

Executive
Version



Global Innovation Index 2026

Powering
Entrepreneurs
at the Frontier
of Science



WIPO

© WIPO, 2026

 Attribution 4.0 International
(CC BY 4.0)

The CC license does not apply
to non-WIPO content in this
publication.

WIPO Reference 2000 ExSumm/26

DOI: [10.34667/tind.60373](https://doi.org/10.34667/tind.60373)

Cover: Getty Images, Unsplash



Executive
Version

Global Innovation Index 2026

Powering
Entrepreneurs
at the Frontier
of Science

Welcome to the 19th edition of WIPO's flagship *Global Innovation Index (GII)* which takes the pulse of innovation across 139 economies and ranks the world's top 100 innovation clusters.

At a time of economic, social and technological disruption, heightened by advances in AI, the question for policymakers is not just how to generate new ideas and discoveries, but how we turn great ideas into real products, businesses and jobs that represent real value for economies and societies.

This year's special theme, "Powering Entrepreneurs at the Frontier of Science", examines how science-based startups and university spinouts turn frontier research into commercial ventures in fields such as health technologies, quantum computing and agritech, and in countries of all stages of economic development. To support the analysis, the GII 2026 introduces the Dealroom-WIPO Deep Science Startup Tracker, the first global mapping of deep science startups and university spinouts.

Close to 100 WIPO Member States already use the GII to benchmark innovation performance and inform national strategies. It continues to serve as a trusted resource for ministers, policymakers, researchers and businesses seeking to strengthen innovation ecosystems around the world.



Daren Tang
Director General
World Intellectual Property
Organization (WIPO)

GII 2026 at a glance
The Global Innovation Index 2026 ranks the innovation performance of 139 economies, maps the world's top 100 innovation clusters, and tracks the main global innovation trends.

This year's special GII theme asks how deep science startups turn frontier research into new industries, and what it takes for them to scale.

Global leaders in innovation, 2026

Top innovation economies by region

Northern America	Latin America and the Caribbean	Europe	Sub-Saharan Africa*	Northern Africa and Western Asia*	Central and Southern Asia	South East Asia, East Asia and Oceania
1 United States	1 Chile	1 Switzerland	1 Mauritius	1 Israel	1 India	1 Republic of Korea
2 Canada	2 Brazil	2 Sweden	2 South Africa	2 United Arab Emirates ↑	2 Kazakhstan ★	2 Singapore
	3 Mexico	3 United Kingdom	3 Botswana	3 Cyprus ↓	3 Bhutan ★	3 China
			4 Senegal ↑	4 Saudi Arabia ★		



Top innovation economies by income group

High-income	Upper middle-income	Lower middle-income	Low-income ^
1 Switzerland	1 China	1 India	1 Rwanda
2 Sweden	2 Malaysia	2 Viet Nam	2 Madagascar ↑
3 United States	3 Thailand ★	3 Philippines	3 Togo ↓

★ Indicates a new entrant into the group's top economies in 2026.

↑↓ Indicates movement in rank (up or down) within the top economies, relative to 2025.

* Top regional economies including island economies Cyprus and Mauritius.

^ Top economies in the low-income group, including island economy Madagascar.

Note: World Bank Income Group Classification (July 2025). Year-on-year changes in GII rank are influenced by performance and methodological considerations (see Appendix I).

Source: Global Innovation Index Database, WIPO, 2026.

Global Innovation Index 2026 rankings

GII rank	Economy	Score	Income group rank	Region rank	GII rank	Economy	Score	Income group rank	Region rank
1	Switzerland	66.7	1	1	71	Tunisia	29.3	6	14
2	Sweden	63.2	2	2	72	Mongolia	29.1	16	13
3	United States	62.3	3	1	73	Kazakhstan	29.1	17	2
4	Republic of Korea	61.4	4	1	74	Bhutan	28.9	7	3
5	Singapore	61.0	5	2	75	Argentina	28.8	18	6
6	United Kingdom	59.6	6	3	76	Montenegro	28.8	19	36
7	Netherlands (Kingdom of the)	58.4	7	4	77	Uzbekistan	28.7	8	4
8	Finland	57.9	8	5	78	Colombia	28.6	20	7
9	Denmark	57.7	9	6	79	Albania	28.3	21	37
10	China	57.0	1	3	80	Peru	27.9	22	8
11	Germany	56.8	10	7	81	Iran (Islamic Republic of)	27.6	23	5
12	Japan	54.1	11	4	82	Botswana	27.1	24	3
13	France	54.0	12	8	83	Egypt	26.1	9	15
14	Hong Kong, China	53.2	13	5	84	Bosnia and Herzegovina	26.1	25	38
15	Israel	52.2	14	1	85	Azerbaijan	25.8	26	16
16	Canada	51.1	15	2	86	Lebanon	25.6	10	17
17	Estonia	50.4	16	9	87	Jamaica	24.9	27	9
18	Austria	50.2	17	10	88	Belarus	24.5	28	39
19	Ireland	50.1	18	11	89	Panama	24.4	51	10
20	Australia	49.6	19	6	90	Senegal	24.4	11	4
21	Norway	48.5	20	12	91	Barbados	24.2	52	11
22	Belgium	48.5	21	13	92	Kyrgyzstan	24.1	12	6
23	Luxembourg	46.6	22	14	93	Cambodia	23.8	13	14
24	New Zealand	46.4	23	7	94	Sri Lanka	23.7	14	7
25	United Arab Emirates	46.4	24	2	95	Pakistan	23.7	15	8
26	Iceland	46.3	25	15	96	Rwanda	23.3	1	5
27	Italy	46.2	26	16	97	Kenya	23.0	16	6
28	Spain	45.4	27	17	98	Brunei Darussalam	23.0	53	15
29	Cyprus	45.3	28	3	99	Dominican Republic	22.9	29	12
30	Portugal	44.5	29	18	100	El Salvador	22.8	30	13
31	Malta	43.8	30	19	101	Ghana	22.6	17	7
32	Lithuania	43.2	31	20	102	Namibia	22.5	18	8
33	Czech Republic	42.8	32	21	103	Cabo Verde	22.4	31	9
34	Malaysia	41.8	2	8	104	Nepal	22.3	19	9
35	Slovenia	41.1	33	22	105	Bangladesh	21.5	20	10
36	Hungary	40.7	34	23	106	Ecuador	21.3	32	14
37	Bulgaria	40.3	35	24	107	Trinidad and Tobago	21.2	54	15
38	India	40.1	1	1	108	Lao People's Democratic Republic	21.2	21	16
39	Poland	39.5	36	25	109	Paraguay	21.1	33	16
40	Latvia	38.3	37	26	110	Côte d'Ivoire	20.8	22	10
41	Greece	38.2	38	27	111	Algeria	20.5	34	18
42	Saudi Arabia	37.9	39	4	112	Tajikistan	20.3	23	11
43	Viet Nam	37.7	2	9	113	Madagascar	20.2	2	11
44	Thailand	37.6	3	10	114	Bolivia (Plurinational State of)	19.7	24	17
45	Türkiye	37.5	4	5	115	Zambia	19.5	25	12
46	Croatia	36.9	40	28	116	Honduras	19.2	26	18
47	Qatar	36.6	41	6	117	Benin	19.1	27	13
48	Slovakia	36.5	42	29	118	Nigeria	19.1	28	14
49	Romania	35.3	43	30	119	United Republic of Tanzania	19.0	29	15
50	Mauritius	34.1	5	1	120	Guatemala	19.0	35	19
51	Chile	33.8	44	1	121	Cameroon	18.9	30	16
52	Philippines	33.8	3	11	122	Togo	18.7	3	17
53	Brazil	33.5	6	2	123	Uganda	18.4	4	18
54	Morocco	32.8	4	7	124	Nicaragua	18.0	31	20
55	Indonesia	32.7	7	12	125	Myanmar	17.4	32	17
56	Serbia	32.5	8	31	126	Malawi	17.2	5	19
57	Georgia	32.2	9	8	127	Venezuela (Bolivarian Republic of)	16.7		21
58	Russian Federation	31.8	45	32	128	Lesotho	16.5	33	20
59	Armenia	31.6	10	9	129	Mozambique	16.1	6	21
60	Jordan	31.5	5	10	130	Burkina Faso	16.1	7	22
61	North Macedonia	31.2	11	33	131	Mauritania	16.1	34	23
62	Kuwait	30.9	46	11	132	Zimbabwe	16.1	35	24
63	South Africa	30.9	12	2	133	Ethiopia	15.7		25
64	Bahrain	30.8	47	12	134	Mali	15.2	8	26
65	Mexico	30.6	13	3	135	Burundi	15.1	9	27
66	Uruguay	30.5	48	4	136	Angola	13.0	36	28
67	Ukraine	30.4	14	34	137	Democratic Republic of the Congo	12.6	10	29
68	Republic of Moldova	30.3	15	35	138	Niger	12.1	11	30
69	Oman	30.0	49	13	139	Chad	9.5	12	31
70	Costa Rica	29.8	50	5					

Low-income	Sub-Saharan Africa	Latin America and the Caribbean
Lower middle-income	Central and Southern Asia	Northern America
Upper middle-income	South East Asia, East Asia, and Oceania	Europe
High-income	Northern Africa and Western Asia	

Note: The Bolivarian Republic of Venezuela and Ethiopia are not included in any income group because they are unclassified in the World Bank FY2026 income classification. The Bolivarian Republic of Venezuela is unclassified due to the unavailability of gross national income (GNI) per capita data, while Ethiopia has a temporary unclassified status.

Source: Global Innovation Index Database, WIPO, 2026.

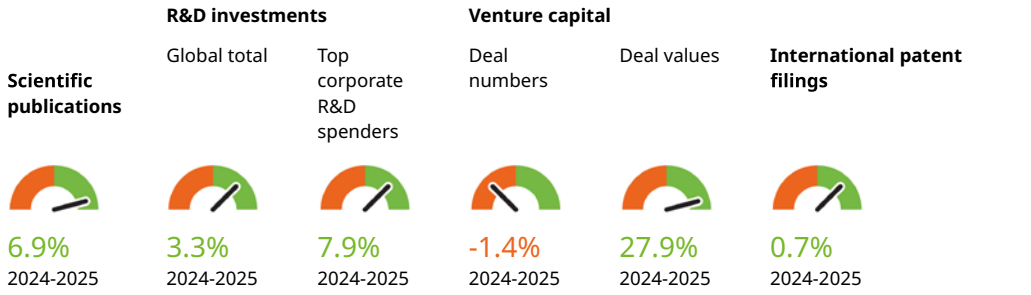
Key takeaways

1. In 2025, innovation investments largely positive again after the 2023 downturn, but growth mostly below trend

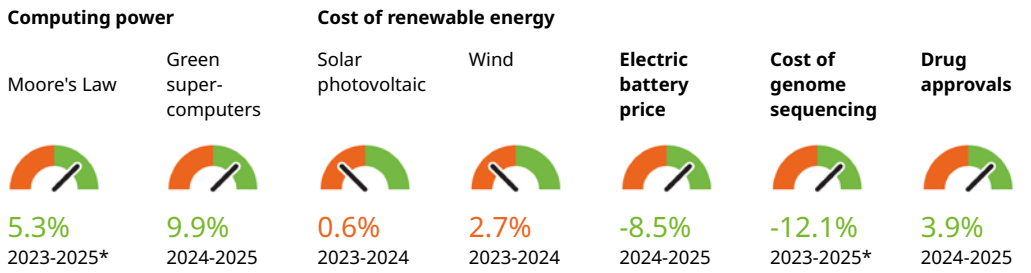
↑ **Overall picture positive in 2025:** Across all four parts of the GII Global Innovation Tracker results are more uniformly positive than in recent editions; only three indicators moved in a less favorable direction: venture capital (VC) deal counts, renewable energy costs and global temperatures, while all other indicators moved in a favorable direction; four grew faster than the 10-year trend: scientific publications, VC deal values, cancer radiotherapy availability and labor productivity. Growth remained below the decade average elsewhere.

Global Innovation Tracker Dashboard

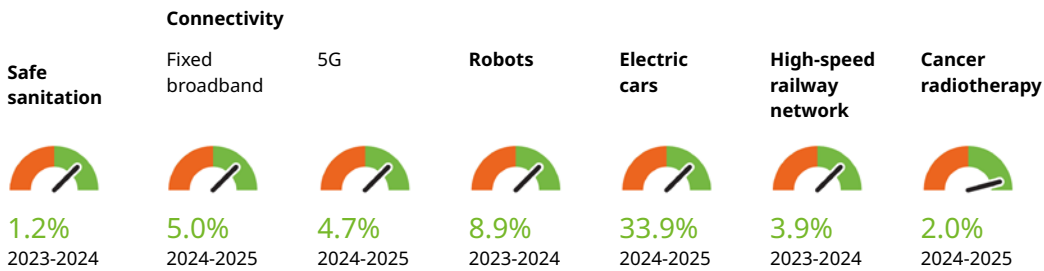
Science and innovation investment



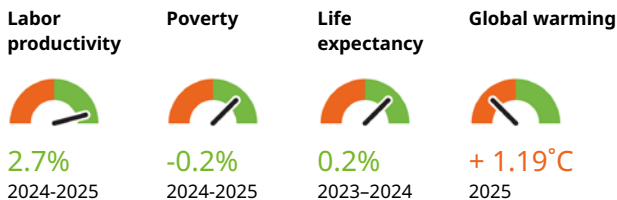
Technological progress



Technology adoption



Socioeconomic impact



Notes: For the gauges, the red (left) half denotes an unfavorable direction of change, while the green (right) half denotes a favorable direction. A pointer in the red zone indicates an unfavorable movement in the latest year. A pointer in the green zone at approximately 45° indicates a favorable movement that remains below the indicator's 10-year trend, while a pointer in the green zone at approximately 75° indicates a favorable movement that exceeds the 10-year trend.

* = Compound annual growth rate.

See the Data notes at the end of Global Innovation Tracker section for a definition of the indicators and their data sources. Historic data may have been updated and might differ from last year's Global Innovation Tracker. Values for R&D, VC deals, and the cost of genome sequencing, as well as poverty, are estimates or nowcasts. Poverty, which is expressed as a percentage, has its growth reported as a simple arithmetic change in percentage points over the indicated period.

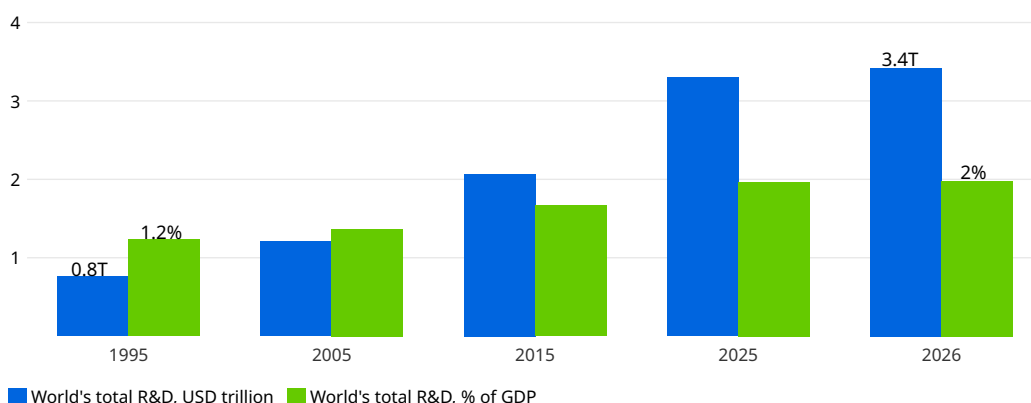
Source: Global Innovation Index Database, WIPO, 2026.

↑ **Scientific publications hit a new global record:** Global research output surpassed 2.4 million articles last year, growing 6.9 percent above its long-run trend.

↗ **Global R&D growth solid, China edges ahead of the United States:** Global R&D expenditure grew by 4.7 percent in real terms in 2024, when China's total R&D spending moved slightly ahead of the United States. The rest of the world is projected to grow by around 2 percent, with R&D capacity spreading to middle-income economies such as Egypt, Indonesia, Malaysia and Viet Nam.

Global R&D intensity is holding close to 2 percent of GDP, up from 1.2 percent three decades ago, though its rise has plateaued. Global R&D is projected to have moderated to 3.3 percent in 2025 and be 3.6 percent in 2026, above GDP growth.

Global R&D in USD trillion and as % of GDP



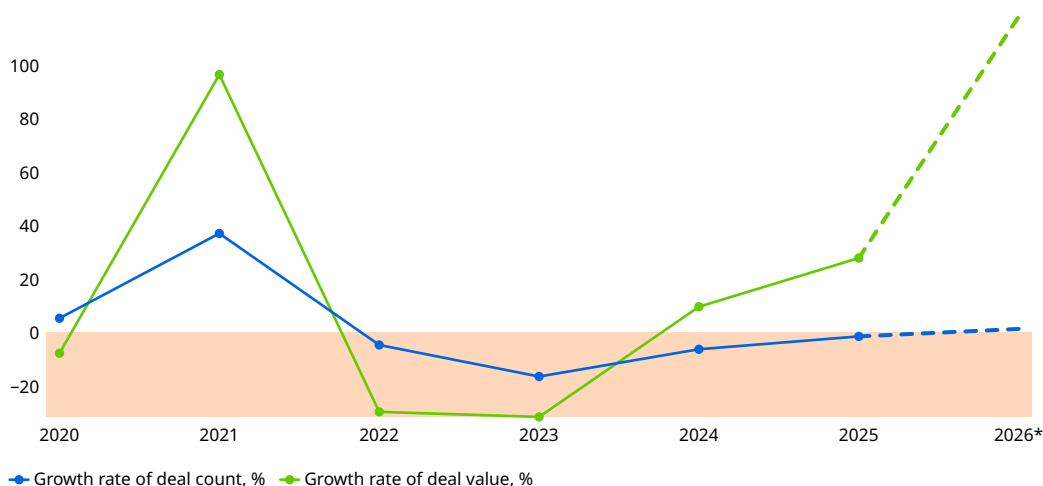
Note: Global R&D expenditure is expressed in PPP-adjusted constant 2020 prices.

Source: WIPO, based on data from Eurostat, OECD, RICYT, and UNESCO UIS.

