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Navigating Artificial Intelligence Landscape in APEC: Balancing Development and Oversight

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KEY MESSAGES

- Driven by technological breakthroughs in Generative AI (GenAI), the development and adoption of AI have surged both globally and within the APEC region.
- AI is increasingly utilised across various sectors as its capabilities evolve into more general-purpose applications. This transformation is also reshaping the trade landscape, influencing global value chains, generating new demands for AI products, supporting goods and services, and attracting skilled talent. At the same time, AI is introducing several challenges, including the opacity of its decision-making processes, potential intellectual property (IP) infringements, and the risk of widening the digital divide.
- Effective policies are essential to harness the benefits of AI while mitigating associated risks and limitations. There is a growing trend of global and regional initiatives aimed at regulating AI, with several key efforts involving APEC economies. AI has become a recurring topic in trade agreements, appearing in at least nine Free Trade Agreements (FTAs) and Digital Economy Agreements (DEAs), six of which include at least one APEC economy.
- At the domestic level, several APEC economies have established AI-specific laws, regulations, or guidelines to foster AI development and use. There is also an increasing interest in advancing dedicated AI legislation among economies who have not done so. However, despite a general approach towards a risk-based regulation, notable differences remain in the scope and implementation of AI regulations among economies.
- Some economies are also relying on existing regulatory frameworks to govern AI (even if it is non-AI specific) while acknowledging the need for updates and enhancements. Others prioritise risk management guidelines and standards over formal legislation.
- APEC can play a pivotal role in coordinating AI regulatory approaches across the Asia-Pacific region, emphasising the urgent need for cohesive, consistent, and interoperable legal and policy frameworks. This includes serving as a platform, through various APEC committees, to address critical AI-related issues; expanding commitments to AI in FTAs and DEAs; sharing best practices for implementing AI principles; and ensuring that inclusivity remains central to AI-related policies.

Introduction

In November 2022, the APEC Policy Support Unit (PSU) released a policy brief titled "Artificial Intelligence in Economic Policymaking".[1] The brief highlights artificial intelligence (AI) as a potent tool with applications throughout the various stages of the policy cycle. However, it also points out the limitations and risks associated with using AI in policymaking, such as its challenges in understanding policy-relevant concepts like justice and equity, and the biases that AI developers could have, as reflected in AI algorithms and models.

AI's role and impacts extend beyond policymaking. Globally and within APEC, AI development and adoption have progressed rapidly. According to a global survey by McKinsey, the proportion of organisations integrating AI capabilities into business processes surged from 47 percent in 2018 to 78 percent in 2024, with the highest adoption rates seen among technology firms.[2] This growing interest in AI has also spurred a significant increase in investment within APEC. Since 2018, equity investment in private AI firms in the region has risen by 156.9 percent, reaching a high of USD 164.9 billion in 2024.[3] The top three AI application fields by investment value in 2024 were data and analytics (USD 77.7 billion), software (USD 74.7 billion), and general-purpose applications (USD 73.0 billion).[4]

The release of OpenAI's ChatGPT in November 2022 has catalysed widespread AI adoption. Unlike previous AI applications that rely on machine learning rule-based decisions (e.g., if this then that), ChatGPT uses GenAI, a more complex technology that uses neural networks to identify patterns within datasets. GenAI is now widely used for creating content, including text, images and videos. Reflecting technological advancements in GenAI, the number of patent families in this field has surged from around 700 to more than 14,000 just in the past 10 years.[5] Based on the inventor addresses provided in patent applications, APEC economies (China; Japan; Korea; and the United States) made up the top four source economies for these patents between 2014 and 2023. The number of scientific publications on GenAI has seen an even greater increase, exponentially rising from about 100 in 2014 to more than 34,000 in 2023. Notably, a significant portion of these patents and publications were recorded in 2023 alone.[5] The release of open-source models such as LlaMA and DeepSeek has further contributed to the widespread adoption of AI.

