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Advancing Free Trade
for Asia-Pacific **Prosperity**

Enhanced APEC Agenda for Structural Reform (EAASR) Mid-Term Review Report

APEC Policy Support Unit

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LIST OF KEY ABBREVIATIONS

AEPR	APEC Economic Policy Report
AIDER	APEC Internet and Digital Economy Roadmap
ANSSR	APEC New Strategy for Structural Reform
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
ASCR	APEC Services Competitiveness Roadmap
BCG	Bio–Circular–Green
CBDC	central bank digital currency
CO ₂	carbon dioxide
DDS	digitally deliverable services
EAASR	Enhanced APEC Agenda for Structural Reform
EoDB	Ease of Doing Business
FDI	foreign direct investment
GDP	gross domestic product
GNI	gross national income
GRP	good regulatory practices
IAP	individual action plan (EAASR)
ICT	information and communications technology
IMF	International Monetary Fund
JSI	Joint Statement Initiative (WTO)
LAISR	Leaders’ Agenda to Implement Structural Reform
MSME	micro, small and medium enterprise
MTR	mid-term review (EAASR)
NGO	non-governmental organisations
ODR	online dispute resolution
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
PSU	Policy Support Unit (APEC)
R&D	research and development
RAASR	Renewed APEC Agenda for Structural Reform
SME	small and medium enterprise
STEM	science, technology, engineering and mathematics
STRI	Services Trade Restrictiveness Index (OECD)
UNESCO	United Nations Education, Scientific and Cultural Organization
UNICEF	United Nations Children’s Fund
WHO	World Health Organization
WTO	World Trade Organization

KEY MESSAGES

- The Enhanced APEC Agenda for Structural Reform (EAASR) underscores APEC's longstanding commitment to structural reforms. EAASR also serves as the Economic Committee's concrete, medium-term response to delivering on the APEC Putrajaya Vision 2040 and Aotearoa Plan of Action.
- EAASR focuses on four pillars:
 - Pillar #1: Creating an enabling environment for open, transparent and competitive markets
 - Pillar #2: Boosting business recovery and resilience against future shocks
 - Pillar #3: Ensuring that all groups in society have equal access to opportunities for a more inclusive, sustainable growth, and greater well-being
 - Pillar #4: Harnessing innovation, new technology and skills development to boost productivity and digitalisation
- When APEC's Structural Reform Ministers endorsed EAASR in 2021, they also agreed on a mid-term review to be conducted in 2023. The objective of this report is to discuss progress, to share experiences and lessons learnt, and to further guide reform actions by economies. In conducting the mid-term review of EAASR, the APEC Policy Support Unit has employed a two-pronged process: (1) at the APEC-wide level, through a set of endorsed external indicators and the EAASR Implementation Plan (including a short survey to gather member economies' perceptions on EAASR implementation); and (2) at the individual economy level, using the individual action plans (IAPs) submitted by APEC member economies.

Review of APEC-wide progress

- The review of APEC-wide progress using the external indicators shows mixed results. Where it is possible to assess APEC's progress over time, some indicators show the region making progress, while others show backsliding or, at best, stagnating performance. APEC's performance in comparison to other regions is similarly mixed.
- Analysis of APEC-wide progress using the external indicators suggests that APEC member economies could:
 - continue to improve the business regulatory environment, with a focus on the services sector (pillars #1, 2, 3 and 4)
 - create a thriving and conducive environment for innovation (pillars #1, 2, 3 and 4)
 - enhance human capital development (pillars #1, 2, 3 and 4)
 - intensify efforts toward achieving a more inclusive society (pillars #1, 2, 3 and 4)
 - strengthen women's economic empowerment (pillars #1 and 3)
 - reinforce digitalisation efforts, including redoubling efforts to overcome the digital divide (pillars #1, 2, 3 and 4)
 - continue the transition to the green economy (pillars #2 and 4)
- The EAASR Implementation Plan and IAPs serve as records of initiatives and actions by member economies to deliver on EAASR objectives. When formulating initiatives and actions to advance EAASR, it is critical that members revisit the recommendations in the various themed APEC Economic Policy Reports (AEPRs) and consider how they could be incorporated in the EAASR Implementation Plan and IAPs. Over the years,

the AEPRs have provided insights on the role of structural reforms in addressing issues such as services, human capital development, infrastructure, women's empowerment, the digital economy, the future of work, and green recovery. More broadly, members could consider establishing appropriate mechanisms to further institutionalize the implementation of AEPR recommendations, if deemed necessary.

- The analysis of the EAASR Implementation Plan shows that APEC has collectively undertaken 37 initiatives, a significant share of which contribute to multiple EAASR pillars. These initiatives also contribute to collective actions under the Aotearoa Plan of Action, with around 95 percent of them contributing to economic driver #2 (innovation and digitalisation, which includes structural reform initiatives). Members would do well to reflect on the outcomes of these initiatives and consider developing appropriate follow-up activities, including the use of capacity building tools such as the EAASR Sub-fund. Members could also propose new initiatives aimed at addressing areas of concern identified in this report.
- One of the objectives during the development of the EAASR Implementation Plan is to foster collaboration across relevant APEC fora on structural reform issues of common interest. Members could do more to increase the share of initiatives that involve such cross-fora activities. They could initiate collaboration with APEC fora focusing on issues that have gained in importance, for example, with the Group on Services and the Digital Economy Steering Group. They could also proactively explore collaborations with APEC fora whose engagements with the Economic Committee could be improved, particularly those dealing with inclusion-related issues such as the Small and Medium Enterprises Working Group and the Policy Partnership on Women and the Economy.
- When exploring cross-fora collaborations, it is important that members continue to ensure better synergy between EAASR and other APEC initiatives under the purview of different fora, such as the APEC Services Competitiveness Roadmap (ASCR), APEC Internet and Digital Economy Roadmap (AIDER) and the La Serena Roadmap for Women and Inclusive Growth.

Review of progress made by individual economies

- Review of progress at the individual economy level saw IAP submissions by 20 economies. These economies provided updates on 136 key initiatives, representing 96 percent of the total of 141 initiatives submitted by economies in support of EAASR. Most of the key initiatives in these updates address pillars #3 and #4. In terms of emphasis, core structural reformsⁱ continue to be the focus, representing close to 70 percent of the key initiatives.
- The IAP updates show members making good progress on many key initiatives. On efforts to develop laws/regulations, economies have solicited views from relevant stakeholders and are advancing draft laws including amendments through domestic processes. Where laws/regulations have been enacted and programmes have been

ⁱ Core structural reforms include six areas: (1) competition policy and law; (2) strengthening economic and legal infrastructure; (3) ease of doing business; (4) regulatory reform; (5) public sector governance; and (6) corporate law and governance.

launched, economies are at various stages of implementation, including allocating and disbursing funds, collaborating with different groups to organise activities, and raising awareness about the programmes. Economies have also assessed the implementation of laws/regulations and programmes by setting up committees and undertaking surveys, among others.

