



THE ADAPTATION ECONOMY INDEX

BETA RELEASE

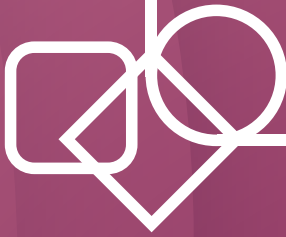
METHODOLOGY, DATA SOURCES & REFERENCES

June 2026



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About the Adaptation Economy Index

The Adaptation Economy Index (AEI) introduces a world-first approach to measuring progress in adapting national economies to deliver inclusive prosperity in a severely climate impacted world. The AEI has been developed to measure whether countries possess the underlying market software, regulatory hardware, and social enablers required to spark commercial innovation, attract private capital, and scale affordable access to climate-adaptive solutions.

For policymakers and regulators, the AEI serves as an analytical blueprint and a quantitative roadmap to diagnose precise structural economic deficiencies—such as weak sovereign risk-transfer mechanisms or commercialisation bottlenecks—enabling them to transform climate adaptation from a peripheral concern into a core economic strategy while successfully structuring “policy-based financing” models that tie sovereign borrowing directly to verifiable milestones.

For the Global Investment Community, the AEI introduces critical structural transparency, moving past backward-looking vulnerability scores. This allows institutional investors and banks to accurately price market risks, identify high-value, de-risked opportunities where local financial and regulatory frameworks actively support climate-adaptive assets, and ultimately prevent capital allocation into stranded assets.

For Adaptation Solution Innovators and Enterprises, the AEI acts as an invaluable guide for locating the most supportive market environments to scale and deploy products profitably. By quantifying local innovation ecosystems and regulatory price signals, it helps entrepreneurs target markets where climate demand is actively backed by the necessary socioeconomic, financial, and institutional infrastructure to guarantee scalable, long-term growth.

The Adaptation Economy Index illustrates a practical approach to measuring “whole-economy” transformative adaptation, thereby more effectively planning, executing, and communicating progress in advancing it. The AEI brings quantification to the seven overarching enabling domains identified in the Adaptation Economy Framework released in November 2025, developed by a Morphosis-led group including the Center for Sustainability Studies at Fundação Getulio Vargas, the Paulson Institute, Instituto Itaúsa, and Basilinna.

June 2026 Adaptation Economy Index Beta Release

The June 2026 Beta release translates the Adaptation Economy Framework into a rigorous, data-driven diagnostic tool covering 72 countries across all global regions. The release builds on a 14-country prototype launched at the World Economic Forum Annual Meeting in Davos in January 2026. This June 2026 release marks a significant methodological step towards a globally comprehensive Adaptation Economy Index and paves the way for a family of subnational, sectoral, and asset-level Adaptation Economy indexes planned for 2026 and beyond.

This June 2026 Beta release is an open invitation to the policy, investment, research, and business communities to engage with the framework—stress-testing its assumptions, contributing ground-level insights, and helping to build the shared measurement infrastructure that transformative adaptation requires. Morphosis plans to develop the AEI along three dimensions: enhancing the indicator architecture with derived datasets utilising AI-assisted methodologies on heterogeneous auditable sources to capture dimensions not yet represented by existing authoritative sources; expanding country and sub-sovereign regional coverage to bring the analysis closer to where adaptation decisions are made; and extending the framework into sectoral applications for agriculture, infrastructure, and other climate-critical industries.

About Morphosis

Morphosis is an investment and insight business for the adaptation economy—the basis of future value for every household, asset, enterprise, and economy in a severely climate-disrupted world. Climate impacts, nature's decline, geopolitical instability, and technological disruption are reshaping how communities, businesses, and economies function. Nations that evolve adaptation markets and economies will be best placed to attract investment and secure inclusive prosperity at scale. The businesses delivering adaptation solutions represent the next wave of transformative value creation. Morphosis builds adaptation economies and solution businesses with expertise, capital, connectivity, and intelligence that help investors, policymakers, and solution providers.

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All errors and omissions in this report are the responsibility of the authors.