Currently, AI (as well as GenAI) lacks a universally accepted definition, with those provided in key policy instruments being broad enough to capture all types of AI. For example, the OECD describes an AI system as a "machine-based system that, for explicit or implicit objectives, infers from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environment".[6] A similar definition is included in the ASEAN Guide on AI Governance and Ethics.[7] Meanwhile, the Council of Europe's definition highlights the ability of such machines to reproduce the cognitive abilities of a human being and that current developments aim to entrust a machine with complex tasks previously delegated to a human.[8] Likewise, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and World Intellectual Property Organization (WIPO) emphasise the technology's capacity to carry out tasks considered to require human intelligence or cognitive functions.[9,10]

As AI adoption by industries and consumers in APEC economies accelerates, cross-border regulatory cooperation is still in its early stages. Although several APEC economies have introduced domestic strategies and legislation to regulate AI development and its applications, there remains limited clarity on how these frameworks can be interoperable. The emerging regulatory fragmentation could raise costs of AI adoption, potentially affecting trade and investment flows.[11,12] Drawing from the latest desk research up to March 2025, this policy brief outlines the current state of AI regulatory landscape across APEC economies at both domestic and international levels. It first sets the context by reviewing the benefits and challenges of AI development and adoption, then examines governance efforts in the region, and lastly considers APEC's potential role in promoting greater alignment and cooperation in this area.

Benefits and risks of AI

AI's versatility allows it to be used across domains. For instance, through natural language processing, AI can translate languages, summarise texts, answer questions, and analyse sentiment, enhancing interactions between humans and computers. It can also assist with image recognition and object detection, enabling more informed decision-making, sometimes in real-time. Additionally, AI can analyse vast amounts of data, identify patterns, and distil information. In production processes, for instance, AI analytics and predictive capabilities can enhance firms' competitiveness in the global market by addressing inefficiencies, providing more accurate demand forecasting, and creating new revenue opportunities.

As AI capabilities become more general-purpose (i.e., adapting to various domains and tasks with unprecedented flexibility and efficiency), its applications have expanded across numerous sectors. For example, financial institutions use AI as virtual agents[13] to handle customer inquiries and complaints, manage portfolios, and detect frauds.[14] In the healthcare sector, AI in medical imaging aids radiologists and pathologists in identifying abnormalities and potentially detecting diseases at earlier stages.[15]

The trade landscape is increasingly being reshaped by AI through its impacts on the global value chains. Firms can leverage AI tools to better manage their supply chain risks by enhancing visibility beyond direct and second-tier suppliers.[16] Advancements in AI may lead to the restructuring of production links as increased automation alters the cross-border division of labour, potentially encouraging the onshoring of production.[17] Firms can also reduce trade costs using AI through its ability to optimise logistics flows and navigate complex trade regulations. Customs authorities can leverage AI to administer tax and duty collection, classify products, and conduct risk assessments of shipments.

The emergence and surge of AI also creates new demand for AI products, supporting the trade of AI-related goods and services, and attracting skilled talents.[11] Core components such as graphics processing units (GPUs) are essential for developing, testing and deploying AI systems, while ICT services and network equipment are necessary for seamless connectivity. Talent-wise, access to engineers and programmers is crucial for AI development and deployment. Furthermore, AI systems require high-quality training data, making policies to facilitate cross-border data flows even more important.

Despite its significant benefits, the rise of AI presents several challenges. One issue is its opaque decision-making process. AI systems use layers of algorithms and vast datasets, making the rationale behind their outputs unclear, even to developers. The consequences might be minor in some cases, such as content deviating from historical contexts,[25] inaccurate solutions to simple problems, or false-flagging harmless content. However, the ramifications can be significant in other cases, such as misreading of medical images, misdiagnosing conditions,[26] or mislabelling taxpayers as fraudsters.[27]

Box 1. AI challenges to IP Rights

The implications and challenges of AI for intellectual property rights (IPRs) have gained significant attention since the release of advanced AI models like ChatGPT and Stability. Before their widespread use, legislative action and case law on AI's impact on IPRs were limited and scattered across few jurisdictions. Now, these issues are central to debates as creators file lawsuits alleging IPR infringements, mostly focusing on copyright violations.[18] Courts around the world are also grappling with the question of whether copyright or potentially patent law could protect AI-generated products.

The intensity of these discussions varies internationally, partly due to the lack of clarity on protection of IPRs in major international conventions which do not clearly define, for instance, what constitutes an 'author' of a copyrighted work, or whether the author can be a machine.[19] Similar uncertainties exist regarding the patentability of AI-generated 'inventions', as the concept of an 'inventor' remains undefined.[20]

Determining the legal status of AI outputs is crucial for establishing legal certainty, which could in turn promote their commercialisation (though this does not depend exclusively on IPRs). Issues concerning the legality of AI-generated works will likely be resolved on a case-by-case basis by courts. In copyrights matters, particularly for AI outputs, decisions will probably hinge on the degree of human creativity and innovation in contested works. More specifically, the question on whether the current international and domestic IPR frameworks are sufficiently adaptable to address the complexities introduced by AI remains open. Despite vibrant international discussions on this issue, there remains limited binding legal guidance.