- At the same time, economies also noted challenges in advancing other initiatives. Reasons include resource constraints (e.g., manpower, equipment and funding), fragmented efforts, unclear implementation guidelines, low public awareness, and external factors (e.g., COVID-19). This suggests that members would benefit from regular sessions where lessons learnt are shared, including the value of staying the course, the need to respond and adapt to challenges, the importance of community engagement, the significance of holistic approaches, and the usefulness of a clear implementation plan. Member economies can also leverage on the EAASR Sub-fund to advance key initiatives/actions.
- EAASR explicitly encourages members to nominate reform actions for the services sector. Some economies have responded by including key initiatives in their IAPs that foreground the services sector right in the title or write-up. However, initiatives that do not specifically identify the services sector as a focus remain in the majority. Given that the reforms and actions under these initiatives often also benefit the services sector, economies are encouraged to ensure that this is reflected in their EAASR reporting. Members are also encouraged to include at least one initiative directly related to the services sector in their IAPs in any future updates.
- Finally, monitoring and evaluation of implementation are critical. Although members have made good use of both qualitative and quantitative indicators to monitor progress, there are areas for improvement, including in identifying the baseline against which the latest data and information could be compared; using both broad and specific indicators to complement one another; and leveraging alternative data sources.

1. INTRODUCTION

1.1 BRIEF HISTORY OF APEC STRUCTURAL REFORM EFFORTS

APEC has a long history of leading structural reform efforts in the Asia-Pacific region. Efforts began taking shape almost two decades ago with the adoption of the Leaders' Agenda to Implement Structural Reform (LAISR) in 2004 (APEC, 2004a). Five priorities were identified to focus economies' efforts until 2010, namely: (1) regulatory reform; (2) competition policy; (3) corporate governance; (4) public sector governance; and (5) economic and legal infrastructure (APEC, 2004b).

As LAISR drew to a close, APEC Leaders, noting that structural reform is a continuous process, adopted the APEC New Strategy for Structural Reform (ANSSR) to guide economies' efforts until 2015 (APEC, 2010). ANSSR categorised actions into five pillars aimed at promoting:

- more open, well-functioning, transparent and competitive markets
- labour market opportunities, training and education
- sustained small and medium enterprise (SME)² development and enhanced opportunities for women and vulnerable populations
- effective and fiscally sustainable social safety net programmes
- better functioning and effectively regulated financial markets

Recognising the strong interest of its member economies to continue with structural reform efforts and the role of such efforts in potentially promoting inclusion, APEC's Structural Reform Ministers set forth the Renewed APEC Agenda for Structural Reform (RAASR) in 2015 (APEC, 2015). This iteration identified three pillars that could act as guideposts for the choice of concrete reform actions by individual economies:

- more open, well-functioning, transparent, and competitive markets
- deeper participation in those markets by all segments of society, including micro, small, and medium enterprises (MSMEs), women, youth, older workers, and people with disabilities
- sustainable social policies that promote the abovementioned objectives, enhance economic resilience, and are well-targeted, effective and non-discriminatory.

With RAASR coming to an end in 2020, APEC began to consider how structural reform efforts could be sustained in the region. It is worth noting that 2020 was also the year when the COVID-19 pandemic struck. As the latest iteration of APEC's structural reform agenda, the Enhanced APEC Agenda for Structural Reform (EAASR) underscores APEC's longstanding commitment to structural reform in overcoming issues such as inequality and climate change, as well as reflects the urgency of tackling the wide-ranging implications of the pandemic in the region. Endorsed by APEC's Structural Reform Ministers in 2021, EAASR comprises four pillars of work:

- Pillar #1: creating an enabling environment for open, transparent and competitive markets
- Pillar #2: boosting business recovery and resilience against future shocks

² Small and medium enterprise (SME) is defined differently by each APEC economy. Some economies also have a micro-sized enterprise category. For consistency, this report uses micro, small and medium enterprise (MSME) interchangeably with SME.

- Pillar #3: ensuring that all groups in society have equal access to opportunities for a more inclusive, sustainable growth, and greater well-being
- Pillar #4: harnessing innovation, new technology and skills development to boost productivity and digitalisation (APEC, 2021a)

Furthermore, EAASR aims to contribute to achieving the APEC Putrajaya Vision 2040 and the Aotearoa Plan of Action by setting out a new direction for growth-focused structural reforms that are inclusive, sustainable and innovation-friendly. Indeed, the APEC Putrajaya Vision 2040 explicitly mentions as an objective the pursuit of ‘structural reforms and sound economic policies to promote innovation as well as improve productivity and dynamism’ (APEC, 2020c), while the Aotearoa Plan of Action elaborates that structural reform initiatives would be advanced by economies under EAASR’s four pillars and through collaboration across relevant APEC fora (APEC, 2021c).

1.2 CONTEXT OF THE MID-TERM REVIEW OF EAASR

When APEC’s Structural Reform Ministers endorsed EAASR in 2021, they also agreed on a mid-term and a final review of the agenda, to be conducted in 2023 and 2025, respectively. The objective of this report on the mid-term review (MTR) is to discuss progress, to share experiences and lessons learnt, and to further guide reform actions by economies.

The MTR involves a two-pronged process: (1) at an APEC-wide level, using the endorsed external indicators and the EAASR Implementation Plan (including a short survey to gather member economies’ perceptions on EAASR implementation); and (2) at an individual economy level, through the individual action plans (IAPs) submitted by member economies. This process balances two perspectives, namely: (1) the importance of monitoring the progress made by individual economies since the range of key initiatives identified traverses a wide spectrum; and (2) the value of monitoring and analysing APEC-wide progress on structural reform to consider aspects beyond the key initiatives identified by economies.

With the MTR report, the APEC Policy Support Unit (PSU) aims to provide a snapshot of progress in various areas related to EAASR and to encourage deeper policy discussions among APEC members, particularly on measures to enhance their efforts moving toward 2025. Additionally, the MTR report serves as a key input in the Economic Committee’s evaluation of progress and contribution toward achieving the APEC Putrajaya Vision 2040 (APEC, 2020c) and the Aotearoa Plan of Action (APEC, 2021c).

2. REVIEW OF APEC-WIDE PROGRESS

The endorsement of the Enhanced APEC Agenda for Structural Reform (EAASR) in 2021 came with the instruction that the Economic Committee work with the APEC Policy Support Unit (PSU) to update the quantitative indicators used for monitoring and reporting on APEC-wide progress on structural reform. As a background, quantitative indicators had been employed for the same purpose under the Renewed APEC Agenda for Structural Reform (RAASR). In line with the spirit and intent of EAASR to demonstrate both the importance of continuing to address the gaps identified in the RAASR Final Review and the urgency of responding to the new challenges amid the evolving economic landscape, the APEC PSU employed a two-pronged approach to identify and improve the quantitative indicators for monitoring and reviewing EAASR's progress:

- review the indicators used for monitoring RAASR and to keep them for monitoring EAASR if they are still relevant
- review a broader list of indicators, particularly those that have not been used for monitoring RAASR and to add them if relevant.

As a result of this exercise, the APEC PSU produced a report proposing a total of 28 indicators, and these were endorsed by the Economic Committee in 2021 (Wirjo, Calizo, and Carranceja, 2022). Table 2.1 lists all the indicators and its associated EAASR pillars. All but four of these indicators can be associated with more than one pillar, which is to be expected since these pillars are linked to one another. The 28 indicators can also be grouped into potential themes under each EAASR pillar, thereby facilitating a better understanding of how each of the indicators are related to each other.

The APEC Structural Reform Ministers also tasked the Economic Committee to develop and enact an EAASR Implementation Plan that identifies actions, indicators and timelines for the review. This is to ensure that the Economic Committee meets its key collective structural reform-related actions as laid out in the Aotearoa Plan of Action:

- advance future APEC initiatives on structural reform under the four pillars of EAASR, including through sharing information and best practices, promoting good regulatory practices and regulatory cooperation, and building capacity to support the implementation of EAASR commitments
- collaborate across relevant APEC fora on issues related to structural reform, including services and the digital economy

The resulting EAASR Implementation Plan, endorsed in 2022, complements the EAASR individual actions plans (IAPs) submitted by economies and serves as a living document that is reviewed regularly, with action items for economies to modify, add or remove over the EAASR period.

