

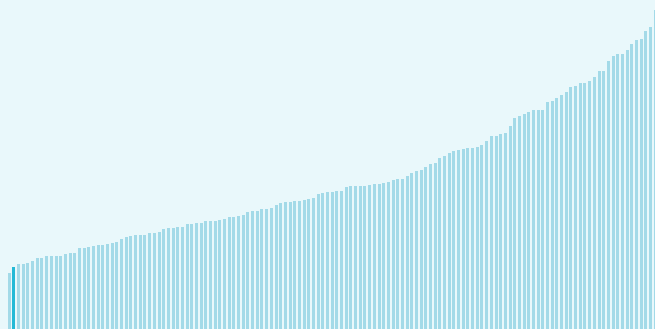
# Global Innovation Index 2025



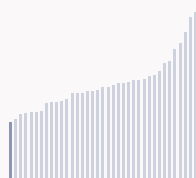
## Angola ranking in the Global Innovation Index 2025

Angola ranks **138th** among the 139 economies featured in the GII 2025.

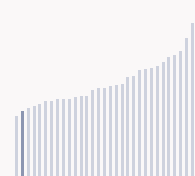
The Global Innovation Index (GII) ranks world economies according to their innovation capabilities. Consisting of roughly 80 indicators, grouped into innovation inputs and outputs, the GII aims to capture the multi-dimensional facets of innovation.



Angola ranks 37th among the 37 Lower middle-income group economies.



Angola ranks 31st among the 32 economies in Sub-Saharan Africa.



### ► Angola GII Ranking (2020-2025)

The table shows the rankings of Angola over the past six years. Data availability and changes to the GII model framework influence year-on-year comparisons of the GII rankings. The statistical confidence interval for the ranking of Angola in the GII 2025 is between ranks 135 and 139.

| Year | GII Position | Innovation Inputs | Innovation Outputs |
|------|--------------|-------------------|--------------------|
| 2020 | n/a          | n/a               | n/a                |
| 2021 | 132nd        | 131st             | 131st              |
| 2022 | 127th        | 129th             | 117th              |
| 2023 | 132nd        | 132nd             | 132nd              |
| 2024 | 133rd        | 132nd             | 133rd              |
| 2025 | 138th        | 133rd             | 137th              |

Angola performs worse in innovation outputs than innovation inputs in 2025.

This year Angola ranks 133rd in innovation inputs. This position is lower than last year.

Angola ranks 137th in innovation outputs. This position is lower than last year.

Angola has no clusters in the world's top innovation clusters of the Global Innovation Index.

# Global Innovation Index 2025



## > Global Innovation Tracker

The Global Innovation Tracker 2025 shows what is the current state of innovation in Angola, how rapidly is technology being embraced and what are the resulting societal impacts.



For Angola, 2 indicators have improved in the short-term and 3 indicators have worsened.

### Science and innovation investment

|                           | Scientific publications | R&D investments | Venture capital deal numbers | International patent filings |
|---------------------------|-------------------------|-----------------|------------------------------|------------------------------|
| Short term                | ▲ 24.2 %<br>2023 - 2024 | n/a             | n/a                          | n/a                          |
| Long term (annual growth) | ▲ 15.9 %<br>2014 - 2024 | n/a             | n/a                          | ▼ -100 %<br>2014 - 2024      |

### Technology adoption

|                           | Safe sanitation | Connectivity                       |                                     | Robots | Electric vehicles |
|---------------------------|-----------------|------------------------------------|-------------------------------------|--------|-------------------|
|                           |                 | Fixed broadband                    | 5G                                  |        |                   |
| Short term                | n/a             | ▼ -0.3%<br>2022 - 2023             | n/a                                 | n/a    | n/a               |
| Long term (annual growth) | n/a             | ▲ 19.9%<br>2013 - 2023             | n/a                                 | n/a    | n/a               |
| Penetration               | n/a             | 0.4<br>per 100 inhabitants in 2023 | 17.3<br>per 100 inhabitants in 2023 | n/a    | n/a               |

### Socioeconomic impact

|                           | Labor productivity      | Life expectancy        | Temperature change |
|---------------------------|-------------------------|------------------------|--------------------|
| Short term                | ▼ -1.1 %<br>2023 - 2024 | ▲ 0.6 %<br>2022 - 2023 | + 1.3 °C<br>2024   |
| Long term (annual growth) | ▼ -3.3 %<br>2014 - 2024 | ▲ 0.8 %<br>2013 - 2023 | + 0.7 °C<br>2014   |
| Level                     | 23,265.2<br>USD in 2024 | 64.6<br>years in 2023  | n/a                |

Notes: Not all indicators of the Global Innovation Tracker are used to calculate the Global Innovation Index. Long-term annual growth refers to the compound annual growth rate (CAGR) over the indicated period. For each variable, a one-year growth rate is set for the short run, and ten-year CAGR is set for the long run; time windows might differ when gaps exist in data availability. The end period corresponds to the most recent available observation, which may differ among countries. Temperature change is an exception: it indicates the change in degrees Celsius with respect to the average temperature in the countries. from 1951–1980. Figures are rounded.