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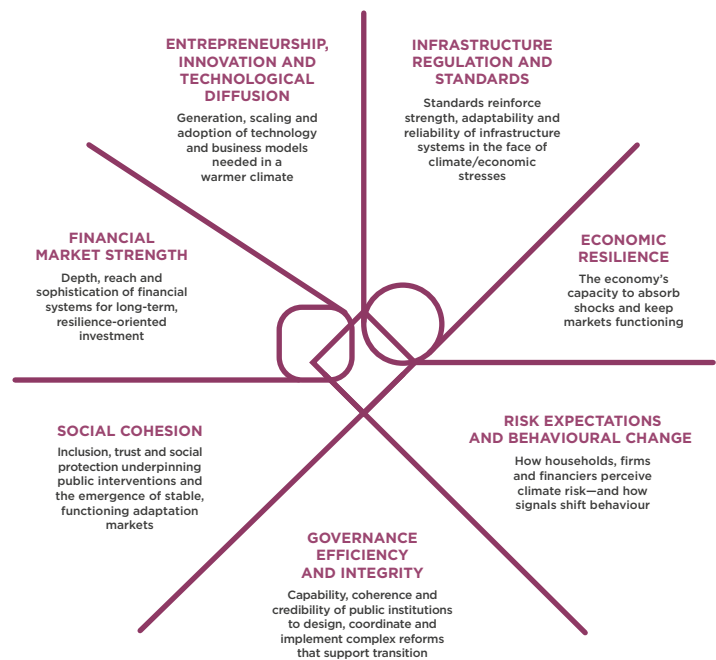
Methodology, Data Sources & References; The Adaptation Economy Index - A Beta Version.

Geneva: Morphosis Solutions SA

The Adaptation Economy Framework

The transition to a resilient economy is not a single, isolated policy act; it is a comprehensive structural transformation. To delineate the contours of this transformation, The Adaptation Economy Framework comprises Seven Domains critical to a nation's capacity to foster, scale, and sustain robust adaptation markets.

This framework targets the underlying transversal drivers of economic and societal adaptation—the structural "gears" that dictate how successfully an entire macroeconomy self-corrects and recalibrates in response to a warming world.



1. **Economic Resilience:** The macroeconomic foundation, including fiscal stability and trade diversification, which lowers the cost of capital and buffers economies against climate-induced supply shocks.
2. **Risk Expectations and Behavioural Change:** The "software" of the economy—mandatory disclosures, open risk data, and climate-stress testing—that align household and business decisions with reality.
3. **Financial Market Strength:** The availability of adaptation-focused financial products and prudential oversight that unlocks private and blended capital.
4. **Entrepreneurship, Innovation, and Technological Diffusion:** The engine of new solutions, focusing on R&D, tech-transfer, and the workforce skills needed to deploy adaptation products at scale.

5. **Infrastructure Regulation and Standards***: The physical "hardware," embedded in building standards and spatial planning, which must in itself be resilient to warming temperatures and which serves as a foundation for all other market activities.
6. **Governance Efficiency and Integrity**: The institutional credibility—transparent procurement and anti-corruption measures—required for long-term policy implementation and the smooth functioning of markets.
7. **Social Cohesion**: Inclusive social protection frameworks and equitable access to services, ensuring that entrepreneurs can take risks and that society endeavours to leave no one behind amid massive transformation.

The breadth of the domains covered highlights that mobilising capital—whether private investments or constrained public funds—is never an isolated, technical exercise in financial engineering. Designing sophisticated blended finance instruments or innovative resilience bonds achieves little if the underlying market architecture is broken. Transformational adaptation requires the intentional, proactive shaping of the ecosystem in which enterprises, capital allocators, and local communities interact.

*The Index has updated the infrastructure pillar to use 'Infrastructure Regulation and Standards' as a more precise definition than the 'Quality & Robustness of Infrastructure' used in the November 2025 Framework.