↗ **Corporate R&D hits a record:** Corporate R&D expenditure among the world's top spenders stood at a record USD 1.5 trillion last year, growing 5.8 percent in real terms from 2024. This expansion is increasingly driven by software and artificial intelligence (AI)-intensive firms, though aerospace and defense R&D rose sharply as well.

↘ **Venture capital (VC) values recover, but activity narrows:** VC deal values increased by around 28 percent to USD 510 billion last year, the strongest annual gain since 2021. AI accounted for 53 percent of global VC deal value in 2025, surging to 77 percent in the first half of 2026. However, deal counts fell by 1.4 percent, a fourth consecutive annual decline. Still, VC is developing beyond the known hubs: African startups raised about USD 3.2 billion last year, up some 40 percent on 2024.

Growth of global VC deal count and value, %

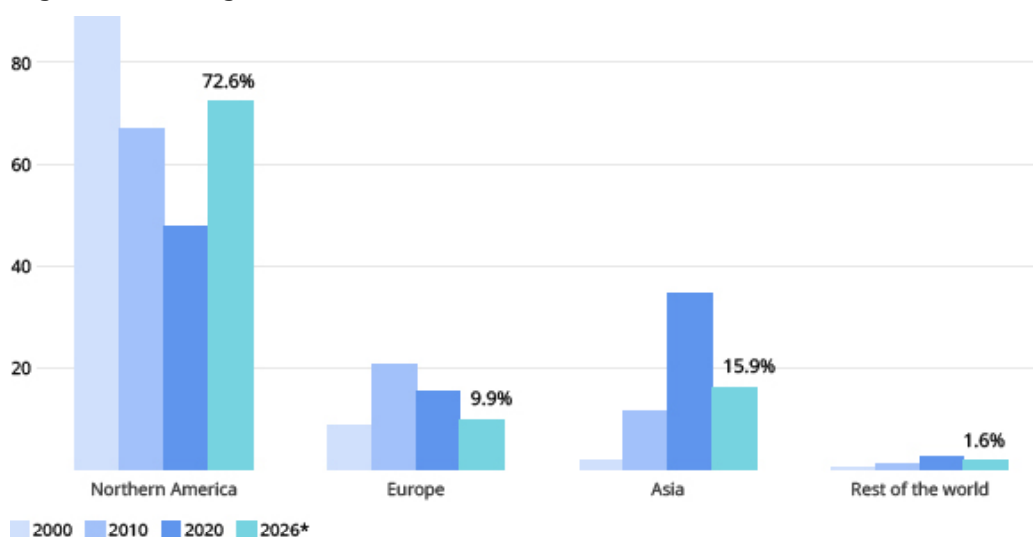


Note:

Data as of 30 June, 2026. Values for 2026 (full year) are estimated based on available data for the first two quarters of 2026.

Source: WIPO, based on data from PitchBook.

Regional shares of global VC deal value, %



Note: Data as of 20 July, 2026. Values for 2026 (full year) are estimated based on available data for the first two quarters of 2026.

Source: WIPO, based on data from PitchBook.

🔗 **International patent filings continue to expand, but below trend:** Patent applications under the Patent Cooperation Treaty (PCT) increased by 0.7 percent, a second consecutive year of moderate growth.

2. Technological progress: continued advances at a slower pace

Technology advanced on almost every front in 2025, though at a slower pace than over the past decade.

- Supercomputing efficiency and transistor counts on frontier chips both rose, though below their long-run rates.
- The average global battery price fell to a record low of USD 108 per kWh, with China lowest at USD 84, while solar and wind power costs rose for the first time since 2014.
- Genome sequencing costs fell by around 12 percent, in line with the decade trend, and drug approvals increased again, led by oncology and immunology, though below the long-run average.

3. Technology adoption: wider diffusion with uneven access

Technology adoption widened across every indicator in 2025, but each grew below its long-run trend; a sign that diffusion is slowing.

- The global EV stock reached 75 million, electric cars made up about a quarter of new car sales, and the high-speed rail network reached 67,723 km, led by China, with momentum building in the Asia-Pacific and Middle East regions.
- 5G networks now reach 55 percent of the global population, though access is uneven, and robot deployment rose around 9 percent to 4.7 million in 2024, helped by middle-income economies such as India, Mexico and Viet Nam.
- Cancer radiotherapy availability continued to improve, but coverage remains limited in low-income economies.

4. Socioeconomic impact: social gains continue, climate pressures persist

Innovation delivered welfare gains in 2025, even as climate pressures persist.

- Labor productivity rose 2.7 percent, now above its 10-year trend; a key question is whether AI-related investment will trigger wider productivity gains or stay confined to a few firms.

- The share of the global population living below USD 3 per day fell to about 10 percent, and life expectancy reached 73.5 years as the post-pandemic recovery takes hold.
- Global temperatures reached the second highest level on record, with the first half of 2026 running even warmer.

5. In a turbulent year, the innovation frontier holds: Switzerland, Sweden and the United States lead again

- Switzerland (1st, for a 16th consecutive year), Sweden (2nd) and the United States (3rd) remain the world's top three innovation economies, with the Republic of Korea (4th) and Singapore (5th) close behind. No new economy enters the top 15.
- Europe again accounts for the largest share of the top innovation economies, claiming 14 of the top 25. The Kingdom of the Netherlands moves up to 7th and Austria to 18th.
- Asia takes five places: China (10th) remains the only middle-income economy among the leaders, Japan stays 12th and Hong Kong, China rises to 14th.
- Beneath the continuity there is movement: the United Arab Emirates enters the top 25, while Canada (16th), Australia (20th) and New Zealand (24th) regain ground. Their recoveries share a pattern: mature innovation systems strengthening their academic base, university-industry links and research investment.

6. A few other economies reach key milestones including Portugal, Latvia, Kuwait and Costa Rica; Bhutan joins the GII

- Portugal (30th) reaches the top 30.
- Lithuania moves up to 32nd and Latvia enters the top 40 (40th).
- Kuwait (62nd) and Costa Rica (70th) advance into the top 70, and Bhutan enters the GII, at 74th. Its entry follows a multi-year collaboration with WIPO on improving the availability of innovation indicators.

7. Middle-income economies keep climbing, but an innovation glass ceiling is becoming more apparent

- China (10th), India (38th), Viet Nam (43rd), Türkiye (45th), the Philippines (52nd), Morocco (54th) and Indonesia (55th) have advanced most among middle-income economies since 2013. Morocco reaches its best rank ever; Viet Nam returns to its pre-pandemic level.
- The innovation outputs of these emerging economies now often exceed inputs: China ranks 5th in outputs against 22nd in inputs, India 25th against 49th and Viet Nam 35th against 54th.
- A benchmarking against high-income and middle-income medians points to selective rather than uniform convergence. Convergence has been easiest in production and exports, startup finance and intellectual property, and hardest in the knowledge base and R&D, where research capacity builds slowly. The long-term climbers have not yet reached high-income performance across the entire innovation system. China, the exception, reaches high-income levels in 21 of 25 benchmarked indicators.
- The routes differ: India climbs through digital services and venture capital, leading the world in ICT services exports; Viet Nam and the Philippines through high-tech manufacturing and trade, while still trailing in domestic invention; Türkiye through industrial design and branding; and Indonesia through its large domestic market and startup finance, on a still thin R&D base of around 0.3 percent of GDP.
- The next stage of catch-up will depend on whether these strengths can be complemented by deeper research systems, broader knowledge creation and stronger connections across the innovation ecosystem.

8. Since 2019, a newer wave of climbers has gathered pace, powered by investment, digital transformation and services

- Saudi Arabia (42nd), Qatar (47th), Mauritius (50th), Brazil (53rd), Jordan (60th) and Bahrain (64th) recorded some of the strongest advances since 2019 among the top 70.
- The Gulf economies climb through investment in digital infrastructure, finance and talent as part of state-led diversification: Saudi Arabia leads the world in ICT use, and Riyadh enters the top 100 innovation clusters; Qatar ranks 1st in tertiary inbound mobility; Bahrain 1st in ICT

access, with one of the world's best business environments; and Jordan takes a knowledge-intensive route, ranking 1st in scientific articles.

- Mauritius shows how a small economy can diversify through services, ranking 6th both in cultural and creative services exports and in VC investors.
- Brazil pairs Latin America's deepest science and R&D base with strong trademark activity and late-stage VC, anchored by São Paulo among the top-100 innovation clusters.
- The test for this second group is similar: to avoid a plateau by turning recent gains into broader, sustained innovation performance.

Innovation performance at different income levels, 2026

High-income group	Upper middle-income group	Lower middle-income group	Low-income group
Performance above expectation for level of development			
Switzerland	China	India	Rwanda
Sweden	Thailand	Viet Nam	Madagascar
United States	Brazil	Philippines	Malawi
Republic of Korea	Indonesia	Morocco	Mozambique
United Kingdom	South Africa	Jordan	Burundi
Netherlands (Kingdom of the)	Ukraine	Tunisia	
Finland	Republic of Moldova	Bhutan	
Denmark		Uzbekistan	
Germany		Senegal	
Japan		Pakistan	
France			
Hong Kong, China			
Israel			
Canada			
Estonia			
Performance in line with level of development			
Singapore	Malaysia	Egypt	Togo
Austria	Türkiye	Lebanon	Uganda
Ireland	Mauritius	Kyrgyzstan	Burkina Faso
Australia	Serbia	Cambodia	
Norway	Georgia	Sri Lanka	
Belgium	Armenia	Kenya	
New Zealand	North Macedonia	Ghana	
United Arab Emirates	Mexico	Namibia	
Iceland	Mongolia	Nepal	
Italy	Colombia	Bangladesh	
Spain	Albania	Lao People's Democratic Republic	
Cyprus	Peru	Côte d'Ivoire	
Portugal	Iran (Islamic Republic of)	Tajikistan	
Malta	Botswana	Zambia	
Lithuania	Bosnia and Herzegovina	Benin	
Czech Republic	Jamaica	United Republic of Tanzania	
Slovenia	El Salvador	Cameroon	
Hungary	Cabo Verde	Lesotho	
Bulgaria			
Poland			
Latvia			
Greece			
Chile			
All other economies			
Luxembourg	Kazakhstan	Bolivia (Plurinational State of)	Mali
Saudi Arabia	Argentina	Honduras	Democratic Republic of the Congo
Croatia	Montenegro	Nigeria	Niger
Qatar	Azerbaijan	Nicaragua	Chad
Slovakia	Belarus	Myanmar	
Romania	Dominican Republic	Mauritania	
Russian Federation	Ecuador	Zimbabwe	
Kuwait	Paraguay	Angola	
Bahrain	Algeria		
Uruguay	Guatemala		
Oman			
Costa Rica			
Panama			
Barbados			
Brunei Darussalam			
Trinidad and Tobago			

Note: The Bolivarian Republic of Venezuela and Ethiopia are not included in any income group because they are unclassified in the World Bank FY2026 income classification. The Bolivarian Republic of Venezuela is unclassified due to the unavailability of gross national income (GNI) per capita data, while Ethiopia has a temporary unclassified status.

Source: Global Innovation Index Database, WIPO, 2026.

9. Who converts inputs into outputs?

- China is the most prominent outlier with a high ratio of outputs to inputs, even compared with high-income economies.
- Several middle-income economies do more with less: Morocco ranks 76th in inputs, but 46th in outputs, with the Islamic Republic of Iran, Mexico, Tunisia, Türkiye and Viet Nam showing similar patterns, and Madagascar, Nigeria, Pakistan and Zimbabwe also producing more than their inputs would suggest.
- Qatar, Saudi Arabia and the United Arab Emirates show the reverse: strong institutional, infrastructure and investment foundations, with conversion into results the necessary next step.

10. Switzerland, China, India and Rwanda lead their income groups; momentum in Africa

- Malaysia (34th), Viet Nam (43rd), Thailand (44th) and Türkiye (45th) reinforce the growing presence of middle-income economies in the upper half of the ranking.
- In Europe, 12 economies improve, including Italy (27th) and Spain (28th); the region's central challenge, echoed in competitiveness debates, is to convert its research and industrial strengths into fast-growing firms, scaleup finance and productivity growth.
- Chile (51st) leads Latin America and the Caribbean, ahead of Brazil (53rd), Mexico (65th), Uruguay (66th) and Costa Rica (70th). Assets remain concentrated in a few economies, and research, entrepreneurship and market access are not yet connected strongly enough to form a regional engine.
- India leads Central and Southern Asia, ahead of Kazakhstan (73rd) and Bhutan (74th). The region consolidates its lead over Latin America and the Caribbean on the strength of its innovation outputs.
- Morocco leads a North African rise, pairing industrial upgrading with the business use of intangible assets, from industrial designs to trademarks and high-tech manufacturing. Tunisia builds on human capital and science, ranking 1st in science and engineering graduates; Egypt combines a large domestic market, a substantial scientific base and R&D spending above 1 percent of GDP; Algeria invests in education at among the highest rates worldwide.
- Sub-Saharan Africa shows some of the year's most encouraging momentum: Mauritius reaches the top 50; South Africa marks nine consecutive years of overperformance; Rwanda posts the strongest low-income advance, backed by strong institutions (26th); and Botswana and Kenya move up on growing use of trademarks, utility models and industrial designs, alongside a growing VC layer around selected hubs.

11. New green-field R&D and high-tech FDI indicator: investment is highly concentrated, but middle-income magnets emerge

- The GII 2026 introduces a green-field R&D and high-tech FDI indicator, based on announced investment projects. Firms announced close to 6,000 such projects in 2025, roughly one in three of all green-field projects worldwide.
- Investment is concentrated: the top 10 destinations attracted 58 percent of projects, led by the United States, India and the United Arab Emirates.
- Sixteen economies are global investment hubs, above the world average on both inflows and outflows; China and India are the middle-income economies among them. Fourteen investment magnets, 10 of them middle-income, attract far more than they invest abroad, with Mexico the strongest.

12. Twenty-one economies innovate above their level of development, led by India and Viet Nam for a 16th year

- The GII 2026 identifies 21 innovation overperformers, four more than in 2025. India and Viet Nam remain the longest-standing, at 16 consecutive years; the Republic of Moldova returns with 15 appearances; Rwanda and Ukraine count 14 each.
- Bhutan, Mozambique and Pakistan also overperform.
- Ten of the 21 are lower middle-income economies; Sub-Saharan Africa hosts the largest number (seven), and Brazil remains the only overperformer in Latin America and the Caribbean, for a sixth consecutive year.

- Thirty-nine economies perform below expectations, most in Latin America and the Caribbean.
- Pillar imbalances often mark assets rather than weaknesses: Rwanda ranks 26th in Institutions, Algeria 39th in Human capital and research and Cambodia 31st in Market sophistication, all well above their overall ranks; the task is to build channels that turn these strengths into broader performance.
- The wider lesson: innovation success depends not only on resources, but on how effectively economies connect research, firms, finance, skills, institutions and markets into a functioning ecosystem.
- The results point to four conclusions: the innovation frontier is persistent but not frozen; middle-income catch-up is real, but faces a glass ceiling that so far only China has broken; innovation momentum is spreading through distinct regional pathways; and income alone does not determine innovation performance.
- The policy implication is system coherence: the priority is not to raise inputs or target a higher rank, but to strengthen the paths through which institutions, skills, infrastructure, finance, firms and creative capabilities reinforce one another.

13. The world's top innovation clusters span six out of the seven continents, with Shenzhen–Hong Kong–Guangzhou leading globally for a second year

- Shenzhen–Hong Kong–Guangzhou (China and Hong Kong, China) again tops the GII top 100 innovation cluster ranking, followed by Tokyo–Yokohama (Japan), San Jose–San Francisco (United States), Beijing (China), and Seoul (Republic of Korea). All five top clusters held their positions from last year, underscoring the stability at the top of the ranking.

Top innovation cluster by economy or cross-border region among the top 100, 2026



Note: Squares with numbers show cluster ranks.

Map: © OpenMapTiles, © OpenStreetMap contributors <https://www.openstreetmap.org/copyright>.

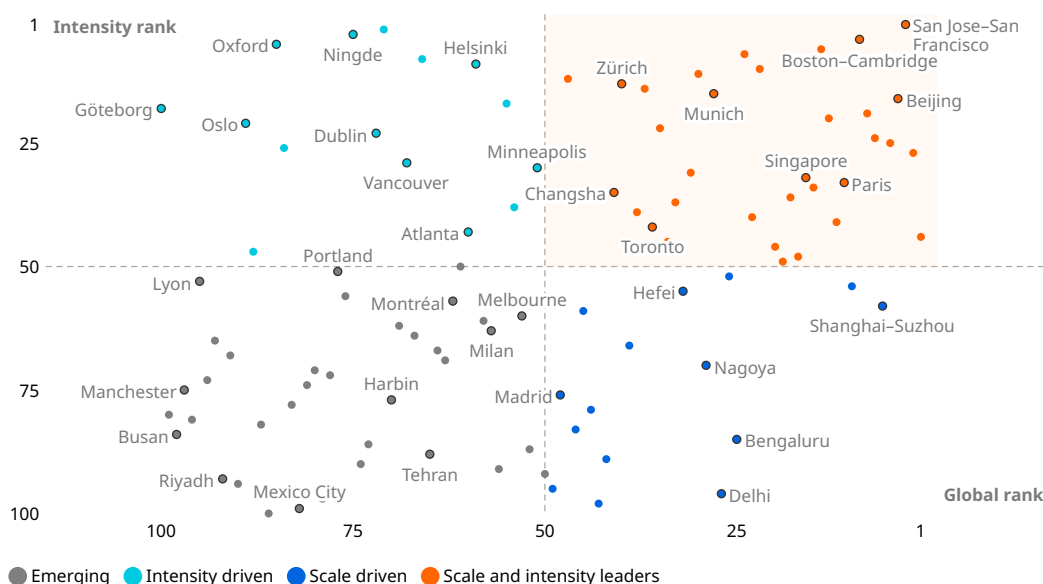
Source: Global Innovation Index Database, WIPO, 2026.

- China and the United States lead the innovation cluster count for a fourth consecutive year, with China now hosting 25 and the United States 20.
- Germany follows with seven clusters (led by Munich, 28th), then India (led by Bengaluru, 25th) and the United Kingdom (led by London, 8th) with four each.
- Beyond the clusters of China and India, São Paulo (49th, Brazil); Cairo (86th, Egypt); Tehran (65th, Islamic Republic of Iran); Kuala Lumpur (90th, Malaysia); Mexico City (82nd, Mexico); and Istanbul (56th, Türkiye) are the middle-income clusters in the top 100.
- Riyadh (92nd, Saudi Arabia) enters the top 100, while Ningde (China) records the largest rank gain, climbing 24 places (99th to 75th).

