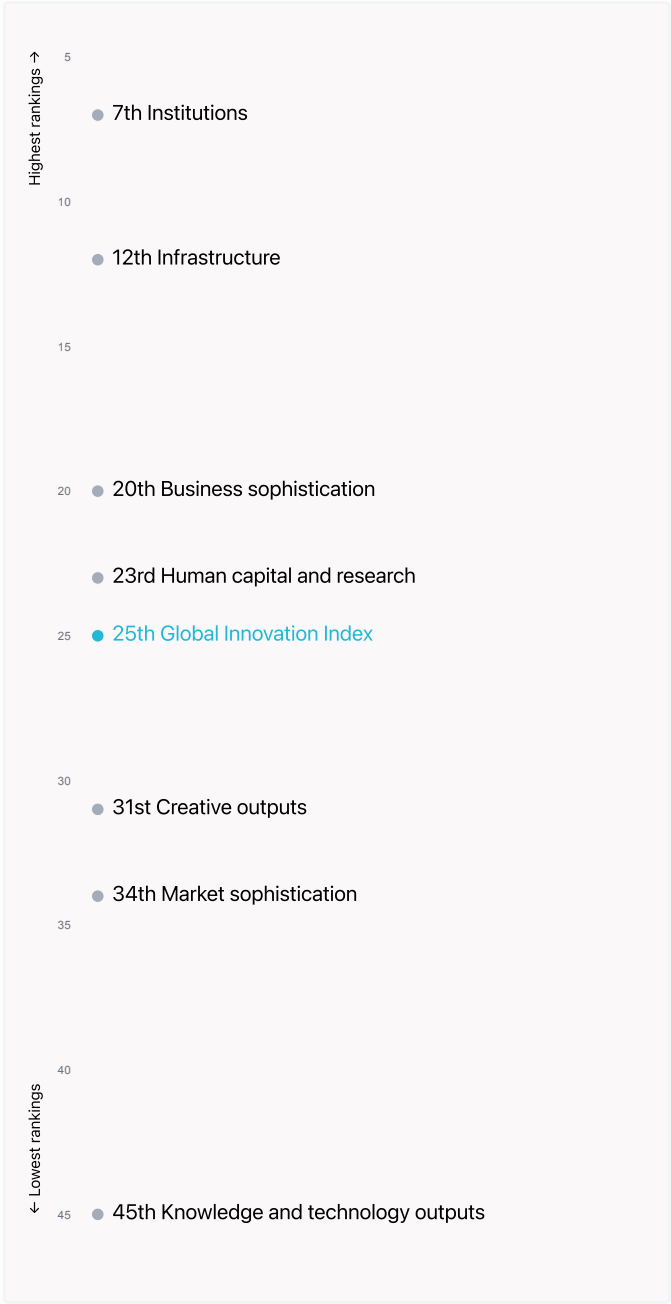
> Relationship between innovation inputs and outputs





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



Highest rankings

New Zealand ranks highest in Institutions (7th), Infrastructure (12th), Business sophistication (20th) and Human capital and research (23rd).

Lowest rankings

New Zealand ranks lowest in Knowledge and technology outputs (45th), Market sophistication (34th) and Creative outputs (31st).

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



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

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



High-Income economies

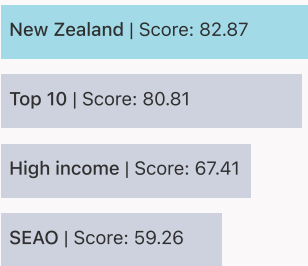
New Zealand performs above the high-income group average in Institutions, Human capital and research, Infrastructure, Business sophistication, Creative outputs.



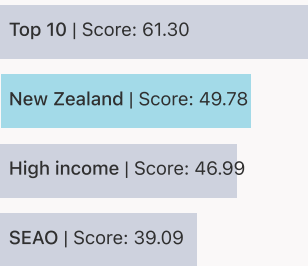
South East Asia, East Asia, And Oceania

New Zealand performs above the regional average in Institutions, Human capital and research, Infrastructure, Business sophistication, Creative outputs.

