



EU - Gulf Cooperation Council (GCC) Dialogue on Economic Diversification

EU – GCC Dialogue on Economic Diversification Gulf Cooperation Council (GCC) countries

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Abbreviations

Bn	billion
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GERD	Gross domestic expenditure on research and development
GII	Global Innovation Index
GWh	Gigawatt hours
ICT	information and communication technologies
IP	Intellectual Property
Mn	million
PPP\$ GDP	purchasing power parity GDP in international dollars
Pop	population
OECD	Organisation for Economic Co-operation and Development
R&D	research and development
S&T	science and technology
th	thousand
UAE	United Arab Emirates
VC	venture capital
WIPO	World Intellectual Property Organization

1 The Global Innovation Index - Role in policymaking

Innovation is widely recognized as a central driver of economic growth and development. The Global Innovation Index (GII) was created in 2007 with the aim of identifying and determining metrics and methods that could capture a picture of innovation in society that is as complete as possible.

There were several motivations for setting this goal. First, innovation is important for driving economic progress and competitiveness – for both developed and developing economies. Many governments are putting innovation at the center of their growth strategies. Second, the definition of innovation has broadened – it is no longer restricted to research and development (R&D) laboratories and published scientific papers. The concept of innovation has become more general and horizontal in nature, and now includes social, business model and technical aspects. Last, but not least, recognizing and celebrating innovation in emerging markets is critical for inspiring people – especially the next generation of entrepreneurs and innovators.

The GII adopts a broad notion of innovation, originally elaborated in the *Oslo Manual* developed by the European Communities and the Organisation for Economic Co-operation and Development (OECD). In its fourth edition, the *Oslo Manual 2018* introduces a more general definition of innovation: *An innovation is a new or improved product or process (or combination thereof) that differs significantly from the unit's previous products or processes and that has been made available to potential users (product) or brought into use by the unit (process).* It is important to highlight how these definitions capture the evolution of the way innovation has been perceived and understood over the last two decades.

Now in its 15th edition, the GII helps create an environment in which innovation factors are subject to continual evaluation. It provides a key tool for decision-makers and a rich database of detailed metrics, offering a convenient source of information for refining innovation policies.

The index has an important role in the design of economic policy strategies. The aim of the GII is to provide insightful data on innovation, to track major innovation developments at the country and regional level and, in turn, to assist policymakers in evaluating their innovation performance and making informed innovation policy decisions.

The 2022 edition of the GII continues to use the GII Global Innovation Tracker introduced in 2021, to advance a data-based understanding of innovation.

The GII 2022 report is published by WIPO in partnership with the Portulans Institute, with the support of corporate network partners, the Confederation of Indian Industry (CII), Brazilian National Confederation of Industry (CNI), Ecopetrol (Colombia) and the Turkish Exporters Assembly (TIM).

The GII 2022 tracks global innovation trends against the background of an ongoing pandemic, a slowing of productivity growth and other evolving challenges.

Historic data, plus the global economic recession, would have led one to expect a prompt cutback in research and development (R&D), intellectual property (IP) filings and venture capital in 2020 and 2021. However, the opposite happened.

Government budget allocations for the top R&D spending economies showed strong growth in 2020, as governments vigorously sought to mitigate the economic effects of the crisis on the future of

innovation. For 2021 R&D budgets, the picture is more varied, with government spending having continued to grow in the Republic of Korea and Germany, but being cut by Japan and the United States.

Investments in global R&D in 2020 grew at a rate of 3.3 percent, not falling, but slowing from the historically high 6.1 percent R&D growth rate recorded in 2019.

Top corporate R&D spenders increased their R&D expenditure by more than 11 percent in 2020, and by almost 10 percent to over USD 900 billion in 2021, which is higher than in 2019 before the pandemic. This increase was primarily driven by four industries: ICT hardware and electrical equipment; Software and ICT services; Pharmaceuticals and biotechnology; and Construction and industrial metals. Firms that cut R&D in 2020, including in sectors such as Automobiles; Industrial engineering and transportation; and Travel, generally – but not always – returned to R&D growth in 2021.

