

Global Futures Bulletin



GOVERNANCE GAPS:
ASSESSING GLOBAL
DISPARITIES IN AI
POLICY INITIATIVES
AROUND THE WORLD

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Introduction¹

The rapid design, development, and deployment of artificial intelligence (AI) is outpacing regulatory efforts to promote safety and alignment. Around the world, policymakers are scrambling to catch up. While countries and companies in the US, Europe and China dominate the creation of AI technologies and the formulation of regulatory policies, virtually everyone else lags behind when it comes to Al governance and regulation. It is critical that decision-makers in developing countries also craft regulations tailored to their local needs and capacities. It is likewise important to anticipate how the rapid expansion of Al could exacerbate economic disparities and concentrate power in a small number of countries and technology firms.

Global, regional, national, and local coordination and oversight is critical to ensuring Al's benefits are equitably distributed while mitigating potential harms. To be sure, Al holds immense promise for boosting productivity and efficiency. However, concerns over Al risks are mounting. A growing ecosystem of laws, policies, standards, and recommendations is emerging as countries, with governments, companies, and non-

governmental organizations seeking to shape the trajectory of Al. To better understand the evolving Al governance landscape, the Igarapé Institute conducted a review of the global Al policy instruments ecosystem. The primary goal of this exercise is to assess whether these initiatives are gaining traction (or not) in the Global South.

The Al Governance Ecosystem Database (AI-GED) is a global repository designed to measure and track AI policy instruments intended to improve safety and alignment. It also assesses Al regulations in relation to a range of social and economic metrics.² The AI-GED serves as a tool for policymakers and researchers to map and monitor trends in Al policy initiatives worldwide.3 As of 2024, the dataset includes 734 Alrelated initiatives spanning 78 countries and regional organizations. Specific initiatives are categorized by type, issuing entity, target audience, key principles, and other variables. The database covers initiatives developed by public, private, and nonprofit entities, offering policymakers, industry professionals, researchers, and advocates valuable insights into Al policy instruments. It is available as an interactive visualization, enabling users to explore how Al policies evolve geographically and over time.4

Crucially, the AI-GED highlights the growing divide in Al governance between the Global North and South, reflecting broader disparities in Al development and accessibility. Several key trends stand out. First, Al-related policy initiatives have surged over the past decade, particularly in the last three years. Second, most documented initiatives are concentrated in high-income countries, particularly in the United States and Europe. However, there has been increasing engagement in AI initiatives from the Global South.⁵ especially in Latin America, South Asia, and more recently, Africa. Third, Al initiatives are predominantly government-led, though private sector involvement is notable in upper- and middleincome settings. Finally, despite the existence of hundreds of Al-related policies and initiatives, legally binding regulations remain limited worldwide.

Drawing on AI-GED data, this paper examines the evolution of AI initiatives over the past decade. The first section outlines the context in which Al policies and standards are being developed. The second presents key descriptive findings from Al-GED, while the third analyzes these insights through the lens of various demographic measures, exploring how a country or region's socioeconomic status influences Al policy creation. While the Al-GED enhances understanding of the changing global Al policy landscape, it also has certain limitations. The fast-paced development of Al technologies and policies requires continuous updates to the database. Moreover, disparities in policy transparency and accessibility across countries and organizations may create coverage gaps and reporting biases.6

Background

The scale and speed of Al development and adoption is breathtaking. The need for coordinated oversight of Al design, development, and deployment is becoming more pressing. Al governance is complex, requiring a balance between innovation and competition while ensuring safety and security. It encompasses a broad range of activities, from establishing ethical and safety guidelines to mitigate bias, surveillance, and malicious use, to policies addressing negative externalities such as job displacement and the concentration of economic and political power in a few dominant technology companies.

The breakneck pace of Al advancement and adoption underscores the urgent need for effective Al governance. On the one hand, Al promises unprecedented economic and productivity gains, with estimates suggesting it could contribute up to US\$15.7 trillion to the global economy by 2030.7 This prosperity is unlikely to be evenly distributed: "only US\$1.7 trillion is expected to reach the 152 countries and over 6.8 billion people in the Global South".8 On the other hand, concerns are mounting over Al's serious - and potentially existential – risks, as well as the extraordinary energy demands required to sustain continued growth. In its latest Technology and Innovation Report, the United Nations cited the statistic that AI will impact 40 per cent of employment globally, but developed economies are "better positioned than emerging and low-income economies to capitalize on the benefits of Al."9

The deepening Al governance divide is starkly illustrated by disparity in Al development – particularly in Large Language Models (LLMs). According to Stanford University's Center for Human-Centered Al, of the 109 "notable" machine learning models that had the most impact on the Al ecosystem, 61 were created in the United States, 25 in Western Europe, and 15 in China. Only two originated in a

developing country (Egypt). Much of this is because "[t]he Global South lacks a strong Al market – as of September 2023, half of the world's 300 Al large-language models (LLMs) were built by Americans, and another 40% were...Chinese-made."¹⁰

The UN High-level Advisory Body on Artificial Intelligence's report¹¹ also highlights the lack of representation from the Global South. As of September 2024, its research found that not a single one of "top 100 high-performance computing clusters in the world capable of training large Al models" is located in a developing country. Compounding these challenges are weak capital markets, limited energy and data processing capacities, and a shortage of skilled workers.

What do these AI disparities mean for states in the Global South? The locus of innovation is inherently tied to power and influence. Countries at the forefront of innovation tend to shape the rules and standards that govern it. As signaled at the 2025 Paris AI Summit, there is a risk that developing nations could become increasingly dependent on AI systems designed and regulated by wealthier nations. These technologies carry embedded social, cultural, and political values, reinforcing pre-existing disparities.

A telling example is the contested history of aviation. In the United States, the Wright brothers are credited with the first powered flight, while in Brazil, Alberto Santos-Dumont is celebrated as the true pioneer. Similarly, when Al systems – trained predominantly on Western datasets – become global arbiters of truth, they risk erasing regionally significant narratives that are relevant to cultural identity.

To date, Al governance has been led by the United States and European Union, with many nations following their regulatory frameworks. Meanwhile, China, India, and the United Arab Emirates (UAE) have also advanced significant Al strategies that are increasingly influential in

the Global South. Additionally, large technology companies such as Google, Microsoft, OpenAl, and Anthropic have published their own Al principles and ethical guidelines, underlining the critical role of public-private partnerships to deliver effective governance.

Notwithstanding these and other efforts, developing a global AI governance strategy faces significant challenges, especially in a geopolitically fragmented and competitive environment. At a minimum, policymakers must balance fostering AI innovation with ensuring adequate safeguards. Overly restrictive regulations could stifle progress, while insufficient oversight may perpetuate bias and amplify existing inequities. Further, cultural differences in perspectives on technology, privacy, and ethical norms underscore the importance of regional approaches that address local needs and capacities.

Recent global initiatives on AI safety and alignment point to the need for a deliberately crafted technological future that ensures inclusivity, openness, sustainability, fairness, safety, and security for all. For example, the 2024 Global Digital Compact¹² outlines commitments to five objectives: (i) closing all digital divides and accelerating progress towards the Sustainable Development Goals (SDGs); (ii) expanding inclusion in and benefits from the digital economy for all; (iii) fostering an inclusive, open, safe and secure digital space that respects, protects and promotes human rights; (iv) advancing responsible, equitable and interoperable data governance approaches; and (v) enhancing international governance of artificial intelligence for the benefit of humanity.

A key implication of the Compact's stated goals is that "all" and "humanity" include every individual, regardless of nationality. Needless to say, the global landscape of Al development, investment, and regulation continues to evolve at different speeds worldwide.

Introducing the Al Governance Ecosystem Database (Al-GED)

As of 2024, the AI-GED contains 734 AI policy instruments in 78 countries and regional organizations. In the early 2010s, AI-related initiatives were limited. For example, between 2011 and 2016, only 20 AI-related initiatives were recorded, representing just 3% of the current dataset (see Figure 1). The limited number of AI initiatives during this period reflects the nascent stage of AI technologies

and the relatively low level of concern among government and industries.

However, the AI-GED documents a significant surge in AI policy instruments between 2017 and 2019, with the number of policies rising from 50 in 2017 to 130 in 2019 (see Figure 1). AI policies initiated during this period account for 41% of the AI-GED.