# Global Innovation Index 2025



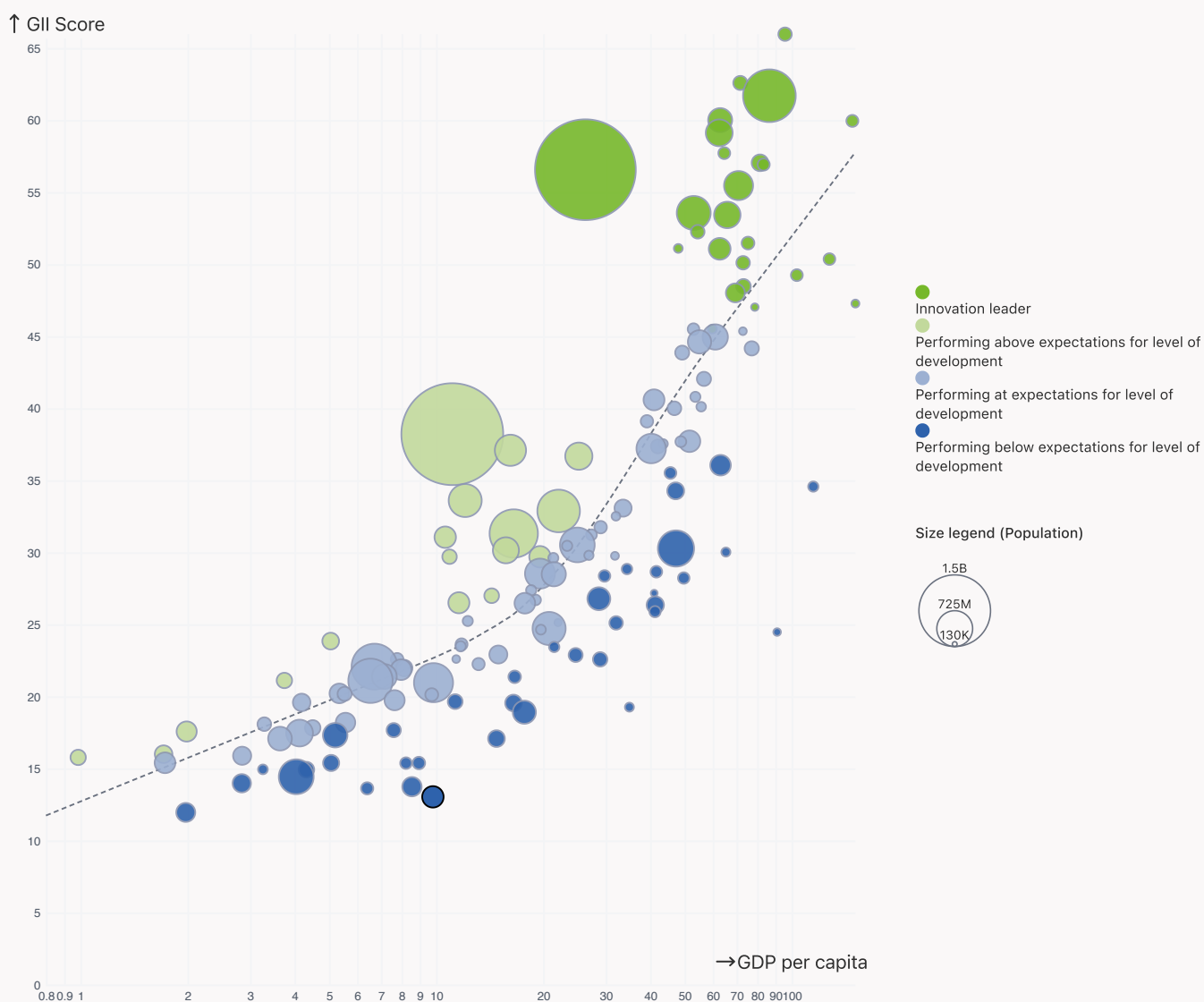
## Expected vs. Observed Innovation Performance

The bubble chart below shows the relationship between income levels (GDP per capita) and innovation performance (GII score). The trend line gives an indication of the expected innovation performance according to income level. Economies appearing above the trend line are performing better than expected and those below are performing below expectations.



Relative to GDP Angola performs below expectations for its level of development.

### > Innovation overperformers relative to their economic development



# Global Innovation Index 2025



## Effectively translating innovation investments into innovation outputs

The chart below shows the relationship between innovation inputs and innovation outputs. Economies above the line are effectively translating costly innovation investments into more and higher-quality outputs.



Angola produces less innovation outputs relative to its level of innovation investments.