International trademark filings – a good proxy for entrepreneurship – saw particularly strong growth in 2021, up by 15 percent.

The biggest boom was in venture capital (VC). VC deals grew by 46 percent in 2021, recording levels comparable to the internet boom years of the late 1990s.

Technological progress, adoption and innovation's socioeconomic impact all show signs of weakness – the future of innovation-driven growth is at stake. Largely due to COVID-19's short-term influence, the socioeconomic impact of innovation seems to be at a low point. All proxies for innovation impact are experiencing a significant slowdown. Today, productivity growth – the metric used by economists to gauge whether living standards can be improved over time – is at its lowest level ever. What has been called the period of Great Stagnation brings into question the ability of innovation to create future growth.

The thematic focus of this year's 2022 report considers this sober outlook and asks: "What is the future of innovation-driven growth?" and "Who is right?". The innovation pessimists argue that low productivity is here to stay, that those innovations that are emerging will not have the same transformative impact on productivity as did past technologies. The innovation optimists predict a new economic and social era where innovation will increase productivity.

The GII 2022 puts its hopes in two novel innovation waves:

1. an upcoming Digital Age innovation wave built on supercomputing, artificial intelligence and automation that is on the verge of making ample productivity impacts across all sectors – including services – and helping to achieve scientific breakthroughs in basic sciences of all fields; and
2. a Deep Science innovation wave built on breakthroughs in biotechnologies, nanotechnologies, new materials and other sciences that is revolutionizing innovations in four fields of key importance to society: health, food, environment, and mobility.

That said, the positive effects of these two novel waves will take a long time to materialize. Many obstacles, particularly in the area of technology adoption and diffusion, have to be overcome first.

1.1 Global Innovation Index Methodology

A key challenge is to find metrics that capture innovation as it actually happens in the world today. Direct official measures that quantify innovation outputs remain extremely scarce. For example, there

are no official statistics on the amount of innovative activity – defined as the number of new products, processes or other innovations – for any given innovation actor, let alone for any given country.

Most measurements also struggle to appropriately capture the innovation outputs of a wider spectrum of innovation actors, such as the services sector or public sector entities. This includes innovation surveys, which have contributed greatly to the measurement of innovation activities but fail to provide a good and reliable sense of cross-economy innovation output performance and are often not applicable to developing economies, where innovation is often informal.