Box 1. Al Policy Instruments and the Al Governance Ecosystem Database

Al policy instruments refer to formal initiatives – both binding and non-binding – designed to regulate, guide, or influence Al development and deployment. These instruments vary in scope and enforceability, ranging from laws and national strategies, and regulatory frameworks (e.g. the EU Al Act,¹³ the U.S. Executive Order on Safe, Secure, and Trustworthy Al,¹⁴ China's Generative Al Measures),¹⁵ as well as key recommendations and voluntary commitments (e.g. the Asilomar Al Principles,¹⁶ Al principles declared by highly influential technology companies,¹⁷ the OECD Recommendation of the Council on Artificial Intelligence).¹⁸

The taxonomy categorizes these instruments into key types, including binding agreements, government programs, laws, national strategies, recommendations, reports, and voluntary commitments. We also focus on policies addressing Al safety and alignment, ensuring Al is robust, secure, and aligned with human values. Examples include technical safety standards, human oversight frameworks, and risk management guidelines developed by governments, intergovernmental organizations, private sector alliances, and civil society.

*For more detailed reflections on methods, data sources, and definitions, see Annex 1.

Even before the launch of ChatGPT in 2022, awareness was growing about the domestic, regional, and global implications of AI technologies for safety and security. 19 For example, in 2016, Dario Amodei, then an OpenAI employee and now CEO of Anthropic, co-authored the technical paper Concrete Problems in Al Safety.20 The paper highlighted how accident-prone machine learning systems could lead to "unintended and harmful behavior." Shortly after, in 2017, the Future of Life Institute introduced the Asilomar AI Principles, proposing over 20 basic principles emphasizing research, ethics and values, and longer-term concerns. These principles were endorsed by corporate leaders, academics, and civil society organizations.21

Measures to regulate AI expanded dramatically from 2021 onward. By 2021, 458 Al-related policy instruments had been introduced and by 2023, this number had increased to 657. In fact, 38% of all Al initiatives documented in the AI-GED were established in the past three years (see Figure 1). This sharp increase is likely linked to the advent of commercial LLMs such as ChatGPT, alongside a concerted push by government and industries to capture Al's economic potential while minimizing associated risks. The apparent reduction in new initiatives in 2024 may be due to outdated databases and insufficient evidence of recent initiatives, emphasizing the need for timely updates and continuous monitoring to ensure effective progress.

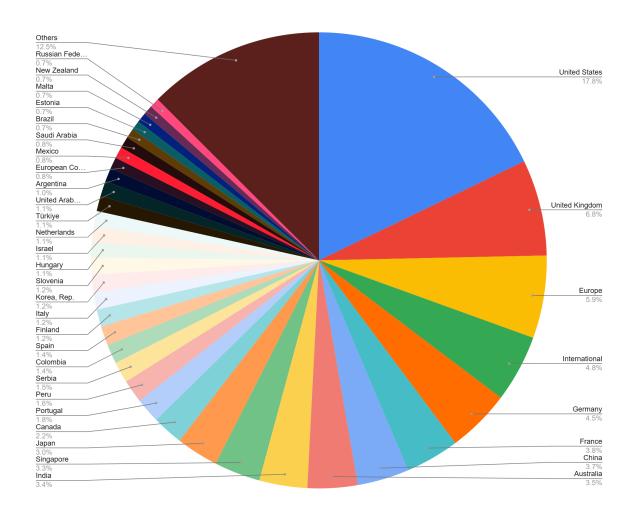
Figure 1. Evolution of Al Policy Instruments in the Al-GED (2011-2024)

Year	Number	%
2011	2	0%
2013	1	0%
2014	5	1%
2015	3	0%
2016	9	1%
2017	51	7%
2018	118	16%
2019	130	18%
2020	79	11%
2021	60	8%
2022	101	14%
2023	98	13%
2024	77	10%
Total	734	100%

The global distribution of Al initiatives is highly skewed toward the Global North. Europe and Central Asia account for 43% of all initiatives in the Al-GED, while North America comprises 21%. Combined, North America, Europe, and Asia represent nearly two-thirds – 65% – of all entries. The countries with the most Al initiatives emphasizing safety and alignment include the United States (131 initiatives across all years), followed by the United Kingdom (50), Germany (33), France (28), China (27), and Australia (26) (see Figures 2 and 3).

A closer look at private investment trends helps explain the rising interest in Al policy initiatives. Between 2013 and 2020, investments in Alfocused companies and start-ups surged, growing tenfold from US\$6 billion to US\$67 billion annually. In 2021, global Al investment peaked at approximately US\$132.3 billion before declining to US\$85.36 billion in 2023. Unsurprisingly, the United States leads when in Al investment, followed by China, Europe, and the United Kingdom. Collectively, these four countries/regions account for 457 Al policy initiatives, about 63% of all Al initiatives worldwide.

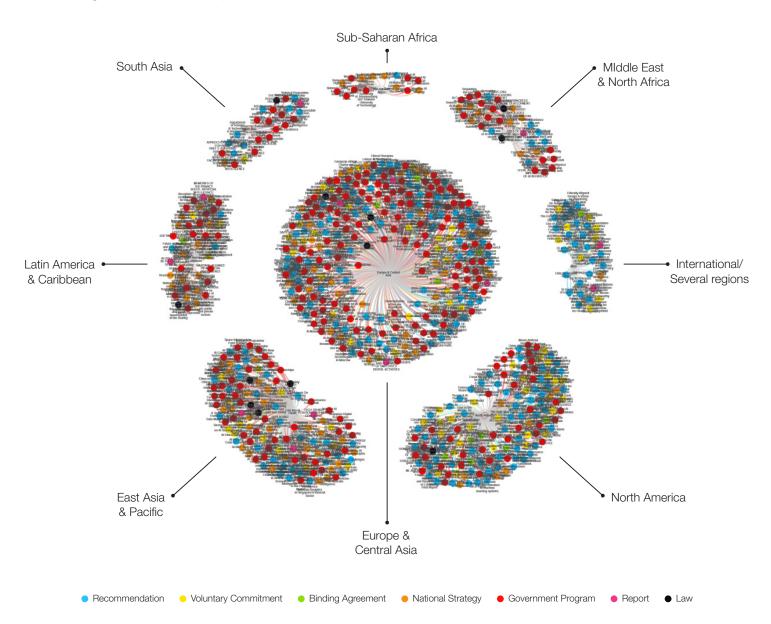
Figure 2. Distribution of Al Policy Instruments by Country (2011-2024)



Even so, participation from the Global South in formulating Al initiatives has grown significantly in recent years. This shift becomes more evident when comparing the 2015-2019 and 2020-2024 periods. During this time, Al-related initiatives in Europe and Asia expanded by 19% – increasing from 134 to 160 initiatives. In contrast, initiatives in Latin America and the Caribbean saw a 121%

surge, nearly doubling from 14 to 31 initiatives. South Asian countries experienced a 171% increase, growing from 7 to 19 Al-related initiatives, while the Middle East and North Africa recorded a 118% rise, from 11 to 24. The most notable growth occurred in Sub-Saharan Africa, where Al initiatives quadrupled from just 3 in 2015-2019 to nearly 12 in 2020-2024, marking a 300% expansion.

Figure 3. Snapshot of Kumu Visualization of the Al Governance Ecosystem Database (Al-GED) by Region and Initiative Type

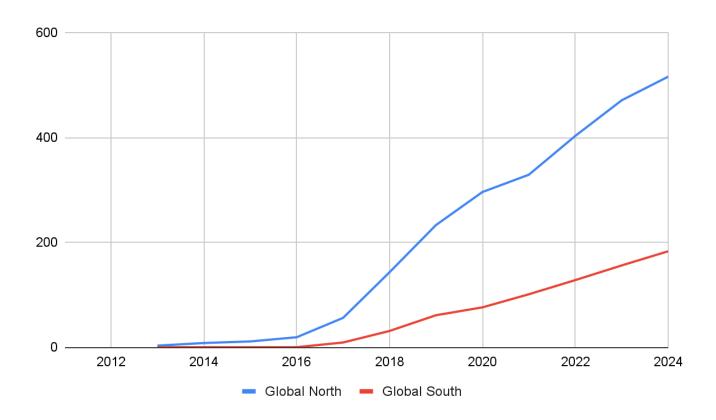


Access the Kumu Visualization at the <u>Al Governance Ecosystem Database</u> (Al-GED), of Igarapé Institute.