Index Pillar		Focus	Rationale	Working Metrics
FINANCIAL MARKET STRENGTH	3	Capital depth, reach and regulatory quality	Adaptation solutions can only scale if capital reaches them with sufficient depth, breadth, and sophistication. Domestic credit to the private sector measures how much capital the financial system channels into active enterprises, while the quality of financial-services regulation establishes the rules and confidence needed for sustained investment. Venture capital indicates the availability of frontier risk capital needed to nurture early-stage adaptation technologies toward mass deployment. Finally, broad financial account ownership reflects how much of the population can participate in the formal financial system to support demand for adaptation goods and services.	Domestic credit to private sector (% of GDP); Quality of regulations for financial services; Financial account ownership or mobile money usage (% age 15+); Venture capital received (deal count/bn \$PPP GDP)
ENTREPRENEURSHIP INNOVATION AND TECHNOLOGICAL DIFFUSION	4	Business dynamism, talent, and resource efficiency	Adaptation depends on new solutions being invented, launched, and diffused at pace, in a process of creative destruction. Robust competition regulation ensures new market entrants can challenge climate-vulnerable incumbents, while streamlined business-entry regulation reflects how easily entrepreneurs can get adaptation-focused firms off the ground. These ventures draw from a baseline of STEM graduates as the human-capital foundation for technical solutions, complemented by perceived opportunity, which tracks the share of the population that sees market openings worth acting on. Material productivity measures how efficiently the economy converts raw inputs into economic value, serving as a proxy for resource-smart innovation.	Quality of regulations for market competition; Quality of regulations for business entry; Operational efficiency of business entry; STEM graduates as percentage of total graduates in tertiary education; Perceived opportunities for starting a business; Material productivity
INFRASTRUCTURE REGULATION AND STANDARDS	5	Rules and standards for resilient assets and essential services	Resilient physical infrastructure depends on the structural rules governing how fixed assets are built and essential services run. Environmental construction permits and their transparency capture whether long-term environmental requirements are embedded in the early-stage approval process. Clear building, zoning, and land-use regulations and their transparency reflect whether structural codes and spatial planning are designed to ensure physical assets can withstand climate stress. Finally, the sustainability of water, electricity, and internet indicates whether the essential utilities that every commercial market depends on are governed for long-term environmental sustainability and reliable provision.	Environmental permits for construction; Transparency of environmental permits; Building, zoning and land use regulations; Building, zoning and land use transparency; Environmental sustainability of electricity, water, and internet
GOVERNANCE EFFICIENCY AND INTEGRITY	6	Institutional capability, integrity and accessibility	Capable, honest, and transparent institutions provide the policy bedrock that adaptation markets need to form and scale. Government effectiveness ensures that official policy translates into reliably implemented administrative frameworks on the ground, underpinned by low corruption and the stable rule of law that long-horizon private investment requires. Publicised laws and government data provide institutional transparency, helping firms understand evolving policy parameters and avoid regulatory capture. E-government services increase efficiency allowing entrepreneurs and solution providers to navigate the permits and approvals needed to deploy adaptation solutions.	Government Effectiveness; Corruption Perceptions Index; Publicised laws and government data; E-Government Development Index
SOCIAL COHESION	7	Social protection, trust and civil harmony	Transformational adaptation is structurally challenging, and social cohesion is the ultimate shock-absorber that allows a society to withstand it. Comprehensive social protection captures an economy's capacity to absorb systemic change without catastrophic human displacement, creating a secure baseline that makes individual risk-taking more palatable. This institutional safety net is reinforced by community trust between neighbours, which lowers conflict risk and smooths the adoption of sweeping reforms. Similarly, the absence of violence in civil disputes signals whether societal grievances are settled through legitimate, predictable channels rather than disruptive force.	Population covered by at least one social protection benefit; Neighbours care about you and your wellbeing; People do not resort to violence to redress personal grievances

Data Aggregation Methodology

The June 2026 Beta AEI follows the broad logic of the OECD/European Union/EC-JRC (2008) handbook, complemented by more recent JRC European Commission (2025) guidance. Its sequence, from theoretical framework through to aggregation, serves as the structuring guidelines for the AEI's construction.

The AEI is built based on 31 indicators drawn from leading international data sources - detailed later in this document. Because the adaptation economy is a novel concept, few existing datasets map directly onto its constituent components. Therefore, each concept has been matched to the indicator proxy that captures it most closely while meeting two conditions: (1) closeness of fit to the underlying concept, and (2) broad, consistent cross-country coverage from authoritative sources.

Each indicator is then normalised to a common 1-10 scale, with 10 representing the most positive outcome. Where an indicator has natural theoretical bounds (for example, a variable measured at a fixed 0-100 range), those minimum and maximum values are used. Otherwise, the observed minimum and maximum of the full dataset (often much larger than the sample used in the Beta AEI) define the endpoints. For positive polarity (i.e. when higher is better), we use the following formula for the transformation:

$$\text{normalised score} = 9 \times \left(\frac{\text{country raw indicator} - \text{sample minimum}}{\text{sample maximum} - \text{sample minimum}} \right) + 1$$

and for negative polarity (in cases when lower values indicate better performance), the scale is inverted, via the following formula:

$$\text{normalised score} = -9 \times \left(\frac{\text{country raw indicator} - \text{sample minimum}}{\text{sample maximum} - \text{sample minimum}} \right) + 10$$

The inflation rate is a special case, since neither very high nor very low values are desirable. It is normalised around an optimal band (0.5%–2%): values within the band score the maximum, and the score then declines linearly with distance from the band in either direction, producing a flat-bottomed, V-shaped transformation centred on the inflation target.