14. San Jose–San Francisco and Cambridge are the most innovation-intensive clusters, with several smaller hubs close behind

- San Jose–San Francisco (United States) and Cambridge (United Kingdom) retain the top two positions by innovation intensity relative to population. Ningde (China) rises to 3rd place, driven by Contemporary Amperex Technology Co. (CATL).
- Boston–Cambridge (United States) and Oxford (United Kingdom) round out the top five.
- Daejeon (Republic of Korea) enters the top 10 intensity ranking.
- Eindhoven (8th, Kingdom of the Netherlands) and Helsinki (9th, Finland) lead the European Union (EU) by intensity with five EU clusters ranking among the intensity top 15.
- A new comparison of scale and intensity shows that only San Jose–San Francisco and Boston–Cambridge rank in the global top 10 on both counts. Göteborg (Sweden) has the widest gap, 100th globally, but 18th by intensity; Delhi (India) the largest the other way, 27th globally, but 96th by intensity.

Scale versus intensity in the world's top 100 innovation clusters, 2026



Source: Global Innovation Index Database, WIPO, 2026.

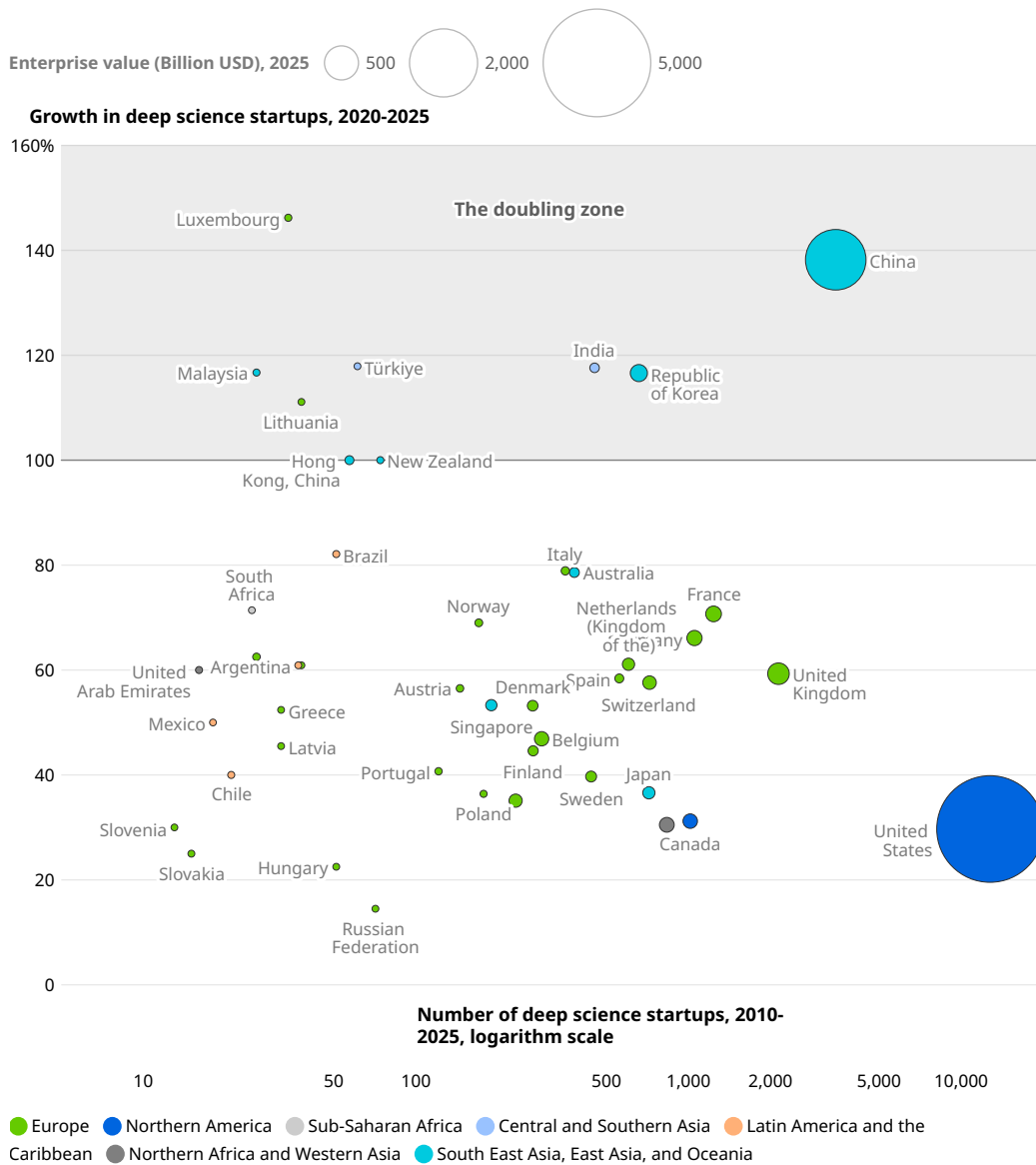
This year's special GII theme looks to the future of science-powered entrepreneurship

15. A deep science wave: more than 30,000 startups since 2000, now worth USD 7.6 trillion

- Deep science ventures span life sciences, semiconductors, robotics, space, energy and advanced materials, turning frontier research into new firms and industries.
- Drawing on the new Dealroom–WIPO Deep Science Startup Tracker – the first global mapping of deep science startups and spinouts – more than 30,000 deep science startups have been created since 2000, 9.5 times the 2010 figure representing about 16 percent compound growth a year. Their share of all venture-backed startups reached a 15-year high of 16 percent in 2025.
- The field is concentrated at the top, but broadening at the base. The United States leads, with 12,752 firms, followed by China (3,466) and the United Kingdom (2,133); yet China grew 138 percent between 2020 and 2025 against 30 percent for the United States, Estonia grew fastest of all, and Türkiye, India and Malaysia lead the middle-income group (in order of growth).
- Together these firms are worth USD 7.6 trillion, up 23 percent on 2024. Deep science attracted USD 122 billion in VC in 2025; excluding the USD 250+ million megadeals, that is 36.5 percent of global VC funding, nearly double the 2015 share, with the mix tilting from life sciences to semiconductors and robotics.

- Universities are the key source of deep science entrepreneurship: over 40 percent of energy and life sciences ventures created since 2010 spin out of academic research, and US institutions such as Harvard, MIT and Stanford are behind 15 of the top 20 spinouts.

Established leaders and rising challengers in deep science



Note: Estonia is not shown for legibility. Its growth of 313 percent between 2020 and 2025 was the fastest of any economy covered. The doubling zone represents economies that have at least doubled their number of deep science startups between 2020 and 2025.

Source: GII 2026, Dealroom-WIPO Deep Science Startup Tracker.

16. Patents anchor deep science ventures, and their use widens with maturity

- With years between invention and first sales, patents are often the only verifiable asset a venture holds when securing financing, partnerships and licensing: 50 percent of deep science startups hold patents, against 15.4 percent of other startups; the gap has widened over the last decade. Medical devices and digital health is the most patent-intensive sector.
- Patent use rises with maturity, from around 43 percent of ventures at seed stage to 69 percent at late stage; the Republic of Korea, Finland and Japan record the highest national rates. Patent leadership spans regions: East Asia's 20 holders include 19 Chinese entities, led by ChangXin Memory, with 8,311 patent families.
- Patent leadership is also emerging among middle-income economies: Malaysia's Lemonex (49 patent families) and India's Qure AI (37) lead, ahead of El Salvador's Axonne (13), Brazil's HiLab and South Africa's LIQID Medical (10 each), with Egypt's Mogassam and Kenya's Octavia Carbon topping national rankings.

The top deep science patent holders in middle-income economies, by economy, 2010–2025

17

Company	Launch year	Sector	Economy	Region	Number of patent families
ChangXin Memory Technologies	2016	Semiconductors	China	South East Asia, East Asia, and Oceania	8,311
Lemonex	2013	Life Sciences	Malaysia	South East Asia, East Asia, and Oceania	49
Qure AI	2016	Medical Devices and Digital Health	India	Central and Southern Asia	37
Axonne	2018	Semiconductors	El Salvador	Latin America and the Caribbean	13
HiLab	2015	Medical Devices and Digital Health	Brazil	Latin America and the Caribbean	10
LIQID Medical	2017	Medical Devices and Digital Health	South Africa	Sub-Saharan Africa	10
Bioeutectics	2021	Life Sciences	Argentina	Latin America and the Caribbean	7
Reglagene	2018	Life Sciences	Mexico	Latin America and the Caribbean	6
Qubitrium	2020	Semiconductors	Türkiye	Northern Africa and Western Asia	5
Bio Natural Solutions	2017	Food and Agritech	Peru	Latin America and the Caribbean	4
MBrainTrain	2012	Medical Devices and Digital Health	Serbia	Europe	4
Mogassam	2013	Transportation	Egypt	Northern Africa and Western Asia	2
IRNERO	2018	Robotics and Autonomous Systems	Georgia	Northern Africa and Western Asia	2
Neurabot	2018	Life Sciences	Indonesia	South East Asia, East Asia, and Oceania	2
Octavia Carbon	2022	Energy	Kenya	Sub-Saharan Africa	2
Baiya phytopharm	2018	Life Sciences	Thailand	South East Asia, East Asia, and Oceania	2
OsseoLabs	2022	Medical Devices and Digital Health	Thailand	South East Asia, East Asia, and Oceania	2
Cropfleet	2020	Food and Agritech	Belarus	Europe	1
Jendo Innovations	2016	Medical Devices and Digital Health	Sri Lanka	Central and Southern Asia	1
Carbominer	2020	Advanced materials and manufacturing	Ukraine	Europe	1

Note: Thailand recorded two deep science startups tied at 2 patent families each (Baiya phytopharm and OsseoLabs).
Source: GII 2026, Dealroom-WIPO Deep Science Startup Tracker.

17. Deep science takes root beyond leading hubs, but ventures stall at predictable transitions

- Deep science is taking root beyond the leading hubs, from vaccines at the Serum Institute of India and Biovac in South Africa to BioNTech's mRNA facility in Rwanda.
- Yet R&D intensity sits below 0.5 percent of GDP in many low- and middle-income economies, and finance is thin: in Latin America, 72 percent of science-intensive startups stall at seed and only 19 percent reach Series A.
- Even with record financing, ventures stall at predictable transitions: from research to investable proof-of-concept, from pilot to commercial deployment, and from working technology to profitable firm. Series B and C financing cliffs, regulatory friction, scarce talent and uncertain demand compound one another; industrialization rather than invention is now the binding constraint.

18. Policy priorities: finance the full translation stack and activate demand

- Policy can raise the odds by financing the full translation stack and activating demand. Between research grants and private capital, ecosystems need proof-of-concept funding, pilot and demonstration facilities and later-stage patient capital, deployed through blended instruments such as matching funds, guarantees and first-loss tranches.
- On the demand side, government procurement built on functional requirements, offtake commitments and anchor-customer programs turn breakthroughs into financeable projects. Equally important are the institutions around the science: professionalized technology transfer; shared labs, testbeds and certification pathways; regulatory sandboxes extended beyond fintech; and an intellectual property (IP) architecture of affordable filing, patent pools and IP-backed finance.
- Translation talent completes the stack, including startup-leave provisions such as Tunisia's Startup Act, under which employees can take up to two years leave to build a venture with a guaranteed right to return.
- Policy should start from a diagnosis of where ventures stall and measure downstream outcomes such as follow-on investment, not program counts.

To conclude, the GII 2026 Special theme shows that the deep science wave is real and global, but its payoff is not assured: turning pilots into pipelines requires finance across stages, shared infrastructure, workable IP frameworks and translation talent.

GII 2026 results
The GII unveils the
world's innovation
leaders and measures
the performance of
139 economies.

This chapter presents the main findings from the Global Innovation Index (GII) 2026, highlighting top-performing economies across different income groups and world regions. It identifies innovation leaders and innovation overperformers achieving results beyond expectations for their development level.

The GII 2026 rankings primarily reflect data from 2024 to 2026 (representing over 80 percent of all data points). Appendix I provides comprehensive guidance on how to interpret the results properly, explaining the methodological considerations that affect direct comparisons being made between annual rankings.

Who leads global innovation in 2026?

Switzerland, Sweden and the United States remain the world's top three innovation economies. Despite global economic and geopolitical turbulence, the top 25 at the innovation frontier remains persistent, but not frozen

Switzerland – ranked 1st for a 16th consecutive year – Sweden and the United States remain the world's top three innovation economies. In a period of major geopolitical and economic turbulence, the most striking feature about the top of the ranking is its stability. The leading economies are broadly those of 2025. No new economy enters the top 15, and Europe again accounts for the largest share of the leading group – with 14 economies out of 25 innovation leaders, and the Kingdom of the Netherlands moving up to 7th and Austria to 18th. The main signal at the innovation frontier this year is continuity, rather than the emergence of any single new entrant.

Asia is also firmly embedded among the top ranks, with five economies in the top 25. The Republic of Korea and Singapore consolidate 4th and 5th place respectively, China remains 10th – as the only middle-income economy among the innovation leaders, Japan holds 12th and Hong Kong, China climbs to 14th (Figure 1). This Asian presence is now an established feature of the top ranks, rather than a development unique to this year.

The **Republic of Korea** model is built around exceptional corporate research and technological development: it ranks 1st in business-performed R&D, researchers employed by business and PCT patents by inventor origin, and 2nd in overall R&D expenditure. Seoul's rise to 4th among the world's top innovation clusters reinforces this picture. **Singapore** continues to provide the strongest overall environment for innovation inputs (1st). **China's** sustained position within the top 10 remains the clearest long-term structural shift.

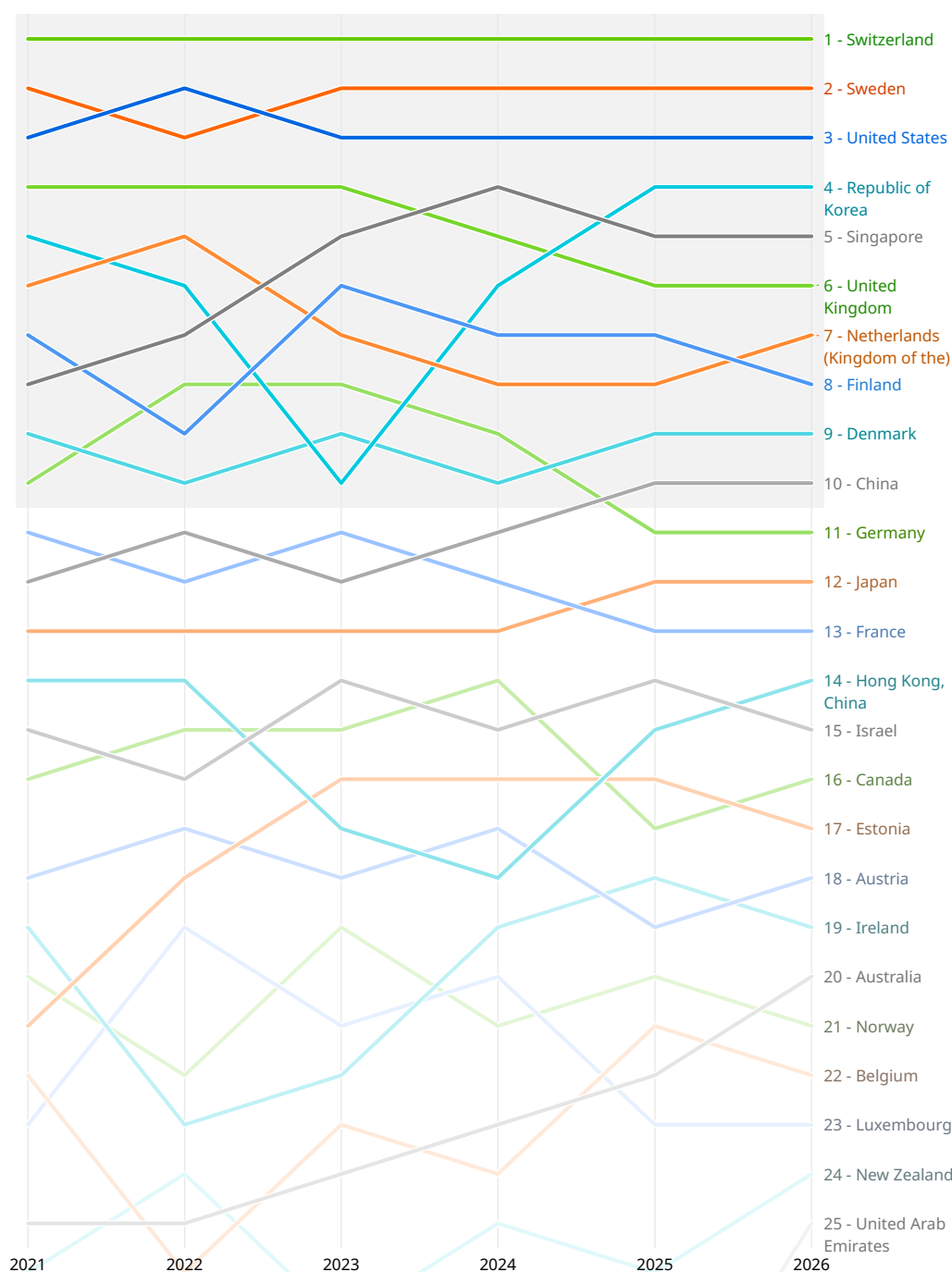
Japan's continued presence at 12th reflects the strength of its industrial and corporate innovation, which is among the strongest in the world. Japan ranks 1st in production and export complexity, 3rd in patent families and 3rd in business-performed R&D. Tokyo-Yokohama remains the world's second-ranked top innovation cluster, reflecting the global weight of Japan's patenting, research and venture capital activity.

Estonia (17th) remains one of the most consistent long-term upward performers in the Index. Its model continues to rest on digital adoption and scalable intangible activity: Estonia ranks 2nd in ICT use, 3rd in ICT services imports, 6th in ICT services exports and 1st in unicorn valuation.