1.2 Framework of the Global Innovation Index 2022

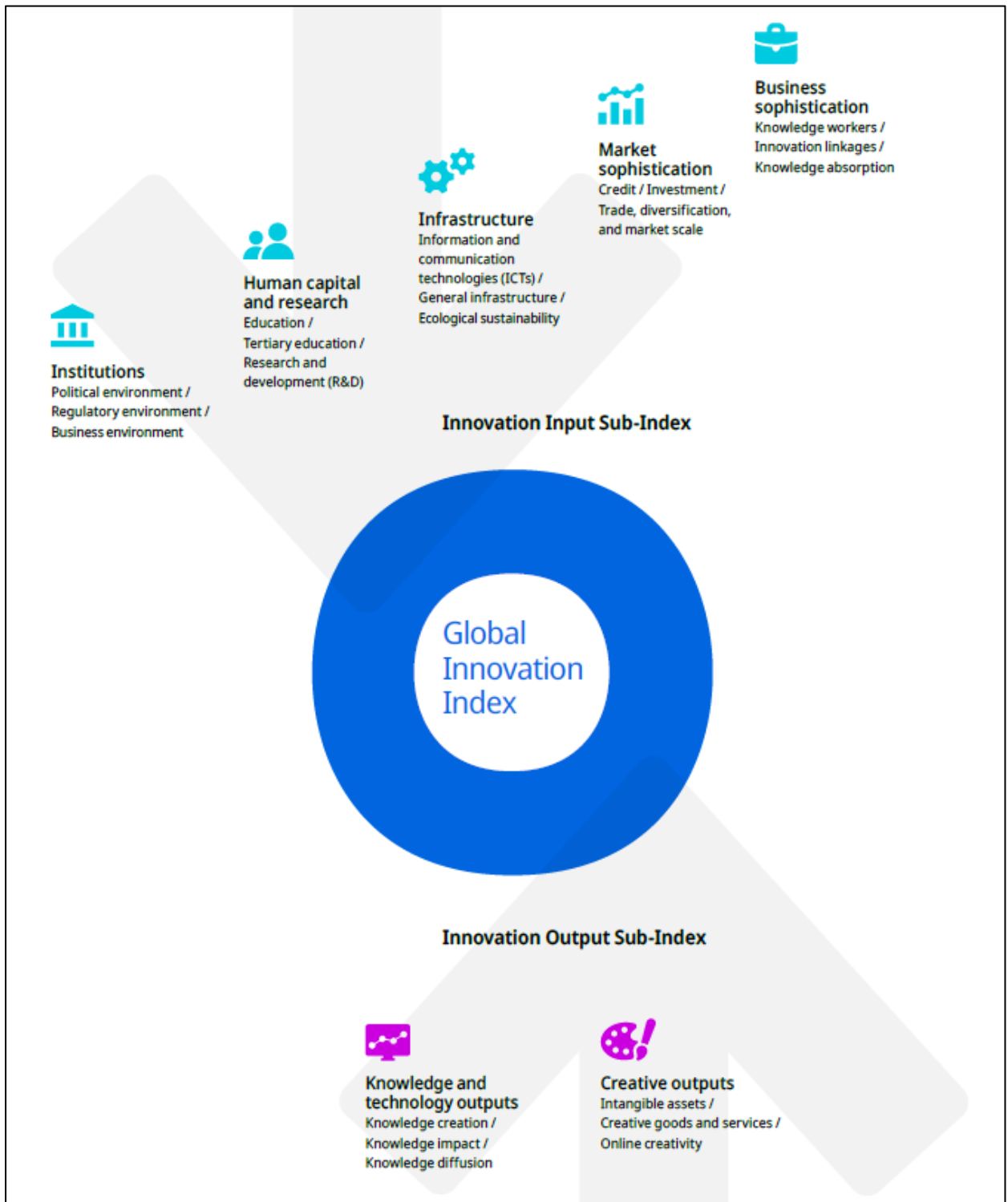
The GII relies on two sub-indices—the Innovation Input Sub-Index and the Innovation Output Sub-Index—each built around pillars. Three indices are calculated:

- Innovation Input Sub-Index: Five input pillars capture elements of the national economy that enable and facilitate innovative activities.
- Innovation Output Sub-Index: Innovation outputs are the result of innovative activities within the economy. Although the Output Sub-Index includes only two pillars, it has the same weight in calculating the overall GII scores as the Input Sub-Index.
- The overall GII score is the average of the Input and Output Sub-Indices, on which the GII economy rankings are then produced.

The GII 2022 model includes 81 indicators for 132 economies, which represent 94.1 percent of the world’s population and 98.5 percent of the world’s GDP in purchasing power parity current international dollars. The data used for each country are the most recent available. For some economies data are from 2022, while for others the GII index used data from 2021, 2020 and for a small percentage of countries, data from earlier years.

The framework of the GII 2022 is presented in Figure 1.

Figure 1. Framework of the Global Innovation Index 2022



Source: Global Innovation Index 2022 Report, WIPO

2 Key findings

Top 3 innovative economies in Europe are Switzerland, Sweden and the United Kingdom. In Northern Africa and Western Asia the top 3 are Israel, the United Arab Emirates and Turkey.

Europe still hosts the largest number of innovation leaders – 15 in total – that rank among the top 25. Out of the 39 European economies covered, 12 move up the rankings this year: the Netherlands (5th), Germany (8th), Austria (17th), Estonia (18th), Luxembourg (19th), Malta (21st), Italy (28th), Spain (29th), Poland (38th), Greece (44th), the Republic of Moldova (56th) and Bosnia and Herzegovina (70th).

Switzerland has the most high-performing Institutions in the region (2nd worldwide), and is the regional and global leader in innovation outputs, ranking 1st in both Knowledge and technology outputs and Creative outputs. Germany leads in Human capital and research (2nd), while Sweden comes top in Infrastructure and Business sophistication worldwide (1st in both pillars).