### > Relationship between innovation inputs and outputs

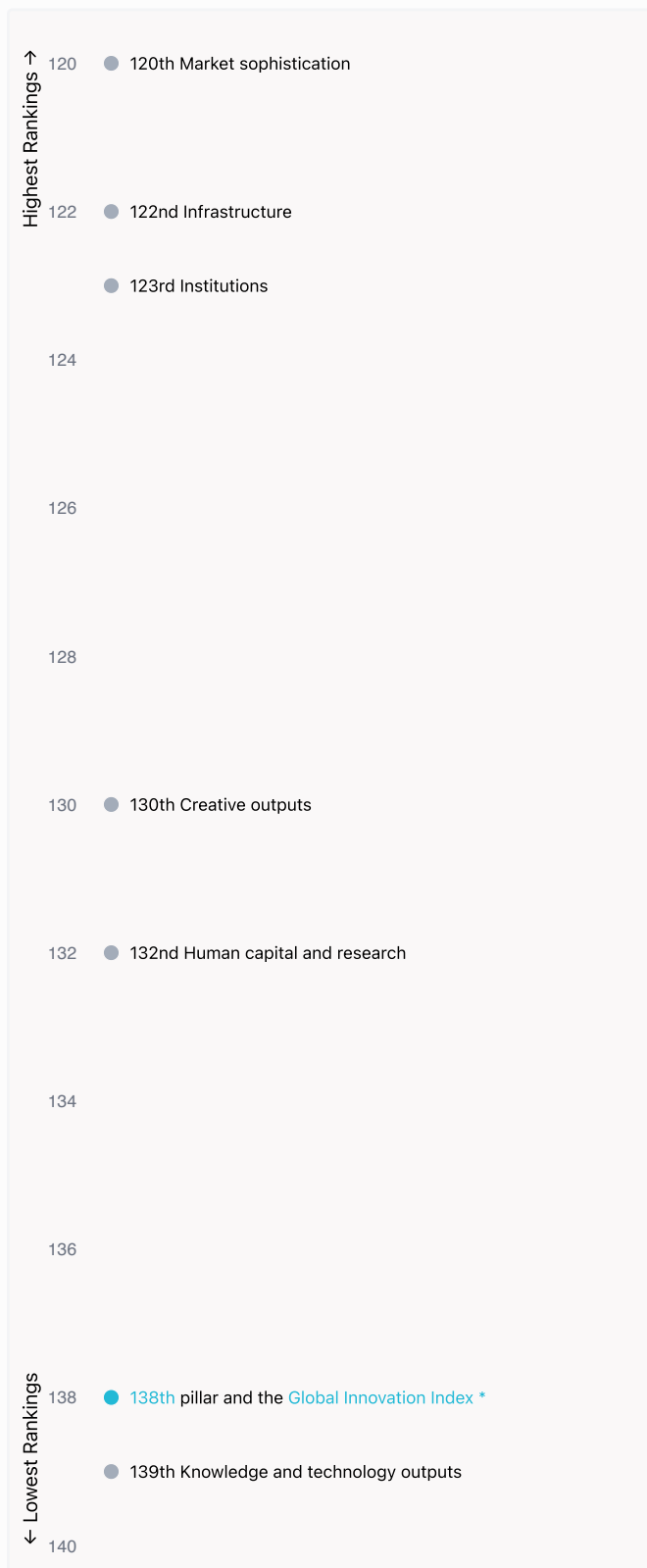


# Global Innovation Index 2025



## Overview of Angola's rankings in the seven areas of the GII in 2025

The chart shows the ranking for each of the seven areas that the GII comprises. The strongest areas for Angola are those that rank above the GII (shown in blue) and the weakest are those that rank below.



### Highest Rankings

Angola ranks highest in Market sophistication (120th), Infrastructure (122nd), Institutions (123rd) and Creative outputs (130th).



### Lowest Rankings

Angola ranks lowest in Knowledge and technology outputs (139th), Business sophistication, GII Index (138th) and Human capital and research (132nd).

\* Business sophistication



The full WIPO Intellectual Property Statistics profile for Angola can be found on <https://www.wipo.int/edocs/statistics-country-profile/en/ao.pdf>

# Global Innovation Index 2025



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



### Lower middle-income economies

Angola performs below the Lower middle-income group average in all pillars.



### Sub-Saharan Africa

Angola performs below the regional average in all pillars.

#### Institutions

Top 10 | Score: 78.63

Sub-Saharan Africa | Score: 40.29

Lower middle-income | Score: 37.2

Angola | Score: 27.64

#### Human capital and research

Top 10 | Score: 59.30

Lower middle-income | Score: 20.8

Sub-Saharan Africa | Score: 18.06

Angola | Score: 12.87

#### Infrastructure

Top 10 | Score: 61.36

Lower middle-income | Score: 32.1

Sub-Saharan Africa | Score: 27.58

Angola | Score: 26.87

#### Market sophistication

Top 10 | Score: 61.82

Lower middle-income | Score: 28.1

Sub-Saharan Africa | Score: 22.67

Angola | Score: 20.72

#### Business sophistication

Top 10 | Score: 59.10

Lower middle-income | Score: 25.3

Sub-Saharan Africa | Score: 25.36

Angola | Score: 16.10

#### Knowledge and technology outputs

Top 10 | Score: 54.93

Lower middle-income | Score: 15.4

Sub-Saharan Africa | Score: 11.53

Angola | Score: 5.46

#### Creative outputs

Top 10 | Score: 55.98

Lower middle-income | Score: 13.8

Sub-Saharan Africa | Score: 10.61

Angola | Score: 4.97

# Global Innovation Index 2025



## Innovation strengths and weaknesses in Angola

The table below gives an overview of the indicator strengths and weaknesses of Angola in the GII 2025.



Angola's best-ranked innovation strengths are **Youth demographic dividend, % (rank 6)**, **Gross capital formation, % GDP (rank 13)** and **Low-carbon energy use, % (rank 47)**.

### Strengths

| Rank | Code  | Indicator name                                |
|------|-------|---|
| 6    | 5.1.3 | Youth demographic dividend, %                 |
| 13   | 3.2.3 | Gross capital formation, % GDP                |
| 47   | 3.3.2 | Low-carbon energy use, %                      |
| 49   | 3.3.1 | GDP/unit of energy use                        |
| 58   | 4.3.3 | Domestic market scale, bn PPP\$               |
| 66   | 5.3.1 | Intellectual property payments, % total trade |
| 77   | 6.2.3 | Software spending, % GDP                      |
| 90   | 6.3.2 | Production and export complexity              |
| 96   | 1.1.1 | Operational stability for businesses*         |
| 102  | 6.3.3 | High-tech exports, % total trade              |