Beneath the continuity, there is still movement: Australia, Canada and New Zealand regain ground

Beneath the continuity at the top of the GII, Canada (16th), Australia (20th) and New Zealand (24th) move back up the ranking, returning closer to their pre-pandemic positions. Their respective recoveries follow a similar pattern: each is a mature innovation system regaining ground through strengthening its academic system, improving the links between universities and firms, and rebuilding research investment. In **Canada**, the rebound is supported by R&D expenditure equaling around 1.8 percent of GDP in 2025, and growing corporate R&D spending (18th).

Figure 1 The GII innovation leaders, 2021–2026



Note: Changes to methodology and variations in data availability may affect year-to-year comparisons of GII rankings. The GII model undergoes periodic refinements, which need to be taken into consideration when interpreting longitudinal performance trends.

Source: Global Innovation Index Database, WIPO, 2026.

Australia returns to the top 20, with innovation inputs rising to 13th and outputs to 24th. Progress is supported by world class universities (4th), a stronger university–industry R&D collaboration (6th) and a big improvement in cluster development (5th), alongside further integration into international knowledge flows through corporate R&D investors (15th), and intellectual property payments (12th) and receipts (16th). Production and export complexity has also improved (72nd) – even if at a lower level.

New Zealand's rise to 24th is driven by a broad strengthening of innovation inputs (17th), with Institutions reaching 3rd and government effectiveness 5th. Gains in tertiary education (21st), science and engineering graduates (51st), ecological sustainability (30th) and global corporate R&D investors (30th) serve to reinforce this improvement.

Box 1 How to use the Global Innovation Index for better innovation metrics and policy

Over time, the GII has grown from a benchmarking exercise into a working tool for innovation policy. In WIPO's 2025–2026 survey, 78 percent of responding member states (93 of 120) reported using the GII, most often to improve innovation ecosystems and policy (63 percent), strengthen innovation data (53 percent) or as a reference when formulating economic plans and policies (41 percent).

Uptake is broad among WIPO member states. Reported use is highest among member states in Asia and the Pacific (85 percent), followed by transition and developed countries (80 percent), Latin America and the Caribbean and Africa (both 74 percent) and the Arab countries (69 percent). By income level, reported use is highest among lower middle-income economies (89 percent).

To support this engagement, the WIPO GII team organizes up to 80 national and regional events every year and helps governments to set up interministerial task forces.

The GII encourages evidence-based policymaking through a two-step approach:

- **Assessment:** bring together policymakers, statisticians and innovation actors to analyze national innovation performance.
- **Response:** identify strengths and weaknesses, then designs policy measures coordinated with public and private actors.

Key implementation practices

There are four key practices essential to innovation policy implementation:

- **Policy integration:** embed innovation and intellectual property (IP) in national economic development strategy frameworks and set up interministerial task forces that adopt a whole-of-government approach and report to senior leadership.
- **Stakeholder engagement:** consult widely with startups, universities, large companies, IP stakeholders and innovation clusters, and align national IP policy with the broader innovation strategy.
- **Measurable outcomes:** set clear, quantifiable targets so that progress can be tracked and policies adjusted.
- **Realistic targets:** aim for steady improvement in the system rather than quick movements in the ranking and allow time for policy effects to show.

The [GII Innovation Ecosystems & Data Explorer 2026](#) allows users to generate economy briefs and profiles and make country comparisons; follow the time series behind each indicator; and explore micro-data on intangible assets, top universities and leading brands. Recent editions have added cluster and regional briefs, such as for the Association of Southeast Asian Nations (ASEAN), or least developed countries (LDCs); and the underlying datasets, including Innovation Tracker data, are available to download.

WIPO also works with those economies interested in joining the GII. On request, the GII team produces a monitoring dashboard that shows a prospective member where its data is either missing or outdated and how many indicators, and which ones, it would need to supply in order to qualify. After a careful prioritization of such gaps, WIPO connects the country in question with the relevant data providers. This approach works best when the country in question stays actively engaged throughout the process. Bhutan joins the GII in 2026, having followed a dedicated process of this kind.

Expanding use at the sub-national level

The GII also supports better innovation measurement and policy at the sub-national level, whether it be regional, provincial or city. The GII innovation cluster ranking serves to identify those geographical areas worldwide that have the highest density of inventors, scientific authors and venture capital deals. The WIPO Toolkit [Enabling Innovation Measurement at](#)

the Sub-National Level helps those member states that want to build their own sub-national metrics or indices. It sets out what GII indicators work at the sub-national level, reviews existing indices in Brazil, China, Colombia, the European Union, India and Viet Nam, and points to new sources of big data suited to measuring innovation locally.

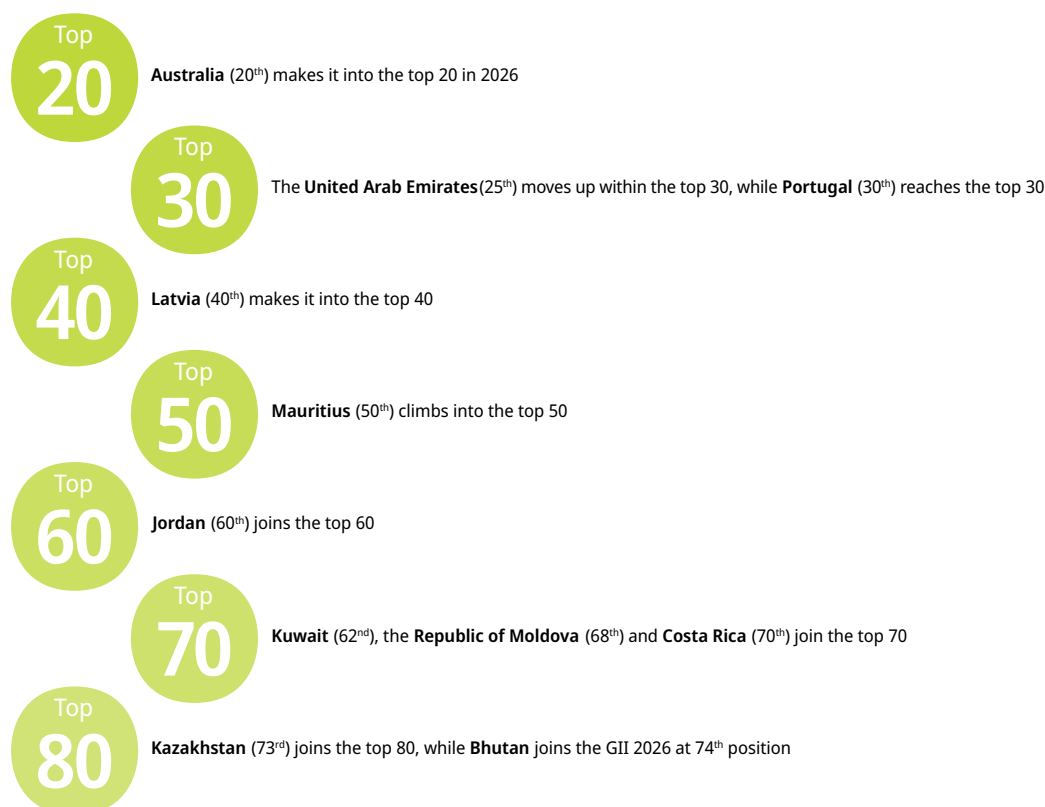
Innovating innovation metrics

To advance the measurement of innovation, WIPO runs the GII iLens Innovation Data Lab, launched in 2024. Its 2025 and 2026 workshops examined venture capital and private equity metrics, startups and high-growth firms, deep science such as genome sequencing, the limits of AI-related data, and the measurement of industrialization and investment. Drawing on new data sources and methods, including web scraping and geospatial analysis, the Lab's findings feed into future GII editions and widen the set of tools available for innovation measurement.

Several economies reach new ranking milestones in 2026

Several economies cross important ranking thresholds in 2026 (Figure 2). At the upper end, **Portugal** (30th) reaches the top 30, thanks to an ecosystem that combines domestic industry diversification (1st), scientific production – with scientific and technical articles ranked 11th, researchers (12th), business-financed R&D (16th) and finance for startups and scaleups (19th). Two Baltic economies have moved up. **Lithuania** moves further up within the top 40, to 32nd, while **Latvia** enters the top 40 at 40th place.

Figure 2 Economies soaring to new heights in innovation, 2026



Note: Year-on-year comparisons of GII rankings must take into account the changes to the GII model that have occurred overtime, as well as data availability.

Source: Global Innovation Index Database, WIPO, 2026.

Further down the ranking, **Kuwait** advances into the top 70 at 62nd. Its progress builds on its enabling conditions, particularly ICT access (4th) and ICT use (3rd), alongside strengthening financing and investment indicators. The **Republic of Moldova** rises to 68th, combining more limited innovation inputs (94th) with comparatively strong, digitally enabled outputs (51st).

Costa Rica (70th) also enters the top 70. Its position reflects an internationalized, service-oriented ecosystem, supported by green-field R&D and high-tech FDI (1st) – showing its attractiveness as a location for innovation-intensive investment, ICT services exports (14th) and its productivity growth (17th).

Within the top 80, **Kazakhstan** rises to 73rd, the biggest advance in Central and Southern Asia. Close behind, **Bhutan** enters the GII for the first time at 74th place.

Switzerland, China, India and Rwanda are income group leaders; Thailand ramps up among upper middle-income economies; while Kazakhstan, Bhutan and Saudi Arabia reach the top of their regions

Beyond charting movement among the innovation leaders, the GII 2026 records notable shifts across income groups and world regions. Switzerland, China, India and Rwanda are leaders of their respective income groups (Table 1).

China remains the highest-ranked middle-income economy at 10th and the only such economy in the top 30. Malaysia (34th) and India (38th) remain in the top 40, while Viet Nam (43rd), Thailand (44th), Türkiye (45th), the Philippines (52nd), Morocco (54th) and Indonesia (55th) reinforce the growing presence of middle-income economies in the upper half of the rankings.

Table 1 Top 10 economies by income group

Income group rank	High-income economies (54 in total)	Income group rank	Upper middle-income economies (35 in total)
1	Switzerland (1)	1	China (10)
2	Sweden (2)	2	Malaysia (34)
3	United States of America (3)	3	Thailand (44)
4	Republic of Korea (4)	4	Türkiye (45)
5	Singapore (5)	5	Mauritius (50)
6	United Kingdom (6)	6	Brazil (53)
7	Netherlands (Kingdom of the) (7)	7	Indonesia (55)
8	Finland (8)	8	Serbia (56)
9	Denmark (9)	9	Georgia (57)
10	Germany (11)	10	Armenia (59)
Income group rank	Lower middle-income economies (36 in total)	Income group rank	Low-income economies (12 in total)
1	India (38)	1	Rwanda (96)
2	Viet Nam (43)	2	Madagascar (113)
3	Philippines (52)	3	Togo (122)
4	Morocco (54)	4	Uganda (123)
5	Jordan (60)	5	Malawi (126)
6	Tunisia (71)	6	Mozambique (129)
7	Bhutan (74)	7	Burkina Faso (130)
8	Uzbekistan (77)	8	Mali (134)
9	Egypt (83)	9	Burundi (135)
10	Lebanon (86)	10	Democratic Republic of the Congo (137)

Note: The Bolivarian Republic of Venezuela and Ethiopia are not included in any income group, because they are unclassified in the World Bank FY2026 income classification. The Bolivarian Republic of Venezuela is unclassified due to the unavailability of gross national income (GNI) per capita data, while Ethiopia has a temporary unclassified status.

Source: Global Innovation Index Database, WIPO, 2026.

Among low-income economies, Rwanda records the strongest advance, rising to 96th, followed by Madagascar, which moves up to 113th place.

Northern Africa and Western Asia also sees important upward movement, with Saudi Arabia (42nd) reaching fourth place in the region. Among others, Tunisia moves up to 71st, Egypt to 83rd, Azerbaijan rises to 85th, Lebanon to 86th and Algeria to 111th. In South East Asia, East Asia and Oceania, Viet Nam rises to 43rd, Thailand to 44th, Mongolia moves up to 72nd and Cambodia to 93rd. Central and Southern Asia strengthens its position through gains across several economies. India remains the regional leader at 38th, Kazakhstan (73rd) moves up to take 2nd position, followed by Bhutan (74th). Kyrgyzstan and Pakistan each gain four places, moving up to 92nd and 95th respectively. Nepal climbs to 104th place and Bangladesh to 105th.

Latin America and the Caribbean is led by Chile (51st), Brazil (53rd), Mexico (65th), Uruguay (66th) and Costa Rica (70th). Ecuador (106th) and Trinidad and Tobago (107th) each advance seven places, while Honduras (116th), Guatemala (120th), Nicaragua (124th) and the Bolivarian Republic of Venezuela (127th) also rise. Sub-Saharan Africa records some of the largest individual advances. Mauritius leads the region at 50th, followed by South Africa (63rd), Botswana (82nd) and Senegal (90th). Kenya rises five places to 97th place.

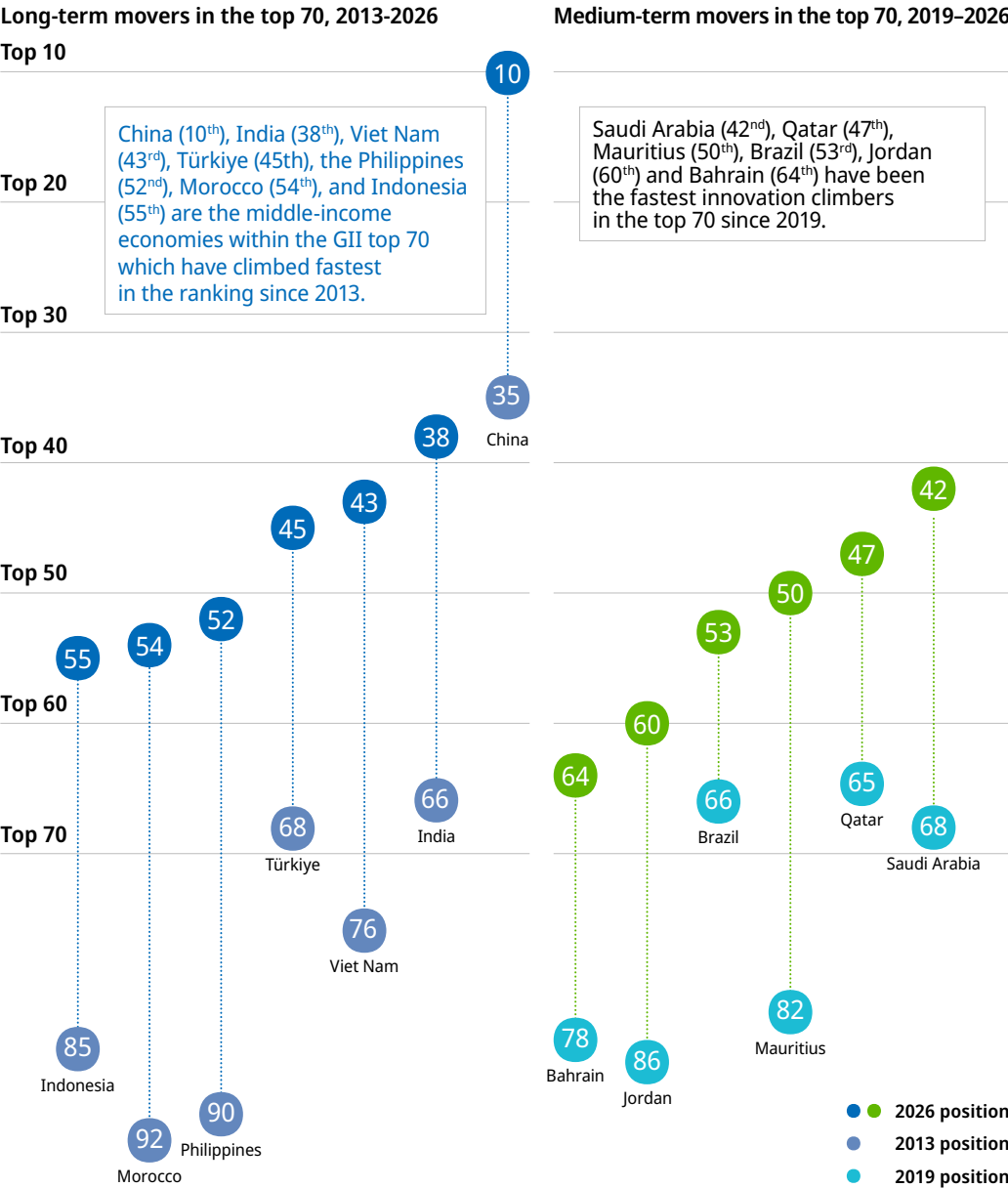
Who is gaining momentum? And who are the innovation climbers in 2026?

A group of middle-income economies has climbed the upper half of the GII as far as the top 40, but the road ahead gets steeper

China (10th), India (38th), Viet Nam (43rd), Türkiye (45th), the Philippines (52nd), Morocco (54th) and Indonesia (55th) are those middle-income economies within the GII top 70 that have made the strongest long-term advances since 2013 (Figure 3). Their progress has followed different routes, but they share one feature: they have built firms, sectors and production networks able to turn selected strengths into innovation results. In several cases, innovation outputs now exceed the level suggested by innovation inputs. China ranks 5th in outputs compared with 22nd in inputs, India 25th and 49th, Viet Nam 35th and 54th, the Philippines 49th and 69th and Morocco 46th and 76th. Their rise has therefore depended not only on an expansion of innovation resources, but also on connecting domestic capabilities to markets – through global value chains, high-tech trade, digital services, design, branding, intellectual property and startup activity. But while this helps explain their progress, it also points toward the next barrier: climbing beyond the top 40 or top 50 requires a broader research capacity, stronger business R&D, deeper science–industry linkages and more domestic knowledge creation.

A benchmarking exercise against high- and middle-income medians shows where the catch-up is strongest (Box 2). The seven middle-income climbers have moved closest to high-income economies in those indicators related to production and exports, and to a lesser extent to those related to startup support and access to finance. Convergence is weaker in the slower-building parts of the innovation system: R&D, the research and academic infrastructure, scientific production and impact and its connectivity with the private sector. This is the effective ceiling for most middle-income climbers. China is the exception. It reaches high-income levels across most areas, including R&D expenditure levels, business R&D, high-tech manufacturing and intellectual property use, which helps explain why it alone has entered the top 10.