The AI-GED also highlights the rising share of AI initiatives in the Global South, with increasing participation from countries previously unrepresented in the AI policy initiatives ecosystem. From a global perspective, this shift suggests a modest but important step toward more inclusive

governance. Greater regional representation brings new and necessary perspectives to the discussion. In 2017, only 20% of all documented Al-related initiatives originated from lower- and middle-income countries identified as Global South. By 2024, this proportion had risen to 38% (see Figure 4).

Figure 4. Evolution of Al Policy Instruments: Share in Global North and Global South (2011-2024)



Note: The Global South, or developing countries, generally includes Africa, Latin America and the Caribbean, and Asia (excluding Israel, Japan, and South Korea), as well as Oceania (excluding Australia and New Zealand). Developed economies encompass North America, Europe, Israel, Japan, the Republic of Korea, Australia, and New Zealand. UN Trade and Development Classifications.

There are diverging regional dynamics in Al initiatives that warrant scrutiny (see Figure 5). For example, Brazil (5 initiatives, 0.68% of the total) and Mexico (6 initiatives, 0.82%) in Latin America, India (25 initiatives, 3.41%) in South Asia, and the UAE and Israel (both with 8 initiatives, 1.09%) appear to be vying for Al leadership.

While these nations have fewer Al-related initiatives compared to the United States (131 initiatives, 17.85%), the United Kingdom (50 initiatives, 6.81%), and Europe (43 initiatives, 5.86%), they play a key role in shaping Al governance in their respective regions.

Among them, India leads with 25 initiatives, highlighting its strategic positioning in the global AI landscape.

In Sub-Saharan Africa, countries such as Nigeria, Kenya, Rwanda, and South Africa are emerging as Al leaders. Rwanda launched its National Artificial Intelligence Policy in 2023, while Nigeria developed a National Al Strategy (NAIS), positioning both as early adopters in a region with only 15 total initiatives.²³ Although South Africa has yet to propose official Al policy interventions, it is actively gathering input for a draft National Al plan.²⁴

Figure 5. Distribution of Al Policy Interventions by Region (2011-2024)

Year	North America	Latin America & Caribbean	Europe & Central Asia	Middle East & North Africa	Sub- Saharan Africa	South Asia	East Asia & Pacific	Multiple countries
2011	1		1					
2013			1					
2014	2		3					
2015	1		2					
2016	6		2					1
2017	12		18	1		2	13	5
2018	24	6	55		2	4	18	9
2019	20	8	57	10	1	1	23	10
2020	14	7	45	2	2	1	7	1
2021	7	6	16	3	1	5	20	2
2022	17	4	52	3	5	3	17	1
2023	24	6	25	11	2	9	18	3
2024	19	8	22	5	2	1	13	6
Total	147	45	299	35	15	26	129	38
Percentage share	21	7	43	5	2	4	19	6

Most Al initiatives featured in the Al-GED are non-binding. Al recommendations, government initiatives, and voluntary commitments account for 80% of all identified policies. Surprisingly, binding laws and agreements represent just 4% of the total caseload (see Figures 6 and 8 - Kumu snapshot). This discrepancy suggests that current Al governance remains largely voluntary and cautious, prioritizing flexibility and adaptability over binding commitments.

It may also reflect the influence of private interests in reducing binding regulations. The lack of legally enforceable measures underscores the challenges of crafting binding rules for a rapidly evolving technology whose full impact is not yet fully understood. As AI technology matures and associated risks become clearer, a shift towards more binding policies is likely.

Figure 6. Distribution of Al Policy Instruments by Type (2011-2024)

Туре	Number	Percentage (%)
Binding agreement	12	2
Government Program	283	39
Law	12	2
National Strategy	108	15
Recommendation	224	31
Report	14	2
Voluntary commitment	81	11
Total	734	100

There are only three active and comprehensive Al laws included in the Al-GED by January 2025: the Al Legislative Package (EU Al Act), the Interim Measures for the Management of Generative Artificial Intelligence Services (China), and Law 31814 (Peru). These laws specifically regulate the use and development of AI, rather than secondary factors such as data protection or automated decisionmaking.²⁶ All three laws came into effect between 2023 and 2024, reflecting the nascent nature of binding AI initiatives (see Figure 7). The lag, coupled with a rapid pace of public and private Al investment – particularly in Western economies - highlights the risks of Al development without adequate safeguards and oversight.

These three legally binding Al laws apply to approximately a quarter (23%) of the world's population.²⁷ The EU AI Act prioritizes ethical and safety-related considerations within a highly structured risk-based framework for Al applications. China's Al measures emphasize control over AI technologies and their alignment with social and political state priorities. Meanwhile. Peru's recent Al law seeks to promote economic growth and national development, with less focus on AI safety and alignment. Paradoxically, the countries currently making the largest Al investments are prioritizing risk management, while the only developing country with a binding Al law is primarily focused on utilizing the technology for fostering social and economic mobility.

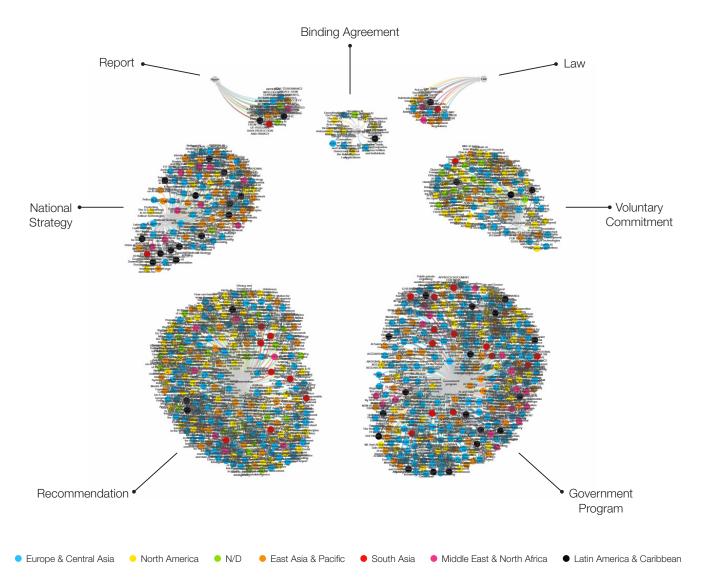
There are several global efforts to strengthen international Al governance. The UN has established a High-level Advisory Body on Artificial Intelligence, published the Global Digital Compact, and outlined commitments to enhance Al governance for the benefit of humanity. The Council of Europe recently adopted the world's first international treaty on artificial intelligence, intended as a globally binding legal instrument. As of November

2024, 37 nations have signed the treaty, nearly all from Europe, with Israel and the US included. ²⁸ Currently, no binding Al-related laws are in effect in Africa, South Asia, the Middle East, or North America. While the U.S. leads in Al initiatives and investment and was the first to create an Al Safety Institute, focus on safety and alignment is expected to change under the new Trump administration.

Figure 7. Active Binding Laws and Agreements in Al-GED Database (2011-2024) - Review by January 2025

Full name of the Al law initiative	Lead entity/issuer (name)	Country of issuer, Year	Year law went into effect
Al Legislative Package (EU Al Act)	European Commission	Europe, 2021	Aug 2024
Interim Measures for the Management of Generative Artificial Intelligence Services (Generative Al Measures)	Chinese Government	China, 2023	Aug 2023
Law 31814 promotes the use of artificial intelligence in favor of the economic and social development of the country	Government of Peru	Peru, 2023	July 2023
Full name of the Al treaty	Lead entity/ issuer (name)	Year adopted	
Council of Europe Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law	Council of Europe (37 signatories as of Nov 10 2024)	2024	

Figure 8. Snapshot of Kumu Visualization of the Al Governance Ecosystem Database (Al-GED) by Initiative Type and Region



Access the Kumu Visualization at the Al Governance Ecosystem Database (Al-GED), of Igarapé Institute.