### Weaknesses

| Rank | Code  | Indicator name                                     |
|------|-------|--|
| 139  | 6.1.4 | Scientific and technical articles/bn PPP\$ GDP     |
| 135  | 5.2.4 | State of cluster development <sup>†</sup>          |
| 134  | 5.2.2 | University–industry R&D collaboration <sup>†</sup> |
| 127  | 6.3.1 | Intellectual property receipts, % total trade      |
| 113  | 4.3.2 | Domestic industry diversification                  |
| 113  | 3.2.2 | Logistics performance*                             |
| 109  | 6.1.2 | PCT patents by inventor origin/bn PPP\$ GDP        |
| 100  | 5.2.5 | Patent families/bn PPP\$ GDP                       |
| 80   | 2.3.4 | QS university ranking, top 3*                      |
| 53   | 6.2.2 | Unicorn valuation, % GDP                           |
| 44   | 2.3.3 | Global corporate R&D investors, top 3, mn USD      |

# Global Innovation Index 2025



## Angola's innovation system

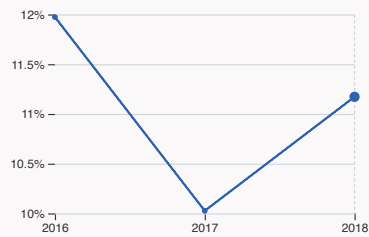
As far as practicable, the plots below present unscaled indicator data.

### > Innovation inputs in Angola



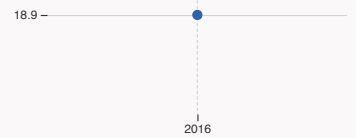
#### 2.1.1 Expenditure on education

was equal to 2.51 % GDP in 2023, up by 0.13 percentage points from the year prior – and equivalent to an indicator rank of 122.



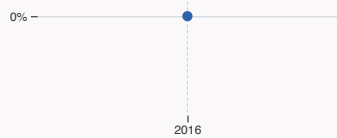
#### 2.2.2 Graduates in science and engineering

was equal to 11.17 % of total graduates in 2018, up by 1.15 percentage points from the year prior – and equivalent to an indicator rank of 114.



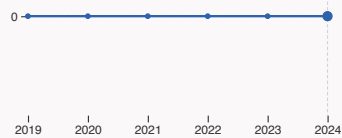
#### 2.3.1 Researchers

was equal to 18.94 FTE per million population in 2016 – and equivalent to an indicator rank of 107.



#### 2.3.2 Gross expenditure on R&D

was equal to 0.03 % GDP in 2016 – and equivalent to an indicator rank of 111.



#### 2.3.4 QS university ranking

The country does not have any universities in the QS world universities ranking in 2024.



#### 4.3.2 Domestic industry diversification

was equal to an index score of 0.55 in 2022 with no change from the year prior – and equivalent to an indicator rank of 113.



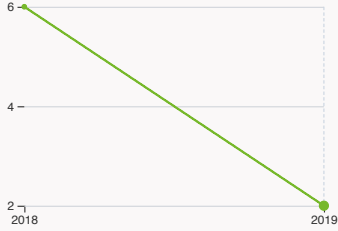
#### 5.1.1 Knowledge-intensive employment

was equal to 8.42 % of total workforce in 2022, up by 0.93 percentage points from the year prior – and equivalent to an indicator rank of 106.

# Global Innovation Index 2025



## > Innovation outputs in Angola



### 6.1.1 Patents by origin

was equal to 2 patents in 2019, down by 66.67% from the year prior – and equivalent to an indicator rank of 135.



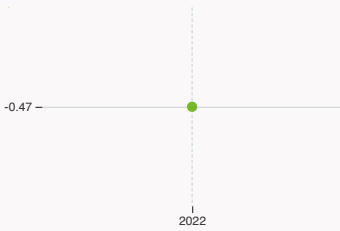
### 6.2.2 Unicorn valuation

The country does not have unicorns in 2025.



### 6.2.4 High-tech manufacturing

was equal to 89.52 high-tech manufacturing output in million USD in 2022, up by 56.64% from the year prior – and equivalent to an indicator rank of 108.



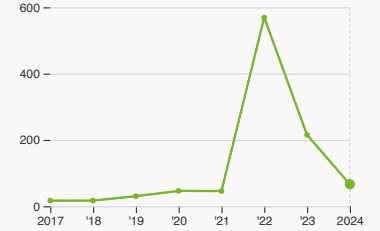
### 6.3.2 Production and export complexity

was equal to a score of -0.47 in 2022 – and equivalent to an indicator rank of 90.



### 6.3.3 High-tech exports

was equal to 110.4 million USD in 2023, up by 22.11% from the year prior – and equivalent to an indicator rank of 102.



### 7.3.3 Mobile app creation

was equal to 66.44 thousand global downloads of mobile apps in 2024, down by 69.12% from the year prior – and equivalent to an indicator rank of 125.