Another critical aspect of the IPR system's adequacy for AI involves the protection of training data, among others, under copyright law. Unauthorised use of such data can lead to copyright infringement. Although many jurisdictions provide exceptions and defences for using this data,[21] their interpretations vary significantly. In the APEC region, some economies have adopted relevant Text and Data Mining (TDM) exceptions, but the scope of these exceptions differs. For example, Japan and Singapore have introduced TDM exceptions as part of their strategies to boost the digital economy.[22]

Despite efforts to enhance flexibility in copyright laws, legislation varies across APEC economies. While fair use—a broad copyright exception with origins in the US copyright statues—is seen as vital for fostering digital innovation, its application in AI copyright infringement cases remains debated and subject to judicial interpretation, as recent legal disputes in the US illustrate. Furthermore, while some economies such as Singapore has included fair use exception in its Copyright Act,[23] many APEC economies follow the authors' rights tradition in copyright law—commonly associated with civil law systems—which makes the widespread adoption of exceptions like fair use a complex and often contentious issue. Notably, regarding exceptions for training AI systems,[24] infringement will occur in the jurisdiction where the training takes place, even if the training data had been scraped from the Internet in different jurisdictions. This suggests that adopting exceptions for AI training could be strategically used in broader policies to promote AI innovation hubs.

More insidiously, AI can be used to facilitate illegal activities and rights violations. In the business world, the complexity of AI models enables firms to claim plausible deniability in anti-competitive practices.[28] Additionally, AI has been employed to spread misinformation through automated bots and deepfakes, influencing public opinion on social media.[29] AI can also be a tool for discrimination and unlawful surveillance,[30] as evidenced by some law enforcement cases.[31] Besides, concerns have been raised about AI's role in intellectual property (IP) infringement, posing considerable risks to the creative economy. See Box 1 for current discussions about AI and IP.

Another aspect that heightens AI risks is the generally high cost of developing AI systems, especially as models become more complex. For example, the training cost of OpenAI's GPT-3 was estimated to be over USD 4 million[32] while GPT-4's training cost has reportedly exceeded USD 100 million.[33] This could lead to higher market concentration, with recent findings showing that over 90 partnerships and strategic investments involve the same few major players.[34] Sectors in AI-supporting services are also subject to such market consolidation. The cloud computing market, for instance, is dominated by three tech giants controlling about two-thirds of the market.[35,36] Open-source AI models could turn out to be a balancing development, as their licenses allow for model customisation and fine-tuning across various industries.[37]

Access to data is also crucial to level the playing field among developers and has become one of the key bottlenecks in AI development.[38] The combination of limited data access and high AI development costs could deepen the digital divide, exacerbating disparities between and within economies, communities, and socioeconomic groups. For example, the adoption of AI may accelerate premature deindustrialisation in developing economies by reducing dependence on large pool of low-cost labour through improved efficiency.[39] Additionally, disproportionate AI adoption by higher-income earners and businesses could skew income distribution even further in their favour, as increased productivity tends to boost capital returns.[40]

Role of policies

Without underestimating the complexities of regulating a technology with wide-ranging societal impacts, policies can play a crucial role in maximising the benefits of AI while mitigating its risks and limitations. Recognising this, APEC members have implemented or are in the process of establishing laws, regulations, and other instruments of governance focused on AI. These evolving initiatives are being developed alongside efforts by the international community to agree on global frameworks for AI governance. The following sections delve deeper into these developments.

International regulatory activities on AI

Global and regional initiatives aimed at regulating AI are on the rise. Several key initiatives now involve participation from APEC economies, including the UN General Assembly Resolution on AI (2024);[41] the Seoul Declaration for Safe, Innovative, and Inclusive AI (2024);[42] the Seoul Statement of Intent toward International Cooperation on AI Safety Science (2024);[43] the ASEAN Guide on AI Governance and Ethics (2024);[7] the OECD AI Principles (originally adopted in 2019, updated in 2024);[44] the Global AI Governance Initiative (2023);[45] the G20 New Delhi Leaders' Declaration (2023);[46] the Bletchley Declaration (2023);[47] the G7 Hiroshima Process (2023);[48] the Santiago Declaration and subsequent works by Latin America and Caribbean economies (2023);[49] UNESCO's Recommendation on the Ethics of AI (2021);[50] and the G20 AI Principles (2019);[51] among others.