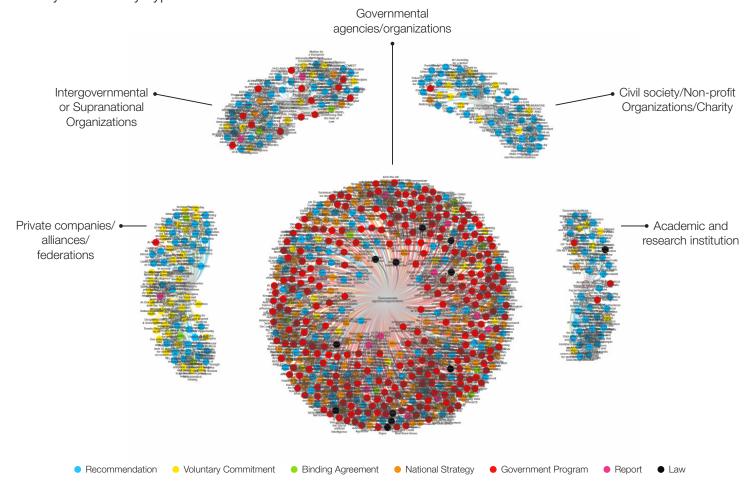
The AI-GED finds that governmental entities dominate AI safety and alignment efforts, accounting for 68% of all initiatives (Figures 9 and 10). Government leadership is particularly pronounced in the Global South, where some regions rely almost exclusively on governmental bodies for the AI governance ecosystem. Notably, 94% of the documented initiatives in both the Middle East & North Africa and East Asia & Pacific are government-led.

Figure 9. Distribution of Al Policy Instruments by Lead Entity/Issuer (2011-2024)

Lead entity/issuer (type)	Number	Percentage (%)
Academic and research institution	46	6
Civil society/Non-profit organizations/Charity	51	7
Governmental agencies/Organizations	496	68
Intergovernmental or supranational organizations	63	9
Private companies/ Alliances/ Federations	78	11
Total	734	100

There are significant regional differences in private sector engagement in Al rule-making between the Global North and South. According to the Al-GED, private entities play a much larger role in shaping Al policies in developed countries (Global North, 13%) compared to less developed ones (Global South, 3%) (see Figure 11). In Europe and North America, Al initiatives appear to be influenced by a more diverse range of actors, raising questions about the extent of societal participation in Al policymaking across different regions.²⁹

Figure 10. Snapshot of Kumu Visualization of the Al Governance Ecosystem Database (Al-GED) by Lead Entity Type



Access the Kumu Visualization at the Al Governance Ecosystem Database (Al-GED), of Igarapé Institute.

Al investment across the Global South remains low due to a combination of structural. economic, and geopolitical factors. Limited infrastructure and digital capacity create significant barriers to Al development, as many countries in Latin America, Africa, and parts of Asia lack high-speed internet, reliable electricity, and advanced computing facilities essential for AI research and deployment. Moreover, AI development depends on large datasets and cloud computing, both dominated by U.S. and Chinese firms, creating dependency and limiting local innovation. The high cost of Al talent exacerbates the issue, as "brain drain" drives skilled professionals to wealthier nations with better funding opportunities, widening the talent gap. Additionally, regulatory uncertainty and weak policy frameworks discourage both local and foreign investors from supporting Al startups and initiatives.

As noted, the global Al landscape is concentrated among a few dominant players,

creating an imbalance in funding and resource access. The majority of Al venture capital and private sector investment flows to the U.S., China, and parts of Europe, where tech giants and research institutions lead Al advancements. The lack of Al-focused funding mechanisms in the Global South limits access to capital, making it difficult for entrepreneurs and research institutions to scale Al-driven innovations. Furthermore, Al applications are often designed for Global North markets, limiting commercial incentives for investors to fund Al solutions tailored to the specific challenges of the Global South. As a result, critical areas such as agriculture optimization. disease prediction, and informal economy analytics receive less funding. Without stronger public-private partnerships, targeted government incentives, and regional Al policies, Al investment in the Global South will continue to lag, deepening the technological divide between advanced economies and developing economies.

Figure 11. Distribution of Al Policy Instruments by Lead Entity/Issuer and Region (2011-2024)

Lead entity/Issuer (type)	Number	Percentage (%)
Global North	516	
Academic and research institution	39	8
Civil society/ Non-profit organizations/ Charity	38	7
Governmental agencies/Organizations	327	63
Intergovernmental or supranational organizations	44	9
Private companies/ Alliances/ Federations	68	13

Lead entity/Issuer (type)	Number	Percentage (%)
Global South	183	
Academic and research institution	2	1
Civil society/ Non-profit organizations/ Charity	5	3
Governmental agencies/ Organizations	168	92
Intergovernmental or supranational organizations	3	2
Private companies/ Alliances/ Federations	5	3

The AI-GED database also considers the "key principles" that inform ethical AI guidance and standards (see Figure 12).³⁰ These principles aim to ensure that AI innovation and development align with societal values, human rights, and sustainable practices. Notably, the dataset includes 450 initiatives focused on

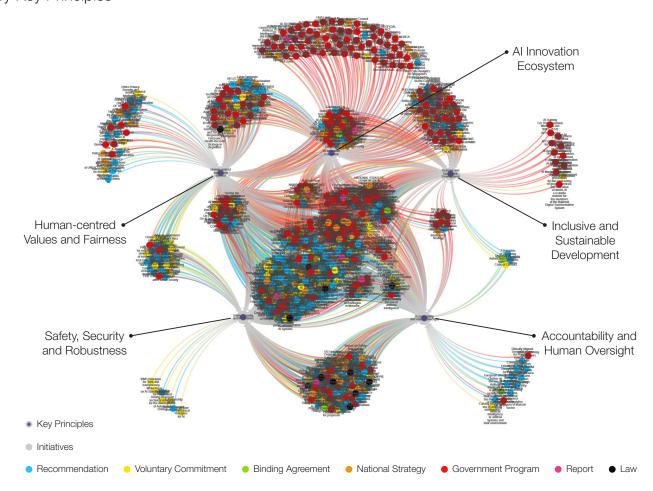
"human-centered values" and "fairness", 31 while 412 emphasize "accountability and human oversight." 32 Additionally, 391 initiatives prioritize "safety, security, and robustness", 33 and 364 promote an "Al innovation ecosystem." 34 However, only 234 initiatives are connected to "inclusive and sustainable development". 35

Figure 12. Distribution of Al Policy Instruments by Key Principles (2011-2024)

Key principles	Number
Human-centered values and fairness	450
Accountability and Human Oversight	412
Safety, Security, and Robustness	391
Al Innovation Ecosystem	364
Inclusive and Sustainable Development	234

Note: The numbers indicate how often each principle is associated with an initiative. Since a single initiative can be linked to multiple principles, the total does not sum to n=734.

Figure 13. Snapshot of Kumu Visualization of the Al Governance Ecosystem Database (Al-GED) by Key Principles



Access the Kumu Visualization at the Al Governance Ecosystem Database (Al-GED), of Igarapé Institute.

The AI-GED enables an exploration of potential relationships between the number of AI policy initiatives per country and national socioeconomic and technological indicators. This analysis helps contextualize the formulation and adoption of AI policies across different regions and may also uncover structural factors influencing broader AI governance, particularly

in the Global South. Figure 14 underlines that Al policy instruments predominantly concentrated in higher-income countries (74%). The technological dominance of wealthier nations – primarily in the Global North – often translates into stronger Al governance infrastructure, further reinforcing global inequalities in Al regulation and accessibility.

Figure 14. Distribution of Al Policy Instruments by Income Group (2011-2024)

WB income group	Number	Percentage (%)
High-income	545	74
Upper middle income	3	0
Lower middle income	41	6
Low-income	105	14
Multiple countries	40	5
Total	734	100

Source of classification: World Bank income classification.36

Predictably, countries with the highest Human Capital Index (HCI)³⁷ also report the most Alrelated initiatives (see Figure 15). For example, the United States, with an HCI of 0.705, has 131 documented initiatives. Singapore, which has the highest HCI (0.88), reports 24 initiatives, followed by Italy, with an HCI of 0.82 and 9 initiatives. In contrast, countries with the lowest HCI, such as Nigeria (HCI of

0.36) and Rwanda (0.38), registered just three initiatives each. The HCl measures "health, knowledge, and standard of living" to assess a country's lifestyle and capabilities. Each of these factors likely plays a role in Al policy development, suggesting that a country's Al policy infrastructure is influenced by more than just its economic status.