Table 2.1 APEC-wide indicators and their associated EAASR pillars

No.	Source	Indicator	Type	Associated EAASR Pillar			
1	ILO	Employment-to-population ratio	Outcome	.	.	3	.
2	ILO	Labour force participation rate for age group 65+	Outcome	.	.	3	.
3	ILO	Labour income distribution by decile	Outcome	.	.	3	.
4	ILO	Share of youth unemployment	Outcome	.	.	3	.
5	WHO/ UNICEF	Joint monitoring program indicators for water supply and sanitation	Outcome	1	.	3	.
6	World Bank	Indicators on women, business, and the law	Policy-based	1	.	3	.
7	Lang et al. (2023)	Net zero tracker	Policy-based	.	2	.	4
8	OECD	Production-based and demand-based CO ₂ productivity (GDP per unit of energy-related CO ₂ emissions)	Outcome	.	2	.	4
9	OECD	Programme for International Student Assessment (PISA) indicators on reading, mathematics, science and social inclusion	Outcome	.	.	3	4
10	OWID	Share of primary energy from renewable sources	Outcome	.	2	.	4
11	World Bank	Indicators on carbon dioxide damage (% of GNI)	Outcome	.	2	.	4
12	ILO	Indicators on social protection	Outcome	1	2	3	.
13	UNESCO	Gross R&D expenditure (% of GDP)	Outcome	1	2	.	4
14	UNESCO	Tertiary gross enrolment ratio	Outcome	.	2	3	4
15	World Bank/ OECD	Indicators on healthcare resources	Outcome	1	2	3	.
16	ITU	Indicators on access to ICT infrastructure	Outcome	1	2	3	4
17	OECD	Digital Services Trade Restrictiveness Index	Policy-based	1	2	3	4
18	OECD	Foreign Direct Investment Regulatory Restrictiveness Index	Policy-based	1	2	3	4
19	OECD	Services Trade Restrictiveness Index	Policy-based	1	2	3	4
20	The Conference Board	Labour productivity per person employed	Outcome	1	2	3	4
21	UNESCO	Percentage of graduates from STEM programs in tertiary education	Outcome	1	2	3	4
22	WEF	Global competitiveness indicator for product market efficiency	Perception-based	1	2	3	4
23	WEF	Global competitiveness indicators for business dynamism, innovation, and intellectual property	Perception-based	1	2	3	4
24	WEF	Global competitiveness indicators for financial system	Perception-based	1	2	3	4
25	WEF	Global competitiveness indicators for infrastructure	Perception-based	1	2	3	4
26	WEF	Global competitiveness indicators for labour market efficiency	Perception-based	1	2	3	4
27	WEF	Global competitiveness indicators for skills	Perception-based	1	2	3	4
28	World Bank	Global Findex indicators on share of population making and receiving digital payments in the last year (15+)	Outcome	1	2	3	4

ILO=International Labour Organization; ITU=International Telecommunication Union; OECD=Organisation for Economic Co-operation and Development; OWID=Our World in Data; UNESCO=United Nations Educational, Scientific, and Cultural Organization; UNICEF=United Nations Children's Fund; WEF=World Economic Forum; WHO=World Health Organization
Source: Adapted from Wirjo, Calizo, and Carranceja (2022).

2.1 UPDATE ON EXTERNAL INDICATORS

2.1.1 Status of external indicators










Despite the intent to make use of the full set of endorsed external indicators to monitor progress, reasons such as update frequency, delay in release or change in methodology meant that not all indicators were available for the EAASR mid-term review (MTR) report. COVID-19, in particular, affected a significant number of indicators. For example, members of the Organisation for Economic Co-operation and Development (OECD) and their associates

decided to postpone the 2021 assessment for the Programme for International Student Assessment (PISA) to 2022 to reflect post-COVID challenges.

The APEC PSU has developed a classification system to overcome some of these issues and to enable as many indicators as possible to be analysed for the MTR. Figure 2.1 shows the colour-coded classification system, which considers whether it is possible to establish a baseline (set at data from the years 2019–2021) or to monitor progress for the purposes of the MTR (which requires data from the years 2022–2023):

- Red: A baseline could not be established as the year of latest available data for the indicator is 2018 or earlier.
- Orange: A baseline could be established, but progress could not be monitored as there is no data beyond 2021 for the indicator.³
- Green: A baseline could be established, and progress could be monitored given that the latest year where data are available is either 2022 or 2023.

Figure 2.1 System for classifying the endorsed external indicators

Indicator categories	Latest data available	Establish a baseline	Monitor progress
 Red Indicators	2018 or earlier		
 Orange Indicators	2019–2021		
 Green Indicators	2022–2023		

Source: Authors.

Using this classification system, there are a total of 2 red indicators, 19 orange indicators, and 8 green indicators, as of 29 May 2023 (Table 2.2).⁴ This report focuses on analysis and discussion of the 19 orange indicators and 8 green indicators.

Between the report by the APEC PSU proposing the indicators for monitoring APEC-wide progress on EAASR and this MTR report, changes and/or modifications have been observed for only one indicator: Lang et al. (2023)'s net zero tracker. This indicator had significant changes in 2023, particularly in the set of categories used to classify economies' net zero emissions targets (for example, 'proposed legislation' and 'target under discussion' were categories no longer used in 2023). Given this methodological change, data across years are no longer comparable. As such, data for this indicator prior to 2023 will not be utilised in the report.

³ Although APEC progress could not be monitored, it is possible to assess where APEC stood relative to its peers based on the latest available data, if relevant to motivating initiatives and activities by members.

⁴ EAASR has only 28 endorsed external indicators. However, the OECD CO₂ productivity indicator has two components, which have different colour classifications.

Table 2.2 Status of endorsed external indicators (as of 29 May 2023)

No.	Source	Indicator	Latest data available	Colour classification
1	ILO	Employment-to-population ratio	2022	■ Green
2	ILO	Labour force participation rate for age group 65+	2022	■ Green
3	ILO	Labour income distribution by decile	2020	■ Orange
4	ILO	Share of youth unemployment	2022	■ Green
5	WHO/ UNICEF	Joint monitoring program indicators for water supply and sanitation	2020	■ Orange
6	World Bank	Indicators on women, business, and the law	2023	■ Green
7	Lang et al. (2023)	Net zero tracker	2023	■ Green
8	OECD	Production-based and demand-based CO ₂ productivity (GDP per unit of energy-related CO ₂ emissions)		
		(a) Production-based component	2021	■ Orange
		(b) Demand-based component	2018	■ Red
9	OECD	Programme for International Student Assessment (PISA) indicators on reading, mathematics, science and social inclusion	2018	■ Red
10	OWID	Share of primary energy from renewable sources	2021	■ Orange
11	World Bank	Indicators on carbon dioxide damage (% of GNI)	2021	■ Orange
12	ILO	Indicators on social protection	2020	■ Orange
13	UNESCO	Gross R&D expenditure (% of GDP)	2020	■ Orange
14	UNESCO	Tertiary gross enrolment ratio	2020	■ Orange
15	World Bank/ OECD	Indicators on healthcare resources	2020	■ Orange
16	ITU	Indicators on access to ICT infrastructure	2021	■ Orange
17	OECD	Digital Services Trade Restrictiveness Index	2022	■ Green
18	OECD	Foreign Direct Investment Regulatory Restrictiveness Index	2020	■ Orange
19	OECD	Services Trade Restrictiveness Index	2022	■ Green
20	The Conference Board	Labour productivity per person employed	2022	■ Green
21	UNESCO	Percentage of graduates from STEM programs in tertiary education	2020	■ Orange
22	WEF	Global competitiveness indicator for product market efficiency	2019	■ Orange
23	WEF	Global competitiveness indicators for business dynamism, innovation, and intellectual property	2019	■ Orange
24	WEF	Global competitiveness indicators for financial system	2019	■ Orange
25	WEF	Global competitiveness indicators for infrastructure	2019	■ Orange
26	WEF	Global competitiveness indicators for labour market efficiency	2019	■ Orange
27	WEF	Global competitiveness indicators for skills	2019	■ Orange
28	World Bank	Global Findex indicators on share of population making and receiving digital payments in the last year (15+)	2021	■ Orange

Note: See also Figure 2.1 for colour classification.