Nevertheless, there are no initiatives within the APEC region that carry binding legal authority. Outside APEC, only the Council of Europe (CoE) has developed a framework convention on AI with legal authority and is open for parties outside Europe to join.[52] This convention requires that AI systems adhere to fundamental principles, such as human dignity and individual autonomy, transparency and oversight, accountability and responsibility, equality and non-discrimination, privacy and personal data protection, reliability, and safe innovation.[53] The scope of the CoE Convention is limited to public authorities and private actors acting on their behalf, meaning that it is not directly applicable to private actors.

Other initiatives are categorised as "soft law", which, while non-binding, set important benchmarks and facilitate international cooperation towards AI governance. A notable example is the OECD AI Principles, which emphasise foundational principles such as inclusive growth, sustainable development and well-being; transparency and explainability; robustness, security and safety; and accountability. These principles have significantly influenced various global and regional frameworks and greatly contributed to the shaping of domestic AI legislations. Participation in these initiatives varies among APEC economies (see Figure 1).

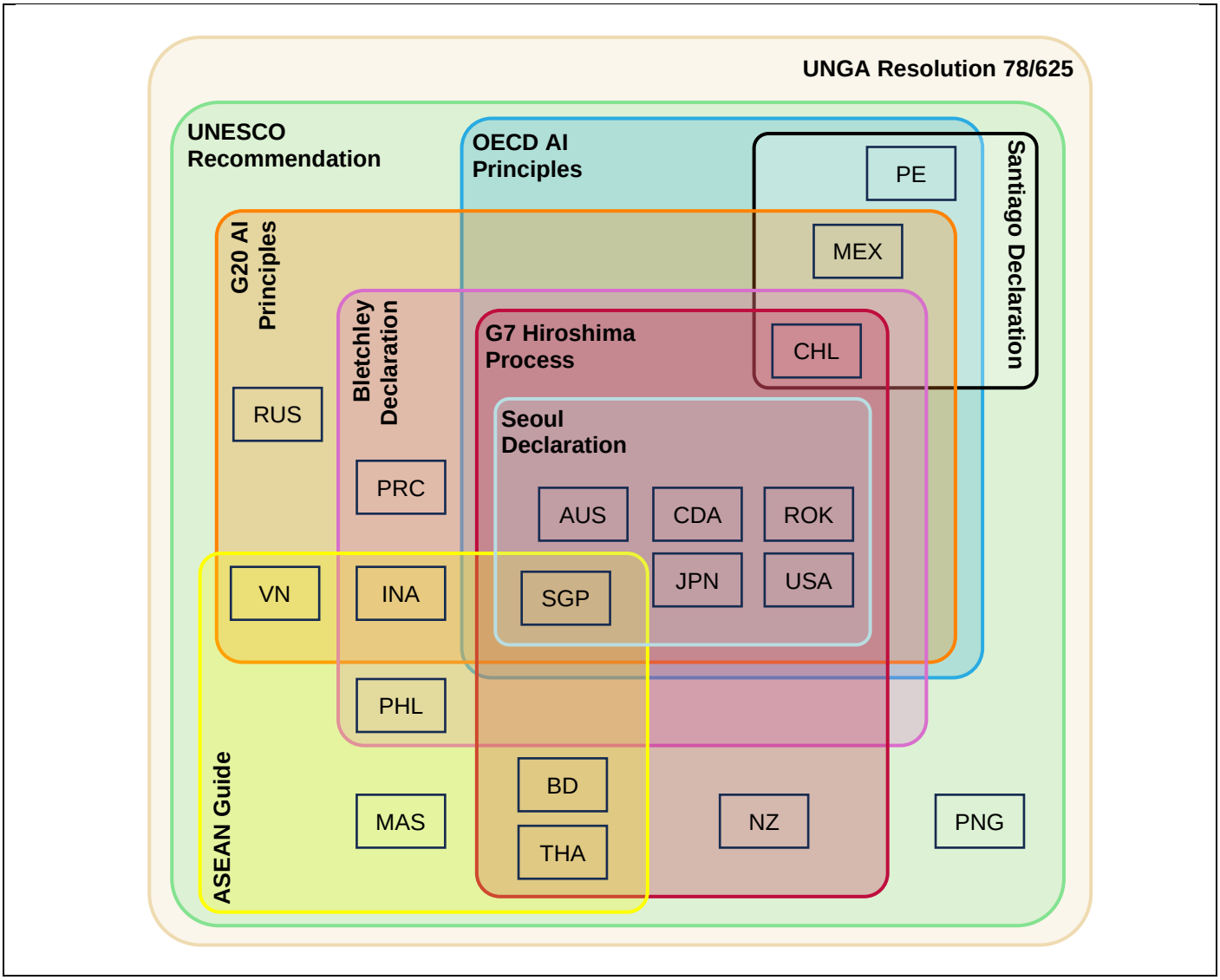

Figure 1. Participation of APEC economies in selected global AI governance frameworks

Note: Diagram only includes APEC economies that are part of these initiatives. Participation in this context is broadly defined as concurrence, adoption, adherence, or endorsement of the governance frameworks by economies, or by virtue of their full membership in host institutions. Economies may or may not be bound by these frameworks. The figure above does not cover economies that participated as guests or observers during the drafting processes, except when they are also signatories or have acceded to the said governance framework (e.g., Australia; Brunei Darussalam; Chile; Korea; New Zealand; Singapore; and Thailand in the G7 Hiroshima Process; Singapore and Viet Nam in the G20 AI Principles). It also does not cover unilateral implementation by non-participants. Source: Authors' compilation.

AI-specific provisions in Free Trade Agreements (FTAs) and Digital Economy Agreements (DEAs)[54]