Institutions



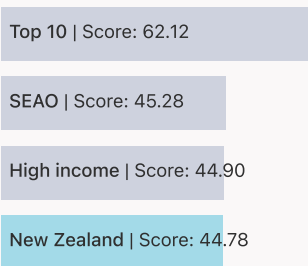
Human capital and research



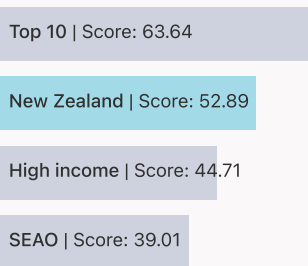
Infrastructure



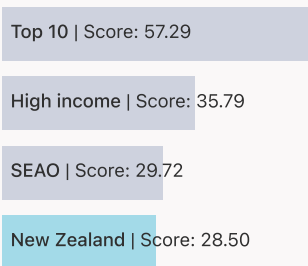
Market sophistication



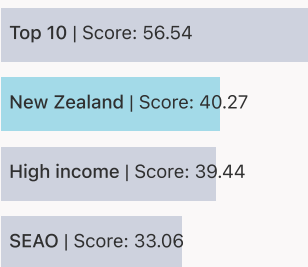
Business sophistication



Knowledge and technology outputs



Creative outputs





Innovation strengths and weaknesses in New Zealand

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



New Zealand’s main innovation strengths are **Regulatory quality*** (rank 3), **Operational stability for businesses*** (rank 4) and **School life expectancy, years** (rank 4).

Strengths

Rank	Code	Indicator name
3	1.2.1	Regulatory quality*
4	1.1.1	Operational stability for businesses*
4	2.1.3	School life expectancy, years
5	5.1.2	Firms offering formal training, %
6	3.1.4	E-participation*
6	3.1.3	Government's online service*
7	1.2.2	Rule of law*
8	4.3.1	Applied tariff rate, weighted avg., %
9	4.1.2	Domestic credit to private sector, % GDP
12	5.3.3	ICT services imports, % total trade

Weaknesses

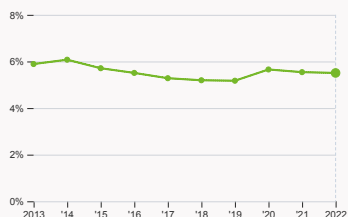
Rank	Code	Indicator name
83	6.2.1	Labor productivity growth, %
78	4.3.2	Domestic industry diversification
75	2.1.5	Pupil–teacher ratio, secondary
70	5.3.4	FDI net inflows, % GDP
69	6.2.4	High-tech manufacturing, %
67	7.2.4	Creative goods exports, % total trade
62	2.2.2	Graduates in science and engineering, %
61	2.1.2	Government funding/pupil, secondary, % GDP/cap
54	7.2.2	National feature films/mn pop. 15–69
49	6.2.2	Unicorn valuation, % GDP



New Zealand's innovation system

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

> Innovation inputs in New Zealand



2.1.1 Expenditure on education

was equal to 5.51 % GDP in 2022, down by 0.04 percentage points from the year prior – and equivalent to an indicator rank of 27.



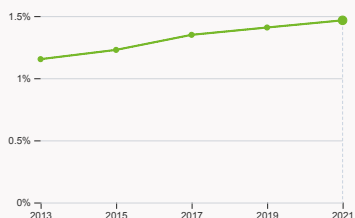
2.2.2 Graduates in science and engineering

was equal to 22.74 % of total graduates in 2021, down by 0.89 percentage points from the year prior – and equivalent to an indicator rank of 62.



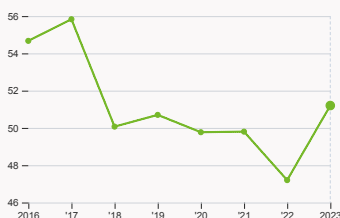
2.3.1 Researchers

was equal to 5084.38 FTE per million population in 2021, down by 8.98% from the year prior – and equivalent to an indicator rank of 19.



2.3.2 Gross expenditure on R&D

was equal to 1.47 % GDP in 2021, up by 0.06 percentage points from the year prior – and equivalent to an indicator rank of 27.



2.3.4 QS university ranking

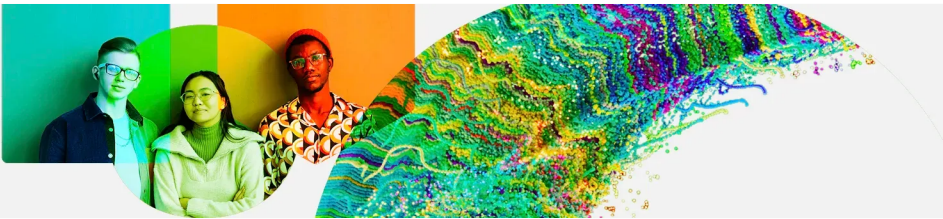
was equal to an average score of 51.2 for the top three universities in 2023, up by 8.47% from the year prior – and equivalent to an indicator rank of 19.