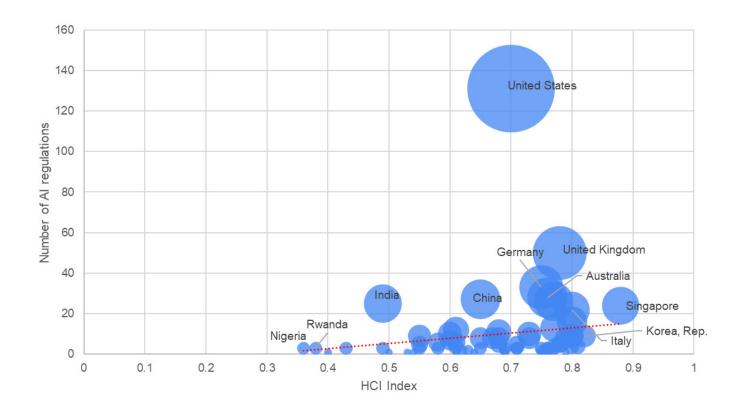


Figure 15. Distribution of Al Policy Instruments by HCI (2011-2024)

Source: World Bank Human Capital Index (HCI). The bubble size represents the number of Al-related initiatives by country, with the U.S. having the largest bubble.

By contrast, the relationship between digital access (measured as the percentage of individuals using the Internet)³⁸ and Al policy development is less intuitive (see Figure 16). For example, countries with 100% internet access, such as Iceland, Saudi Arabia, Qatar, and the UAE, report comparatively few Al policy interventions. However, the United States, which has the highest number of Al-related initiatives, registers 92% internet penetration.

Similarly, the United Kingdom, with 50 Alrelated policy initiatives, has 97% of the population connected to the internet. As

an important outlier, India, where only 46% of the population has internet access, has implemented 25 Al-related initiatives. Likewise, China with a 76% internet penetration, has 27 Al-related policy initiatives. Ultimately, internet access alone does not seem to be a strong predictor of Al policy development. Countries like India and China, despite lower internet penetration rates, still report significant Al regulatory activity. This suggests that other factors – such as regime type, governance priorities, and economic strategies – likely play a more decisive role in shaping Al governance.

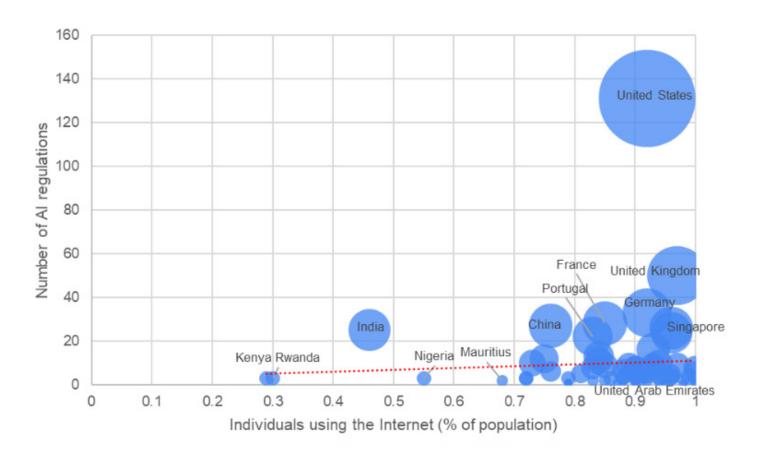


Figure 16. Distribution of Al Policy Instruments by Internet Access (2011-2024)

Source of classification: World Bank: International Telecommunication Union (ITU) World Telecommunication/ICT Indicators Database.

There appears to be a more robust association between global competitiveness and Al policy interventions landscape (Figure 17). Specifically, the 15 countries with the highest Global Competitiveness Index³⁹ scores in 2019 effectively concentrate 51% of all Al-related initiatives. As such, global competitiveness positively reflects these countries' ability to develop Al regulatory frameworks.

The highest-ranking countries include Singapore, the United States, Hong Kong (China), the Netherlands, Switzerland, Japan, Germany, Sweden, the United Kingdom, Denmark, Finland, the Republic of Korea, Canada, France, and Australia. The alignment between global competitiveness and Al policy development indicates that factors such as innovation capacity, economic priorities, and institutional strength are key factors enabling robust Al regulatory frameworks.

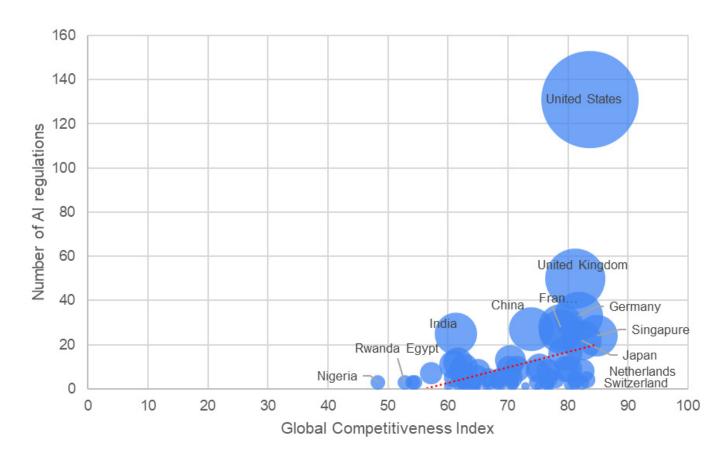


Figure 17. Distribution of Al Policy Interventions by Global Competitiveness Index (2011-2024)

Source: Global Competitiveness Index - WEF World Economic Forum

Arguably, the variable that seems most related to AI interventions is the International Monetary Fund's AI Preparedness Index (AIPI), measured in 2023 (Figure 18). 40 The AIPI ranking is based on an average of four key areas: digital infrastructure, human capital, technological innovation, and legal frameworks. Notably, national and regional gaps in AI readiness are not solely caused by – nor can they be resolved by – the robustness of laws and policies alone. Lower-scoring regions also grapple with fundamental and infrastructure deficits that hinder their ability to adopt and deploy AI systems effectively.

Advanced economies significantly outperform the rest in AIPI scores, averaging 0.68 compared to 0.46 for emerging markets and just 0.32 for low-income countries. Regional AIPI scores further bolster the growing divide in AI policy initiatives. North America leads with 0.74, followed by Europe at 0.63. Asia ranks slightly lower, at 0.52, while Sub-Saharan Africa lags far behind at 0.34. Moreover, 63% of AI-GED entries originate from North America and Europe, reinforcing the notion that the countries best prepared for AI are also shaping its global norms.⁴¹

The AIPI Index also reveals that the 15 countries with the highest levels of AI preparedness (Singapore, Denmark, the United States, the Netherlands, Estonia, Finland, Switzerland, New Zealand, Germany, Sweden, Luxembourg, Japan, the United Kingdom, Australia, and South Korea) account for 46% of all AI initiatives globally.

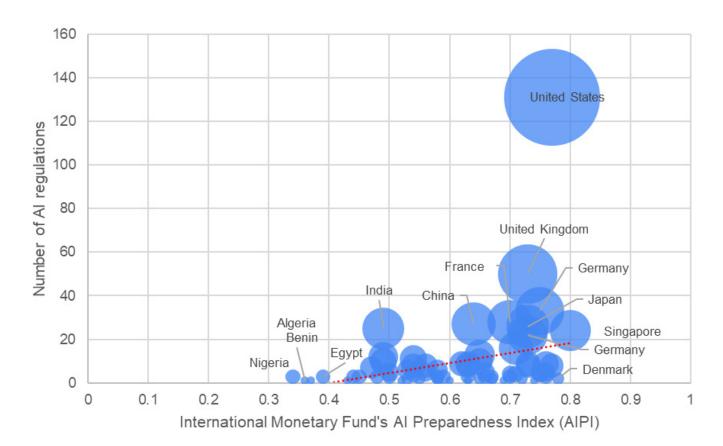


Figure 18. Distribution of Al Policy Instruments by Al Preparedness Index (2011-2024)

Source: World Economic Forum and International Monetary Fund.