| Output rank  | Input rank | Income       | Region             | Population (mn) | GDP, PPP\$ (bn) | GDP per capita, PPP\$ |  |
|--|------------|--------------|--------------------|-----------------|-----------------|-----------------------|--|
| 137  | 133        | Lower middle | Sub-Saharan Africa | 37.9            | 374.9           | 9,801                 |  |
|  |            |              |                    | Score / Value   | Rank            |                       |  |
| <b>Institutions</b>  |            |              |                    | 27.6            | 123             |                       |  |
| <b>1.1 Institutional environment</b>                         |            |              |                    | 34.8            | 111             |                       |  |
| 1.1.1 Operational stability for businesses*                  |            |              |                    | 51.3            | 96              | ●                     |  |
| 1.1.2 Government effectiveness*                              |            |              |                    | 18.3            | 129             |                       |  |
| <b>1.2 Regulatory environment</b>                            |            |              |                    | 27.4            | 125             |                       |  |
| 1.2.1 Regulatory quality*                                    |            |              |                    | 29.2            | 115             |                       |  |
| 1.2.2 Rule of law*   |            |              |                    | 25.6            | 127             |                       |  |
| <b>1.3 Business environment</b>                              |            |              |                    | 20.7            | 122             | ◇                     |  |
| 1.3.1 Policy stability for doing business†                   |            |              |                    | 22.9            | 120             |                       |  |
| 1.3.2 Entrepreneurship policies and culture†                 |            |              |                    | 18.6            | 79              | ◇                     |  |
| <b>Human capital and research</b>                            |            |              |                    | 12.9            | 132             | ◇                     |  |
| <b>2.1 Education</b>   |            |              |                    | 33.7            | [122]           |                       |  |
| 2.1.1 Expenditure on education, % GDP                        |            |              |                    | 2.5             | 122             |                       |  |
| 2.1.2 Government funding/pupil, secondary, % GDP/cap         |            |              |                    | n/a             | n/a             |                       |  |
| 2.1.3 School life expectancy, years                          |            |              |                    | n/a             | n/a             |                       |  |
| 2.1.4 PISA scales in reading, maths and science              |            |              |                    | n/a             | n/a             |                       |  |
| 2.1.5 Pupil-teacher ratio, secondary                         |            |              |                    | 28              | 120             | ◇                     |  |
| <b>2.2 Tertiary education</b>                                |            |              |                    | 4.8             | 127             | ◇                     |  |
| 2.2.1 Tertiary enrolment, % gross                            |            |              |                    | 10              | 122             |                       |  |
| 2.2.2 Graduates in science and engineering, %                |            |              |                    | 11.2            | 114             | ◇                     |  |
| 2.2.3 Tertiary inbound mobility, %                           |            |              |                    | n/a             | n/a             |                       |  |
| <b>2.3 Research and development (R&amp;D)</b>                |            |              |                    | 0.1             | 118             |                       |  |
| 2.3.1 Researchers, FTE/mn pop.                               |            |              |                    | 18.9            | 107             | ◇                     |  |
| 2.3.2 Gross expenditure on R&D, % GDP                        |            |              |                    | 0.03            | 111             | ◇                     |  |
| 2.3.3 Global corporate R&D investors, top 3, mn USD          |            |              |                    | 0               | 44              | ◇                     |  |
| 2.3.4 QS university ranking, top 3*                          |            |              |                    | 0               | 80              | ◇                     |  |
| <b>Infrastructure</b>  |            |              |                    | 26.9            | 122             |                       |  |
| <b>3.1 Information and communication technologies (ICTs)</b> |            |              |                    | 38.3            | 125             | ◇                     |  |
| 3.1.1 ICT access*  |            |              |                    | 45.8            | 121             |                       |  |
| 3.1.2 ICT use*   |            |              |                    | 41.6            | 116             | ◇                     |  |
| 3.1.3 Government's online service*                           |            |              |                    | 27.4            | 124             |                       |  |
| <b>3.2 General infrastructure</b>                            |            |              |                    | 22.7            | 98              |                       |  |
| 3.2.1 Electricity output, GWh/mn pop.                        |            |              |                    | 442.8           | 114             | ◇                     |  |
| 3.2.2 Logistics performance*                                 |            |              |                    | 0               | 113             | ◇                     |  |
| 3.2.3 Gross capital formation, % GDP                         |            |              |                    | 33.4            | 13              | ●                     |  |
| <b>3.3 Ecological sustainability</b>                         |            |              |                    | 19.7            | 72              |                       |  |
| 3.3.1 GDP/unit of energy use                                 |            |              |                    | 12.7            | 49              | ●                     |  |
| 3.3.2 Low-carbon energy use, %                               |            |              |                    | 26.2            | 47              | ●                     |  |
| 3.3.3 ISO 14001 environment/bn PPP\$ GDP                     |            |              |                    | 0.07            | 134             |                       |  |
| <b>Market sophistication</b>                                 |            |              |                    | 20.7            | 120             |                       |  |
| <b>4.1 Credit</b>  |            |              |                    | 8.4             | 120             |                       |  |
| 4.1.1 Finance for startups and scaleups†                     |            |              |                    | 24.7            | 85              | ◇                     |  |
| 4.1.2 Domestic credit to private sector, % GDP               |            |              |                    | 9.5             | 132             |                       |  |
| 4.1.3 Loans from microfinance institutions, % GDP            |            |              |                    | 0.005           | 64              | ◇                     |  |
| <b>4.2 Investment</b>  |            |              |                    | n/a             | [n/a]           |                       |  |
| 4.2.1 Market capitalization, % GDP                           |            |              |                    | n/a             | n/a             |                       |  |
| 4.2.2 Venture capital (VC) received, deal count/bn PPP\$ GDP |            |              |                    | n/a             | n/a             |                       |  |
| 4.2.3 Late-stage VC deal count, % global VC                  |            |              |                    | n/a             | n/a             |                       |  |
| 4.2.4 VC investors, deal count/bn PPP\$ GDP                  |            |              |                    | n/a             | n/a             |                       |  |
| 4.2.5 VC investor co-participation/bn PPP\$ GDP              |            |              |                    | n/a             | n/a             |                       |  |
| <b>4.3 Trade, diversification and market scale</b>           |            |              |                    | 33              | 130             | ◇                     |  |
| 4.3.1 Applied tariff rate, weighted avg., %                  |            |              |                    | 7.3             | 115             | ◇                     |  |
| 4.3.2 Domestic industry diversification                      |            |              |                    | 0               | 113             | ◇                     |  |