Figure 3 Economies climbing the global innovation ladder, since 2013 and since 2019



Note: Changes in methodology and variations in data availability may affect year-to-year comparisons of GII rankings. The GII model undergoes periodic refinements, which should be considered when interpreting longitudinal performance trends.

Source: Global Innovation Index Database, WIPO, 2026.

For most other middle-income climbers, moving beyond the top 40 or top 50 requires more than strong performance in global production networks, exports and intellectual property use. Morocco and Viet Nam remain among the more dynamic recent stories, with Viet Nam bouncing back to pre-pandemic levels and Morocco climbing to its best rank ever at 54th. India and the Philippines have made important jumps and are now hovering at around the top 40 or top 50. Indonesia has stabilized at around 55th in the last three years, whereas Türkiye has declined in the past two years. What still holds most of these economies back is the depth and breadth of the innovation system: research capacity, university quality, scientific production, business R&D, patenting and science-industry linkages are not yet strong enough across the board.

Box 2 Narrowing the gap: middle-income innovation pathways

The seven long-term middle-income innovation climbers identified in Figure 3 – China (10th), India (38th), Viet Nam (43rd), Türkiye (45th), the Philippines (52nd), Morocco (54th) and Indonesia (55th) – have moved closer to high-income innovation performance, but have done so unevenly.

To examine where convergence is taking place, this box compares their performance across 25 indicators grouped into five areas: knowledge base, R&D, startup and finance ecosystem, production and exports, and intellectual property. Each indicator is classified as Higher, Medium or Lower, depending on whether the economy reaches the high-income median, lies between the middle- and high-income medians, or falls below the middle-income median (Box Table 2.1).

Box Table 2.1 Narrowing the gap? Innovation performance of the long-term middle-income climbers

Indicator	China	India	Türkiye	Viet Nam	Philippines	Indonesia	Morocco
Knowledge base (can the economies generate scientific knowledge?)							
IN 2.3.4 – QS university ranking	Higher	Higher	Medium	Medium	Medium	Higher	Medium
IN 5.2.3 – University industry and international engagement	Higher	Medium	Higher	Medium	Lower	Medium	Medium
OUT 6.1.4 – Scientific and technical articles	Higher	Lower	Medium	Lower	Lower	Lower	Medium
OUT 6.1.5 – Citable documents H-index	Higher	Higher	Medium	Medium	Medium	Medium	Medium
R&D (are these economies significant players in the R&D space?)							
IN 2.3.1 – Researchers	Medium	Lower	Medium	Medium	Lower	Lower	Medium
IN 2.3.2 – Gross expenditure on R&D	Higher	Medium	Medium	Medium	Medium	Medium	–
IN 2.3.3 – Global corporate R&D investors	Higher	Higher	Medium	Medium	Medium	Medium	Medium
IN 5.1.4 – GERD performed by business	Higher	Medium	Higher	Medium	Medium	Lower	–
IN 5.3.6 – Research talent	Higher	Medium	Higher	Medium	Medium	Lower	Lower
Startup and finance ecosystem (do these economies have innovation finance and start-up policies?)							
IN 1.3.2 – Entrepreneurship policies and culture	Higher	Higher	Lower	Higher	–	Higher	Lower
IN 4.1.1 – Finance for startups and scaleups	Higher	Higher	Medium	Medium	–	Higher	Lower
IN 4.2.2 – Venture capital (VC) received	Medium	Medium	Medium	Medium	Lower	Lower	Medium
IN 4.2.3 – Late-stage VC deal count	Higher	Higher	Higher	Medium	Medium	Higher	Lower
OUT 6.2.2 – Unicorn valuation	Higher	Higher	Medium	Higher	Higher	Higher	Medium

Box Table 2.1 Narrowing the gap? Innovation performance of the long-term middle-income climbers (cont.)

Indicator	China	India	Türkiye	Viet Nam	Philippines	Indonesia	Morocco
Production and exports (can production reach global markets?)							
IN 5.3.5 – Green-field R&D & high-tech FDI	Lower	Medium	Medium	Medium	Medium	Lower	Medium
OUT 6.2.4 – High-tech manufacturing	Higher	Higher	Medium	Higher	Higher	Medium	Higher
OUT 6.3.3 – High-tech exports	Higher	Medium	Medium	Higher	Higher	Medium	Medium
OUT 6.3.4 – ICT services exports	Medium	Higher	Medium	Lower	Higher	Medium	Higher
OUT 6.3.2 – Production and export complexity	Higher	Medium	Medium	Medium	Medium	Medium	Lower
Intellectual property (can ideas be turned into protected assets?)							
OUT 6.1.1 – Patents by origin	Higher	Higher	Higher	Medium	Medium	Medium	Medium
OUT 6.1.2 – PCT patents by inventor origin	Higher	Medium	Medium	Lower	Lower	Lower	Medium
OUT 7.1.1 – Intangible asset intensity, top 15	Higher	Higher	Medium	Medium	Medium	Higher	Higher
OUT 7.1.2 – Trademarks by origin	Higher	Medium	Higher	Higher	Medium	Lower	Higher
OUT 7.1.4 – Industrial designs by origin	Higher	Higher	Higher	Medium	Medium	Medium	Higher
OUT 7.1.3 – Global brand value, top 5,000	Higher	Higher	Medium	Higher	Higher	Medium	Medium

Note: Thresholds are computed separately for each indicator using GII 2026 data. An economy is classified as *Higher* if its value for that indicator is at or above the high-income economies' median; *Medium* if it falls below that but is at or above the median of middle-income economies; and *Lower* if it falls below the middle-income economies' median. "–" indicates no data are available.

Source: WIPO, Global Innovation Index 2026.

The comparison points to **selective rather than uniform convergence**. Except for China, the long-term climbers have not yet reached high-income performance across the entire innovation system. Instead, each has developed a distinct combination of capabilities that has supported its rise in the ranking. The next stage of catch-up will depend on whether these strengths can be complemented by deeper research systems, broader knowledge creation and stronger connections across the innovation ecosystem.

Three points stand out. First, convergence has been easiest in respect to startup finance, production and exports, and intellectual property, and hardest in the knowledge base and R&D, where deep research capacity builds slowly and where most climbers remain within the medium range. This is the effective ceiling for middle-income catch-up. Second, China is the exception that defines the rule. It has broken through by building that research base, reaching high-income levels in 21 of 25 indicators, while the others have not. Third, the position of the remaining climbers is not uniform. India holds the second-broadest profile, but remains thin in respect to researchers and scientific articles; Viet Nam and the Philippines lead in production and trade, yet trail in domestic invention; and several have advanced faster on production and exports and IP measures than on the research foundations needed to sustain that progress. Whether these economies keep rising or plateau will depend on whether they can complement their market strengths with the slower-building research systems that China has built to reach the top of the rankings.

Unlike **China**, which is discussed at length in Box 2, **India's** pathway is more strongly shaped by digital services, venture capital and entrepreneurship. It has one of the broadest profiles among the seven middle-income climbers (Box 2). It leads globally in ICT services exports (1st), ranks 4th in late-stage venture capital deals and performs strongly in intangible asset intensity (13th). These capabilities have helped India reach 15th in Knowledge and technology outputs, although further progress will depend on spreading research, technology adoption and firm-level innovation beyond its leading digital and startup sectors.

Viet Nam and the **Philippines** have advanced through integration into international manufacturing and service networks. Both reach high-income levels in high-tech manufacturing and high-tech exports, as well as in indicators linked to unicorn valuation and global brands. Viet Nam leads in both high-tech exports and creative goods exports and ranks 3rd in high-tech imports, while the Philippines ranks 4th in high-tech exports, 6th in high-tech imports and 23rd in high-tech manufacturing. Their next step is to move into higher-value functions within those networks by expanding domestic research, patenting and knowledge creation. Both remain below the middle-income median in terms of scientific articles and PCT patenting, suggesting that their international production strengths still exceed their domestic knowledge-generation and invention capabilities.

Türkiye follows a more industrial and intangible asset-intensive route. Türkiye is particularly strong in R&D and intellectual property. Domestic industry diversification (5th), industrial designs (6th), trademarks (7th) and Creative outputs (28th) indicate strong capabilities in manufacturing, design and branding. Research talent (8th) and tertiary enrolment (9th) provide an additional foundation for moving toward more technology-intensive production and productivity growth. But its strengths may benefit from sustained improvements across the wider enabling environment, including education (77th), tertiary education (58th), the regulatory environment (102nd) and the business environment (103rd).

Indonesia has advanced through its large domestic market (7th), expanding digital economy and increasingly active startup-finance environment – with finance for startups and scaleups ranked 12th and late-stage venture capital at 26th – both comparable to high-income economy levels. However, its R&D base remains comparatively thin. Indonesia's R&D expenditures as a percentage of GDP were equal to only 0.3 percent of GDP in 2020 – the latest available data point; R&D performed by business was only 0.02 percent of GDP; and researchers working in the private sector, only represented 4.4 percent of all researchers. The next phase of its development will depend on strengthening research capacity and the connections between universities, startups and established firms.

Since 2019, and beyond the longer-term innovation climbers, a newer group has gained momentum, often through investment, digital transformation and services

Since 2019, Saudi Arabia (42nd), Qatar (47th), Mauritius (50th), Brazil (53rd), Jordan (60th) and Bahrain (64th) have recorded some of the strongest sustained advances among economies now ranked within the GII top 70.

Much of the momentum in Western Asia Gulf economies has been innovation input-led. **Saudi Arabia's** rise is supported by rapid digital adoption, reflected in its global leadership in ICT use (1st), and its government online services (4th). Its innovation geography is also becoming more visible: Riyadh enters the world's top 100 innovation clusters at 92nd place in 2026, showing a growing concentration of science, technology and venture capital activity. **Qatar's** strength is more based on its talent and robust Infrastructure (16th), leading in tertiary inbound mobility (1st). **Jordan** reaches the top 60 through a more knowledge-intensive route, excelling in scientific production – ranking 1st in scientific and technical articles, and showing exceptional performance relative to the overall scale of its system. **Bahrain's** progress similarly reflects an enabling environment built around digital connectivity – ranking 1st in ICT access, 10th in ICT use, and with additional strengths in government online service (23rd) and computer software spending (23rd). In addition, its general infrastructure (2nd), and its business environment (6th) are among the world's best.

Beyond Western Asia Gulf economies, **Mauritius's** rise to 50th place reflects the relative success of a small economy that has used services, digital connectivity and investment to diversify its innovation paths. Mauritius has built a competitive services platform around ICTs, financial and professional services, creative exports and digitally enabled business activity. This helps explain why Mauritius performs strongly in cultural and creative services exports (6th), ICT use (25th), venture capital investors (6th), market capitalization (25th) and green-field R&D and high-tech FDI (23rd). The next step is to move further up the value chain, from outsourced and back-office services toward higher-value digital products, data services, fintech, software, and creative industries for African and global markets.

Brazil holds up this year thanks to a combination of having a large domestic market (8th), as well as strengths in science, entrepreneurship and intangible assets ahead of other Latin American economies. Its strong trademark activity (8th), intellectual property payments (13th), late-stage venture capital (16th), corporate R&D investors (23rd) and utility models (24th) support an ecosystem that has strengths in science and business activity. São Paulo's continuing presence among the leading global innovation clusters – ranked 49th – in 2026, reinforces Brazil's role as Latin America's main research, technology and startup hub. Brazil's challenge continues to be to turn these strengths into broader productivity gains (labor productivity growth remains low – at rank 94th), strengthen R&D performed by the private sector (36th) and improve its business environment (129th) and the availability of human capital in support of innovation (e.g., graduates in science and engineering, ranked 101st) – particularly beyond São Paulo and other major hubs.

Which economies do more with less?

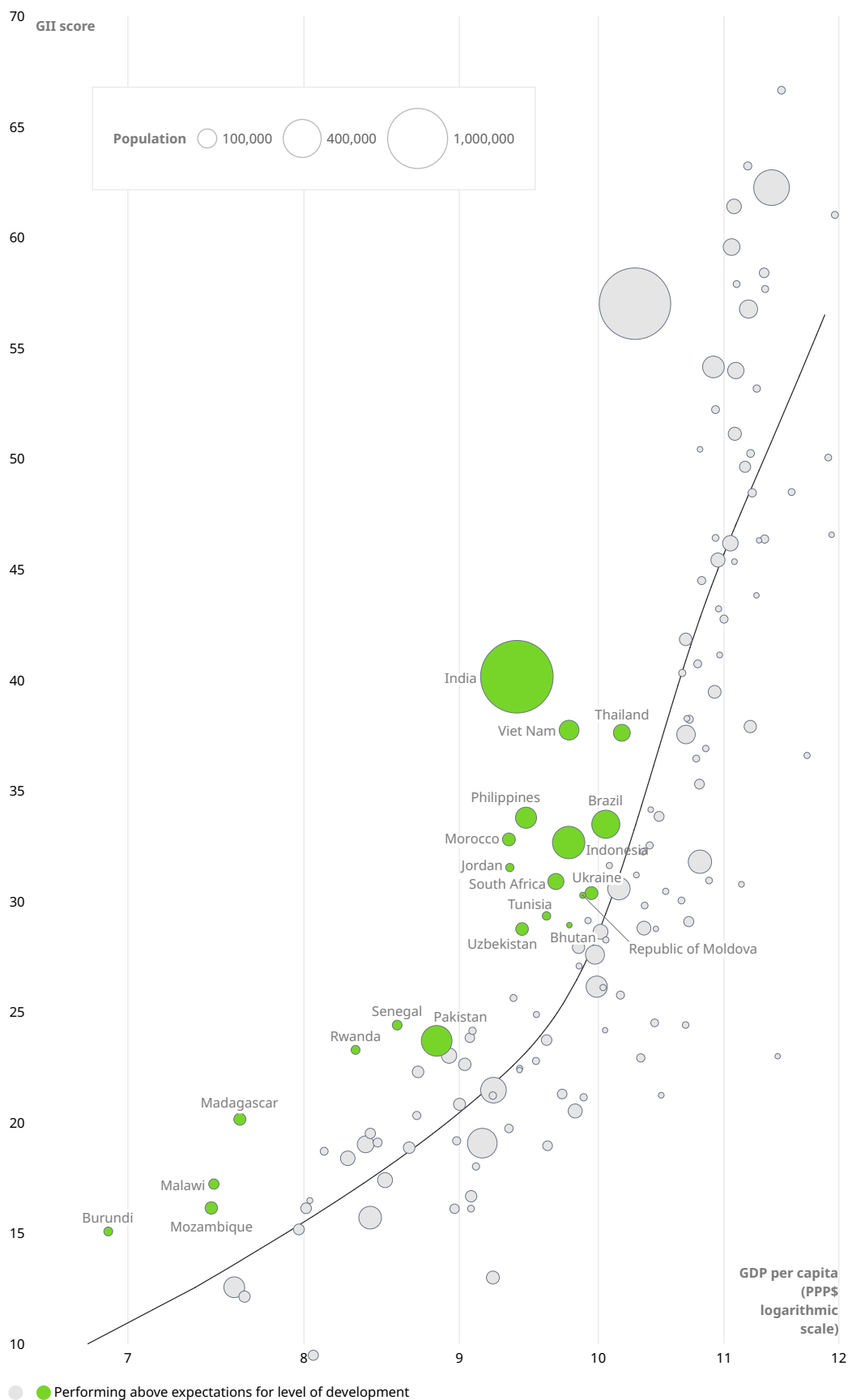
India and Viet Nam are the longest-standing overperformers. Mozambique, Pakistan and the Republic of Moldova return to the group in 2026, and Bhutan is an overperformer in its first year

Innovation overperformance shows that innovation does not follow a straight line from income to results. The GII 2026 identifies 21 economies that perform above expectations for their level of economic development, four more than in 2025 (Figure 4). India and Viet Nam remain the longest-standing innovation overperformers, having sustained this status for 16 consecutive years. The Republic of Moldova follows with 15 appearances, returning to the group in 2026, while Rwanda and Ukraine have each overperformed in 14 editions. Thailand has done so 12 times, followed by Malawi at 11 times and Jordan, Madagascar and Mozambique at 10 each. Mozambique and Pakistan also return to the group this year, while Bhutan joins for the first time. This year, 10 of the 21 overperformers ramp up their rankings – namely, Jordan, Madagascar, Morocco, Pakistan, the Republic of Moldova, Rwanda, Thailand, Tunisia, Uzbekistan and Viet Nam.

Overperformance is concentrated among middle-income economies: 10 of the 21 are lower middle-income economies, six are upper middle-income and five are low-income. Sub-Saharan Africa accounts for the largest number, with seven economies, followed by Central and Southern Asia and South East Asia, East Asia and Oceania, with four each. Northern Africa and Western Asia contributes three, Europe two, and Brazil remains the only overperformer in Latin America and the Caribbean (Table 2).

Several economies have overperformed for an extended periods. South Africa (63rd) records its ninth consecutive year as an overperformer, while Senegal (90th) does so for the ninth time overall. The Philippines (52nd) and Morocco (54th) have each reached eight appearances, and Brazil (53rd) extends its uninterrupted period of overperformance to six years. Indonesia (55th) and Uzbekistan (77th) have now performed above expectations for five consecutive years.

Figure 4 Innovation overperformers, relative to economic development



Note: Bubbles sized according to population. The cubic spline trendline shows the expected level of innovation performance at different levels of GDP per capita for all the economies covered by the GII 2026.

Source: Global Innovation Index Database, WIPO, 2026.

Bhutan enters the GII with an innovation profile that combines a relatively strong institutional (36th) and regulatory environment (52nd) with digital upgrading and ecological sustainability (3rd). Gross capital formation (1st), and low-carbon energy use (2nd) are high, and it has a relatively strong performance in software spending (21st) and high-tech imports (23rd). Digital transformation and economic diversification are a policy priority, although ICT use (92nd) remains a challenge. Bhutan's innovation challenge is therefore to use its strong institutions, clean-energy base and digital ambitions to build a small but differentiated ecosystem around sustainable investment, creative industries and digital services.