Index scores provide further context for regional variations in private sector engagement in Al governance. Regions with higher scores tend to have more diverse stakeholders shaping Al policies, including significant private sector participation. On the other hand, regions with lower scores feature laws and recommendations that originate almost exclusively from government entities. This suggests that foundational gaps in the Global South may be hindering engagement in Al governance.

The Global Competitiveness Index and the AIPI Index together provide further insight into the uneven distribution of Al policy instruments worldwide. The 15 countries with the highest

competitiveness scores account for nearly 60% of initiatives, demonstrating their capacity to develop AI frameworks. Similarly, the top 15 countries in the AIPI Index represent 53% of global Al initiatives.

Notably, five countries – Singapore, the United States, the Netherlands, Germany, and Japan - appear in both rankings, highlighting their leadership in Al preparedness and regulation. Advanced economies outpace others significantly, with an average AIPI score of 0.68, compared to 0.46 for emerging markets and just 0.32 for low-income countries. This disparity suggests that nations most prepared for AI are the ones setting the global standards, reinforcing the current divide in Al governance.

Conclusions

The rapid expansion of Al policy instruments, standards, and policies aimed at ensuring safety and alignment reflects a growing awareness of Al-related risks. The surge in Al risk mitigation measures is positively connected to increasing concerns among political decision-makers, technology companies, research institutions, and the broader public. Still, the uneven distribution of Al policy instruments remains a significant - and potentially dangerous challenge. The AI-GED reveals a sharp divide in Al governance between the Global North and South, despite a significant increase in Al initiatives from lower- and middle-income countries in recent years. The United Nations' 2025 Technology and Innovation Report supports this finding. 118 countries (mostly from the Global South) have not put forth nor are bound by any international Al policy instruments. The majority of nations involved in setting international Al governance frameworks are the ones that make up the G7.42

The number and types of organizations responsible for shaping Al policy instruments differ significantly between the Global North and South. In the Global North, Al governance involves a wide range of stakeholders, including government agencies, private sector entities, and civil society organizations. By contrast, regulatory initiatives in the Global South appear to be primarily driven by state actors, which may indicate the exclusion of certain voices in lower-and middle-income settings.

At the same time, the significant involvement of private sector actors in Al norm-setting and standards development in the Global North raises complex questions, particularly regarding conflicts of interest and the concentration of power within the policy ecosystem. The complexity of advanced LLMs means that even their creators may not fully understand their implications, exacerbating the knowledge gaps between industry insiders and policymakers. These information asymmetries can undermine governance frameworks, making them either overly restrictive or insufficiently protective. Additionally, private companies may advocate for policies more aligned with their agendas.

Stakeholders in the Global North continue to be the dominant players when it comes to setting out the rules for AI safety and alignment. While wealthier governments, companies, and researchers are setting out standards on what is considered safe and ethical, these frameworks often reflect biases and assumptions rooted in Global North perspectives. In some cases, cultural values and economic priorities in other parts of the world may differ significantly, leading to misaligned applications and unintended consequences. A more inclusive and globally aware approach to Al governance is essential - not only to reduce risks to safety and security but also to ensure that the social and economic benefits of AI are fairly distributed.

Annex 1. Methodological Note

The AI Governance Ecosystem Database (AI-GED) is a global repository designed to track, categorize, and analyze AI policy instruments, providing a comprehensive overview of AI governance trends worldwide. As of 2024, the database includes 734 initiatives from 78 countries and regional organizations, classifying policy instruments by type, issuing entity, target audience, key principles, and other contextual variables. It covers initiatives developed by public, private, and nonprofit entities, offering policymakers, industry professionals, researchers, and advocates valuable insights into the AI policy initiatives landscape.

Beyond mapping global trends, the AI-GED also sheds light on disparities in AI governance between the Global North and South, reflecting broader inequalities in AI development, accessibility, and regulatory capacity. Addressing these gaps requires data-driven, collaborative governance, and the AI-GED serves as a key tool for identifying regulatory gaps, analyzing policy diffusion, and informing future AI governance strategies, particularly in underrepresented regions.

The database is accessible through an interactive visualization platform (see Annex 2), allowing users to explore relationships between Al policies, their geographical distribution, and their evolution over time. It is regularly updated, with data available until the end of 2024.

Defining Al Policy Instruments

For this project, Al policy instruments or initiatives refer to formal initiatives issued by government bodies, private organizations, and civil society organizations that aim to regulate, guide, or influence Al development and deployment. These instruments range from legally binding frameworks (laws, regulations, binding agreements) to non-binding guidelines (strategies, recommendations, voluntary commitments, and reports).

The AI-GED specifically tracks initiatives focused on AI safety and alignment, including technical standards, risk management frameworks, and human oversight mechanisms developed by governments, intergovernmental organizations, private-sector alliances, and NGOs.

Database Variables

The AI-GED categorizes AI policy instruments using the following key variables:

- Full name of the Al-related initiative
- Lead entity/ issuer (name of the organization that issued the initiative)
- Year of publication/ launch
- Lead entity type:
 - Academic and research institutions Universities and research centers focused on Algovernance.
 - Civil society/ Nonprofits/ Advocacy organizations NGOs and independent institutions promoting Al-related policies.
 - Governmental agencies/ organizations National or local government bodies issuing policies.
 - Intergovernmental/ supranational organizations Bodies coordinating Al policies across multiple countries.
 - Private companies/ alliances/ federations Individual companies or industry groups issuing Al-related guidelines.
- Country of issuer
- Region (adapted from the World Bank classifications,⁴³ with modifications to include Central Asia within the Europe & East Asia category to better reflect governance dynamics in Europe as a whole).
- Type of initiative:
 - Binding agreement: A formal commitment with mandatory compliance requirements for the issuing organization and all affiliated entities or signatories.
 - Government Program: A structured set of activities, services, or initiatives implemented by a government entity with dedicated resources (financial, human, or material) to achieve specific Al policy objectives
 - Law: A legally enforceable rule or regulation enacted by a legislative body, establishing rights, duties, and penalties related to Al development and use, typically with formal enforcement mechanisms.
 - National Strategy: A comprehensive, high-level framework established by a national government that outlines long-term vision, objectives, and Al-related priorities, often serving as a blueprint for subsequent legislation, programs, or initiatives.
 - Recommendation: Non-binding guidance or advice issued by an authoritative body that suggests preferred courses of action for Al development and deployment without imposing obligations or enforcement mechanisms.
 - Report: A formal document that presents factual information, analysis, findings, and often recommendations on specific Al policy topics, intended to inform decision-making but not itself constituting policy.
 - Voluntary commitment: A self-imposed pledge or promise made by an organization to undertake specific actions or achieve certain goals (often regarding AI safety and deployment), where compliance is discretionary rather than mandated by an external authority.

- Key Al Governance Principles Tracked: Documents are analyzed based on their dedication to the following Al governance principles:⁴⁴
 - Human-Centered Values and Fairness: This principle includes fairness and non-discrimination, ensuring AI prevents biased inputs and outcomes. It also promotes AI's role in enhancing positive human qualities and values, such as health, safety, and economic development. Additionally, it emphasizes human rights protection, ensuring AI technologies are developed and applied in ways that respect fundamental freedoms and dignity.
 - Al Innovation Ecosystem: This principle addresses both research and development (R&D) and the broader Al ecosystem. It emphasizes fostering a digital environment conducive to Al by establishing supportive policy frameworks and investing in Al research and development. The goal is to create conditions that allow Al technologies to thrive while ensuring they align with societal needs and ethical standards.
 - Safety, Security, and Robustness: This principle ensures algorithms are reliable and secure. It includes safeguards for data privacy, protection against misuse, and preventing unauthorized dissemination of information obtained through Al.
 - Accountability and Human Oversight: This principle recognizes that human judgment is
 essential in identifying and mitigating AI biases. It involves transparency, explainability,
 and mechanisms for redress in cases of unreliable or biased AI results. Furthermore, it
 highlights the importance of human control over technology, ensuring humans have the
 final say in AI decision-making.
 - Inclusive and Sustainable Development: This principle addresses the long-term societal and environmental impact of Al. It emphasizes human capacity building, labor market transitions, and the responsibilities of those who operate, sell, and regulate Al technologies. It also promotes inclusive economic growth, sustainable development, wellbeing, and international cooperation, ensuring Al is trustworthy and beneficial to society.