A few underlying indicator distributions are distorted by extreme values that exert undue influence once normalised. These are primarily identified using criteria defined in the JRC's guidelines, namely absolute skewness above 2 and excess kurtosis above 3.5. In some borderline cases, distributions were deemed to warrant treatment despite not meeting these thresholds, based on expert judgement. The result is that out of the 31 indicators, seven were treated by capping extreme values, either at the nearest less extreme observation or by setting thresholds based on theoretical or empirical grounds. Treatment was kept to a minimum, affecting only the problematic observations.

The AEI is built from these normalised scores through successive, equally weighted aggregations. A simple arithmetic mean was chosen over more elaborate schemes because it maintains transparency and ensures that every score can be retraced to its components. Each pillar score is derived from the mean of its indicators, and the overall AEI score is the average of the seven pillars. The only exception to this flat structure is the measure of the environmental sustainability of water, electricity and internet. This indicator is itself a composite, computed as the average of three separately normalised indicators, which then enters the AEI as a single indicator like any other.

Missing values are not externally modelled or imputed. The AEI instead tolerates limited gaps. A country is retained if it has no more than three missing values, provided these are not concentrated within one pillar. Where an indicator is missing, the pillar score is computed as the mean of the available indicators. This implicitly assigns the missing value its pillar average, avoiding the introduction of modelled values.

The table below shows the structure and the weights on each of the seven pillars and their constituent indicators within the Beta AEI. Weights are rounded to one decimal place for display, though full precision is used in the computation.

Pillar / Indicator	Weight
Pillar 1: Economic Resilience	14.3%
• Economic Complexity Index	20%
• Export product concentration	20%
• Gross domestic savings (% GDP)	20%
• Ecological deficit/reserve	20%
• Inflation rate (average consumer prices)	20%
Pillar 2: Risk Expectations and Behavioural Change	14.3%
• Climate change a threat to country in next 20 years	25%
• Worried severe weather events could cause serious harm	25%
• Plan for future disaster known by all household members over 10 years old	25%
• Nonlife insurance premium volume to GDP (%)	25%
Pillar 3: Financial Market Strength	14.3%
• Domestic credit to private sector (% of GDP)	25%
• Quality of regulations for financial services	25%
• Venture capital received (deal count/bn \$PPP GDP)	25%
• Financial account ownership or mobile money usage (% age 15+)	25%

Pillar / Indicator	Weight
Pillar 4: Entrepreneurship, Innovation and Technological Diffusion	14.3%
• Quality of regulations for business entry	16.7%
• Operational efficiency of business entry	16.7%
• Quality of regulations for market competition	16.7%
• STEM graduates as percentage of total graduates in tertiary education	16.7%
• Perceived opportunities for starting a business	16.7%
• Material productivity	16.7%
Pillar 5: Infrastructure Regulation and Standards	14.3%
• Environmental permits for construction	20%
• Transparency of environmental permits	20%
• Building, zoning and land use regulations	20%
• Building, zoning and land use transparency	20%
• Environmental sustainability of electricity, water & internet (composite)	20%
Pillar 6: Governance Efficiency and Integrity	14.3%
• Government Effectiveness	25%
• Corruption Perceptions Index	25%
• Publicised laws and government data	25%
• E-Government Development Index	25%
Pillar 7: Social Cohesion	14.3%
• Population covered by at least one social protection benefit	33.3%
• Neighbours care about you and your wellbeing	33.3%
• People do not resort to violence to redress personal grievances	33.3%

Additional methodological improvements are planned as the AEI moves through and beyond its Beta phase. Chief among these are rigorous multivariate and correlation analyses conducted both within and across the seven pillars, alongside comprehensive sensitivity testing to evaluate the impact of data-treatment and weighting choices. Simultaneously, the indicator set itself is slated to evolve. Because the structural concepts defining an adaptation economy are inherently at the knowledge frontier, it is not possible to capture every dimension by relying solely on existing authoritative sources. Consequently, existing data sources will be complemented by innovative indicators derived from heterogeneous and unstructured data, utilising AI-enabled methodologies that maintain rigorous auditability to source data.