Source: Compiled by the APEC PSU.

2.1.2 Caveats on insights from indicators

The indicators can provide a snapshot of progress in areas or topics with linkages to EAASR pillars. Where there are improvements, they could motivate further efforts by economies. Where there are gaps, they could indicate that more could be done to improve the current state

and encourage deeper policy discussions, including sharing best practices among each other. However, there are general caveats associated with the insights obtained from the indicators.

First is causation. Indicators may be affected by factors other than concrete actions identified by economies. Even in instances where actions have a direct impact on an indicator, it may take time for the outcome of these actions to be captured by the indicators.

Second is inference. Improvement in indicator data may not be directly linked to desired observable outcomes for various reasons. For example, positive progress in policy indicators may not necessarily be accompanied by the outcome indicators moving in the same direction. As an illustration, an improvement in the business regulatory environment could facilitate the increased participation of MSMEs, but that is not a given since MSMEs could still decide not to participate in the market. Likewise, increased support to groups with untapped economic potential could help with their employment but that does not always happen for multiple reasons. It would be worthwhile to identify these reasons and then to respond accordingly.

Third is regional perspective. An analysis of these indicators generally provides a regional perspective, which may be different from those of an individual economy. There are many instances wherein an indicator shows improvements in the regional score but the opposite when viewed from the perspective of individual economies. This could indicate that APEC-level activities, such as capacity building and sharing of best practices, may not directly lead to actions and/or implementation at the individual economy-level.

Fourth is coverage. Data availability at the individual economy level can be patchy for some indicators. To improve data coverage, this report has utilised previous year data to fill in gaps. However, regional aggregates built using this method are reported only when at least one third of the available data points are based on the actual year being reported. This way, the aggregates can remain reflective of the year's actual performance. Despite the intent to include as many member economies as possible in each indicator, some indicators will still only include data from selected member economies. In such instances, it is important to note that changes in score may not be reflective of APEC as a whole. In this report, all indicators include data from at least half of APEC member economies, except for the indicator on hospital beds per 1,000 people.

Last, but not the least, these indicators are not exhaustive and do not cover all aspects of structural reform efforts, although they reflect the intent to provide a snapshot of progress in areas or topics related to the EAASR. As such, relevant indicators reported by economies in their IAPs can serve as useful complements.

2.2 UPDATE ON THE EAASR IMPLEMENTATION PLAN

Since the EAASR Implementation Plan was endorsed in the first plenary meeting of the APEC Economic Committee (EC1) for 2022, it has been circulated thrice to members for updates: (1) prior to EC2 2022; (2) prior to EC1 2023; and (3) after EC1 2023. Information provided by members range from inserting new initiatives to identifying cross-pillar/fora support and determining milestones and timelines.

A total of 37 key initiatives/actions were reported in the latest version of the EAASR Implementation Plan (dated 11 April 2023). Some of the initiatives have been completed, while others are in progress. Notably, some of these initiatives/actions benefited from the EAASR

Sub-fund (initial value of USD 1.9 million in 2021). As of May 2023, USD 1.6 million are still available, which translate to a utilization rate of around 17.9 percent. Member economies can leverage the remaining EAASR Sub-fund to support the implementation of more key initiatives/actions.

Around 26 initiatives (70 percent) are cross-pillar, meaning that even as the specific initiative was identified as contributing to a particular main pillar, it contributes to other EAASR pillars as well. More than a third of the initiatives (35 percent or 13 initiatives) identified cross-fora support, underscoring the value of cross-fora collaboration in undertaking reform initiatives such as the need to involve multiple agencies.

All the initiatives contribute to collective actions for the Aotearoa Plan of Action, with around 95 percent contributing to economic driver #2 (innovation and digitalisation) where structural reforms are explicitly mentioned. This shows that EAASR serves as the Economic Committee's concrete response to delivering on both the APEC Putrajaya Vision 2040 and the Aotearoa Plan of Action. These initiatives will be further elaborated on in the sections on the respective pillars where relevant.

Several initiatives also contribute to specific APEC goals. Around 18 initiatives (49 percent) contribute to the La Serena Roadmap for Women and Inclusive Growth (APEC, 2019a), most of them specifically contributing to key action area A (empowering women through access to capital and markets). Meanwhile, around 10 initiatives (27 percent) contribute to the Bangkok Goals on Bio–Circular–Green (BCG) Economy (APEC, 2022b).

In addition, a short survey was conducted to complement the information reflected in the EAASR Implementation Plan. As part of the mid-term review of EAASR, this survey provided members' perceptions on where the Economic Committee has done well in implementing EAASR and where there may be scope for improvement.⁵

2.3 ANALYSIS OF APEC-WIDE PROGRESS, BY PILLAR

The discussions in this section have been structured to enable progress on each pillar to be read with minimal need to refer to other pillars. Readers may find some discussions to be repetitive as there are common themes and indicators that are relevant across pillars, which underscores the cross-cutting nature of structural reform efforts. For example, innovation could contribute to Pillar #1 as economies that are open to new ideas are more likely to have more competitive markets. Likewise, innovation could contribute to Pillar #4 by boosting productivity and digitalisation. Access to basic services, social protection and infrastructure could contribute to Pillar #1 as they would enable more people to participate in the labour market, hence making it more open and competitive. Access to basic services, social protection and infrastructure also contribute to Pillar #3 as they would enable more people, including those with untapped economic potential to have more equal access to opportunities.

2.3.1 Pillar #1: Creating an enabling environment for open, transparent and competitive markets

Economic agents exchange resources with one another on a daily basis. The constantly changing market conditions means that facilitating these exchanges is always a work in

⁵ Appendix A provides a compilation of member economies' perceptions.

progress. Optimising the benefits of the digital economy, for instance, would require economies to have the skilled labour that businesses need to process and analyse the large amount of data generated. In a similar vein, having good digital infrastructure would enable the provision of and access to digitally deliverable services (DDS). Put simply, factors such as labour, financial resources, infrastructure, basic services, and policies collectively contribute to the creation of an enabling environment for open and competitive markets to continue functioning amid a changing landscape.

This section explores APEC's progress on pillar #1 across four themes: (1) improving business regulations and facilitating their conduct; (2) enhancing the competitiveness of the labour market and access to financial resources; (3) enhancing innovation and productivity; and (4) strengthening access to basic services, social protection, and infrastructure.