By organizing Al policies through this structured taxonomy, the Al-GED provides a robust tool for policymakers to assess regulatory gaps, benchmark best practices, and inform Al governance strategies globally.

Database sources

- OECD.Al Policy Observatory <u>National Al policies & strategies</u>. The database is a live repository of over 800 Al policy initiatives from 69 countries, territories, and the EU. Accessed on 1/15/2025.⁴⁵
- 2. <u>Al Ethics Guidelines Global Inventory</u> Algorithm Watch. A database of frameworks and guidelines that outline principles for the ethical development and implementation of automated decision-making (ADM) systems. Last updated in April 2020.
- 3. The global landscape of AI ethics guidelines (Article).⁴⁶ A scoping review of the existing corpus of documents containing soft-law or non-legal norms issued by organizations. The study also includes an analysis of gray literature on AI ethics principles and guidelines, with academic and legal sources excluded. September 2019. <u>Table of Ethics Guidelines</u> by Nature Machine Intelligence.
- 4. <u>Principled Artificial Intelligence</u>. Mapping Consensus in Ethical and Rights-based Approaches to Principles for AI (Berkman Klein Center) (article).⁴⁷ A research study analyzing various ethical Ai frameworks using a broad set of tools and search terms. Published in February 2020.
- 5. <u>Global Al Regulatory Update</u> (February 2024). A comprehensive review of Al regulatory development across multiple jurisdictions.
- 6. White & Case Al Watch: <u>Global Regulatory Tracker</u>. A detailed resource tracking Al regulations across individual countries, regional bodies (EU, African Union), and international organizations (G7, UN, OECD). The tracker aims to help businesses navigate the fragmented global Al regulatory landscape by providing insights into implementation status, compliance challenges, and emerging trends.
- 7. Eversheds Sutherland <u>Global Al Regulatory Update</u>. A bulletin covering Al regulatory developments across multiple regions, including Global, Cross-Border, Asia, Europe, Middle East, UK, and U.S.. The update delivers timely insights into new laws, policies, and Al governance guidance. Last updated in November 20224.
- 8. Institute for Al Policy and Strategy. A research organization that published a comprehensive analysis of Al Safety Institutes (AlSIs) in October 2024. The report examines seven jurisdictions, including the first wave (Japan, UK, US) and later institutions (EU, Canada, France, Singapore). It provides an in-depth analysis of the key characteristics, functions, and challenges of these institutes with a focus on their technical mandates, safety evaluations, and relationships with industry and government.
- 9. Active search: The active search process primarily utilized on the Google search engine to identify database entries. Key search terms combined country names, company names, and region names with Al-related keywords, such as "[Country name] Al policy," "New Al regulations," "[Company name] Al policy," and "[Region name] Al framework." These searches aimed to capture national and regional Al policies, recent Al regulations, corporate Al policies, and Al ethical frameworks and guidelines.
 - To complement web searches, Al-focused audio and video content provided additional context and helped identify recent Al developments. Podcasts like "Hard Fork," which explores the intersection of technology and policy, and "Your Undivided Attention," which frequently discusses Al ethics and governance, were among the sources used. You Tube channels such as "The Al Daily Brief" also contributed to coverage. The active search methodology was then applied to integrate relevant entries into the database. An active search is especially important for capturing initiatives from the Global South (Figure 19).

Figure 19. Distribution of Al Policy Initiatives Across Sources

Sources	Global North	Global South
OECD.Al Policy Observatory	48%	58%
Algorithm Watch	22%	6%
Active Search	11%	19%
The global landscape of AI ethics guidelines	11%	2%
Berkman Klein Center for Internet & Society	4%	6%
Global Al Regulatory Update	1%	2%
Eversheds Sutherland	1%	3%
White & Case Al Watch: Global Regulatory Tracker	1%	4%
Institute for AI Policy and Strategy	1%	1%

^{*}One initiative can have one or more sources of information.

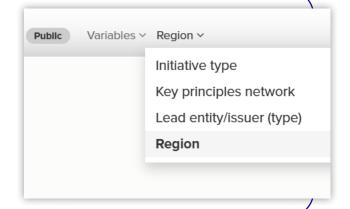
Definitions

- WB Income group. The World Bank classifies countries into four income groups for analytical purposes: low, lower-middle, upper-middle, and high-income. This classification is based on Gross National Income (GNI) per capita, measured in U.S. dollars and converted from local currency using the World Bank Atlas method. SaWorld Development Indicators.
- Human capital index of issuing country (2020): The Human Capital Index (HCI) quantifies the contribution of health and education to the productivity of the next generation of workers. It measures the human capital that a child born today can expect to attain by age 18, given the risks of poor health and inadequate education in the country of birth. Source: World Bank.
- Individuals using the Internet (% of the population). Internet users are individuals who have used the Internet from any location in the last three months. Access can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV etc. Source: World Development Indicators (Latest year available, mostly 2021-22). (Original source, International Telecommunication Union (ITU) World Telecommunication/ICT Indicators Database).
- Global competitiveness index 4.0 (2019). The Global Competitiveness Index assesses the competitiveness landscape of economies, providing insight into the drivers of productivity and prosperity. It measures national competitiveness, defined as the set of institutions, policies, and factors that determine productivity levels. Source: World Economic Forum.
- The International Monetary Fund's AI Preparedness Index (AIPI) (2023) is calculated by averaging scores across four key components: digital infrastructure, human capital, technological innovation, and legal frameworks. Regions with lower AIPI scores often face fundamental and infrastructure deficits that hinder their ability to effectively adopt and deploy Al systems.

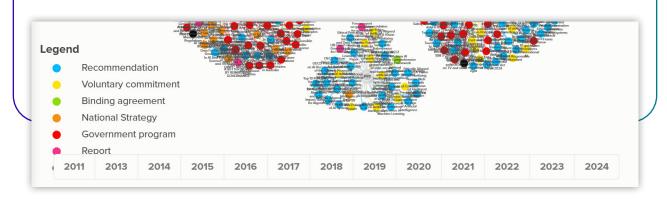
Annex 2. Kumu data visualization of the Al Governance Ecosystem Database (Al-GED)

Kumu is an online free platform for data visualization and mapping of complex systems. It enables the creation of dynamic, interactive maps that show relationships, clusters, and connections between various elements—ideal for exploring public policies, actor networks, strategies, or regulatory frameworks. In the context of this Al policy visualization, Kumu allows users to:

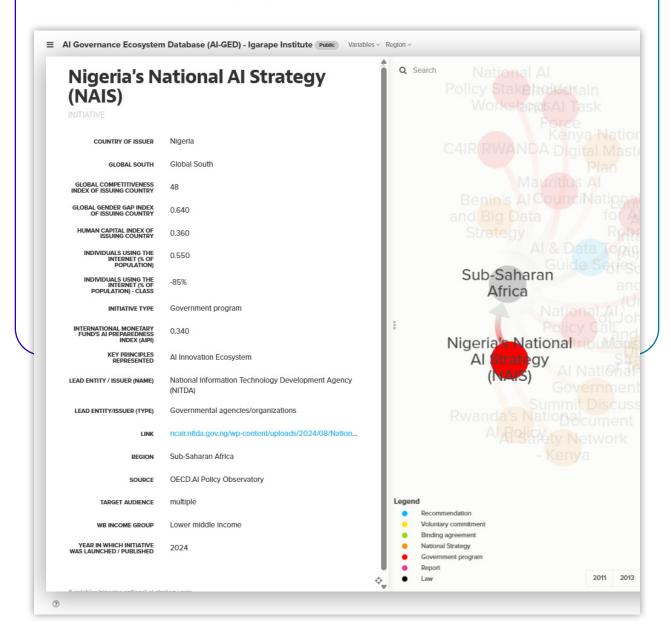
Explore over 700 Al policy instruments interactively, with views for region, initiative type, and lead entity/issuer. A "key principles network" view indicates that a single initiative may address multiple principles simultaneously (e.g., transparency, accountability, human rights). You can access to each of the views by clicking the menu of options.



- Visualize data through clusters and color-coded groupings, enabling multidimensional filtering (e.g., filtering by region while coloring by initiative type).
- Use a year slider to view the evolution of initiatives over time.