The United Arab Emirates (UAE) takes a big leap forward this year reaching 31st place, bringing it closer to the top 30. Other economies within the region move up the rankings, including notable improvers Saudi Arabia (51st), Qatar (52nd), Kuwait (62nd) and Bahrain (72nd).

Creating balanced and efficient innovation ecosystems

Several economies are still struggling to translate innovation inputs into outputs efficiently.

Some economies are very efficient at converting innovation inputs into outputs. Among the high-income group (Annex Table A 1), Switzerland (1st) produces considerably higher levels of outputs than other high-income economies, such as the United States (2nd), Sweden (3rd) and Singapore (7th), at comparable levels of innovation inputs. Germany (8th) produces the same levels of outputs as the United States and the Netherlands (5th), at lower levels of innovation inputs.

However, several high-income economies struggle to obtain a better balance between level of investment and results, often to the detriment of their overall innovation performance. This group of economies includes, notably, oil and natural gas producers and exporters Norway (22nd), the United Arab Emirates (31st), Saudi Arabia (51st), Bahrain (72nd).

Asia as a region is catching up rapidly on Northern America and Europe. The global innovation landscape is changing – both within the top 25 leading innovation economies, as well as more generally within the overall rankings and the league tables by income group or region. The most notable of these changes are: (i) a significant shift within this year's top 15 innovators, with the United States, Singapore, Germany and China moving up the ranking, the latter overtaking France.

Science and Technology (S&T) clusters

GII presents the innovation output at local level by providing the list of the world's largest top 100 science and technology (S&T) clusters, defined as the geographical areas around the world with the highest density of inventors and scientific authors.

China is now on a par with the United States in terms of the number of top 100 S&T clusters. In 2022, as in previous years, the top 100 S&T clusters are highly concentrated in three regions, Northern America, Europe and Asia and, especially, in two countries: the United States and China. For the first time, China hosts as many clusters as the United States, with 21 each. Germany follows, with 10 clusters in the top 100, with Cologne and Munich as the two largest clusters.

Mirroring last year's results, with the exception of China, only five middle-income economies have clusters in the top 100: Brazil, India, the Islamic Republic of Iran, Turkey and the Russian Federation.

GII use in policymaking

A survey carried out by WIPO in early 2022 shows that 70 percent of WIPO member states use the Global Innovation Index (GII). Out of the 110 responses received (one response per country), 68 countries had used the GII during the period 2020–2021 to improve their innovation ecosystems and policymaking, while 37 went so far as to use the GII as a specific reference in economic plans or policies.

While there is no recipe for moving up the GII rankings, the GII could be used to improve an economy's innovation performance.

A chief benefit of the GII is that it puts data-based evidence and metrics at the core of evaluating, crafting and deploying innovation policies. As a first step, countries begin by bringing together statisticians and decision-makers in order to understand the country's innovation performance, based on the GII metrics. In a second step, the policy discussion turns to leveraging domestic innovation opportunities, while at the same time overcoming country-specific weaknesses. Both steps are an exercise in careful coordination among different public and private innovation actors, as well as between government entities at the local, regional and national levels. Ideally, the GII becomes a tool for such coordination.

Recommendations on using GII to improve an economy's performance:

- Ensure innovation is embedded as a key priority in the country's pathway to national development and progress, possibly formulated within a clear innovation policy.
- Establish a cross-ministerial task force to pursue innovation policy and GII matters through a "whole of government approach," ideally reporting to the top tier of government, for instance, the Prime Minister's Office.
- Ensure any innovation policy task force interacts and consults with innovation actors from both the private and public sectors, including start-ups, deans of research universities and relevant innovation clusters.
- Ensure any national intellectual property (IP) policy is aligned with or even integrated into the above innovation policy.
- Ensure the targets or actions of innovation policy are quantifiable, and that they are regularly revisited and evaluated.
- Do not set over-ambitious and therefore unrealistic GII ranking targets – for example, by aiming to enter the top 20 by next year when the economy's ranking would suggest it is still far from achieving that goal. GII rankings rarely increase in large leaps from one year to the next, particularly at the top.
- Do not expect policy changes to result in improved GII indicator performance instantaneously. There are important lags between innovation policy formulation, execution and impact. The latest available innovation data is also rarely current, often lagging by a few years.
- Do not treat the GII as a mathematical exercise – that is, by attempting to collect or focus on specific indicators in order to climb the rankings. GII rank alone is only a partial reflection of national development and progress.
- Do not over focus on year-on-year changes to the GII alone. These are influenced by relative performance vis-à-vis other countries and other methodological considerations, many of which lie outside the control of the economy in question. Setting objectives over a multi-year period – for example, three to five years – and looking at combined progress over several years is a more fitting use of the GII.