2.3.1.1 Improving business regulations and facilitating their conduct

Policies affecting business conduct contribute significantly to fostering an enabling environment for open and competitive markets to function. A facilitative regulatory environment, for example, lowers the burdens and cost for businesses to operate, enabling them to focus on their products. Meanwhile, policies that are open to foreign direct investment (FDI) and trade allow businesses to reach wider markets well beyond their borders. Recognising that governments and policies play a role in facilitating business conduct, APEC economies have rolled out various domestic initiatives ranging from digitalizing business registration to having online regulatory database to improve transparency. For example, Singapore utilised digital technologies to improve business registration, which resulted in a streamlined process that entrepreneurs can complete in just 1.5 days.⁶ Similarly, China has gradually been improving its business registration processes (Wei et al., 2022). Through a multi-year initiative, China has eased incorporation requirements, digitized government services, and strengthened inter-governmental data sharing and coordination, among others. This resulted in an increase in market entities from 61 million in 2013 to 154 million in 2021. Chapter 3 of this report provides more economy-specific information. At regional level, APEC economies have also advanced a range of initiatives. For example, the APEC Collaborative Framework for Online Dispute Resolution (ODR) aims to help businesses, particularly MSMEs, resolve cross-border business disputes (see Box 2.1).

Box 2.1 The APEC Collaborative Framework for ODR of Cross-Border Business to Business Disputes ('ODR Framework')

Endorsed in 2019, the ODR Framework sought to help global businesses, particularly MSMEs, to resolve business to business (B2B) cross-border disputes focusing on low value disputes, as defined by member economies. Through the ODR Framework, ODR providers from economies that have 'opted-in' to the Framework and who have confirmed they commit to the Model Procedural Rules are listed on the website. Small businesses are encouraged to use these providers to resolve commercial cross-border disputes. The ODR Framework is designed to promote B2B cross-border confidence by providing quick and affordable electronic resolution and enforcement of disputes across borders, languages, and different legal jurisdictions.

Based on the ODR Framework's satellite website (<https://www.apec.org/SELI/Overview>), there are five economies that have currently opted-in the ODR Framework. As of June 2023, these economies

⁶ For more on this example, see: <https://www.edb.gov.sg/en/why-singapore/business-friendly-environment.html> (accessed 27 July 2023).

are China; Hong Kong, China; Japan; Singapore; and the United States. Currently, four ODR providers have joined the Framework and have been listed on the website. Moreover, various related activities have been organized, including holding a Hybrid Workshop on Implementing the ODR Collaborative Framework (Dennis, 2022), launching a satellite website and a study on Best Practices in Using ODR (Dennis, 2023).

Source: APEC (2019b).

To improve competition enforcement, a practical guide for competition authorities and regulators was developed that includes: the quantitative tools and techniques available to gather and analyse data in competition cases; studies; and impact assessments (APEC, 2022d). Another competition-related project aims to enhance the ability of competition agencies to bring successful competition enforcement actions and promote sound competition laws and regulations in their economies (CPLG 01 2022A).⁷ A project is also underway to develop a Practical APEC–OECD Resource on International Regulatory Cooperation (IRC) that aims to improve collaboration between trade and regulatory policy officials (EC 04 2020S).

APEC has also advanced different initiatives to facilitate business conduct under the third iteration of the APEC Ease of Doing Business (EoDB) Action Plan (Box 2.2).

Box 2.2 Progress in implementing the Third APEC EoDB Action Plan

Facilitating business conduct is an area that APEC economies are familiar with. In 2009, APEC introduced the Ease of Doing Business (EoDB) initiative to make it cheaper, faster and easier to do business in the region. Following the First APEC EoDB Action Plan (2010–2015) and the Second APEC EoDB Action Plan (2016–2018), the Third APEC EoDB Action Plan (2020–2025) was endorsed at the 2021 APEC Ministerial Meeting on Structural Reform.

The Third EoDB Action Plan carried over two priority areas that had been included in the previous action plans, namely, enforcing contracts and getting credit. It also introduced three new priority areas: registering property, resolving insolvency and protecting minority investors. The goal is to further improve the business environment in the region, with an APEC-wide target of 12 percent improvement in the identified priority areas by 2025. The discontinuation of the World Bank Doing Business project has made it challenging to measure progress as the World Bank indicators are a critical element of the assessment.

Despite this limitation, available resources indicate that APEC has continued to advance the goal of the Third APEC EoDB Action Plan. As part of the Action Plan, APEC economies formulated an APEC EoDB Implementation Plan to identify capacity-building and technical assistance activities for possible implementation. A review of the latest version of the Implementation Plan shows that APEC has identified various activities, several of which have been completed. For example, under the priority area of protecting minority investors, the United States and Viet Nam led the publication of a report on facilitating minority investor participation in the governance of privately led companies in February 2020.

On the priority area of resolving insolvency, the United States and the International Institute for the Unification of Private Law (UNIDROIT) published a report on current insolvency systems in APEC economies and proposed strategies for managing company insolvencies in May 2021. This was

⁷ APEC projects can be identified using their unique project number. Readers can view more information about APEC projects by accessing the APEC Project Database: <https://aimp2.apec.org/sites/PDB/default.aspx>.

followed by a workshop on corporate insolvency regimes in the aftermath of the COVID-19 pandemic held in June 2021.

On to the priority area of getting credit, Thailand held a policy dialogue titled ‘Ease of Doing Business: Easier Access to Credit’ in August 2022 to share experiences on facilitating lending through measures beyond collateral and bankruptcy laws and to explore the possibility of enabling cross-border credit information sharing.

There are also activities that are beneficial across multiple priority areas. For example, the study on key emergency measures adopted to limit the negative economic impact of COVID-19 on SME finance, which included challenges in the legal and regulatory frameworks to facilitate market-based financing and solutions for SME recovery, contributed to the priority areas of getting credit, enforcing contracts and resolving insolvency. The same can be said for the workshop held to help APEC economies design their own strategies to implement modernisation of the legal framework for access to credit.

EoDB is also one of the Economic Committee’s core structural reforms. A review of the Enhanced APEC Agenda for Structural Reform (EAASR) individual action plans (IAPs) indicates that 16 APEC economies have identified a total of 51 key initiatives contributing to this core area. Some of these key initiatives are aimed at improving access to credit. For example, Canada has increased access to financing by small businesses by introducing lending against intellectual property and the assets and expenses of start-ups. Chile’s Fintech and Open Banking Bill endeavours to improve the provision of financial services, including credit to firms. Through its MSME Medium Term Development Plan 2022–2026, Papua New Guinea is introducing programmes to provide agriculture financing and credit guarantees.

Among important elements of the MSME infrastructure in Russia are Federal Corporation for the Support of Small and medium-sized enterprises (JSC “SME Corporation”), export support centers and more than 100 partner banks operating under soft loans programs for SMEs. Within the framework of the preferential lending program, subsidies from the federal budget are provided to Russian credit organizations and specialized financial companies in order to compensate for their lost income on loans.

Meanwhile, China’s key initiative to launch a pilot programme on EoDB innovation could, among others, contribute to the protection of minority interests as one of its goals is to protect property rights, legitimate rights and the interests of various market entities according to the law. Further, Hong Kong, China’s key initiative to strengthen the rule of law could contribute to better enforcement of contracts.