The Australia - Singapore Digital Economy Agreement of 2020 is the first agreement which includes an AI-specific provision.[55] Since then, AI provisions—often presented as dedicated articles— have appeared in at least eight additional FTAs or DEAs with the latter focusing exclusively on digital trade. In three FTAs, AI provisions are integrated within digital trade chapters.[56] In five other cases, they form part of DEAs.[57] One of the DEAs, the Korea-Singapore Digital Partnership Agreement, is further supported by a Memorandum of Understanding specifically addressing AI.[58] The Australia-UK FTA (A-UK FTA) also has a comprehensive AI provision in its innovation chapter.[59] Notably, six out of the nine agreements involve at least one APEC economy as a participant.[60]

The AI provisions in FTAs and DEAs underscore key regulatory trends, highlighting the increasing importance of AI in the digital economy. These are:

- **Economic benefits of AI**: Many agreements emphasise the economic advantages that AI offers, such as increased competitiveness and enhanced trade and investment flows. Some provisions also highlight the significant social and economic

benefits AI can provide to individuals and businesses.

- **Ethical governance frameworks centred around trusted, safe, and responsible use of AI**: Eight of the nine agreements present ethical governance as "best endeavour" provision, meaning it does not impose a binding obligation to cooperate. However, the A-UK FTA goes further by establishing a Strategic Innovation Dialogue Committee to oversee cooperation in developing ethical AI governance frameworks.

- **Alignment with international principles**: When formulating AI governance frameworks, parties may refer to internationally recognised principles and guidelines. For example, the OECD AI Principles are explicitly mentioned in one agreement,[59] while the Digital Economy Partnership Agreement (DEPA) outlines principles such as explainability, transparency, fairness, and human-centred values.[61]

- **Risk-based regulatory approaches**: Three agreements highlight the importance of risk-based regulatory approaches that incorporate industry-led standards and best practices in risk management.[62] Additionally, the mitigation of societal risks associated with AI is addressed in the Singapore - UK DEA, which outlines cooperation on ethical use, human diversity, and unintended biases, and algorithmic transparency.[63]

Overall, agreements that include AI-specific provisions acknowledge the transformative potential of this technology and its inherently cross-border nature. There is a clear trend towards framing AI use ethically while promoting its role in driving economic growth. As AI governance continues to evolve, these agreements emphasise cooperation over strict rulemaking, which is understandable given that many jurisdictions still lack dedicated laws (as discussed in the next section). The establishment of bodies like the Australia - UK Strategic Innovation Dialogue demonstrates a concrete commitment to fostering future cooperation on AI through institutionalised mechanisms.