Detailed Metadata Descriptions

The indicators included in the June 2026 Beta AEI represent a rigorous attempt to map the complex, interdependent drivers of a nation's adaptive capacity with existing cross-country data. Detailed descriptions of the metadata used in calculating the index are provided below, organised into the seven domains, or pillars of our framework and index.

The title of each indicator appears on the first line, followed by a description of each indicator. When necessary, additional information is provided. The data used in the computation of the AEI represent the most recent and best data available at the time they were collected. It is possible that some data were updated or revised subsequently.

Pillar 1: Economic Resilience

Economic Complexity Index

Economic development depends in large part on how much productive know-how a country has, and how effectively it uses that know-how to make a wide range of advanced products. The Growth Lab's Country Rankings summarise this capability using a measure called the Economic Complexity Index (ECI). The index combines how diverse a country's export basket is and how ubiquitous those products are across countries. Countries that export a broad mix of sophisticated goods tend to score higher, suggesting deeper productive knowledge.

Year: 2024

Source: The Growth Lab at Harvard University, 2026, "Growth Projections and Complexity Rankings", <https://doi.org/10.7910/DVN/XTAQMC>, Harvard Dataverse

Export product concentration

This index measures, for each country, the degree of concentration of goods exported (it does not include services). It shows if a large share of a country's exports is accounted for by a small number of commodities or, on the contrary, if its exports are well distributed among many products. Therefore, it can be used as a warning sign of low export diversification, with ensuing economic vulnerabilities.

Year: 2024

Source: United Nations Conference on Trade and Development (UNCTADStat)

Gross domestic savings (% GDP)

Gross domestic savings are calculated as GDP less final consumption expenditure (total consumption). This indicator is expressed as a percentage of Gross Domestic Product (GDP), which is the total income earned through the production of goods and services in an economic territory during an accounting period.

Year: 2022

Source: World Bank (World Development Indicators)

Ecological deficit/reserve

Biocapacity per person is the productive area that exists per resident in that country. It is their “ecological income”. A person’s Ecological Footprint is the biologically productive areas required to provide everything they consume. It is their “ecological expenditures”. A biocapacity deficit is the difference between how much a country consumes and how much its ecosystems can renew. Countries can run deficits for three reasons: (a) net imports, (b) use of global commons such as CO₂ emissions, and (c) overuse of their own ecosystems. A reserve is the opposite: the biocapacity is larger than the country’s Footprint.

Year: 2022

Source: Lo, K., Miller, E., Dworatzek, P., Basnet, N., Silva, J., Van Berkum, J. L., Halldórsdóttir, R. B., & Dyck, M. D. R. 2025. National Ecological Footprint and Biocapacity Accounts, 2025 Edition. Data and metadata version 1.0. Produced for Footprint Data Foundation by researchers at York University and the University of Iceland.

<https://footprint.info.yorku.ca/data/>

Inflation rate (average consumer prices)

The average consumer price index (CPI) is a measure of a country’s average level of prices based on the cost of a typical basket of consumer goods and services in a given period. The rate of inflation is the percent change in the average CPI.

Year: 2025

Source: International Monetary Fund (World Economic Outlook)

Pillar 2: Risk Expectations and Behavioural Change**Climate change a threat to country in next 20 years**

Percentage of respondents answering “very serious” or “somewhat serious” to the World Risk Poll question: Do you think that climate change is a very serious threat, a somewhat serious threat, or not a threat at all to the people in this country in the next 20 years?

Year: 2025

Source: Lloyd’s Register Foundation (World Risk Poll)

Worried severe weather events could cause serious harm

Percentage of respondents answering “very worried” to the World Risk Poll question: In general, how worried are you that [severe weather events, such as floods or violent storms] could cause you serious harm?

Year: 2025

Source: Lloyd’s Register Foundation (World Risk Poll)

Plan for future disaster known by all household members over 10 years old

Percentage of respondents answering “yes” to the World Risk Poll question: If a disaster were to occur near you in the future, do you have a plan for what to do that all members of your household who are over 10 years old know about?

Year: 2025

Source: Lloyd’s Register Foundation (World Risk Poll)

Nonlife insurance premium volume to GDP (%)

Ratio of nonlife insurance premium volume to GDP. Premium volume is the insurer’s direct premiums earned (if Property/Casualty) or received (if Life/Health) during the previous calendar year.