Additionally, economies have identified key initiatives aimed at facilitating the conduct of business beyond the priority areas indicated in the Third APEC EoDB Action Plan. A recurrent theme is enhancing access to digital tools and promoting their use for the benefit of businesses. For example, recognising the importance of infrastructure in promoting digitalisation, Japan has made efforts to advance early economy-wide deployment of 5G and to lower mobile phone rates. The full implementation of trade single windows by Brunei Darussalam and by Hong Kong, China would provide a single point for document submissions, hence simplifying customs clearance for businesses. Malaysia is actively facilitating e-commerce adoption among its MSMEs via incentives, training and grants. Thailand has improved its electronic tax filing and payment system to reduce the costs related to taxation procedures incurred by businesses. By promoting online dispute resolution (ODR), Viet Nam seeks to improve access to justice and reduce the cost of dispute resolution for all businesses, in particular SMEs. The Russian Export Centre launched a new online trade service for SMEs, whose objectives include assisting SMEs to open online shops at major e-commerce platforms in the Asia Pacific region. Furthermore, the Russian «Digital SME platform» allows SMEs to receive about 400 federal and regional support measures placed on the platform, hence making it easier for them to do business.

As observed in various key initiatives, APEC economies also continue to improve the business environment so that they remain conducive and enabling to businesses. For example, the Philippines' National Effort for the Harmonization of Efficient Measures of Inter-related Agencies (NEHEMIA) programme entails streamlining government processes to create an enabling environment that facilitates the entry of new players and investments. The rollout of a consumer data right in New Zealand aims to enable people and firms to access and use the data, including for business activities. Through its key initiative on promoting competition, the United States would enforce antitrust laws to combat the excessive concentration of industry and the abuse of market power.

Improving the policy environment for services

Services is an important sector in many APEC economies. In fact, services constitute more than half of GDP and of total employment in most APEC economies (Wirjo, Nguyen, and Calizo, 2022). APEC trade in commercial services is also substantial, amounting to USD 4.9 trillion in 2022.⁸ Given its economic relevance, services have been particularly emphasised in EAASR. Indeed, economies were encouraged to nominate services-specific reform actions in their IAPs (APEC, 2021b).

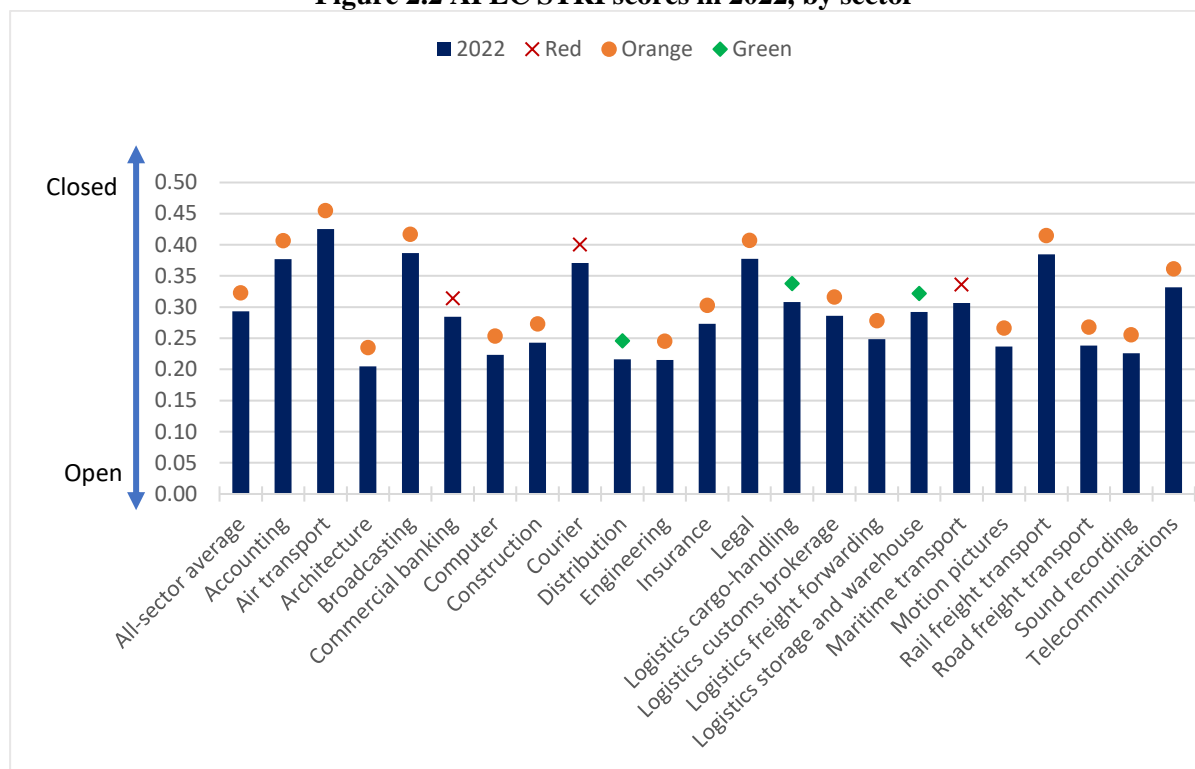
Besides being a sector in its own right, services contribute to the competitiveness of other sectors. A competitive logistics sector, for example, ensures that global value chains function smoothly with minimal disruptions. Access to competitive professional services allows for a more innovative economy. The services sector is therefore critical for creating an enabling environment for open, transparent, and competitive markets.

One way of assessing the restrictiveness of the policy environment surrounding the services sector is through the OECD Services Trade Restrictiveness Index (STRI). For each of the assessed sectors, a value of between 0 (open) and 1 (closed) is assigned to indicate the level of restrictiveness in policies. In 2022, APEC's average all-sector STRI score⁹ was 0.293, which is an improvement from the more restrictive policy environment in 2021 (0.298) (Figure 2.2). Despite this progress, APEC's score remains above the pre-pandemic level (0.291 in 2019).

Analysing the STRI score by sector shows that 19 sectors became less restrictive in 2022 (compared to 2021) (Figure 2.2). For the remaining three sectors (commercial banking, courier, maritime transport), the 2022 score is higher than the 2021 score, indicating a more restrictive policy environment. Despite improvements to many sectors, only distribution, logistics cargo-handling, and logistics storage and warehouse became less restrictive in 2022 compared to the pre-pandemic 2019 score. This shows that APEC needs to strengthen efforts to bring the level of restrictions back to the pre-pandemic 2019 level and to look at overcoming restrictions beyond that.

⁸ APEC PSU calculations based on data from the World Trade Organization. Data for Brunei Darussalam and Papua New Guinea are unavailable.

⁹ The all-sector average refers to the average score across all 22 sectors surveyed in the STRI. These 22 sectors are: accounting; air transport; architecture; broadcasting; commercial banking; computer; construction; courier; distribution; engineering; insurance; legal; logistics cargo-handling; logistics customs brokerage; logistics freight forwarding; logistics storage and warehouse; maritime transport; motion pictures; rail freight transport; road freight transport; sound recording; and telecommunications.

Figure 2.2 APEC STRI scores in 2022, by sector

✗ Red – 2022 score is more restrictive (compared to 2021); ● Orange – 2022 score is less restrictive than 2021 but more restrictive compared to 2019; ◆ Green – 2022 score is less restrictive than 2019

Note: Data for Brunei Darussalam; Hong Kong, China; Papua New Guinea; the Philippines; and Chinese Taipei are unavailable. Aggregates are a simple average.

Source: APEC PSU calculations using data from the OECD (accessed 29 May 2023).