Regulatory activity in APEC economies: moving from principles to practice

As international frameworks and selective AI cooperation efforts within FTAs and DEAs continue to evolve, APEC economies have developed or are in the process of developing laws, regulations or guidelines specifically aimed at regulating AI. The rapid advancement of AI technologies—particularly GenAI—and their widespread adoption have created a new sense of urgency around regulation, and it is likely that more economies may join the bandwagon of considering dedicated regulations in this area.

Where AI-specific laws, regulations, or guidelines have been passed (e.g., China; Korea; Peru; Russia; and the United States), they typically incorporate principles inspired by international instruments. Commonly referenced principles include accountability, transparency, and explainability, reflecting a convergence in AI governance at the level of principles as highlighted by recent research.[64] However, significant differences exist in their scope and implementation. Variations are particularly evident in aspects such as the regulatory scope (e.g., whether regulations apply solely to private entities or also to government use), specific obligations for AI system providers, and the strength of enforcement mechanisms. For example, China's Algorithm Recommendation Regulations,[65] the Deep Synthesis Regulation,[66] and the Generative AI Regulation,[67] apply only to AI systems utilised by private firms, focusing predominantly on the content processed or generated by AI systems. In the case of Peru, the scope of relevant law is different. Specifically, Peru's Law on the Promotion of the use of Artificial Intelligence for Economic and Social Development[68] establishes general guidelines for AI systems and emphasises the importance of AI in public services such as health, justice, and education. In Korea's case, the "AI Basic Act" applies specifically to generative AI systems and those that are categorised as "high-impact" serving domestic users, except those that are solely used for national security purposes.[69] Meanwhile, Russia's Federal Law establishing Digital Innovation and AI in Experimental Legal Regimes expands the scope of liability for damages incurred during AI tool testing and establishes mechanisms to identify individuals responsible for AI-related incidents, among other provisions.[70]

In the case of economies considering AI-dedicated laws, the scope of the proposed laws also varies. Viet Nam is considering a Digital Technology Industry Law (DTI Law) with provisions prohibiting certain AI activities,[71] while in other cases, proposed laws can include the obligation to disclose if a work is AI-generated and requirements to identify the databases used to train AI models (e.g., Mexico[72]). Japan's Act on Promotion of Research and Development and Application of AI-Related Technologies,[73] recently submitted to the Diet, avoids imposing binding obligations or penalties on AI developers, providers, or users. Instead, it encourages business to cooperate with forthcoming government-led initiatives outlined in the proposed Bill to advance AI innovation.[74]

In terms of the processes used to develop these laws and regulations, for some economies where voluntary codes of conduct and/or guidelines are already present, the plan is to develop laws and regulations based on

them (e.g., Canada[75]). In many cases, the aim of policymakers is not to enact laws and regulations that could be too prescriptive as they could deter innovation. Instead, efforts seek to introduce ex-post regulation (e.g., Chinese Taipei[76]).

It is important to note that the absence of AI-specific laws in economies does not necessarily imply the lack of regulatory mechanisms or plans in place. For example, New Zealand, instead of enacting a standalone AI Act, plans to update existing legal frameworks to facilitate AI innovation and address potential harms.[77]

Some economies have also expressed their preference for self-regulation instruments, such as risk-management guidelines and standards rather than specific legislation. Australia, for instance, currently does not have dedicated AI legislation but issued the Voluntary AI Safety Standard in September 2024 which outlines guardrails for responsible AI use.[94] Balancing AI innovation with public interests, including taking into consideration AI ethics and governance is a common thread among many economies, even when AI-specific legislation is absent. Singapore's Model AI Governance Framework,[95] Model AI Governance Framework for Generative AI,[96] and AI Verify,[97] are examples in this regard.

Given the dynamic nature of AI, particularly GenAI, economies are likely to adopt a variety of approaches, including dedicated regulations, self-regulatory measures, or a combination of both, as they develop policy frameworks for AI. Those measures can be complemented by non-regulatory initiatives, as showcased in Box 2.

Box 2. Non-regulatory initiatives on AI in APEC

Besides enacting laws and regulations, economies have launched various initiatives to promote AI development and adoption. A recurring theme in these initiatives is the effort to make AI usage more inclusive, while also fostering economic growth.