4.2.4 VC received, value

was equal to 292.85 thousand USD in 2023, up by 9.64% from the year prior – and equivalent to an indicator rank of 50.

Global Innovation Index 2024



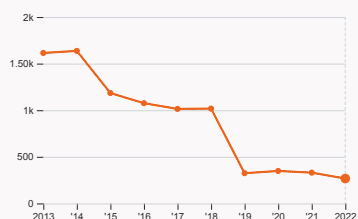
4.3.2 Domestic industry diversification

was equal to an index score of 0.21 in 2022, down by 2.24% from the year prior – and equivalent to an indicator rank of 78.

Global Innovation Index 2024

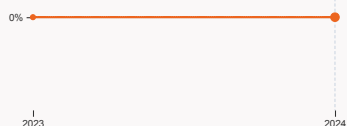


> Innovation outputs in New Zealand



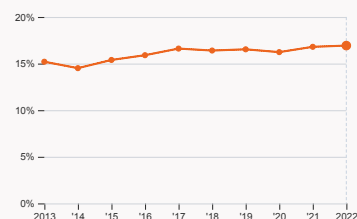
6.1.1 Patents by origin

was equal to 267 patents in 2022, down by 19.09% from the year prior – and equivalent to an indicator rank of 60.



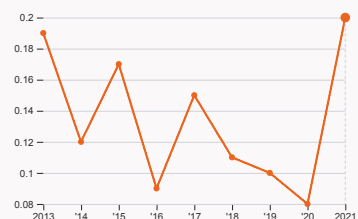
6.2.2 Unicorn valuation

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



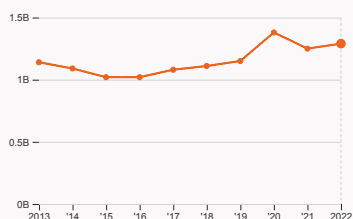
6.2.4 High-tech manufacturing

was equal to 16.93 % of total manufacturing output in 2022, up by 0.13 percentage points from the year prior – and equivalent to an indicator rank of 69.



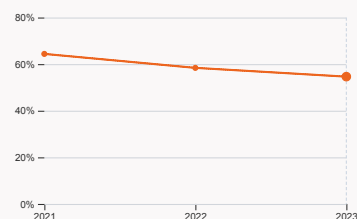
6.3.2 Production and export complexity

was equal to a score of 0.2 in 2021, up by 150% from the year prior – and equivalent to an indicator rank of 52.



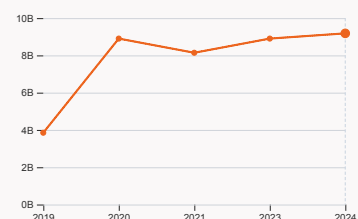
6.3.3 High-tech exports

was equal to 1.29 billion USD in 2022, up by 3.2% from the year prior – and equivalent to an indicator rank of 61.



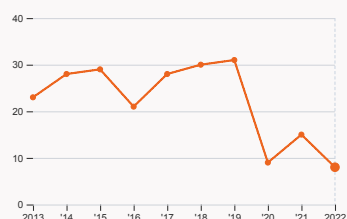
7.1.1 Intangible asset intensity

was equal to 54.63 % for the top 15 companies in 2023, down by 3.77 percentage points from the year prior – and equivalent to an indicator rank of 39.



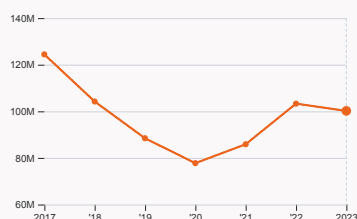
7.1.3 Global brand value

was equal to 9.18 billion USD for the brands in the top 5,000 in 2024, up by 3.15% from the year prior – and equivalent to an indicator rank of 37.



7.2.2 National feature films

was equal to 8 films in 2022, down by 46.67% from the year prior – and equivalent to an indicator rank of 54.



7.3.3 Mobile app creation

was equal to 100.17 million global downloads of mobile apps in 2023, down by 3.01% from the year prior – and equivalent to an indicator rank of 52.