Table 2 Innovation overperformers in 2026, by income group, region and years as an innovation overperformer

Economy	Income group	Region	Years as an innovation overperformer (total)
India	Lower middle-income	Central and Southern Asia	2011–2026 (16)
Viet Nam	Lower middle-income	South East Asia, East Asia, and Oceania	2011–2026 (16)
Republic of Moldova	Upper middle-income	Europe	2011–2024, 2026 (15)
Ukraine	Upper middle-income	Europe	2012, 2014–2026 (14)
Rwanda	Low-income	Sub-Saharan Africa	2012, 2014–2026 (14)
Thailand	Upper middle-income	South East Asia, East Asia, and Oceania	2011, 2014–2015, 2018–2026 (12)
Malawi	Low-income	Sub-Saharan Africa	2012, 2014–2021, 2025–2026 (11)
Jordan	Lower middle-income	Northern Africa and Western Asia	2011–2015, 2022–2026 (10)
Madagascar	Low-income	Sub-Saharan Africa	2016–2018, 2020–2026 (10)
Mozambique	Low-income	Sub-Saharan Africa	2012, 2014–2020, 2022, 2026 (10)
Senegal	Lower middle-income	Sub-Saharan Africa	2012–2015, 2017, 2023–2026 (9)
South Africa	Upper middle-income	Sub-Saharan Africa	2018–2026 (9)
Morocco	Lower middle-income	Northern Africa and Western Asia	2015, 2020–2026 (8)
Philippines	Lower middle-income	South East Asia, East Asia, and Oceania	2019–2026 (8)
Tunisia	Lower middle-income	Northern Africa and Western Asia	2018, 2020–2023, 2025–2026 (7)
Burundi	Low-income	Sub-Saharan Africa	2017, 2019, 2022–2026 (7)
Brazil	Upper middle-income	Latin America and the Caribbean	2021–2026 (6)
Uzbekistan	Lower middle-income	Central and Southern Asia	2022–2026 (5)
Indonesia	Upper middle-income	South East Asia, East Asia, and Oceania	2022–2026 (5)
Pakistan	Lower middle-income	Central and Southern Asia	2022–2024, 2026 (4)
Bhutan	Lower middle-income	Central and Southern Asia	2026 (1)

Note: Income group classification follows the World Bank Income Group Classification (July 2025). Geographical regions correspond to the United Nations publication on standard country or areas codes for statistical use (M49).

Source: Global Innovation Index Database, WIPO, 2026.

Uzbekistan rises two places and maintains its overperformer status for a fifth consecutive year. Its ecosystem combines a supportive business environment (8th) with growing human capital and intellectual property strengths (e.g., utility models are ranked 14th). Uzbekistan ranks 3rd in entrepreneurship policies and culture, 4th in finance for startups and scaleups, 7th in labor productivity growth and 12th in gross capital formation.

Pakistan advances to 95th place and retakes its overperformer status for the fourth time. Its strengths are concentrated in the digital economy: mobile app creation (10th), ICT services exports (15th), high-tech imports (19th), and software spending (33rd). Its relatively strong scientific production (49th) and university quality (47th) support a developing digital economy.

Mozambique (129th) returns to the group of overperformers for a tenth time. Its profile combines strengths in investment, demographics, education and creative activity. It ranks 4th in FDI net inflows, 6th in its youth demographic profile, 19th in both education expenditure and low-carbon energy use, and 27th in microfinance. Its innovation outputs have also broadened in 2026, with industrial designs rising (42nd), together with creative goods exports (69th).

At the other end of the spectrum, 39 economies perform below expectations for their level of economic development in 2026, one more than in 2025.

Latin America and the Caribbean account for the largest share, with 14 economies, followed by Sub-Saharan Africa with nine, and Northern Africa and Western Asia with seven. This group also includes six European economies, two from South East Asia, East Asia and Oceania, and one from Central and Southern Asia. Several high-income economies in Northern Africa and Western Asia remain in this category, including Saudi Arabia (42nd), Qatar (47th), Kuwait (62nd), Bahrain (64th) and Oman (69th), reflecting a gap between strong enabling conditions and the innovation outputs currently generated. In other economies, performance below expectations often reflects an uneven development across the different pillars of the innovation system. It is important to note that as this classification is relative to income level, it should not be interpreted as indicating an absence of significant innovation strengths.

China generates innovation outputs comparable to high-income economies, while others like Morocco, Pakistan, Madagascar and Zimbabwe generate higher-than-expected outputs from more limited innovation inputs

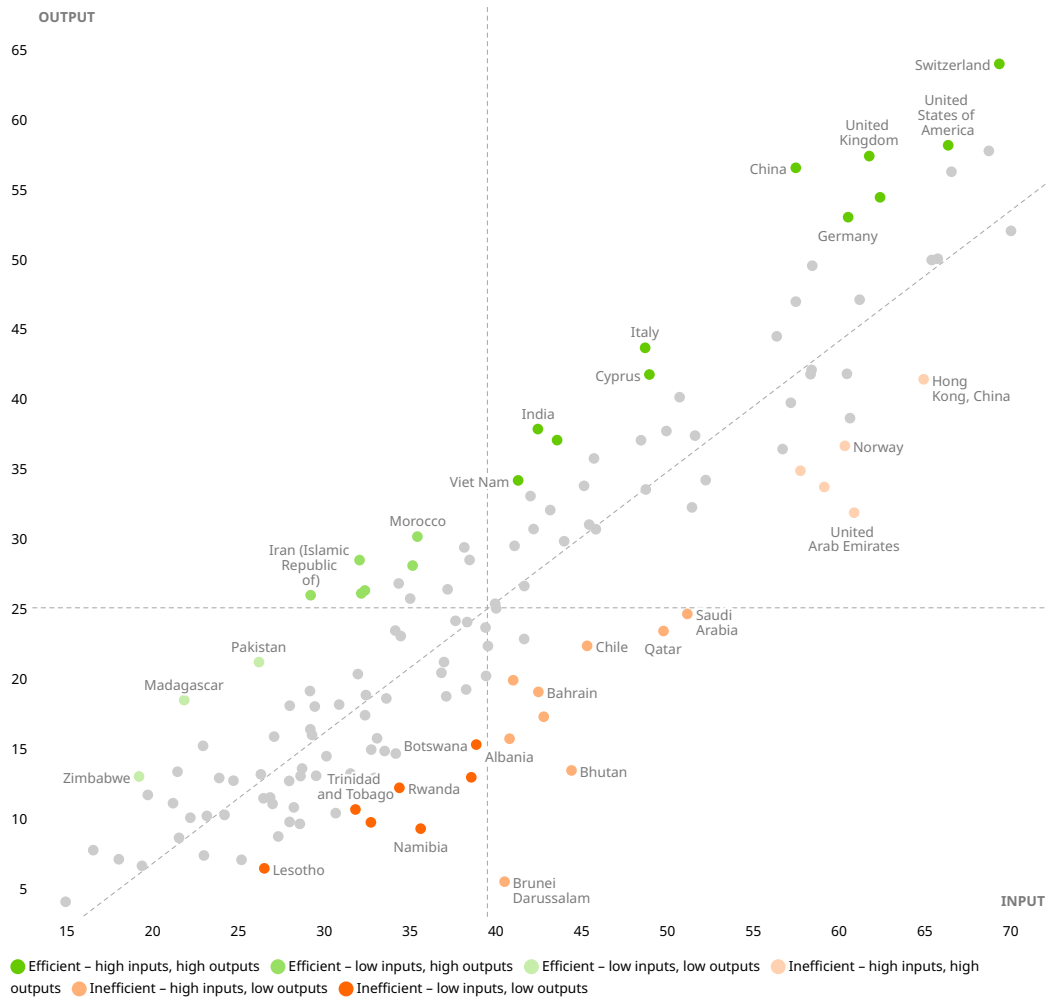
Overperformance compares innovation performance with income level. This section asks a different question – how effectively are innovation inputs converted into outputs?

Figure 5 locates economies in four quadrants according to whether their input and output scores are above or below the global median, thereby showing their absolute position within the innovation landscape. A line then estimates the output level normally associated with a given input score. Economies above the line generate more outputs than expected from their inputs, while those below it have scope to convert enabling conditions more fully into innovation results.

Switzerland (1st) combines both dimensions of performance: it ranks 2nd in innovation inputs and 1st in innovation outputs, generating an output score around 11 points above the level predicted by its level of innovation inputs. Sweden (2nd), the United States (3rd), the Republic of Korea (4th) and the United Kingdom (6th) also occupy the high-input/high-output quadrant. The United Kingdom is especially efficient, ranking 10th in inputs but 4th in outputs. Germany (11th) and Italy (27th) likewise generate relatively strong outputs, ranking 8th and 16th respectively, despite ranking lower in inputs at 14th and 36th.

China is the most prominent outlier, recording the farthest positive distance from the line. Its output score exceeds that of several economies with higher input levels, including Singapore (5th), Germany (11th) and Australia (20th). Singapore (5th) remains an innovation leader, ranking 1st in inputs and 9th in outputs, showing that abundant inputs do not automatically produce proportionately higher output scores across every dimension.

Several middle-income economies combine below-median or moderate inputs with outputs substantially above expectations. India (38th) ranks 49th in inputs but 25th in outputs; Morocco (54th) ranks 76th and 46th respectively; and the Islamic Republic of Iran (81st) ranks 104th in inputs but 58th in outputs. Viet Nam (43rd), Türkiye (45th), Tunisia (71st) and Mexico (65th) display a similar pattern. Among economies with more constrained input bases, Pakistan (95th), Madagascar (113th), Nigeria (118th) and Zimbabwe (132nd) also lie above the regression line, indicating an output performance that is comparatively strong relative to available inputs.

Figure 5 Innovation input to output performance, by economy, 2026

Note: The dashed lines divide economies according to the global median input and output scores. The diagonal regression line represents the expected output score at each input level. Economies above that line generate more innovation outputs than expected relative to inputs, while those below it generate fewer. The four quadrants show economies' absolute input-output positions, while their distance from the regression line captures relative efficiency in translating innovation inputs into outputs.

Source: Global Innovation Index Database, WIPO, 2026.

The high-input/low-output quadrant provides a different policy signal. The United Arab Emirates (25th) ranks 12th in inputs but 42nd in outputs, while Saudi Arabia (42nd) ranks 30th and 62nd, and Qatar (47th) ranks 33rd and 67th. These economies have built substantial institutional, infrastructure and investment foundations; the next stage is to convert these assets into scalable results.

Where are innovation systems unbalanced?

Innovation leaders have balanced innovation ecosystems, while emerging economies such as Rwanda, Algeria, Cambodia and Pakistan can build on standout strengths to improve their overall innovation performance

Most economies in the GII top 25 display a relatively balanced innovation ecosystem, with strong rankings across several input and output pillars. Switzerland, Sweden, the United States, the Republic of Korea and Singapore are examples of such a balanced ecosystem. China (10th) stands apart among the leaders in having a comparatively lower Institutions ranking (48th).

Further down the GII ranking, larger gaps between pillars reveal how innovation systems evolve. Rwanda (96th) ranks 26th in Institutions, Azerbaijan (85th) 36th and Botswana (82nd) 41st. Similarly, Human capital and research is a relative strength in Algeria (39th versus 111th overall), Tunisia (45th versus 71st), Peru (53rd versus 80th), the Islamic Republic of Iran (56th versus 81st) and Kyrgyzstan (64th versus 92nd) (Table 3).

Table 3 Heatmap: GII 2026 rankings overall and by innovation pillar, 2026

Economy	Overall GII	Institutions	Human capital and research	Infrastructure	Market sophistication	Business sophistication	Knowledge and technology outputs	Creative outputs
Switzerland	1	5	8	5	3	3	2	1
Sweden	2	11	5	1	6	1	4	4
United States	3	19	14	33	1	2	3	6
Republic of Korea	4	22	1	6	9	6	7	2
Singapore	5	1	2	15	5	4	8	11
United Kingdom	6	28	7	19	4	15	5	3
Netherlands (Kingdom of the)	7	13	16	30	12	5	10	5
Finland	8	4	4	4	18	11	9	17
Denmark	9	2	12	7	13	10	13	9
China	10	48	23	8	11	16	1	12
Germany	11	21	3	31	21	12	11	8
Japan	12	23	18	24	7	7	12	18
France	13	35	17	17	16	17	14	7
Hong Kong, China	14	7	6	11	2	29	29	15
Israel	15	33	19	47	15	9	6	31
Canada	16	15	11	36	10	20	19	22
Estonia	17	18	34	27	8	26	24	10
Austria	18	24	10	14	30	18	17	21
Ireland	19	10	25	12	34	14	18	23
Australia	20	12	9	29	17	23	26	26
Norway	21	8	22	3	20	21	33	27
Belgium	22	16	15	42	37	8	16	33
Luxembourg	23	6	30	61	25	13	59	13
New Zealand	24	3	21	21	22	24	41	32
United Arab Emirates	25	9	13	13	14	25	47	36
Iceland	26	14	33	2	29	19	45	25
Italy	27	53	29	28	46	33	20	16
Spain	28	55	27	9	33	30	23	24
Cyprus	29	50	46	41	32	27	21	19
Portugal	30	42	20	43	26	31	34	20
Malta	31	40	50	25	47	22	48	14
Lithuania	32	20	44	22	28	34	31	39
Czech Republic	33	30	37	34	70	32	22	40
Malaysia	34	27	51	51	19	28	32	46
Slovenia	35	51	24	20	61	37	27	47
Hungary	36	74	36	32	54	35	25	42
Bulgaria	37	81	73	10	39	46	28	29
India	38	60	54	62	35	63	15	43
Poland	39	61	35	48	62	36	39	34
Latvia	40	43	52	40	45	43	56	37
Greece	41	65	28	23	55	64	40	48
Saudi Arabia	42	25	31	38	24	47	67	62
Viet Nam	43	64	79	59	43	48	35	35
Thailand	44	80	55	58	27	41	38	44
Türkiye	45	103	41	46	44	38	49	28
Croatia	46	67	43	39	50	55	44	49
Qatar	47	17	42	16	41	58	78	58

< 35 35-70 70-105 ≥ 105

Table 3 Heatmap: GII 2026 rankings overall and by innovation pillar, 2026 (cont.)

Economy	Overall GII	Institutions	Human capital and research	Infra-structure	Market sophistication	Business sophistication	Knowledge and technology outputs	Creative outputs
Slovakia	48	73	57	35	59	56	30	54
Romania	49	82	59	37	64	61	42	53
Mauritius	50	34	76	79	38	90	99	30
Chile	51	47	40	50	40	52	75	66
Philippines	52	58	100	64	84	49	37	55
Brazil	53	106	47	56	76	42	51	51
Morocco	54	70	85	81	82	97	58	38
Indonesia	55	49	91	67	52	75	66	57
Serbia	56	76	48	45	74	85	36	82
Georgia	57	37	62	72	57	72	70	70
Russian Federation	58	127	32	69	73	44	57	56
Armenia	59	78	99	70	80	80	60	45
Jordan	60	56	80	76	66	57	64	68
North Macedonia	61	83	72	49	71	69	43	79
Kuwait	62	63	58	53	67	94	80	65
South Africa	63	97	90	66	42	45	74	59
Bahrain	64	31	77	26	79	107	63	99
Mexico	65	112	69	74	75	67	65	52
Uruguay	66	29	78	44	94	101	77	80
Ukraine	67	111	65	77	81	54	46	69
Republic of Moldova	68	88	75	95	85	135	52	50
Oman	69	39	71	54	58	60	105	73
Costa Rica	70	54	95	60	88	40	61	88
Tunisia	71	108	45	105	91	105	53	60
Mongolia	72	95	88	86	87	106	88	41
Kazakhstan	73	75	67	65	89	84	69	77
Bhutan	74	38	49	18	51	132	129	86
Argentina	75	101	60	73	103	74	76	63
Montenegro	76	85	74	68	102	102	55	75
Uzbekistan	77	57	70	71	69	81	62	96
Colombia	78	93	63	75	77	53	81	72
Albania	79	45	93	52	48	77	84	106
Peru	80	92	53	63	56	109	89	74
Iran (Islamic Republic of)	81	136	56	91	68	111	54	64
Botswana	82	41	86	98	65	59	97	91
Egypt	83	100	103	93	83	65	85	71
Bosnia and Herzegovina	84	120	84	85	23	123	68	97
Azerbaijan	85	36	89	87	63	91	100	110
Lebanon	86	132	66	92	53	66	50	111
Jamaica	87	69	87	97	113	93	121	67
Belarus	88	134	38	90	96	62	72	102
Panama	89	79	120	57	78	134	91	94
Senegal	90	62	81	104	90	113	82	113
Barbados	91	44	94	106	133	51	96	98
Kyrgyzstan	92	116	64	100	114	115	79	81
Cambodia	93	90	122	94	31	117	103	93
Sri Lanka	94	99	117	80	105	114	92	78



 < 35 35–70 70–105 ≥ 105

Table 3 Heatmap: GII 2026 rankings overall and by innovation pillar, 2026 (cont.)