Access individual details for each initiative, including name, country, all related variables, and links to full policy documents (when available).



Endnotes

- 1. This paper was written by Sehajleen Kaur (Stanford University), Katherine Aguirre (Igarapé Institute), and Robert Muggah (Igarapé Institute).
- 2. The database was designed by Sehajleen Kaur, Katherine Aguirre and Robert Muggah, with additional inputs from Giulia Neaher (Harvard Kennedy School) and Sam Klein-Markman.
- 3. Data is sourced primarily from public repositories, including the OECD Artificial Intelligence Policy Observatory (covering 2017 to 2024), Algorithm Watch (2021-23), and the White & Case Al Watch: Global Regulatory Tracker. Additional sources include articles from institutions such as the Berkman Klein Center for Internet and Society, among others. The dataset is further supplemented by individual initiatives identified through active searches and news media reports, updated as of January 2025. A complete methodological note is available in Annex 1.
- 4. Access here a visualization of the 734 Al policy instruments https://kumu.io/lgarape/ai-governance-ecosystem-database-ai-ged-igarape-institute#variables. Find more information on the visualization in Annex 2.
- 5. According to the UN Conference on Trade and Development (UNCTAD), the Global South (developing countries) broadly comprises Africa, Latin America and the Caribbean, Asia (excluding Israel, Japan, and South Korea), and Oceania (excluding Australia and New Zealand). Developed economies encompass Northern America, Europe, Israel, Japan, South Korea, Australia, and New Zealand. To learn more about the UN Trade and Development Classifications, visit: https://unctadstat.unctad.org/EN/Classifications.html
- 6. The Igarapé Institute acknowledges that AI governance is continuously evolving and that the database must adapt accordingly. To maintain its relevance, the Institute is committed to regularly updating the data, enhancing usability and accessibility, and incorporating user feedback.
- 7. Igarape Institute and New America (2024). Global Futures Bulletin: Responsible Artificial Intelligence Efforts in the Global South
- 8. Idem.
- 9. Pg 42 https://unctad.org/system/files?file=official-document/tir2025_en.pdf
- 10. Igarape Institute and New America (2024). Global Futures Bulletin: Responsible Artificial Intelligence Efforts in the Global South
- 11. United Nations (2024). Governing Al for Humanity: Final Report
- 12. Find more about the Global Digital Compact at UN Office for Digital and Emerging Technologies
- 13. The EU Al Act introduced the world's first comprehensive risk-based regulatory framework for Al. categorizing risks in four levels and imposing specific prohibitions on high-risk Al applications.
- 14. Executive Order (EO) 14110, issued by the Biden administration in October 2023, established safety testing requirements for advanced AI systems and created the AI Safety Institute. However, in January 2025, the Trump administration repealed this EO and replaced it with one titled "Removing Barriers to American Leadership in Artificial Intelligence."
- 15. Interim measures implemented in August 2023 mandate that Al-generated content must align with Chinese values.
- 16. Developed at the 2017 Asilomar Conference by the Future of Life Institute, this framework established 23 principles for beneficial AI, signed by over 5700 individuals.
- 17. Major tech firms including Google, Microsoft, OpenAl, Anthropic, among others, have published Al principles that play a significant role in shaping industry standards and practices.
- 18. The OECD Recommendation of the Council on Artificial Intelligence is an advisory framework that recommends member states adopt policies ensuring AI systems are robust, secure, fair, and transparent while respecting human rights and democratic values. Although not non-binding, it serves as a foundational reference for national AI strategies worldwide.
- 19. OpenAl (2022). Introducing ChatGPT
- 20. Amodei et al. (2016). Concrete Problems in Al Safety
- 21. The Asilomar Al Principles have 5,720 signatories as of January 2025.
- 22. Our World in Data (2024); U.S. Bureau of Labor Statistics (2024). Annual private investment in artificial intelligence
- 23. Ministry of Information, Communication Technology and Innovation, Rwanda Utilities Regulatory Authority (2023). National Artificial Intelligence Policy for the Republic of Rwanda
- 24. The Department of Communications and Digital Technologies (2024). Al National Government Summit Discussion Document
- 25. The majority of these are proposed and not currently active by January 2025.

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- 26. South Korea's Al Basic Act has been enacted and is set to go into effect in 2026
- 27. Population figures from 2023. World Bank Group Data (2022). Population, total
- 28. Find more about the Council of Europe Al Treaty at Center for Al and Digital Policy
- 29. The OECD AI tracker is one of the main sources of the database, accounting for 47% of cases. Since the OECD AI tracker excludes private companies or civil society this may introduce a bias that should be considered. Nevertheless, the regional contrast remains clear.
- 30. The typology of key principles is adapted from the OECD AI principles
- 31. These principles encompass fairness, non-discrimination, and the promotion of positive human values like health and safety, ensuring Al aligns with fundamental rights and human dignity.
- 32. These principles promote transparency, explainability, and human oversight in AI systems, ensuring biases are mitigated and decisions remain accountable.
- 33. These principles prioritize the technical reliability and security of Al systems, emphasizing data protection and the prevention of misuse.
- 34. These principles emphasize the creation of supportive environments for AI research and development, ensuring innovation aligns with societal needs through robust policy frameworks.
- 35. This principle focuses on long-term societal and environmental impacts including capacity building, labor market transitions, and the promotion of equitable and sustainable growth.
- 36. The World Bank classifies countries into four income groups for analytical purposes: low, lower-middle, upper-middle, and high income. This classification is based on Gross National Income (GNI) per capita, measured in U.S. dollars and converted from local currency using the World Bank Atlas method. Source: The World by Income and Region
- 37. The <u>Human Capital Index</u> (HCI) quantifies the impact of health and education on the productivity of the next generation of workers. It measures the level of human capital that a child born today can expect to attain by age 18, given the risks of poor health and inadequate education in their country of residence. Source: World Bank.
- 38. World Bank Group. <u>Individuals using the Internet</u> (% of population). (Original source: International Telecommunication Union (ITU) World Telecommunication/ICT Indicators Database.
- 39. Global competitiveness Index 4.0 of Issuing Country (2019): The Global Competitiveness Index evaluates the competitiveness landscape of economies, offering insights into the key drivers of productivity and prosperity. It measures national competitiveness, defined as the combination of institutions, policies, and factors that determine overall productivity levels. Source: World Economic Forum (WEF).
- 40. International Monetary Fund (IMF) (2024). Mapping the World's Readiness for Artificial Intelligence Shows Prospects Diverge
- 41. Mauro Cazzaniga, Florence Jaumotte, Longji Li, Giovanni Melina, Augustus J Panton, Carlo Pizzinelli, Emma J Rockall, and Marina Mendes Tavares. <u>Gen-Al: Artificial Intelligence and the Future of Work</u>, Staff Discussion Notes 2024, 001 (2024), accessed March 20, 2025.
- 42. Pg 150 https://unctad.org/system/files?file=official-document/tir2025_en.pdf
- 43. World Bank. World Bank Country and Lending Groups
- 44. The typology of key principles is adapted from the OECD AI principles. Initiatives outside the OECD AI database have been individually reviewed and coded.
- 45. The original dataset separates subcomponents or articles of each policy into individual rows based on "policy instrument type." However, since our dataset does not require this level of differentiation, we retained only the top-level Al policy. Additionally, all policies broadly focused on technology rather than specifically on Al were excluded. We filtered the dataset to include only policies with "Al" or "artificial intelligence" in the title. Finally, we limited our selection to policies introduced after 2017, as Stanford HAI identifies Canada's 2017 strategy as the first national Al strategy.
- 46. Jobin, A., Ienca, M. & Vayena, E. The global landscape of AI ethics guidelines. Nat Mach Intell 1, 389–399 (2019).
- 47. Fjeld, Jessica and Achten, Nele and Hilligoss, Hannah and Nagy, Adam and Srikumar, Madhulika, <u>Principled Artificial Intelligence: Mapping Consensus in Ethical and Rights-Based Approaches to Principles for Al</u> (January 15, 2020). Berkman Klein Center Research Publication No. 2020-1.
- 48. The New York Times (2025). Hard Fork Podcasts
- 49. Center for Humane Technology. Your Undivided Attention Podcast
- 50. YouTube. The Al Daily Brief: Artificial Intelligence News



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