Year: 2020, or most recent year

Source: World Bank (Global Financial Development)

Pillar 3: Financial Market Strength**Domestic credit to private sector (% of GDP)**

Domestic credit to the private sector refers to financial resources provided to the private sector by financial corporations, such as through loans, purchases of non-equity securities, and trade credits and other accounts receivable, that establish a claim for repayment. For some countries, these claims include credit to public enterprises. The financial corporations include monetary authorities and deposit money banks, as well as other financial corporations where data are available (including corporations that do not accept transferable deposits but do incur such liabilities as time and savings deposits). Examples of other financial corporations are finance and leasing companies, money lenders, insurance corporations, pension funds, and foreign exchange companies. This indicator is expressed as a percentage of Gross Domestic Product (GDP), which is the total income earned through the production of goods and services in an economic territory during an accounting period.

Year: 2022

Source: World Bank (Global Financial Development)

Quality of regulations for financial services

[Assessment of] the effectiveness of regulation pertaining to commercial lending, secured transactions, and e-payments, covering the de jure features of regulatory frameworks.

Year: 2025

Source: World Bank (Business Ready 2025)

Financial account ownership or mobile money usage (% age 15+)

Account ownership at a financial institution or with a mobile-money-service provider denotes the percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution or report personally using a mobile money service in the past 12 months (% age 15+).

Year: 2024

Source: World Bank (Global Index Database)

Venture Capital Received (deal count/bn \$PPP GDP)

Indicator that reflects the total number of VC deals received in a given economy. These are transactions going to a venture or company which has its headquarters in the underlying economy. Investors may originate from any global region. Included investors range from individual angels, angel groups, seed and venture funds, corporate venture capital (CVC) arms, and other corporate entities. Deals associated with accelerator programs are excluded unless the accelerator participates in follow-on rounds, in which case only those subsequent financings are included. All equity transactions and mixed debt-and-equity deals are counted. Pure debt deals are excluded, as they fall under venture debt datasets rather than VC activity datasets. The data corresponds to VC deal counts between January 1, 2022, and December 31, 2024. The data represent the three-year average of 2022-24 deals and are reported per billion PPP\$ GDP.

Year: three-year average 2022-2024

Source: World Intellectual Property Organisation (Global Innovation Index 2025)

Pillar 4: Entrepreneurship, Innovation, and Technological Diffusion**Quality of regulations for market competition**

The quality of regulations that promote market competition, covering de jure features of a regulatory framework that enable firms to participate in fair market conditions and innovate, and where firms can participate in open and competitive government markets.

Year: 2025

Source: World Bank (Business Ready 2025)

Quality of regulations for business entry

The quality of regulations for business entry, covering de jure features of a regulatory framework that are necessary for the adoption of good practices for business start-ups.

Year: 2025

Source: World Bank (Business Ready 2025)

Operational efficiency of business entry

The time and cost required to register new domestic and foreign firms.

Year: 2025

Source: World Bank (Business Ready 2025)

STEM graduates as percentage of total graduates in tertiary education

Number of graduates from STEM programmes in tertiary education, expressed as a percentage of the total number of graduates in tertiary education.

Year: 2023, or most recent year

Source: UNESCO (accessed via World Bank)

Perceived opportunities for starting a business

Percentage of 18-64 population who see good opportunities to start a firm in the area where they live. The related question is: In the next six months, will there be good opportunities for starting a business in the area where you live?

Year: 2025, or most recent year

Source: Global Entrepreneurship Monitor (Entrepreneurial Behaviour and Attitudes)

Material productivity

Material productivity is the amount of economic output or value added generated per unit of materials consumed. Economic output is based on GDP, and materials consumed are the total amount of material directly used in an economy, which is calculated as domestic material consumption (DMC). This indicator is measured in thousand US dollars per tonne, constant prices using the 2010 base year, and Purchasing Power Parities (PPPs) converted.

Year: 2024

Source: OECD

Pillar 5: Infrastructure Regulation and Standards**Environmental permits for construction**

Measures whether the legal framework regulates the environmental aspects of construction by assessing: (1) national environmental regulations during construction, including their revision and penalties for non-compliance; (2) a legal definition of

environmental risk; (3) an EIA regime covering qualified professionals, defined triggers (size, nature, location), process requirements (scoping, impact assessment, mitigation, public participation, monitoring), and compliance review (internal or external); and (4) mandatory public consultation with stakeholders.

Year: 2025

Source: World Bank (Business Ready 2025, Subcategory 1.4.1 – Environmental Permits for Construction)

Transparency of environmental permits

Environmental Permits: Measures the transparency and accessibility of environmental permitting information by assessing: (1) whether environmental licensing requirements for moderate-risk construction projects are available online and up to date; (2) whether a current fee schedule for environmental clearances is available.