Economy	Overall GII	Institutions	Human capital and research	Infra-structure	Market sophistication	Business sophistication	Knowledge and technology outputs	Creative outputs
Pakistan	95	126	119	107	99	83	71	76
Rwanda	96	26	98	113	121	95	94	120
Kenya	97	104	125	88	110	99	73	95
Brunei Darussalam	98	32	61	55	104	89	137	136
Dominican Republic	99	59	116	82	112	76	114	104
El Salvador	100	94	123	99	93	100	104	83
Ghana	101	71	107	110	132	70	90	92
Namibia	102	52	83	89	101	88	126	124
Cabo Verde	103	46	115	102	119	103	110	103
Nepal	104	107	97	101	72	120	93	107
Bangladesh	105	113	127	84	98	125	95	87
Ecuador	106	114	96	83	109	104	98	109
Trinidad and Tobago	107	77	82	114	92	129	117	118
Lao People's Democratic Republic	108	68	121	117	60	73	122	121
Paraguay	109	91	136	78	106	110	124	89
Côte d'Ivoire	110	72	133	111	116	82	130	90
Algeria	111	89	39	116	125	122	120	117
Tajikistan	112	96	92	120	117	96	83	127
Madagascar	113	123	118	135	124	79	125	61
Bolivia (Plurinational State of)	114	135	68	132	49	133	131	85
Zambia	115	86	111	118	115	87	119	116
Honduras	116	125	104	108	86	118	101	122
Benin	117	66	110	121	126	98	106	132
Nigeria	118	121	113	123	123	126	108	84
United Republic of Tanzania	119	84	130	112	128	86	116	114
Guatemala	120	115	132	96	95	112	109	115
Cameroon	121	105	101	126	127	39	115	126
Togo	122	110	114	127	100	137	107	108
Uganda	123	87	131	122	135	121	86	123
Nicaragua	124	133	129	103	36	71	113	135
Myanmar	125	138	112	109	107	138	111	101
Malawi	126	102	138	136	97	50	102	130
Venezuela (Bolivarian Republic of)	127	139	26	131	130	78	123	119
Lesotho	128	109	105	115	108	124	138	128
Mozambique	129	129	128	130	120	108	134	105
Burkina Faso	130	118	109	134	111	139	112	125
Mauritania	131	98	102	125	129	116	132	137
Zimbabwe	132	130	139	119	138	68	118	100
Ethiopia	133	122	126	128	136	136	87	131
Mali	134	119	108	129	131	92	133	133
Burundi	135	117	124	133	122	127	136	112
Angola	136	124	134	124	137	131	135	129
Democratic Republic of the Congo	137	137	106	137	118	119	127	138
Niger	138	128	137	139	134	128	128	134
Chad	139	131	135	138	139	130	139	139

< 35 35-70 70-105 ≥ 105

Note: Dark green cells correspond to the 4th quartile (best performers, ranks 1st to 34th); light green to the 3rd quartile (ranks 35th to 69th); light blue to the 2nd quartile (ranks 70th to 104th); gray to the 1st quartile (ranks 105th to 139th).

Source: Global Innovation Index Database, WIPO, 2026.

A higher Market sophistication ranking points to favorable conditions for finance, investment or trade. Bosnia and Herzegovina ranks 23rd in this pillar despite placing 84th overall, Cambodia 31st versus 93rd, and Nicaragua 36th versus 124th. Business sophistication identifies firm capabilities that are comparatively well developed, the availability of knowledge workers and innovation linkages. In this pillar, Cameroon ranks 39th versus 121st overall, Malawi 50th versus 126th, Costa Rica 40th versus 70th, and Botswana 59th versus 82nd.

Conversely, the Islamic Republic of Iran (81st) reaches 54th in Knowledge and technology outputs and 64th in Creative outputs, relative to considerably lower Infrastructure (91st) and Institutions (136th) rankings.

Such imbalances are not necessarily weaknesses. Rather, they identify assets that economies can build upon: input-led systems need stronger channels from institutions and investment to commercialization, while output-led systems can develop further through reinforcing infrastructure, research and financing foundations to sustain existing strengths.

Box 3 Where are companies investing in R&D and high-tech? Insights from FDI announcements

Traditional measures of foreign direct investment (FDI) – stocks and flows – record how much capital has been deployed. The GII has long tracked them through its FDI net inflows indicator (5.3.4), based on International Monetary Fund (IMF) balance-of-payments data. This data is indispensable, but it is more of a retrospective – typically published after a lag of a year or more, highly aggregated, and blind to the innovation-intensity and general nature of the investment: the purchase of an existing manufacturing plant or the stake in registers in the same way as does the purchase of a new AI data center.

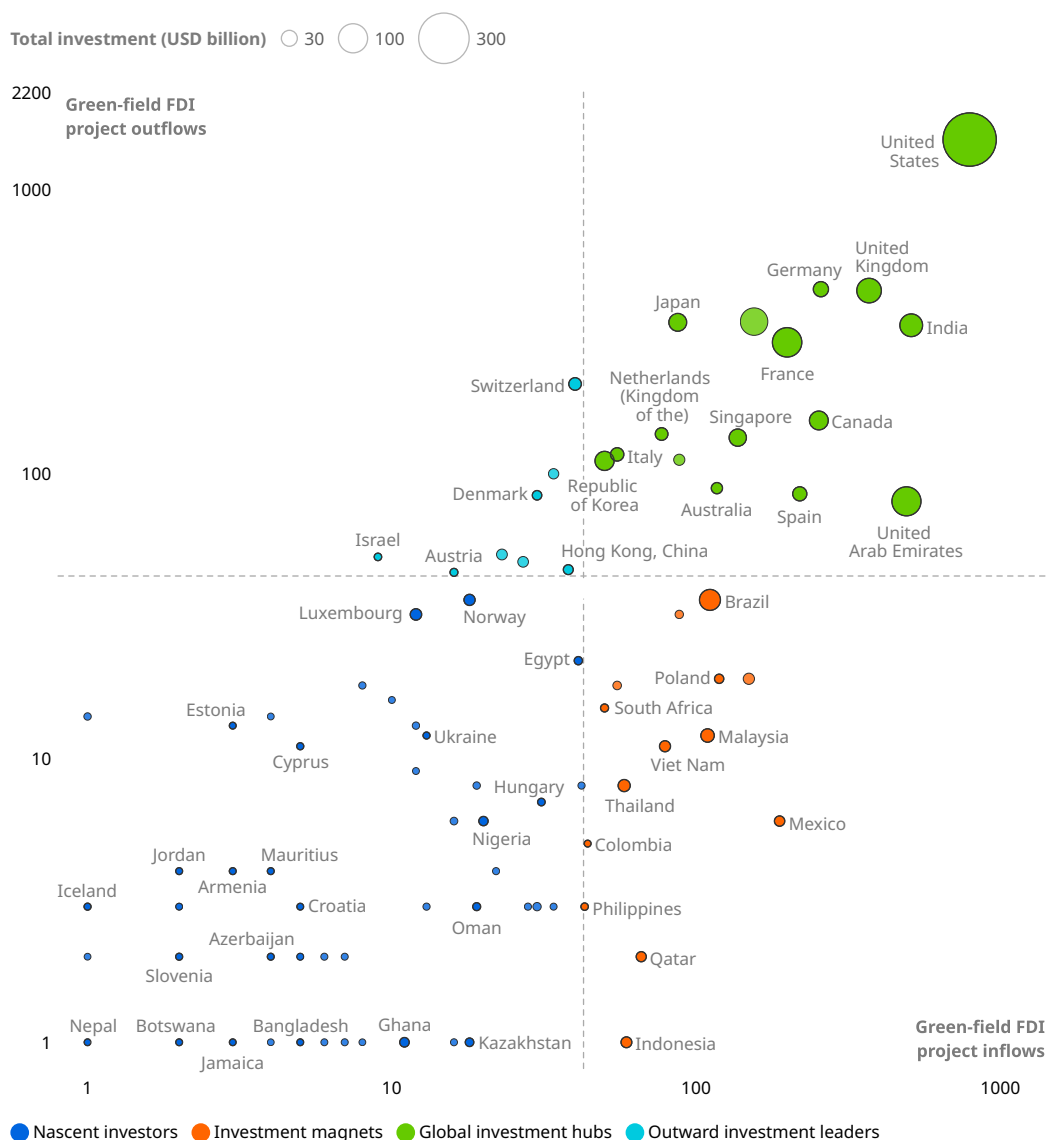
To complement this data with a more forward-looking and innovation-specific metric, in partnership with **FT Locations** the GII 2026 introduces a new indicator, **Green-field R&D & high-tech FDI (5.3.5)**, based on announced green-field investment projects as per the FT Locations fDi Markets database. Green-field FDI is defined as a cross-border investment in a new physical project, or the expansion of an existing one, that creates new jobs and capital investment. By our “R&D and high-tech” definition, announcements enter the indicator when fDi Markets classifies their business activity as R&D or as design, development and testing, or when they fall within high-tech sectors such as semiconductors, biotechnology, and pharmaceuticals, and software and information technology (IT) services.¹ The indicator follows a revealed competitive advantage (RCA) approach: it takes an economy’s share of world R&D and high-tech green-field announcements, counting both inflows and outflows, averaged over 2023–2025, and divides it by that economy’s share of world gross fixed capital formation (GFCF).

In 2025, firms announced close to 6,000 R&D and high-tech projects worldwide – 1,201 R&D projects and 4,769 high-tech ones. That is roughly one in three of the broadly 16,500 green-field projects of all kinds recorded globally in 2025.

Corporate decisions on where to locate R&D and high-tech investments focus on a narrow number of economies. The top 10 destination economies attracted 58 percent of such projects, with the United States, India and the United Arab Emirates in the lead. Concentration is even stronger on the outward side: the top 10 source economies generated 70 percent of all announcements, led by the United States – the origin of one in four projects worldwide – followed by Germany and the United Kingdom.

Box Figure 3.1 maps this two-way geography, plotting each economy’s inbound project announcements in 2025 against its outbound ones, with bubble size reflecting the total announced capital investment. Sixteen economies lie above the world average on both axes, the global investment hubs of the top-right quadrant. Fourteen of these are high-income economies. China and India are the only exceptions. Seven hubs are European, five are in East and South East Asia and Oceania (Australia, China, Japan, the Republic of Korea and Singapore), the United States and Canada represent Northern America, and the United Arab Emirates completes the group.

1 The indicator excludes mergers and acquisitions, which only change the ownership of existing assets.

Box Figure 3.1 Green-field R&D and high-tech FDI projects: inflows versus outflows, 2025

Note: Bubble size is proportional to total announced capital investment (USD billion). Both axes are on a logarithmic scale. Dashed lines mark the average number of inbound and outbound project announcements across the 139 GII economies. Economies above both means are global investment hubs, above the mean on inflows only are labelled investment magnets, on outflows only as outward investment leaders, below both as nascent investors.

Source: WIPO, Global Innovation Index 2026, based on FT Locations, fDi Markets.

The bottom-right quadrant hosts the 14 investment magnets, which are those economies above the world average on inflows, but not on outflows. Ten of these are middle-income economies, and this group is the most geographically dispersed: five economies in South East Asia (Indonesia, Malaysia, the Philippines, Thailand and Viet Nam), three in Latin America (Brazil, Colombia and Mexico), three in Northern Africa and Western Asia (Qatar, Saudi Arabia and Türkiye), Poland and Portugal in Europe, and South Africa, the only Sub-Saharan African economy above the world average on either axis. For these magnets, investment is essentially a one-way flow: Indonesia received 59 projects in 2025 against a single outbound announcement, and the Philippines 43 against three. Mexico is the strongest magnet, attracting 188 projects in 2025 against only six outbound announcements. Saudi Arabia (149 against 19) and Poland (119 against 19) follow as the quadrant's next largest recipients. Brazil (111 against 36) and Türkiye (88 against 32) announce roughly one project abroad for every three they receive, leaving them closest of the magnets to achieving hub status.

The remaining quadrants complete the picture: eight economies are outward investment leaders, investing abroad far more than they receive – all are high-income, among them Switzerland, Sweden, Denmark, Israel and Hong Kong, China. All other economies – nascent investors – are not yet at the world average on both axes.

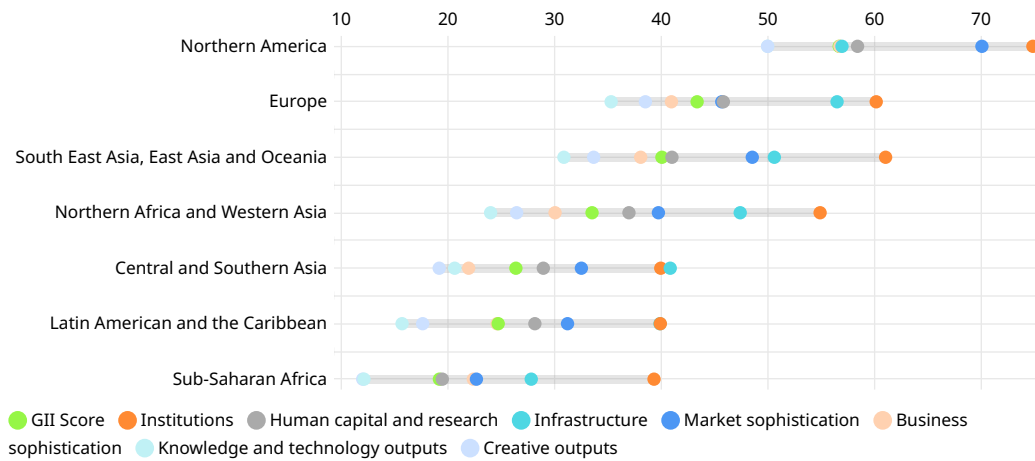
What do regional patterns tell us about the geography of innovation?

Central and Southern Asia consolidates its lead over Latin America and the Caribbean through having stronger innovation outputs, while regional gaps increasingly reflect how effectively innovation inputs are being converted into results

Northern America remains the world's leading innovation region in 2026, with the highest average GII score and a clear lead in both innovation inputs and outputs (Figure 6). **Europe** follows, thanks to having broad strengths across Institutions, Human capital and research, Infrastructure, and Creative outputs, while **South East Asia, East Asia and Oceania** is in 3rd place. The latter continues to stand out for its Institutions, Infrastructure, and Market sophistication.

Northern Africa and Western Asia occupies 4th position. Its performance is comparatively strong in Institutions and Infrastructure, although the gap between inputs and outputs remains wide.

Figure 6 Average regional performance across the seven GII pillars, 2026



Note: Unweighted regional averages across economies.

Source: Global Innovation Index Database, WIPO, 2026.

Central and Southern Asia strengthens its position ahead of **Latin America and the Caribbean**. The average input scores for both regions are now almost identical – with the former being slightly ahead, but Central and Southern Asia has a clearer advantage in outputs. Latin America and the Caribbean has a relative advantage in Business sophistication, suggesting that its central challenge is not the absence of private sector capabilities, but connecting them more effectively to research, commercialization and technology production.

Sub-Saharan Africa scores less well than other regions, but its innovation profile is more varied than the headline average suggests. The region performs relatively better on Institutions, with an average score close to those of Central and Southern Asia and Latin America and the Caribbean, and its Business sophistication exceeds that of Central and Southern Asia. The region's largest gaps remain in Human capital and research, Infrastructure, and both output pillars.

The sections that follow show the most significant developments happening across the seven world regions.

Northern America

Northern America remains the world's strongest innovation region, led by the United States, which retains 3rd place globally, while Canada rises one position to 16th.

The **United States** leads in Market sophistication (1st) and ranks 2nd in Business sophistication, underpinned by having the world's largest corporate R&D investors (1st), strong business-financed and business-performed R&D (both 4th), university-industry R&D collaboration (2nd), late-stage venture capital deals (1st), unicorn valuation (1st), software spending (1st) and intangible asset intensity (1st). **Canada** shares many of these strengths, with notable performance in research talent (9th), late-stage venture capital activity (8th) and software spending (6th). Both economies benefit from having strong Institutions (both in the top 20 worldwide), world-class universities – the United States ranks 1st globally and Canada 6th – as well as deep international and private sector-university connections, with both countries ranking among the top 10 in university-industry and international engagement (6th and 7th respectively). Canada's rise is part of a wider comeback story among mature innovation systems in 2026.

Against this backdrop of overall strength, there remain areas of opportunity. Labor productivity growth offers room for further gains in both the United States (67th) and Canada (114th), and infrastructure investment relative to overall innovation performance represents a further avenue for development (33rd and 36th respectively).

Innovation activity remains concentrated in leading metropolitan ecosystems. Northern America hosts 23 of the world's top 100 science and technology clusters, including 20 in the United States. San Jose–San Francisco ranks 3rd globally and 1st in innovation intensity. Canada retains three top 100 innovation clusters: Toronto (36th), Montréal (61st) and Vancouver (67th), with Montréal improving its ranking this year.

Europe

Europe remains the region with the largest concentration of leading innovation economies, headed by Switzerland (1st), Sweden (2nd), the United Kingdom (6th) and the Kingdom of the Netherlands (7th). Twelve European economies improve their positions in 2026. Italy advances to 27th, Spain to 28th and Lithuania to 32nd, among others. Bosnia and Herzegovina records one of the region's biggest advances, gaining eight places to reach 84th, followed by the Republic of Moldova, which moves up six places at 68th place.

Across the region, strong institutions, research systems and industrial capabilities frequently reinforce one another. Switzerland ranks 1st in Creative outputs, Sweden 1st in researchers, Germany 3rd in global corporate R&D investors and France 4th in intangible asset intensity. Europe's 30 top 100 innovation clusters concentrate these capabilities, with Cambridge, Oxford, Helsinki and Eindhoven performing especially strongly relative to population.

Rising to 7th, the **Kingdom of the Netherlands** combines knowledge creation with international business connectivity. Amsterdam–Rotterdam remains among the world's largest clusters at 26th, while Eindhoven ranks 9th globally by innovation intensity, reflecting a highly patent- and technology-oriented ecosystem.

At 18th place, **Austria** advances through a balanced research–industry model. Gross expenditure on R&D and business-performed R&D both rank 7th, while researchers (8th), public research–industry co-publications (9th), university–industry and international engagement (9th), and production and export complexity (10th), all place Austria among the stronger European innovation systems. **Italy** rises to 27th, with outputs (16th) substantially stronger than inputs (36th). Its ecosystem is characterized by its domestic industry diversification (2nd), quality certification (3rd), industrial designs (4th), corporate R&D investors (12th), intangible asset intensity (16th) and production and export complexity (17th). The innovation clusters of Milan (56th) and Rome (81st) reinforce this industrial and creative landscape.

This year's results show Europe's strengths, but also its central innovation challenge. While Europe has world-class research, strong institutions, advanced industry and dense innovation clusters, further improvement will depend on turning these strengths more consistently into fast-growing firms, scaleup finance, commercialized technologies and productivity growth. This is also the core message of recent European competitiveness debates: the Letta report argues for a stronger Single Market, including a "fifth freedom" for research, innovation, knowledge

and education;² the Draghi report identifies weak innovation diffusion, scaleup barriers and fragmented capital markets as being constraints on European competitiveness;³ and the European Commission's Competitiveness Compass sets out a roadmap to close the innovation gap, decarbonize industry and reduce strategic dependencies.⁴ The GII 2026 picture is consistent with this agenda: Europe's innovation base remains exceptionally strong, but the region's long-term competitiveness will depend on whether its research and industrial strengths can be converted into larger, faster-scaling innovation outcomes.

Northern Africa and Western Asia

Israel continues to lead Northern Africa and Western Asia (NAWA) at 15th, followed by the United Arab Emirates (25th), Cyprus (29th) and Saudi Arabia (42nd).