3 GII 2022 Pillars ranking comparison across GCC countries

Highlighted in green are the highest rankings across GCC countries for each pillar (out of 132 countries). In red are the rankings for each area where EU can assist the GCC countries in improving their innovation capabilities.

Table 1. GCC Global Innovation Index performance by pillar, 2022

GII Pillars	Bahrain	Kuwait	Oman	Qatar	Saudi Arabia	United Arab Emirates
Institutions	27	86	57	25	50	6
Human capital and research	78	55	40	56	30	17
Infrastructure	32	36	56	29	53	7
Market sophistication	75	73	71	47	22	23
Business sophistication	93	101	97	73	53	26
Knowledge and technology outputs	73	68	94	69	65	59
Creative outputs	98	60	80	59	66	45

Source: Analysis based on GII 2022 data

All GCC countries except Oman improved their rankings (Table 2) compared to the 2021 assessment. Highest change was registered in Kuwait, who improved its ranking by 10 places. Oman ranks lower by 3 places compared to 2021.

Table 2. GCC Global Innovation Index rankings, 2018-2022

Country	2018	2019	2020	2021	2022
United Arab Emirates	38	36	34	33	31
Saudi Arabia	61	68	66	66	51
Qatar	51	65	70	68	52
Kuwait	60	60	78	72	62
Bahrain	72	78	79	78	72
Oman	69	80	84	76	79

Source: Analysis based on GII data

4 GCC strengths and key areas where EU can support the GCC economic diversification processes

This chapter provides details on each GCC country's strengths in regards to innovation, as assessed by the GII 2022, as well as areas where EU can support the GCC countries in improving their innovation ecosystems and supporting legal and regulatory frameworks.

4.1 Bahrain

Bahrain ranks:

- 72nd among the 132 economies featured in the GII 2022
- 45th among the 48 high-income group economies (Annex Table A 1)
- 9th among the 19 economies in Northern Africa and Western Asia (Annex Table A 2).

Table 3. Bahrain strengths and key areas for improvement based on GII 2022

Strengths			Areas for improvement		
Indicator Code	Indicator Name	Rank	Indicator Code	Indicator Name	Rank
IN.1	Institutions	27	IN.2.1.1	Expenditure on education, % GDP	123
IN.1.3.1	Policies for doing business	8	IN.2.3.2	Gross expenditure on R&D, % GDP	105
IN.2.1.3	School life expectancy, years	28	IN.3.3.1	GDP/unit of energy use	124
IN.2.2.3	Tertiary inbound mobility, %	15	IN.5.1.3	GERD performed by business, % GDP	80
IN.3	Infrastructure	32	IN.5.3	Knowledge absorption	131
IN.3.1.1	ICT access	16	IN.5.3.2	High-tech imports, % total trade	118
IN.3.1.2	ICT use	30	IN.5.3.3	ICT services imports, % total trade	118
IN.3.2	General infrastructure	6	IN.5.3.5	Research talent, % in businesses	82
IN.3.2.1	Electricity output, GWh/mn pop.	1	OUT.6.1	Knowledge creation	114
IN.3.2.3	Gross capital formation, % GDP	9	OUT.7.1.1	Intangible asset intensity, top 15, %	70
IN.5.2.4	Joint venture/strategic alliance deals/bn PPP\$ GDP	16	OUT.7.1.2	Trademarks by origin/bn PPP\$ GDP	119
OUT.6.2.1	Labor productivity growth, %	15			
OUT.6.2.3	Software spending, % GDP	31			

Source: Author's recommendations based on analysis of the GII 2022 data

4.2 Kuwait

Kuwait ranks:

- 62nd among the 132 economies featured in the GII 2022
- 43rd among the 48 high-income group economies (Annex Table A 1)
- 7th among the 19 economies in Northern Africa and Western Asia (Annex Table A 2).