The STRI places policies into five categories: (1) restrictions on foreign entry; (2) restrictions to movement of people; (3) barriers to competition; (4) regulatory transparency; and (5) other discriminatory measures. Table 2.3 identifies the top two categories of restrictions in the 2022 APEC STRI scores for each sector. As seen in the table, restrictions on foreign entry is the top category of restrictions for 18 sectors. Examples of such restrictions include commercial presence requirement and foreign equity restrictions. Restrictions to movement of people is the top and second top category of restrictions for two and seven sectors, respectively. Examples of such restrictions include extensive labour market tests on intra-corporate transferees and requirements to take a local examination before gaining domestic recognition. Other top two categories of restrictions are barriers to competition (e.g., minimum capital requirements, advertising restrictions), regulatory transparency (e.g., complicated procedures for acquiring a business visa) and other discriminatory measures (e.g., local content requirements). These restrictions could affect competition in many sectors. For example, limiting the provision of certain services to specific providers could foster monopolistic behaviour. Likewise, giving preference to domestic providers in public procurement can inhibit competition.

Understanding the contribution of different policy categories to the overall score allows economies to act on those that contribute significantly to the overall trade restrictiveness of specific services sectors. At the same time, it is worthwhile to note that a siloed approach to reforms may not be sufficient to encourage firms to rethink their strategic decisions, for example, on whether to invest in the economy. As an illustration, while there are no foreign equity restrictions to operate in certain services sub-sectors, there may be requirements for foreign professionals to apply for licenses/certifications before they could practice in an

economy. This calls for a holistic approach to services regulations, including better coordination among government agencies in order to promote a more open, transparent and competitive markets.

Table 2.3 Top two categories of restrictions in the 2022 APEC STRI scores

Sector	Restrictions on foreign entry	Restrictions to movement of people	Barriers to competition	Regulatory transparency	Other discriminatory measures
All-sector average	1	2			
Accounting	1	2			
Air transport	1		2		
Architecture	1			2	
Broadcasting	1			2	
Commercial banking	1		2		
Computer	1	2			
Construction	2	1			
Courier	1		2		
Distribution	1	2			
Engineering	2	1			
Insurance	1		2		
Legal	1	2			
Logistics cargo-handling	1	2			
Logistics customs brokerage	1			2	
Logistics freight forwarding	2			1	
Logistics storage and warehouse	1			2	
Maritime transport	1	2			
Motion pictures	1				2
Rail freight transport	1		2		
Road freight transport	1			2	
Sound recording	1				2
Telecommunications	2		1		

Note: Data for Brunei Darussalam; Hong Kong, China; Papua New Guinea; the Philippines; and Chinese Taipei are unavailable. Aggregates are a simple average.

Source: APEC PSU calculations based on data from the OECD (accessed 29 May 2023).

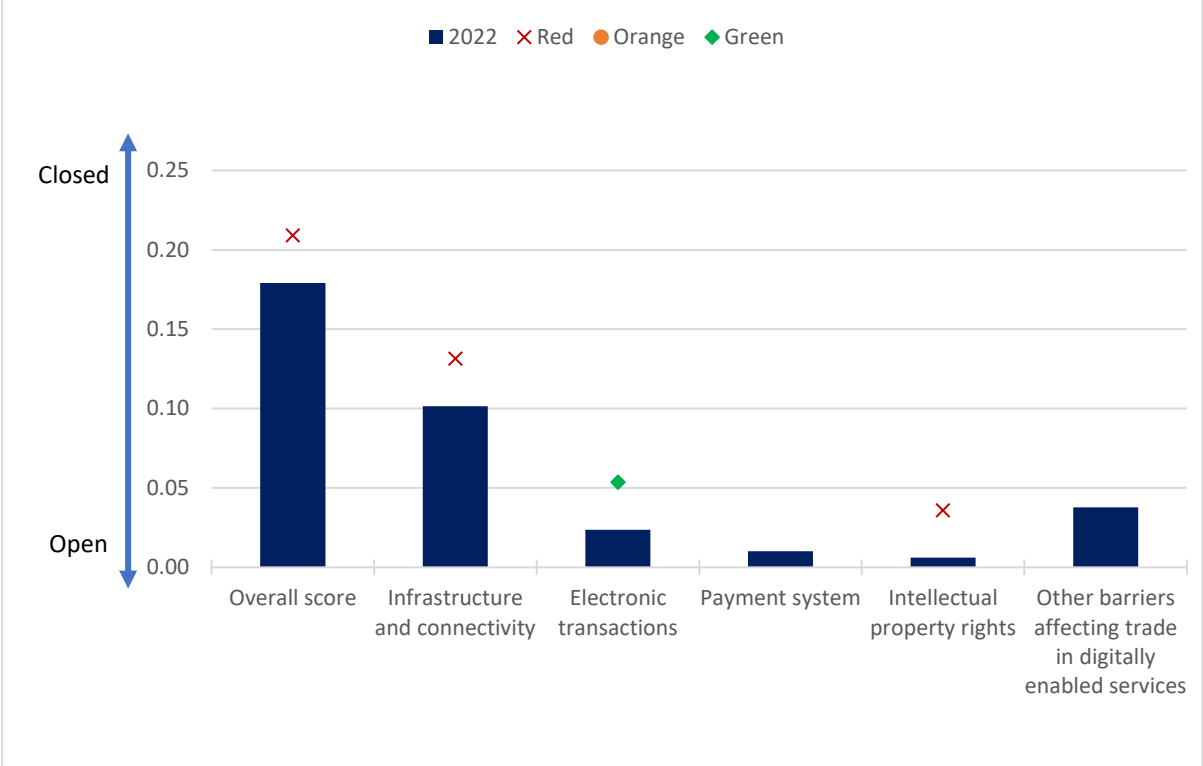
Cognisant that there is a significant overlap between work on EAASR and the APEC Services Competitiveness Roadmap (ASCR), the Economic Committee and the Group on Services had jointly planned a series of activities including the publication of an APEC Policy Brief on EAASR and ASCR: Services Competitiveness and Structural Reform (Drake-Brockman et al., 2022), moderated panels at meetings of the Economic Committee and the Group on Services (EC-GOS 02 2022S) and the curation of a learning website (forthcoming).

Improving the policy environment for digital services

Many services have benefitted from increased digitalisation. For example, professional services can now be delivered virtually using videoconferencing software. Some policies, however, can inhibit firms from delivering services digitally. The OECD has developed the Digital STRI, which aims to identify, catalogue and quantify barriers that affect trade in digitally-enabled services.¹⁰ Like the STRI, the Digital STRI also measures the restrictiveness of the policy environment using a score ranging from 0 (open) to 1 (closed). The analysis of the Digital STRI score for APEC, which covers 18 of its economies, shows that the policy environment for digital services trade has become more restrictive in 2022 relative to 2021 (0.179 vs. 0.175) (Figure 2.3).

¹⁰ Note that digitally-enabled services is a broader term that encompasses DDS.

Figure 2.3 APEC Digital STRI score in 2022, by policy category



X Red – 2022 score is more restrictive (compared to 2021);
 O Orange – 2022 score is less restrictive than 2021 but more restrictive compared to 2019;
 D Green – 2022 score is less restrictive than 2019
 Note: Scores are from 0 (open) to 1 (closed). Aggregates are a simple average. Data for Hong Kong, China; Papua New Guinea; and Chinese Taipei are unavailable.
 Source: APEC PSU calculations based on data from the OECD (accessed 29 May 2023).