New Zealand's innovation top performers

2.3.3 Global corporate R&D investors from New Zealand

Rank	Firm	Industry	R&D	R&D Growth	R&D Intensity
			[mn EUR]	[%]	[%]
729	XERO	Software & Computer Services	252	24	30
1476	FONTERRA CO-OPERATIVE	Food Producers	106	-8	0.8
1505	FISHER & PAYKEL HEALTHCARE	Health Care Equipment & Services	104	13	11

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 New Zealand's top universities

Rank	University	Score
68	THE UNIVERSITY OF AUCKLAND	68.00
206	UNIVERSITY OF OTAGO	45.00
239	MASSEY UNIVERSITY	40.60

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 New Zealand

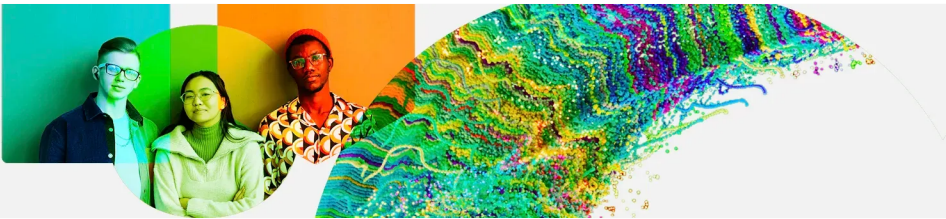
Rank	Firm	Intensity, %
1	XERO LIMITED	99.41
2	FISHER & PAYKEL HEALTHCARE CORPORATION LIMITED	85.53
3	SPARK NEW ZEALAND LIMITED	77.09

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 New Zealand with highest global brand value

Rank	Brand	Industry	Brand Value, mn USD
1	ANLENE	Food	1,514.7
2	ANCHOR	Food	1,448.5
3	ASB BANK	Banking	713.6