Table 4. Kuwait strengths and key areas for improvement based on GII 2022

Strengths			Areas for improvement		
Indicator Code	Indicator Name	Rank	Indicator Code	Indicator Name	Rank
IN.2.1.1	Expenditure on education, % GDP	11	IN.3.3.1	GDP/unit of energy use	123
IN.2.1.5	Pupil-teacher ratio, secondary	5	IN.4.3.2	Domestic industry diversification	102
IN.3.1	Information and communication technologies (ICTs)	21	IN.5.1.4	GERD financed by business, %	94
IN.3.1.1	ICT access	8	IN.5.2.3	GERD financed by abroad, % GDP	97
IN.3.1.4	E-participation	18	IN.5.3.3	ICT services imports, % total trade	122
IN.3.2	General infrastructure	15	IN.5.3.4	FDI net inflows, % GDP	121
IN.3.2.1	Electricity output, GWh/mn pop.	4	OUT.6.1.1	Patents by origin/bn PPP\$ GDP	118
IN.3.2.3	Gross capital formation, % GDP	29	OUT.6.2.1	Labor productivity growth, %	113
IN.4.2.1	Market capitalization, % GDP	17	OUT.7.2.4	Printing and other media, % manufacturing	91
OUT.6.2.3	Software spending, % GDP	26			
OUT.6.3.4	ICT services exports, % total trade	6			
OUT.7.1.3	Global brand value, top 5,000, % GDP	22			

Source: Author's recommendations based on analysis of the GII 2022 data

4.3 Oman

Oman ranks:

- 79th among the 132 economies featured in the GII 2022
- 46th among the 48 high-income group economies (Annex Table A 1)
- 13th among the 19 economies in Northern Africa and Western Asia (Annex Table A 2).

Table 5. Oman strengths and key areas for improvement based on GII 2022

Strengths			Areas for improvement		
Indicator Code	Indicator Name	Rank	Indicator Code	Indicator Name	Rank
IN.1.3.1	Policies for doing business	19	IN.3.3.1	GDP/unit of energy use	111
IN.2.1	Education	10	IN.4.2.3	Venture capital recipients, deals/bn PPP\$ GDP	91
IN.2.1.1	Expenditure on education, % GDP	29	IN.5.1.5	Females employed w/advanced degrees, %	118
IN.2.1.2	Government funding/pupil, secondary, % GDP/cap	3	IN.5.2.3	GERD financed by abroad, % GDP	86
IN.2.2	Tertiary education	23	IN.5.3	Knowledge absorption	113
IN.2.2.2	Graduates in science and engineering, %	1	IN.5.3.2	High-tech imports, % total trade	115
IN.3.1.1	ICT access	15	IN.5.3.5	Research talent, % in businesses	83
IN.3.1.3	Government's online service	24	OUT.6.2.1	Labor productivity growth, %	112
IN.3.2.1	Electricity output, GWh/mn pop.	23	OUT.7.1.4	Industrial designs by origin/bn PPP\$ GDP	111
IN.5.2.2	State of cluster development and depth	21	OUT.7.2.4	Printing and other media, % manufacturing	85
IN.5.3.4	FDI net inflows, % GDP	19			
OUT.7.3.4	Mobile app creation/bn PPP\$ GDP	16			

Source: Author's recommendations based on analysis of the GII 2022 data

4.4 Qatar

Qatar ranks:

- 52nd among the 132 economies featured in the GII 2022
- 42nd among the 48 high-income group economies (Annex Table A 1)
- 6th among the 19 economies in Northern Africa and Western Asia (Annex Table A 2).