Year: 2025

Source: World Bank (Business Ready 2025, Subcategory 2.3.3 – Environmental Permits)

Building, zoning and land use regulations

Measures whether the legal framework ensures safe, sustainable construction and land development across three subcategories: (1) Building Standards: such as unified codes, safety guidelines, inspections, occupancy permits, and enforcement; (2) Building Energy Standards: such as mandatory energy efficiency requirements, plan-review verification, and green building incentives; and (3) Zoning and Land Use Regulations: such as infrastructure access, land use maps, and hazard maps governing where construction is allowed.

Year: 2025

Source: World Bank (Business Ready 2025, 1.2 Building, Zoning and Land Use)

Building, zoning, and land use transparency

Measures the transparency and public accessibility of building and zoning information by assessing whether the following are publicly and currently available: (1) building control regulations accessible to all stakeholders; (2) detailed criteria and steps to obtain building permits; (3) lists of required approvals and documents for building and occupancy permits; (4) up-to-date fee schedules for all construction types; (5) official statistics on issued building permits; (6) an updated city master/zoning plan; (7) the steps to modify a zoning/land use plan; and (8) whether zoning compliance is verified before a building permit application.

Year: 2025

Source: World Bank (Business Ready 2025, Subcategory 2.3.2 – Building, Zoning and Land Use)

Environmental sustainability of electricity, water, and internet

Equally weighted composite indicator of the three Subcategories 1.1.4, 1.2.4, and 1.3.4 – Environmental Sustainability for Electricity, Water, and Internet from World Bank Business Ready 2025. For electricity (1.1.4): environmental standards for generation, transmission, and distribution and their enforcement; requirements and enforcement for business energy-saving practices; and incentives to adopt them. For water (1.2.4): standards for water quality and supply efficiency and their enforcement; requirements, enforcement, and incentives for business water-saving practices; and the sustainability of wastewater treatment and reuse. For internet (1.3.4): environmental reporting or disclosure standards for digital and data infrastructure, and national emissions or energy efficiency targets for communication networks and data centres.

Year: 2025

Source: World Bank (Business Ready 2025, Subcategories 1.1.4, 1.2.4, and 1.3.4 – Environmental Sustainability for Electricity, Water, and Internet)

Pillar 6: Governance Efficiency and Integrity

Government effectiveness

Government Effectiveness captures perceptions of the quality of public services, the civil service, policy formulation and implementation, and the credibility of a government's decisions.

Year: 2024

Source: World Bank (Worldwide Governance Indicators)

Corruption Perceptions Index

The CPI ranks 182 countries and territories worldwide by their perceived levels of public sector corruption. The results are given on a scale of 0 (highly corrupt) to 100 (very clean).

Year: 2025

Source: Transparency International (Corruption Perceptions Index 2025)

Publicised laws and government data

Measures whether basic laws and information on legal rights are publicly available, presented in plain language, and made accessible in all languages. It also measures the quality and accessibility of information published by the government in print or online, and whether administrative regulations, drafts of legislation, and high court decisions are made accessible to the public in a timely manner.

Year: 2025

Source: World Justice Project (Rule of Law Index 2025, Factor 3.1)

E-Government Development Index

E-government can be referred to as the use and application of information technologies in public administration to streamline and integrate workflows and processes, to effectively manage data and information, enhance public service delivery, and expand communication channels for engagement and empowerment of people. The range is [0,1].

Year: 2024

Pillar 7: Social Cohesion

Population covered by at least one social protection benefit

Share of population covered by at least one social protection benefit (in percent).

Year: 2023, or most recent year

Source: International Labour Organisation (ILOSTAT)

Neighbours care about you and your well-being

Percentage of respondents answering “a lot” or “somewhat” to the World Risk Poll question: How much do you think most of your neighbours care about you and your well-being?

Year: 2025

Source: Lloyd’s Register Foundation (World Risk Poll)

People do not resort to violence to redress personal grievances

Measures whether people resort to intimidation or violence to resolve civil disputes amongst themselves or to seek redress from the government, and whether people are free from mob violence.