Global Innovation Index 2024



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

Global Innovation Index 2024

New Zealand

GII 2024 rank

25

Output rank	Input rank	Income	Region	Population (mn)	GDP, PPP\$ (bn)	GDP per capita, PPP\$
34	21	High	SEAO	5.2	279.2	53,809.2
			Score / Value Rank			
Institutions			82.9 7	Business sophistication52.9 20		
1.1 Institutional environment			85.2 11	5.1 Knowledge workers60.6 22		
1.1.1 Operational stability for businesses*			91.3 4	5.1.1 Knowledge-intensive employment, %n/a n/a		
1.1.2 Government effectiveness*			79 19	5.1.2 Firms offering formal training, %66 5		
1.2 Regulatory environment			92.2 5	5.1.3 GERD performed by business, % GDP0.9 26		
1.2.1 Regulatory quality*			90.8 3	5.1.4 GERD financed by business, %50.1 30		
1.2.2 Rule of law*			93.5 7	5.1.5 Females employed w/advanced degrees, %21.5 28		
1.3 Business environment			71.3 [19]	5.2 Innovation linkages52.1 18		
1.3.1 Policy stability for doing business†			71.3 22	5.2.1 Public Research-Industry co-publications, %4.3 17		
1.3.2 Entrepreneurship policies and culture†			n/a n/a	5.2.2 University-industry R&D collaboration†73.5 20		
Human capital and research			49.8 23	5.2.3 State of cluster development†86.1 12		
2.1 Education			63.1 21	5.2.4 Joint venture/strategic alliance deals/bn PPP\$ GDP0.07 20		
2.1.1 Expenditure on education, % GDP			5.5 27	5.2.5 Patent families/bn PPP\$ GDP1.4 26		
2.1.2 Government funding/pupil, secondary, % GDP/cap			17.2 61	5.3 Knowledge absorption46 19		
2.1.3 School life expectancy, years			19.7 4	5.3.1 Intellectual property payments, % total trade1.6 19		
2.1.4 PISA scales in reading, maths and science			494.7 12	5.3.2 High-tech imports, % total trade12.1 21		
2.1.5 Pupil–teacher ratio, secondary			14.6 75	5.3.3 ICT services imports, % total trade3.1 12		
2.2 Tertiary education			42.2 32	5.3.4 FDI net inflows, % GDP2.3 70		
2.2.1 Tertiary enrolment, % gross			79.4 22	5.3.5 Research talent, % in businesses46.2 31		
2.2.2 Graduates in science and engineering, %			22.7 62	Knowledge and technology outputs28.5 45		
2.2.3 Tertiary inbound mobility, %			12 18	6.1 Knowledge creation34.9 28		
2.3 Research and development (R&D)			44 23	6.1.1 Patents by origin/bn PPP\$ GDP1 60		
2.3.1 Researchers, FTE/mn pop.			5,084.4 19	6.1.2 PCT patents by origin/bn PPP\$ GDP1 24		
2.3.2 Gross expenditure on R&D, % GDP			1.5 27	6.1.3 Utility models by origin/bn PPP\$ GDP- -		
2.3.3 Global corporate R&D investors, top 3, mn USD			48.9 32	6.1.4 Scientific and technical articles/bn PPP\$ GDP30.7 15		
2.3.4 QS university ranking, top 3*			51.8 19	6.1.5 Citable documents H-index35.5 27		
Infrastructure			56.4 12	6.2 Knowledge impact22.5 80		
3.1 Information and communication technologies (ICTs)			92.3 10	6.2.1 Labor productivity growth, %0.3 83		
3.1.1 ICT access*			98.6 27	6.2.2 Unicorn valuation, % GDP0 49		
3.1.2 ICT use*			79.8 57	6.2.3 Software spending, % GDP0.2 54		
3.1.3 Government’s online service*			95.3 6	6.2.4 High-tech manufacturing, %16.9 69		
3.1.4 E-participation*			95.3 6	6.3 Knowledge diffusion28.1 48		
3.2 General infrastructure			46.2 27	6.3.1 Intellectual property receipts, % total trade1.8 13		
3.2.1 Electricity output, GWh/mn pop.			8,716.8 17	6.3.2 Production and export complexity48 52		
3.2.2 Logistics performance*			68.2 25	6.3.3 High-tech exports, % total trade2 61		
3.2.3 Gross capital formation, % GDP			26.1 44	6.3.4 ICT services exports, % total trade1.7 61		
3.3 Ecological sustainability			30.7 40	6.3.5 ISO 9001 quality/bn PPP\$ GDP5.7 49		
3.3.1 GDP/unit of energy use			11 59	Creative outputs40.3 31		
3.3.2 Low-carbon energy use, %			43 18	7.1 Intangible assets41.6 33		
3.3.3 ISO 14001 environment/bn PPP\$ GDP			2.3 47	7.1.1 Intangible asset intensity, top 15, %54.6 39		
Market sophistication			44.8 34	7.1.2 Trademarks by origin/bn PPP\$ GDP75.7 16		
4.1 Credit			54.3 [18]	7.1.3 Global brand value, top 5,000, % GDP3.7 37		
4.1.1 Finance for startups and scaleups†			n/a n/a	7.1.4 Industrial designs by origin/bn PPP\$ GDP1.5 45		
4.1.2 Domestic credit to private sector, % GDP			146.9 9	7.2 Creative goods and services20.9 53		
4.1.3 Loans from microfinance institutions, % GDP			n/a n/a	7.2.1 Cultural and creative services exports, % total trade0.5 56		
4.2 Investment			23.3 35	7.2.2 National feature films/mn pop. 15–692.2 54		
4.2.1 Market capitalization, % GDP			49.9 37	7.2.3 Entertainment and media market/th pop. 15–6951.5 11		
4.2.2 Venture capital (VC) investors, deals/bn PPP\$ GDP			0.3 23	7.2.4 Creative goods exports, % total trade0.4 67		
4.2.3 VC recipients, deals/bn PPP\$ GDP			0.2 21	7.3 Online creativity56.9 22		
4.2.4 VC received, value, % GDP			0.001 50	7.3.1 Top-level domains (TLDs)/th pop. 15–6940.9 16		
4.3 Trade, diversification and market scale			56.7 65	7.3.2 GitHub commits/mn pop. 15–6959.7 16		
4.3.1 Applied tariff rate, weighted avg., %			0.7 8	7.3.3 Mobile app creation/bn PPP\$ GDP70 52		
4.3.2 Domestic industry diversification			70.2 78			
4.3.3 Domestic market scale, bn PPP\$			279.2 61			

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 New Zealand.



New Zealand has missing data for five indicators and outdated data for nine indicators.