| 4.3.3 Domestic market scale, bn PPP\$                        |            |              |                    | 374.9           | 58              | ●                     |  |
| <b>Business sophistication</b>                               |            |              |                    | 16.1            | 138             | ◇                     |  |
| <b>5.1 Knowledge workers</b>                                 |            |              |                    | 35.5            | [69]            |                       |  |
| 5.1.1 Knowledge-intensive employment, %                      |            |              |                    | 8.4             | 106             | ●                     |  |
| 5.1.2 Females employed w/advanced degrees, %                 |            |              |                    | 1.3             | 115             | ●                     |  |
| 5.1.3 Youth demographic dividend, %                          |            |              |                    | 63.4            | 6               | ◆                     |  |
| 5.1.4 GERD performed by business, % GDP                      |            |              |                    | n/a             | n/a             |                       |  |
| 5.1.5 GERD financed by business, %                           |            |              |                    | n/a             | n/a             |                       |  |
| <b>5.2 Innovation linkages</b>                               |            |              |                    | 0.3             | 139             | ◇                     |  |
| 5.2.1 Public research-industry co-publications, %            |            |              |                    | 0.3             | 134             | ◇                     |  |
| 5.2.2 University-industry R&D collaboration†                 |            |              |                    | 0               | 134             | ◇                     |  |
| 5.2.3 University industry & international engagement, top 5* |            |              |                    | n/a             | n/a             |                       |  |
| 5.2.4 State of cluster development†                          |            |              |                    | 0               | 135             | ◇                     |  |
| 5.2.5 Patent families/bn PPP\$ GDP                           |            |              |                    | 0               | 100             | ◇                     |  |
| <b>5.3 Knowledge absorption</b>                              |            |              |                    | 12.5            | 138             | ◇                     |  |
| 5.3.1 Intellectual property payments, % total trade          |            |              |                    | 0.6             | 66              | ◆                     |  |
| 5.3.2 High-tech imports, % total trade                       |            |              |                    | 4.7             | 123             |                       |  |
| 5.3.3 ICT services imports, % total trade                    |            |              |                    | 0.3             | 132             |                       |  |
| 5.3.4 FDI net inflows, % GDP                                 |            |              |                    | -5.1            | 133             | ◇                     |  |
| 5.3.5 Research talent, % in businesses                       |            |              |                    | n/a             | n/a             |                       |  |
| <b>Knowledge and technology outputs</b>                      |            |              |                    | 5.5             | 139             | ◇                     |  |
| <b>6.1 Knowledge creation</b>                                |            |              |                    | 0.3             | 139             | ◇                     |  |
| 6.1.1 Patents by origin/bn PPP\$ GDP                         |            |              |                    | 0.007           | 135             | ◇                     |  |
| 6.1.2 PCT patents by inventor origin/bn PPP\$ GDP            |            |              |                    | 0               | 109             | ◇                     |  |
| 6.1.3 Utility models by origin/bn PPP\$ GDP                  |            |              |                    | 0.03            | 64              | ◇                     |  |
| 6.1.4 Scientific and technical articles/bn PPP\$ GDP         |            |              |                    | 0.5             | 139             | ◇                     |  |
| 6.1.5 Citable documents H-index                              |            |              |                    | 0.7             | 136             |                       |  |
| <b>6.2 Knowledge impact</b>                                  |            |              |                    | 7.8             | 135             | ◇                     |  |
| 6.2.1 Labor productivity growth, %                           |            |              |                    | -2.9            | 134             | ◇                     |  |
| 6.2.2 Unicorn valuation, % GDP                               |            |              |                    | 0               | 53              | ◇                     |  |
| 6.2.3 Software spending, % GDP                               |            |              |                    | 0.2             | 77              | ●                     |  |
| 6.2.4 High-tech manufacturing, %                             |            |              |                    | 3.6             | 108             | ◇                     |  |
| <b>6.3 Knowledge diffusion</b>                               |            |              |                    | 8.3             | 116             |                       |  |
| 6.3.1 Intellectual property receipts, % total trade          |            |              |                    | 0               | 127             | ◇                     |  |
| 6.3.2 Production and export complexity                       |            |              |                    | 38.3            | 90              | ●                     |  |
| 6.3.3 High-tech exports, % total trade                       |            |              |                    | 0.4             | 102             | ●                     |  |
| 6.3.4 ICT services exports, % total trade                    |            |              |                    | 0.1             | 136             |                       |  |
| 6.3.5 ISO 9001 quality/bn PPP\$ GDP                          |            |              |                    | 0.3             | 132             |                       |  |
| <b>Creative outputs</b>                                      |            |              |                    | 5               | [130]           |                       |  |
| <b>7.1 Intangible assets</b>                                 |            |              |                    | 4.4             | [123]           |                       |  |
| 7.1.1 Intangible asset intensity, top 15, %                  |            |              |                    | n/a             | n/a             |                       |  |
| 7.1.2 Trademarks by origin/bn PPP\$ GDP                      |            |              |                    | 10              | 114             |                       |  |
| 7.1.3 Global brand value, top 5,000, % GDP                   |            |              |                    | n/a             | n/a             |                       |  |
| 7.1.4 Industrial designs by origin/bn PPP\$ GDP              |            |              |                    | 0.1             | 111             | ◇                     |  |
| <b>7.2 Creative goods and services</b>                       |            |              |                    | 0.1             | [138]           |                       |  |
| 7.2.1 Cultural and creative services exports, % total trade  |            |              |                    | n/a             | n/a             |                       |  |
| 7.2.2 National feature films/mn pop. 15-69                   |            |              |                    | n/a             | n/a             |                       |  |
| 7.2.3 Entertainment and media market/th pop. 15-69           |            |              |                    | n/a             | n/a             |                       |  |
| 7.2.4 Creative goods exports, % total trade                  |            |              |                    | 0.008           | 132             |                       |  |
| <b>7.3 Online creativity</b>                                 |            |              |                    | 11              | 126             |                       |  |
| 7.3.1 Top-level domains (TLDs)/th pop. 15-69                 |            |              |                    | 0.09            | 134             |                       |  |
| 7.3.2 GitHub commits/mn pop. 15-69                           |            |              |                    | 0.4             | 130             |                       |  |
| 7.3.3 Mobile app creation/bn PPP\$ GDP                       |            |              |                    | 32.4            | 125             | ◇                     |  |