Year: 2025

Source: World Justice Project (Rule of Law Index 2025, Factor 5.3)

Beta Adaptation Economy Index Results in Context

ND-GAIN Vulnerability

The ND-GAIN Country Index Vulnerability dimension measures a country’s exposure, sensitivity and capacity to adapt to the negative effects of climate change. ND-GAIN measures overall vulnerability by considering six life-supporting sectors—food, water, health, ecosystem service, human habitat, and infrastructure.

Year: 2023

Source: Notre Dame Global Adaptation Initiative Country Index (ND-GAIN). (2026). University of Notre Dame.

Central government debt (% of GDP)

Total stock of debt liabilities issued by the central government as a share of GDP.

Year: 2024, or most recent year

Source: International Monetary Fund (Global Debt Database)

References

- JRC European Commission. (2025, December).** *Step 3- Data treatment [Slide show]. JRC Week on Composite Indicators and Scoreboards.* European Commission.
https://knowledge4policy.ec.europa.eu/composite-indicators/2025-jrc-week-composite-indicators-scoreboards_en#streaming
- Morphosis. (2025a).** *The Rise of the Adaptation Economy: Investing in Adaptation and Resilience in a World Beyond 1.5C. In Investing in Adaptation to Climate Change.* Geneva: Morphosis Solutions SA.
- Morphosis. (2025b).** *Transformative Adaptation: A Whole-Economy Approach [Technical paper].* Geneva: Morphosis Solutions SA.
- Morphosis. (2026).** *Measuring the Adaptation Economy: the Adaptation Economy Index.* Geneva: Morphosis Solutions SA.
<https://www.morphosis.solutions/adaptation-economy>
- NatureFinance. (2023, December 7).** *Time to plan for a future beyond 1.5 degrees.*
<https://www.naturefinance.net/resources-tools/future-beyond-1-5-degrees/>
- NGFS. (2024).** *Conceptual Note on Adaptation.*
https://www.ngfs.net/system/files/import/ngfs/medias/documents/ngfs_conceptual_note_on_adaptation.pdf#:~:text=This%20Conceptual%20Note%20explores,contribute%20to%20the%20global%20collaborative
- NGFS. (2025).** *NGFS Input Paper on Integrating Adaptation and Resilience Into Transition Plans.*
<https://www.ngfs.net/en/publications-and-statistics/publications/ngfs-input-paper-integrating-adaptation-and-resilience-transition-plans>
- OECD/European Union/EC-JRC. (2008).** *Handbook on Constructing Composite Indicators: Methodology and User Guide.* OECD Publishing.
<https://doi.org/10.1787/9789264043466-en>
- Schwab, K. & World Economic Forum. (2019).** *The Global Competitiveness Report 2019.* World Economic Forum.
https://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf
- Social Progress Imperative. (2026).** *Global Social Progress Index 2026.*
<https://www.socialprogress.org/social-progress-index>

The Paulson Institute in Partnership with Basilinna. (2025). *From Plans to Markets: China's Experiment in Building an Adaptation Economy.* Washington: The Paulson Institute and Basilinna.

United Nations Framework Convention on Climate Change. (2026). *Decision 12/CMA.7: Global Goal on Adaptation (FCCC/PA/CMA/2025/19/Add.2).*
<https://unfccc.int/documents/655273>

University of Notre Dame. (2026). *Notre Dame Global Adaptation Initiative Country Index (ND-GAIN).*

Vendramini, A., & Breviglieri, G. (2025a). *Climate Change Adaptation Financing: From Tracked Flows to Untapped Potential.* The Center for Sustainability Studies at Fundação Getulio Vargas (FGVces).

Vendramini, A., & Breviglieri, G. (2025b). *Fragmented Perspectives, Fragmented Finance: A case study on Brazil's adaptation challenge.* The Center for Sustainability Studies at Fundação Getulio Vargas (FGVces).

World Bank. (2025). *Country Adaptation and Resilience (A&R) Readiness Assessment (English).* Washington, D.C.: World Bank Group.

World Bank. (2026a). *Business Ready (B-READY) 2025.*
<https://www.worldbank.org/en/businessready>

World Bank. (2026b). *Doing Business ARCHIVE.*
<https://archive.doingbusiness.org/en/doingbusiness>

World Economic Forum. (2025). *Global Gender Gap Report 2025.*
<https://www.weforum.org/publications/global-gender-gap-report-2025/>

Zadek, S. (2023, November 27). *Planning for a future beyond 1.5°C.* Project Syndicate.
<https://www.project-syndicate.org/commentary/unrealistic-global-warming-target-hinders-climate-action-by-simon-zadek-2023-11>