Missing data for New Zealand

Code	Indicator name	Economy Year	Model Year	Source
1.3.2	Entrepreneurship policies and culture [†]	n/a	2023	Global Entrepreneurship Monitor
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)
5.1.1	Knowledge-intensive employment, %	n/a	2022	International Labour Organization
6.1.3	Utility models by origin/bn PPP\$ GDP	n/a	2022	World Intellectual Property Organization; International Monetary Fund

Outdated data for New Zealand

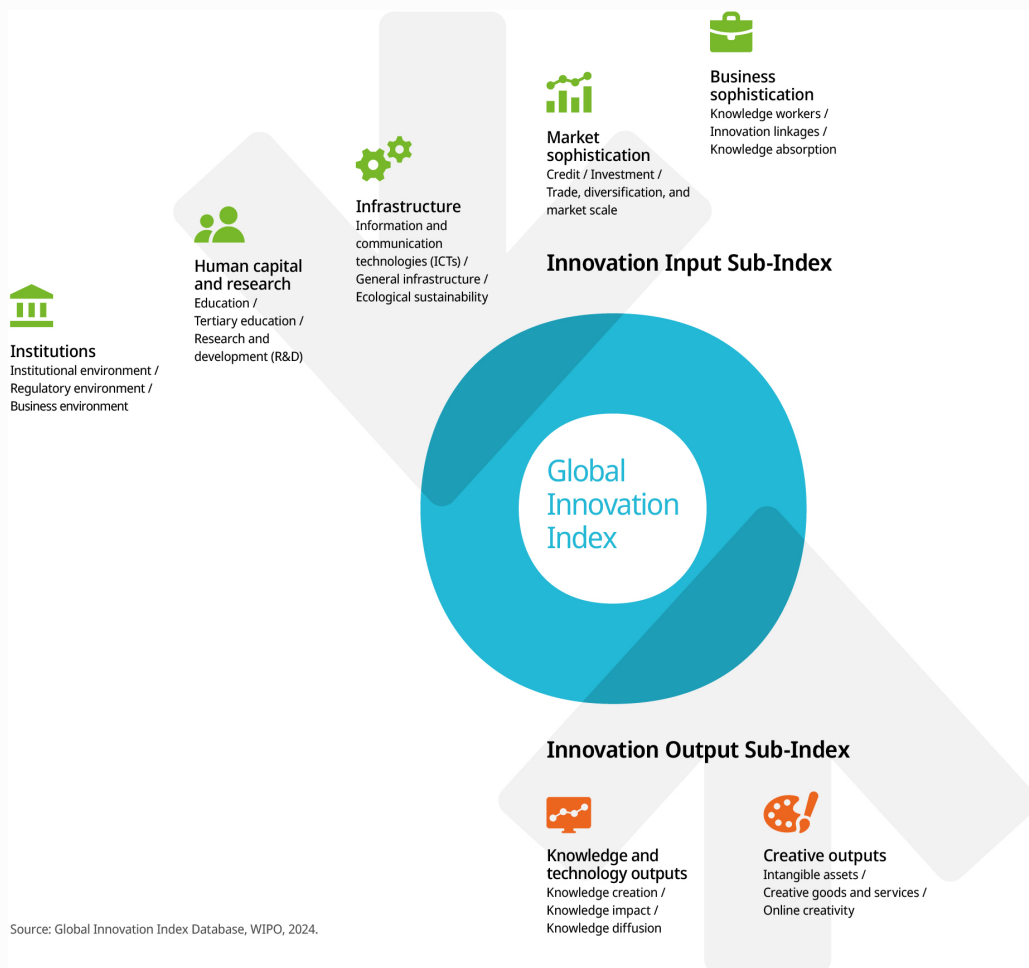
Code	Indicator name	Economy Year	Model Year	Source
2.1.3	School life expectancy, years	2021	2022	UNESCO Institute for Statistics
2.1.5	Pupil-teacher ratio, secondary	2021	2022	UNESCO Institute for Statistics
2.2.1	Tertiary enrolment, % gross	2021	2022	UNESCO Institute for Statistics
2.2.3	Tertiary inbound mobility, %	2021	2022	UNESCO Institute for Statistics
2.3.1	Researchers, FTE/mn pop.	2021	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
2.3.2	Gross expenditure on R&D, % GDP	2021	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.3	GERD performed by business, % GDP	2021	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT
5.1.5	Females employed w/advanced degrees, %	2020	2023	International Labour Organization
5.3.5	Research talent, % in businesses	2021	2022	UNESCO Institute for Statistics; Eurostat; OECD; RICYT

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.