NOTES: ● indicates a strength ○ a weakness ◆ an income group strength ◇ an income group weakness \* an index † a survey question ● that the economy's data is outdated. Square brackets [ ] indicate the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level, n/a represents missing values, a dash - indicates an indicator which is not relevant to this economy and thus not considered for DMC thresholds.

# Global Innovation Index 2025



## Data Availability

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



Angola has missing data for eighteen indicators and outdated data for fourteen indicators.

## Missing data for Angola

| Code  | Indicator name   | Economy year | Model year* | Source   |
|-------|--|--------------|-------------|--|
| 2.1.2 | Government funding/pupil, secondary, % GDP/cap         | n/a          | 2021        | UNESCO Institute for Statistics  |
| 2.1.3 | School life expectancy, years                          | n/a          | 2023        | UNESCO Institute for Statistics  |
| 2.1.4 | PISA scales in reading, maths and science              | n/a          | 2022        | OECD, PISA   |
| 2.2.3 | Tertiary inbound mobility, %                           | n/a          | 2023        | UNESCO Institute for Statistics  |
| 4.2.1 | Market capitalization, % GDP                           | n/a          | 2022        | World Federation of Exchanges; World Bank  |
| 4.2.2 | Venture capital (VC) received, deal count/bn PPP\$ GDP | n/a          | 2024        | PitchBook Data, Inc.; International Monetary Fund  |
| 4.2.3 | Late-stage VC deal count, % global VC                  | n/a          | 2024        | PitchBook Data, Inc.   |
| 4.2.4 | VC investors, deal count/bn PPP\$ GDP                  | n/a          | 2024        | PitchBook Data, Inc.; International Monetary Fund  |
| 4.2.5 | VC investor co-participation/bn PPP\$ GDP              | n/a          | 2024        | PitchBook Data, Inc.; International Monetary Fund  |
| 5.1.4 | GERD performed by business, % GDP                      | n/a          | 2023        | UNESCO Institute for Statistics; Eurostat; OECD; RICYT   |
| 5.1.5 | GERD financed by business, %                           | n/a          | 2022        | UNESCO Institute for Statistics; Eurostat; OECD; RICYT   |
| 5.2.3 | University industry & international engagement, top 5* | n/a          | 2025        | Times Higher Education, World University Rankings 2025   |
| 5.3.5 | Research talent, % in businesses                       | n/a          | 2023        | UNESCO Institute for Statistics; Eurostat; OECD; RICYT   |
| 7.1.1 | Intangible asset intensity, top 15, %                  | n/a          | 2024        | Brand Finance  |
| 7.1.3 | Global brand value, top 5,000, % GDP                   | n/a          | 2025        | Brand Finance; International Monetary Fund   |
| 7.2.1 | Cultural and creative services exports, % total trade  | n/a          | 2023        | World Trade Organization, Organisation for Economic Co-operation and Development; United Nations Conference on Trade and Development |
| 7.2.2 | National feature films/mn pop. 15–69                   | n/a          | 2023        | OMDIA; United Nations, World Population Prospects  |

# Global Innovation Index 2025



| Code  | Indicator name                               | Economy year | Model year* | Source   |
|-------|--|--------------|-------------|--|
| 7.2.3 | Entertainment and media market/th pop. 15–69 | n/a          | 2024        | PwC, GEMO; United Nations, World Population Prospects; International Monetary Fund |

\*Model year corresponds to the most frequent data year (the year that appears most often across all economies in the GII).