One key aspect is supporting AI adoption by firms. In Brunei Darussalam, the Certification in Applied AI (CAAI) Program offers a three-month training and consultancy to help businesses integrate AI systems into their operations.[78] In other economies, programs to expand access to AI are targeted at specific segments of businesses. For instance, Korea and Singapore provide vouchers or subsidies to SMEs and startups for purchasing AI solutions.[79,80] Chinese Taipei offers free use of AI GPUs to at least 70 SMEs and startups starting in 2025.[81] Hong Kong, China introduced an HKD 3 billion three-year subsidy scheme for eligible entities—including R&D enterprises—to utilise the computing power of a supercomputing centre.[82]

The AI platform for SMEs or PyMAIs in Mexico is a particularly interesting example of integrating trade with AI to promote inclusion. Implemented by Microsoft, in addition to providing access and training on AI, the program also aims to enhance the competitiveness of participating SMEs for more seamless integration into the North American supply networks.[83]

Economies are also striving to ensure that AI benefits a broader segment of society. Korea's AI agenda focuses on vulnerable groups, proposing an allocation of KRW 27.3 billion in 2024 for autism treatment, healthcare services for seniors living alone, assistive devices for people with disabilities, and enhanced welfare targeting for high-risk groups.[84] Australia's Next Generation AI Graduates Program aims to expand the AI talent pool by providing training and facilitating collaboration among students, researchers and industry professionals.[85] Meanwhile, in efforts to grow the AI talent, Chinese regulators have leveraged their authority and capacities to integrate universities into the economy's AI strategy, particularly those with Double-First Class (DFC) status and those offering DFC disciplines.[86]

The general dominance of English raises concerns about language and cultural barriers in AI. Although major models offer multi-language options, their performance in non-English languages could be further improved.[87] To address this gap, both public and private sectors have launched various initiatives. For instance, the Singapore government-led initiative SEA-LION is developing a model trained on 11 languages and cultural norms in ASEAN.[88] In Indonesia, a major telecom operator plans to launch a large language model (LLM) that will enable existing AI models like ChatGPT to understand interactions in local languages.[89]

Economies have also collaborated with the private sector to enhance AI-related infrastructure. Several APEC economies, including Chile; Indonesia; Thailand; and Viet Nam have signed partnership agreements with NVIDIA to develop their domestic AI infrastructure and ecosystems.[90,91] Singapore has partnered with Google to deploy cloud computing platforms to boost AI capabilities in its public sector.[92] Meanwhile, Japan has agreed to share the cost of building a new supercomputer by Sakura Internet, a cloud service provider, on the condition that local startups can access the supercomputer's processing capabilities at low rates.[93]

Role for APEC

As a premier regional forum, APEC plays a crucial role in coordinating AI regulatory approaches across the Asia-Pacific region. With the rapid advancement in AI technologies, the need for interoperable regulations has never been more pressing. APEC's experience in creating an enabling framework for data governance (i.e., the APEC Cross-Border Privacy Rules (CBPR) System) puts it in good stead to take this challenge head on. By enhancing regional cooperation, APEC can ensure that the benefits of AI are harnessed responsibly and ethically for sustainable economic growth. Possible activities that could be undertaken under the ambit of APEC are discussed below.

Share good practices on putting AI principles into practice

APEC can continue to excel as a platform for sharing and promoting good practices through workshops, seminars and collaborative projects. Examples of activities that APEC has undertaken (or is in the midst of undertaking) include a report aimed at supporting the scaling of AI in the region,[98] a symposium on ICT skill standards for AI,[99] and a workshop to explore public-private partnership opportunities on AI.[100] Moving forward, APEC can focus its efforts on helping economies translate theoretical principles into actionable policies and practices. This includes developing model guidelines and frameworks to ensure that AI use is ethical, transparent, and accountable among others.

To facilitate AI-linked trade and investment in the region, it is crucial to promote the interoperability of these laws and regulations. Moreover, by showcasing successful case studies and innovative approaches from both within and outside the membership, APEC can encourage the adoption of effective AI governance models that align with international standards. This collaborative effort can enhance the maturity of AI ecosystems across the region, in turn fostering greater trust and public confidence in AI technologies.