The region encompasses several distinct innovation systems. Israel anchors its performance in R&D expenditure (1st) – equaling 6.8 percent of its GDP in 2024, business-performed R&D (1st), venture capital received (1st) and university–industry collaboration (1st). Türkiye's industrial designs (6th) and trademarks (7th), Morocco's industrial designs (5th) and Jordan's scientific articles (1st) point to specialized strengths in intangible assets, creativity and scientific knowledge. Across the region, the next step is to translate these enabling conditions more consistently into research, firm-level innovation and internationally competitive outputs.

Western Asia's Gulf economies continue to climb, with the United Arab Emirates reaching the top 25 and Saudi Arabia, Qatar and Kuwait also advancing – as investment in innovation capacity begins to show in the rankings

Within Western Asia, the Gulf economies continue to climb as they pursue knowledge-based diversification beyond resource dependence. The **United Arab Emirates** gains five positions to reach the top 25, while Kuwait records one of the region's largest advances, rising 11 places to 62nd; Saudi Arabia and Qatar also move up. Their progress is built on strong enabling conditions, including digital government, ICT adoption, infrastructure, higher education, talent attraction and startup finance. The United Arab Emirates is furthest along in translating these foundations into broader innovation activity, with gains in high-tech manufacturing (48th), patent families (41st), FDI inflows (20th) and green-field R&D and high-tech FDI (1st) (Box 3). **Saudi Arabia's** rise is linked to its rapid digital adoption and a more visible innovation geography, with Riyadh entering the global top 100 innovation clusters, while **Qatar** stands out for Infrastructure (16th) and international talent attraction – ranking 1st in tertiary inbound mobility, and **Kuwait** for ICT access (4th) and use (3rd).

The key issue now is the conversion from innovation inputs to outputs. As Figure 5 shows, the United Arab Emirates, Saudi Arabia and Qatar remain in the high-input, lower-output part of the innovation landscape: their enabling conditions are strong, but innovation outputs have not yet reached the same level. For the wider group, the next phase will depend on turning capacity-building and infrastructure into deeper knowledge creation, technology production, intellectual property and globally competitive firms.

Morocco leads North Africa's innovation rise, as Algeria, Egypt and Tunisia also move up

Morocco reaches its best GII rank at 54th, in 2026, leading a North Africa rise, with Tunisia (71st), Egypt (83rd) and Algeria (111th) also rising.

Morocco's rise reflects a growing combination of industrial upgrading and business use of intangible assets. It ranks 5th in industrial designs, 8th in intangible asset intensity and 16th in trademarks, alongside a solid position in high-tech manufacturing (28th). This suggests that firms are increasingly complementing production capacity with design, branding and product differentiation. To sustain its progress, Morocco could strengthen university–industry links, expand business R&D and improve access to startup and scaleup finance – as investment and venture capital indicators remain at relatively low levels.

² See, <https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf>.

³ See, https://commission.europa.eu/topics/competitiveness/draghi-report_en.

⁴ See, https://commission.europa.eu/topics/competitiveness/competitiveness-compass_en.

Tunisia's rise adds to the broader North African advance, while its main strength lies in Human capital and research (45th), scientific production and export-oriented capabilities. It remains a relatively diversified economy that has strengths in science and engineering graduates (1st), scientific production (12th), high-tech exports (38th) and green-field R&D and high-tech FDI (18th). These assets give Tunisia a foundation for technology upgrading and participation in more knowledge-intensive production. The main constraint is that this base is not yet matched by a strong business environment (124th), private sector participation in R&D nor deep innovation linkages (112th). The next step is therefore to connect Tunisia's talent, research and export base more effectively to firms, investment and commercialization, so that scientific and industrial capabilities translate into stronger technology creation, business innovation and higher-value exports.

Egypt (83rd) rises three places, with innovation outputs (75th) continuing to exceed inputs (95th). Its domestic market is large (18th), it has a substantial scientific base relative to other middle-income group economies – with key R&D indicators ranked in the upper tier (research talent at 40th, citable-documents H-index at 44th, university quality at 48th and researchers at 54th), is one of Africa's most entrepreneurial communities, and its economy has increasingly diversified (27th) over the past years. R&D spending was slightly higher than 1 percent of its GDP in 2024 – only behind the United Arab Emirates in the region. Nevertheless, the ecosystem remains highly concentrated in Cairo – ranked 86th globally among innovation clusters. Moreover, private sector R&D remains limited, as does access to venture capital (88th) and credit to the private sector (101st). However, recent investment indicators are also encouraging, with FDI net inflows rising to 22nd and late-stage venture capital activity ranking 41st.

Algeria (111th) advances four positions, thanks to stronger innovation inputs (99th). Education (3rd) is a notable asset: expenditure on education (2nd), government funding per secondary pupil (2nd) and science and engineering graduates (17th). Gross capital formation (5th), researchers (44th) and entrepreneurship policies (43rd) provide additional strengths. Building further on these strengths through business R&D and Knowledge and technology outputs (120th) would support a more balanced innovation profile.

South East Asia, East Asia, and Oceania

South East Asia, East Asia, and Oceania remains one of the world's most dynamic regions for innovation, while also exhibiting considerable internal diversity in terms of innovation performance. The Republic of Korea leads the region at 4th globally, followed by Singapore (5th), China (10th), Japan (12th) and Hong Kong, China (14th).

The region features world-leading R&D investment, with six of its economies ranking among the top 25 for R&D expenditure as a share of GDP, led by the Republic of Korea (5.1 percent of GDP in 2024), Japan (3.6 percent) and China (2.7 percent). Corporate R&D investment and capacity are high across most of the region's economies, with companies in China (2nd), the Republic of Korea (4th), Japan (7th), Australia (15th) and Singapore (21st) among the biggest private R&D spenders worldwide. Private sector involvement in financing R&D is also substantial, exceeding 50 percent of total R&D spending in economies such as Thailand (67 percent of R&D expenditure financed by the private sector in 2023, ranked 5th worldwide), Viet Nam (58 percent, 13th) and Malaysia (55 percent, 19th).

The region's middle-ranked economies – Malaysia (34th), Viet Nam (43rd), Thailand (44th), the Philippines (52nd) and Indonesia (55th) – are strongly integrated into regional and global value chains, with shared strengths in high-tech trade, high-tech manufacturing (Malaysia ranks 17th worldwide), ICT services (the Philippines ranks 18th in ICT services exports) and growing startup activity. Indonesia ranks 26th in late-stage venture capital, while Viet Nam holds 34th place in unicorn valuation, equivalent to 1.2 percent of its GDP. Creative outputs represent an increasing strength, with Viet Nam ranking 5th worldwide in mobile app creation, and Malaysia (16th), Thailand (27th), Viet Nam (28th) and the Philippines (30th) all placing in the top 30 for brand value.

Mongolia and Cambodia record among the region's largest ranking gains this year.

Mongolia rises to 72nd, driven primarily by strengthening innovation outputs (57th). Progress is especially visible in Creative outputs (41st), supported by exceptional performance in trademarks and industrial designs – both ranked 3rd globally – and contributing to growth in intangible assets (8th).

Cambodia ranks 93rd. Its principal strength remains Market sophistication (31st), while Business sophistication registers a notable rise – although at a low level (117th), reflecting improvements in public research–industry co-publications (78th) and cluster development (69th).

Central and Southern Asia

India leads Central and Southern Asia at 38th place, followed by **Kazakhstan** (73rd), **Bhutan** (74th, a new entrant) and **Uzbekistan** (77th). Kazakhstan records the region's largest rise gaining eight places, while both Kyrgyzstan and Pakistan advance four places to 92nd and 95th respectively.

The region has a diverse set of innovation assets. India leads in ICT services exports (1st) and ranks highly in late-stage venture capital deals (4th) (see Box 2), while Pakistan combines strength in ICT services exports (15th) and mobile app creation (10th). Human-capital advantages are visible in science and engineering graduates in Uzbekistan (2nd) and the Islamic Republic of Iran (9th), as well as in Bhutan's tertiary inbound mobility (4th). Access to capital is another regional feature: the Islamic Republic of Iran ranks 2nd in gross capital formation, while Nepal (3rd), Bangladesh (12th) and Kyrgyzstan (15th) perform strongly in microfinance. Tajikistan's utility models (1st) and low-carbon energy use (12th), together with Sri Lanka's energy efficiency (10th on the GDP/unit of energy use indicator), are examples of further areas of specialization. Across the region, the challenge is to connect these strengths more closely through investment in research, infrastructure and innovation linkages.

Kyrgyzstan rises to 92nd, supported by having stronger Knowledge and technology outputs (79th). Its profile combines high labor productivity growth (2nd), cultural and creative services exports (17th), education expenditure (8th), microfinance (15th) and tertiary inbound mobility (16th).

Latin America and the Caribbean

Latin America and the Caribbean continues to be led by **Chile** (51st), followed by **Brazil** (53rd), **Mexico** (65th), **Uruguay** (66th) and **Costa Rica** (70th). Brazil remains the region's only economy performing above expectations for its level of development, sustaining this status for a sixth consecutive year. The largest advances are recorded by the Bolivarian Republic of Venezuela, rising to 127th, Ecuador to 106th, Trinidad and Tobago to 107th, and Nicaragua to 124th.

Latin America and the Caribbean has important innovation assets: Brazil has the region's deepest science and R&D base, Mexico benefits from manufacturing and export capabilities, and smaller economies such as Uruguay and Costa Rica build on services, institutions and digital connectivity. Yet these strengths remain concentrated in a limited number of economies and have not translated into a strong regional engine. Brazil remains the region's only innovation overperformer and the only economy with R&D expenditure above 1 percent of GDP.

The main challenge is not only conversion from inputs to outputs; it is also the limited availability of some of the innovation inputs themselves. Many economies perform better on innovation inputs than outputs: Chile ranks 41st in inputs, but 70th in outputs, Uruguay 56th and 77th, Costa Rica 62nd and 76th, and Trinidad and Tobago 96th and 121st. This gap reflects weak links between knowledge creation, firms, finance, intellectual property and international markets. The region has some strong universities, especially in Argentina, Brazil, Chile, Colombia and Mexico, but university–industry collaboration remains limited across many economies. Scientific production, business R&D, scaling finance and institutional coordination are also uneven. Venture capital and startup activity are similarly concentrated, with Argentina, Brazil, Chile, Colombia and Mexico leading late-stage venture capital, while Brazil and Colombia stand out more clearly in the unicorn valuation and startup-related indicators. The result is a region with real innovation potential, but where research, entrepreneurship and market access are not yet connected strongly enough to scale ideas into technology, exports, brands and productivity gains.

Uruguay (66th) rises two places, combining strong Institutions (29th), policy stability for doing business (7th), low-carbon energy use (10th) and ICT services exports (16th). National feature films (9th) and cultural and creative services exports (23rd) reinforce its service-oriented ecosystem.

Argentina (75th) gains two places, with outputs (66th) exceeding inputs (83rd). Tertiary enrolment (8th), school life expectancy (9th), trademarks (25th), domestic market scale (28th) and university quality (38th) provide a diversified base.

Ecuador (106th) advances seven places, drawing on government online services (25th), microfinance (29th), trademarks (38th), tertiary enrolment (48th) and software spending (50th).

Sub-Saharan Africa

Mauritius leads Sub-Saharan Africa at 50th position, followed by **South Africa** (63rd), **Botswana** (82nd) and **Senegal** (90th). Rwanda records the region's largest rise, advancing to 96th place, followed by Madagascar at 113th; Botswana and Kenya (97th).

Innovation in Sub-Saharan Africa is becoming more visible in 2026, with several economies showing important gains

Innovation in Sub-Saharan Africa remains uneven, but is becoming more visible in 2026, with clearer leaders, overperformers, specialized strengths and improved data coverage. Beneath still-low regional averages, several recurring assets support future innovation gains. Education investment is a notable strength in Namibia (1st), Botswana (3rd), Mauritania (4th), Lesotho (10th), Mozambique (19th) and Burkina Faso (30th), while capital formation supports ecosystems in the United Republic of Tanzania (7th), Angola (13th), Zambia (17th) and Chad (30th). Access to microfinance is another common feature, particularly in regards to Togo (5th), Lesotho (9th), Senegal (10th), Benin (22nd) and Côte d'Ivoire (32nd). And youthful populations provide long-term potential in Niger (1st), Mali (2nd), the Democratic Republic of the Congo (4th), Burundi (5th), Uganda (7th), Ethiopia (19th) and Ghana (26th).

More specialized capabilities are also emerging. Malawi performs strongly in ICT services imports (1st), Cabo Verde in labor productivity growth (11th), Nigeria in unicorn valuation (19th) and Cameroon in entrepreneurship policies and culture (19th). A thin but real startup and venture-capital layer is also visible around selected hubs, with economies such as Kenya, Mauritius, Nigeria and Rwanda attracting private capital, although early-stage funding remains limited. The first inclusion of the Democratic Republic of the Congo (137th) and Chad (139th) in the GII reflects improved innovation-data collection and broadens the evidence with which to assess the region. Overall, Sub-Saharan Africa's innovation performance is not uniform: it combines gaps in skills, infrastructure and outputs, with identifiable hubs of education investment, entrepreneurship, finance, digital activity and data-system improvement.

An output-led advance distinguishes **Botswana**. A rise in trademarks to 18th points to a growing use of intangible assets, while education expenditure (3rd), gross capital formation (9th), microfinance (16th) and market capitalization (24th) provide a supportive base. Improving FDI inflows (49th) and labor productivity growth (47th) serve to further strengthen its profile.

In **Rwanda**, a stronger score on Institutions (26th) and increasingly connected finance and research systems characterize its progress. Policy stability ranks 2nd, while venture capital received (31st), microfinance (24th) and university-industry R&D collaboration (44th) support gains in labor productivity (10th), utility models (26th) and scientific publications (47th).

Kenya's rise reflects a growing entrepreneurial and technology ecosystem. Utility models rank 8th, alongside venture capital received (30th), late-stage venture capital deals (34th), ICT services exports (30th) and low-carbon energy use (11th). Gains in high-tech imports (29th), industrial designs (59th) and mobile app creation (61st) suggest a widening of innovation activity.

Despite comparatively modest inputs (130th), **Madagascar** performs strongly in industrial designs (15th), trademarks (22nd) and ICT services exports (29th), with further gains in cultural and creative services exports (68th) and PCT patents by inventor origin (81st) – although at relatively lower levels.

Conclusion

The GII 2026 points to four broad conclusions about the current state of global innovation.

First, the global innovation remains highly persistent at the frontier, but is not frozen.

Switzerland, Sweden and the United States continue to lead the ranking, while Europe remains the region with the largest concentration of innovation leaders. Asia is now firmly embedded in the upper ranks, with China holding 10th place as the only middle-income economy among the innovation leaders. Beneath this continuity, there is still movement: the Kingdom of the Netherlands moves higher, Canada, Australia and New Zealand regain ground, and the United Arab Emirates enters the top 25. The top of the GII therefore remains structurally stable, but is still highly competitive.

Second, middle-income innovation catch-up is real, but an innovation “glass ceiling” is becoming more evident.

The fastest long-term climbers since 2013 – China, India, Indonesia, Morocco, the Philippines, Türkiye and Viet Nam – have advanced by building competitive firms, export sectors, digital services, startup finance and high-tech production, and through a stronger use of intellectual property. These strengths have helped them enter the upper half of the GII, but not all have continued moving upward at the same pace. For many, the next step is harder: breaking beyond the top 40 or top 50 requires deeper research capacity, stronger universities and more business R&D, patenting, science–industry linkages and domestic knowledge creation. China is the exception that defines the challenge, combining its commercial and production strengths with the research capacity and investment needed to reach the top 10. The question for the next wave of climbers – including Saudi Arabia, Qatar, Mauritius, Brazil, Jordan and Bahrain – is whether they can avoid a similar plateau by turning recent gains in investment, digital infrastructure, services and scientific output into broader and more sustained innovation performance.

Third, innovation momentum is spreading through different regional and sectoral pathways.

In Western Asia, the Gulf economies continue to climb through major investments in digital infrastructure, finance, talent and state-led diversification, with the United Arab Emirates furthest ahead in converting these inputs into outputs. In Africa, Morocco leads a North African rise, while Mauritius, Rwanda and Madagascar show momentum in Sub-Saharan Africa, alongside a growing but still thin venture and startup layer around selected hubs. Latin America and the Caribbean has important assets in Brazil, Chile, Mexico, Uruguay and Costa Rica, but its innovation engine remains too concentrated and underpowered to generate sustained regional gains.

Fourth, innovation performance is not determined by income alone. The 2026 overperformers show that economies can generate more innovation than expected for their level of development when they build on focused strengths. India and Viet Nam remain the longest-standing overperformers, while Jordan, Malawi, Rwanda, South Africa, Thailand and Ukraine confirm that overperformance can persist across regions and income levels. Mozambique, Pakistan and the Republic of Moldova return to the group, and Bhutan enters the GII as an overperformer in its first year. The wider lesson is that innovation success depends not only on resources, but on how effectively economies connect research, firms, finance, skills, institutions and markets into functioning innovation ecosystems.

The broader implication is that innovation policy should focus increasingly on system coherence. Strong pillars or strong performance on individual indicators are valuable, but sustained progress depends on how effectively institutions, skills, infrastructure, finance, firms and creative capabilities reinforce one another. For policymakers, the priority is therefore not simply to raise inputs or target a higher rank, but to strengthen the paths through which innovation generates knowledge, productivity, competitiveness and wider economic value.

Every year, the *Global Innovation Index* (GII) takes the pulse of innovation, offering a unique lens through which to examine how various forces are influencing global innovation trends as well as national and regional innovation performance.

The GII ranks the innovation performance of about 140 economies, showcasing their innovation strengths and weaknesses and identifies the list of the world's top 100 innovation clusters.

The thematic focus of the GII 2026, "Powering Entrepreneurs at the Frontier of Science", explores how to build ecosystems that translate scientific breakthroughs into deep science startups and spinouts that scale real-world solutions, in particular in fields such as advanced materials, life sciences, quantum computing, space and transportation.

For many years, the United Nations General Assembly has referenced the GII in its Resolutions on Science, Technology and Innovation for Sustainable Development to support evidence-based innovation policymaking.

More information on the GII is available at www.wipo.int/gii and the GII economy profiles can be accessed at www.wipo.int/gii-ranking/en/.