# Global Innovation Index 2025



## Outdated data for Angola

| Code  | Indicator name                                     | Economy year | Model year* | Source  |
|-------|--|--------------|-------------|---|
| 1.3.2 | Entrepreneurship policies and culture <sup>†</sup> | 2022         | 2024        | Global Entrepreneurship Monitor                                       |
| 2.1.5 | Pupil–teacher ratio, secondary                     | 2021         | 2023        | UNESCO Institute for Statistics                                       |
| 2.2.2 | Graduates in science and engineering, %            | 2018         | 2022        | UNESCO Institute for Statistics; Eurostat; OECD                       |
| 2.3.1 | Researchers, FTE/mn pop.                           | 2016         | 2023        | UNESCO Institute for Statistics; Eurostat; OECD; RICYT                |
| 2.3.2 | Gross expenditure on R&D, % GDP                    | 2016         | 2023        | UNESCO Institute for Statistics; Eurostat; OECD; RICYT                |
| 3.2.1 | Electricity output, GWh/mn pop.                    | 2022         | 2023        | International Energy Agency   |
| 4.1.1 | Finance for startups and scaleups <sup>†</sup>     | 2022         | 2024        | Global Entrepreneurship Monitor                                       |
| 4.1.3 | Loans from microfinance institutions, % GDP        | 2020         | 2023        | International Monetary Fund, Financial Access Survey (FAS)            |
| 4.3.1 | Applied tariff rate, weighted avg., %              | 2022         | 2023        | World Trade Organization  |
| 5.1.1 | Knowledge-intensive employment, %                  | 2022         | 2024        | International Labour Organization                                     |
| 5.1.2 | Females employed w/advanced degrees, %             | 2021         | 2024        | International Labour Organization                                     |
| 6.1.1 | Patents by origin/bn PPP\$ GDP                     | 2019         | 2023        | World Intellectual Property Organization; International Monetary Fund |
| 6.1.3 | Utility models by origin/bn PPP\$ GDP              | 2019         | 2023        | World Intellectual Property Organization; International Monetary Fund |
| 7.1.4 | Industrial designs by origin/bn PPP\$ GDP          | 2022         | 2023        | World Intellectual Property Organization; International Monetary Fund |

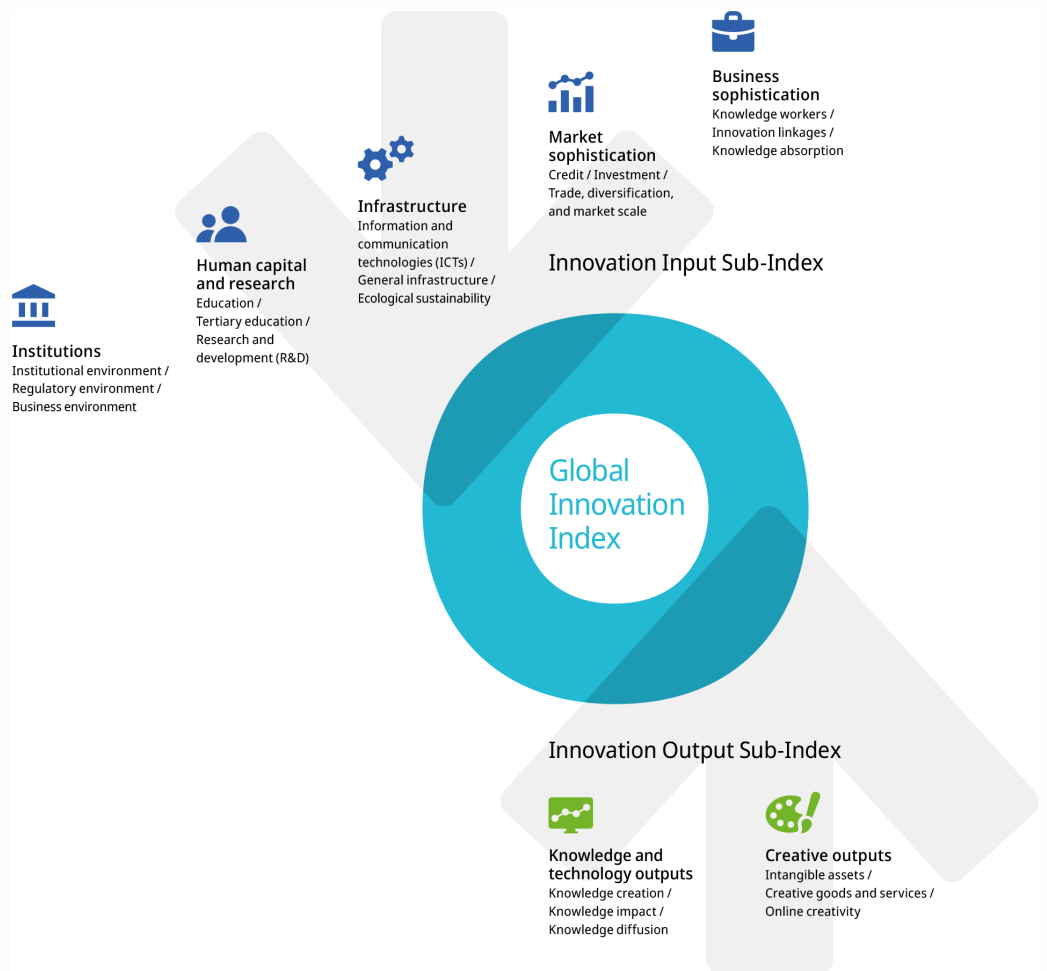
\*Model year corresponds to the most frequent data year (the year that appears most often across all economies in the GII).

# Global Innovation Index 2025



## About the Global Innovation Index

- The Global Innovation Index (GII) is published by the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations.
- Recognizing that innovation is a key driver of economic development, the GII aims to provide an innovation ranking and rich analysis referencing around 140 economies. Over the last decade, the GII has established itself as both a leading reference on innovation and a “tool for action” for economies that incorporate the GII into their innovation agendas.



The Index is a ranking of the innovation capabilities and results of world economies. It measures innovation based on criteria that include institutions, human capital and research infrastructure, credit, investment, linkages, the creation, absorption and diffusion of knowledge and creative outputs.

The GII has two sub-indices: the Innovation Input Sub-Index and the Innovation Output Sub-Index, and seven pillars, each consisting of three sub-pillars.