Furthermore, APEC economies can support the development of certifications, or a risk-based framework grounded in common principles for AI governance. Different standard-setting organisations, such as the International Organization for Standardization / International Electrotechnical Commission (ISO/IEC), are developing technical standards to ensure the transparency, accountability, and bias mitigation of AI systems.[101] There are also ongoing developments in domestic legislation regarding watermarks that might help identify AI-generated material.[102]

Act as a forum for increased transparency on AI regulatory activity

The APEC Digital Economy Steering Group (DESG)'s Data Privacy Subgroup (DPS) includes a regular agenda item in its meetings for economies to voluntarily report on relevant data privacy developments. This practice facilitates continuous monitoring of data privacy regulations across APEC economies, thereby promoting transparency and experience sharing. A similar reporting mechanism could be beneficial in the context of emerging AI governance.

While there are efforts to track ongoing AI regulations in other forums, such as the World Trade Organization (WTO), there has been limited interest by WTO members in notifying forthcoming AI laws to the Technical Barriers to Trade (TBT) committee. So far, only China, Kenya, and the European Union have notified relevant developments.[103] Increased transparency and experience sharing about ongoing regulatory developments will help clarify how and in which areas AI regulation may raise trade concerns. The institutional mechanisms already in place in APEC can contribute to alleviating these concerns.

Expand commitments on AI in FTAs and DEAs

In addition to international initiatives, FTAs and DEAs offer valuable avenues for economies to set a collaborative agenda on AI issues. By integrating AI-specific provisions, APEC economies can align their regulatory goals and approaches to AI development and deployment. This may include agreeing on common principles, establishing standards for AI technologies, promoting interoperability, and facilitating cross-border data flows essential for AI applications. APEC economies can leverage FTAs' digital trade chapters and DEAs to foster a more collaborative environment, and importantly, to mitigate existing and potential trade barriers arising from varied domestic regulations.

Foster mutual understanding and build consensus around AI-related issues (e.g., AI standardisation, IP)

AI has transformed many previously domestic issues into significant cross-border challenges. A prime example is IP infringement related to AI technologies. Despite the cross-border nature of AI development and deployment, enforcement related to IP rights infringement continues to be primarily territorial. APEC can play a vital role in facilitating discussions among member economies to share approaches for adapting IP legal frameworks for AI, including compensation mechanisms for creators when their works are used to train AI systems. This could also involve the development of regional collaborative frameworks that

not only safeguard the rights of IP holders but also encourage the responsible and ethical use of AI.

Ensure inclusion in AI-related policies and initiatives

Inclusion should be a cornerstone of AI-related policies and initiatives as it promotes social cohesion and economic resilience in the face of rapid technological change. Engaging a diverse range of stakeholders is essential for the effective development of AI laws and regulations. APEC can facilitate this process by promoting inclusive dialogue among governments, industries, academia, and civil society to ensure that various perspectives are considered. This engagement is particularly vital in the context of self-regulatory approaches, as industry stakeholders have a crucial role in establishing practical and effective guidelines for AI use. Recognising that AI has the potential to widen the digital divide, APEC can advocate for policies and initiatives that enhance infrastructure and affordability to enable broader access to AI technologies.

Notes

[1] Andre Wirjo et al., "Artificial Intelligence in Economic Policymaking", *APEC Policy Brief* no. 52 (November 2002), www.apec.org/publications/2022/11/artificial-intelligence-in-economic-policymaking.

[2] McKinsey, *The state of AI: How organizations are rewiring to capture value* (McKinsey, 2025), https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai.

[3] The APEC-wide figure is based on the estimated total value of incoming investment which includes both disclosed and estimated amount of undisclosed values. It excludes Brunei Darussalam; Hong Kong, China; and Papua New Guinea due to data unavailability. Source: Emerging Technology Observatory, "CAT: Artificial Intelligence Dashboard", accessed 18 February 2025, https://cat.eto.tech.

[4] Investment figures by fields may be duplicative since an investment may be classified under several application fields. Data exclude Brunei Darussalam; Hong Kong, China; and Papua New Guinea due to data unavailability. Source: see note 3.

[5] WIPO, *Patent Landscape Report: Generative Artificial Intelligence (GenAI)* (WIPO, 2024), www.wipo.int/web-publications/patent-landscape-report-generative-artificial-intelligence-genai/en/index.html

[6] Stuart Russel et al., "Updates to the OECD's definition of an AI system explained", OECD.AI Policy Observatory, 29 November 2023, https://oecd.ai/en/wonk/ai-system-definition-update.

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[9] UNESCO, *Recommendation on the Ethics of Artificial Intelligence* (UNESCO, 2024), https://unesdoc.unesco.org/ark:/48223/pf0000380455.

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