Table 6. Qatar strengths and key areas for improvement based on GII 2022

Strengths			Areas for improvement		
Indicator Code	Indicator Name	Rank	Indicator Code	Indicator Name	Rank
IN.1.3	Business environment	7	IN.3.3.1	GDP/unit of energy use	112
IN.1.3.1	Policies for doing business	12	IN.4.2.3	Venture capital recipients, deals/bn PPP\$ GDP	98
IN.1.3.2	Entrepreneurship policies and culture	5	IN.4.2.4	Venture capital received, value, % GDP	96
IN.2.2	Tertiary education	10	IN.5.2.3	GERD financed by abroad, % GDP	90
IN.2.2.3	Tertiary inbound mobility, %	1	IN.5.3.1	Intellectual property payments, % total trade	122
IN.3.1.1	ICT access	11	IN.5.3.4	FDI net inflows, % GDP	125
IN.3.2	General infrastructure	1	OUT.6.3.1	Intellectual property receipts, % total trade	113
IN.3.2.1	Electricity output, GWh/mn pop.	5	OUT.7.1.2	Trademarks by origin/bn PPP\$ GDP	118
IN.4.1	Credit	19	OUT.7.2.5	Creative goods exports, % total trade	112
IN.4.1.2	Domestic credit to private sector, % GDP	15			
IN.5.2.1	University-industry R&D collaboration	12			
IN.5.3.3	ICT services imports, % total trade	8			
OUT.6.2.2	New businesses/th pop. 15–64	23			
OUT.7.1.3	Global brand value, top 5,000, % GDP	19			

Source: Author's recommendations based on analysis of the GII 2022 data

4.5 Saudi Arabia

Saudi Arabia ranks:

- 51st among the 132 economies featured in the GII 2022
- 41st among the 48 high-income group economies (Annex Table A 1)
- 5th among the 19 economies in Northern Africa and Western Asia (Annex Table A 2).

Table 7. Saudi Arabia strengths and key areas for improvement based on GII 2022

Strengths			Areas for improvement		
Indicator Code	Indicator Name	Rank	Indicator Code	Indicator Name	Rank
IN.1.3.1	Policies for doing business	15	IN.1.1.1	Political and operational stability	120
IN.2.1.1	Expenditure on education, % GDP	3	IN.1.2.3	Cost of redundancy dismissal	103
IN.2.3.3	Global corporate R&D investors, top 3, mn USD	18	IN.2.1.4	PISA scales in reading, maths and science	71
IN.3.1.1	ICT access	6	IN.3.3	Ecological sustainability	99
IN.3.1.2	ICT use	13	IN.3.3.1	GDP/unit of energy use	99
IN.3.2.1	Electricity output, GWh/mn pop.	12	IN.5.3.4	FDI net inflows, % GDP	110
IN.4.2	Investment	14	OUT.6.2	Knowledge impact	97
IN.4.2.1	Market capitalization, % GDP	4	OUT.6.2.1	Labor productivity growth, %	115
IN.4.2.4	Venture capital received, value, % GDP	7	OUT.6.2.2	New businesses/th pop. 15–64	89
IN.4.3.3	Domestic market scale, bn PPP\$	17	OUT.7.1.2	Trademarks by origin/bn PPP\$ GDP	103
IN.5.2.2	State of cluster development and depth	13	OUT.7.1.4	Industrial designs by origin/bn PPP\$ GDP	93
			OUT.7.2.1	Cultural and creative services exports, % total trade	98

Source: Author's recommendations based on analysis of the GII 2022 data

4.6 United Arab Emirates

The United Arab Emirates ranks:

- 31st among the 132 economies featured in the GII 2022
- 30th among the 48 high-income group economies (Annex Table A 1)
- 3rd among the 19 economies in Northern Africa and Western Asia (Annex Table A 2).

Table 8. United Arab Emirates strengths and key areas for improvement based on GII 2022

Strengths			Areas for improvement		
Indicator Code	Indicator Name	Rank	Indicator Code	Indicator Name	Rank
IN.1	Institutions	6	IN.2.1.1	Expenditure on education, % GDP	84
IN.1.2.3	Cost of redundancy dismissal	1	IN.5.1.5	Females employed w/advanced degrees, %	80
IN.1.3	Business environment	1	OUT.6.1	Knowledge creation	97
IN.1.3.1	Policies for doing business	6	OUT.6.1.1	Patents by origin/bn PPP\$ GDP	113
IN.1.3.2	Entrepreneurship policies and culture	1	OUT.6.1.3	Utility models by origin/bn PPP\$ GDP	76
IN.2.2	Tertiary education	1	OUT.6.1.4	Scientific and technical articles/bn PPP\$ GDP	88
IN.2.2.3	Tertiary inbound mobility, %	1	OUT.6.2.1	Labor productivity growth, %	71
IN.3	Infrastructure	7	OUT.6.3.2	Production and export complexity	80
IN.3.1.1	ICT access	3	OUT.7.1.2	Trademarks by origin/bn PPP\$ GDP	110
IN.3.2	General infrastructure	4	OUT.7.1.4	Industrial designs by origin/bn PPP\$ GDP	115
IN.3.2.1	Electricity output, GWh/mn pop.	8	OUT.7.2.2	National feature films/mn pop. 15–69	63
IN.3.2.2	Logistics performance	11			
IN.5.1.4	GERD financed by business, %	5			
IN.5.2.2	State of cluster development and depth	5			
IN.5.3.5	Research talent, % in businesses	2			
OUT.7.2.5	Creative goods exports, % total trade	11			

Source: Author's recommendations based on analysis of the GII 2022 data

5 Next steps

The EU-GCC Dialogue on Economic Diversification Project will follow up on the recommendations above with the European Commission, the EU27 Member States and the project stakeholders to assist them in leveraging these opportunities to contribute to the GCC economic diversification process and to improve the business environment in the GCC countries, which would increase the trade and investment opportunities between EU and GCC countries.

6 Annex

Table A 1. High income economies in the Global Innovation Index 2022

	Region	Economy name
1	Europe	Austria
2	Europe	Belgium
3	Europe	Croatia
4	Europe	Czech Republic
5	Europe	Denmark
6	Europe	Estonia
7	Europe	Finland
8	Europe	France
9	Europe	Germany
10	Europe	Greece
11	Europe	Hungary
12	Europe	Iceland
13	Europe	Ireland
14	Europe	Italy
15	Europe	Latvia
16	Europe	Lithuania
17	Europe	Luxembourg
18	Europe	Malta
19	Europe	Netherlands
20	Europe	Norway
21	Europe	Poland
22	Europe	Portugal
23	Europe	Slovakia
24	Europe	Slovenia
25	Europe	Spain
26	Europe	Sweden
27	Europe	Switzerland
28	Europe	United Kingdom
29	Latin America and the Caribbean	Chile
30	Latin America and the Caribbean	Trinidad and Tobago
31	Latin America and the Caribbean	Uruguay
32	Northern Africa and Western Asia	Bahrain
33	Northern Africa and Western Asia	Cyprus
34	Northern Africa and Western Asia	Israel
35	Northern Africa and Western Asia	Kuwait
36	Northern Africa and Western Asia	Oman
37	Northern Africa and Western Asia	Qatar
38	Northern Africa and Western Asia	Saudi Arabia
39	Northern Africa and Western Asia	United Arab Emirates
40	Northern America	Canada
41	Northern America	United States of America
42	South East Asia, East Asia, and Oceania	Australia

	Region	Economy name
43	South East Asia, East Asia, and Oceania	Brunei Darussalam
44	South East Asia, East Asia, and Oceania	Hong Kong, China
45	South East Asia, East Asia, and Oceania	Japan
46	South East Asia, East Asia, and Oceania	New Zealand
47	South East Asia, East Asia, and Oceania	Republic of Korea
48	South East Asia, East Asia, and Oceania	Singapore

Source: GII 2022 Database

Table A 2. Northern Africa and Western Asia economies in the Global Innovation Index 2022

	Economy name
1	Algeria
2	Armenia
3	Azerbaijan
4	Bahrain
5	Cyprus
6	Egypt
7	Georgia
8	Iraq
9	Israel
10	Jordan
11	Kuwait
12	Morocco
13	Oman
14	Qatar
15	Saudi Arabia
16	Tunisia
17	Türkiye
18	United Arab Emirates
19	Yemen

Source: GII 2022 Database

7 References

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