The Digital STRI evaluates policies across five categories: (1) infrastructure and connectivity; (2) electronic transactions; (3) payment system; (4) intellectual property rights (IPR); and (5) other barriers affecting trade in digitally enabled services. Restrictions related to infrastructure and connectivity had the largest impact to the overall score of the Digital STRI, contributing about 56.6 percent. This is followed by other barriers affecting trade in digitally enabled services, accounting for 21.1 percent. Examples of policies categorized under ‘infrastructure and connectivity’ are restrictions on cross-border data flows and restrictions on use of communication services, while examples of policies categorized under ‘other barriers affecting trade in digitally enabled services’ are commercial and/or local presence requirements to provide cross-border services and performance requirements affecting cross-border digital trade/e-commerce. Many of these policies may foment monopolistic behaviour, hence affecting competition. As an illustration, some economies require businesses to establish a local data centre (infrastructure requirements), while others require local presence in order to provide cross-border services — both of which raises the cost of running a business, enabling only firms with sufficient capital to meet such requirements (Ferracane et al., 2018; UNESCAP, 2022a). These observations suggest that economies may wish to relook policies under these categories.

Improving the policy environment for foreign direct investment

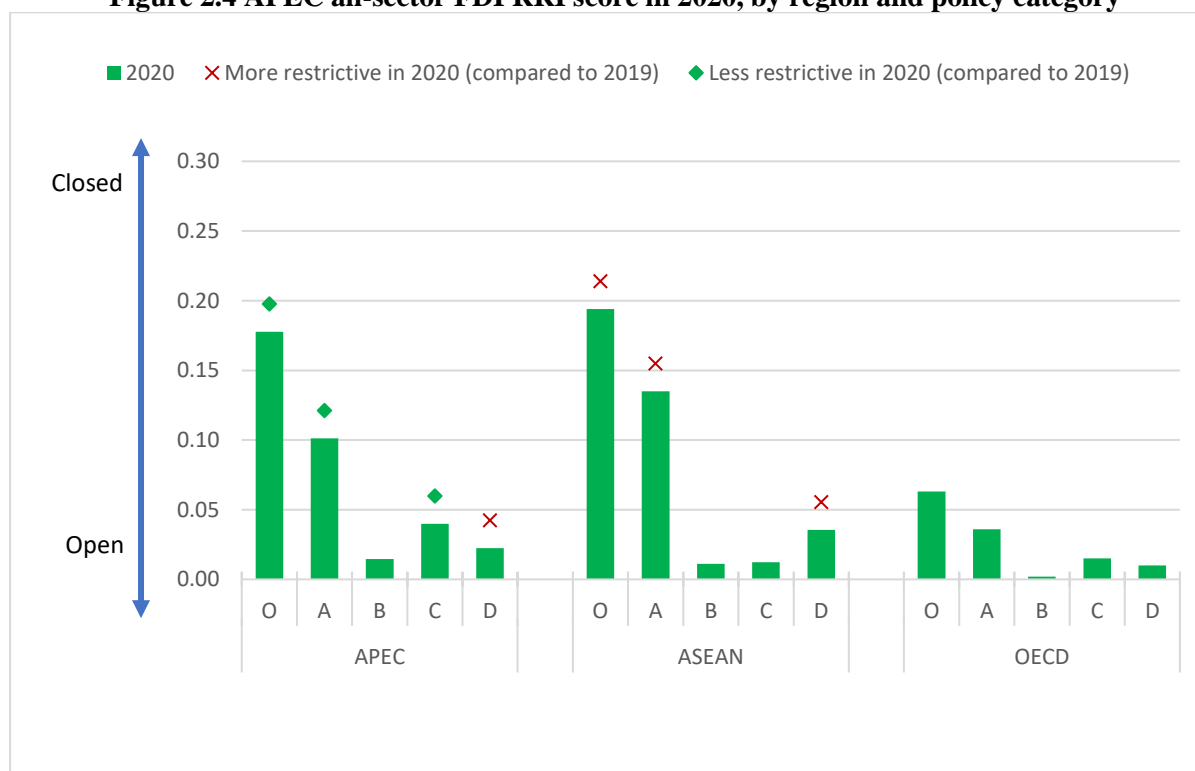
FDI is important for various reasons (e.g., as the source of new technologies or for job creation). But attracting FDI is not easy. Policies can have a key role in facilitating or restricting access to FDI. For instance, removing equity restrictions can incentivise foreign investors to enter the domestic market, while excessive screening and approval requirements can discourage them,

hence affecting competition. Indeed, Mistura and Roulet (2019) estimated that a 10 percent reduction in FDI restrictions is associated with a 2.1 percent increase in bilateral FDI inward stocks.

One way of measuring the restrictiveness of policies affecting FDI is through the OECD's FDI regulatory restrictiveness index (RRI). Like the STRI, the FDI RRI evaluates the policy environment using scores ranging from 0 (open) to 1 (closed). It is also possible to measure the contribution of four policy categories: (1) equity restrictions; (2) key foreign personnel; (3) screening and approval; and (4) other restrictions (e.g., reciprocity requirements, acquisition of land for business purposes).

In 2020, the all-sector FDI RRI score¹¹ in APEC reached 0.178, suggesting a policy environment leaning toward openness (Figure 2.4). Equity restrictions contributed the most to the restrictiveness of APEC's FDI policy environment, representing 56.9 percent of the overall score in 2020. APEC's policy environment in 2020 is less restrictive compared to the 2019 pre-pandemic level. Liberalisation in both equity restrictions and screening and approval measures made this possible, strong enough to offset any increase observed in other restrictions.

Figure 2.4 APEC all-sector FDI RRI score in 2020, by region and policy category



O=overall FDI RRI score; A=equity restrictions; B=key foreign personnel; C=screening and approval; D=other restrictions
 Note: Scores are from 0 (open) to 1 (closed). Aggregates are a simple average. Data for Hong Kong, China; Papua New Guinea; and Chinese Taipei are unavailable.

Source: APEC PSU calculations based on data from the OECD (accessed 29 May 2023).

Compared to its peer regions, APEC's policy environment in 2020 is less restrictive relative to ASEAN (0.194) but more restrictive relative to the OECD (0.063) (Figure 2.4). This suggests

¹¹ The all-sector FDI RRI score refers to the average of all 22 sectors surveyed in the FDI RRI. These 22 sectors are: agriculture; forestry; fishing; mining and quarrying; food and other manufacturing; oil refining and chemicals; metals, machinery and other minerals.; electric, electronics. and other instruments; transport equipment; electricity; construction; wholesale trade; retail trade; transport; hotels and restaurants; media; telecommunications; banking; insurance; other finance; business services; and real estate.

the need for APEC to overcome some of the more restrictive policies in order to remain competitive vis-à-vis the OECD.

By sector grouping, the primary sector¹² had the most restrictive FDI policy environment in APEC, while the secondary sector¹³ had the least. The tertiary sector¹⁴ was between the two. Equity restrictions were the most prominent category contributing to the restrictiveness of the FDI policy environment in both primary and tertiary sectors, while screening and approval requirements contributed the most to the restrictiveness of the FDI policy environment of the secondary sector.

2.3.1.2 Enhancing the competitiveness of the labour market and access to financial resources

Enhancing the competitiveness of the labour market

A competitive labour market, which can contribute to better allocation of human capital, could be characterised as one that provides equitable access to employment opportunities and sufficient labour protection and fair treatment, as well as accommodates an adequate level of workers' voice (El-Ganainy et al., 2021).

Equitable access to employment opportunities. Providing equitable access to employment opportunities necessitates that economies strengthen pre-labour outcomes (e.g., education and skill level of potential employees). After all, an individual's educational attainment can determine the job opportunities available to him/her. Without any intent to downplay the role of other degrees, science, technology, engineering and mathematics (STEM) degrees are critical considering that future demand for workers with STEM-related education is expected to grow (Inoue, 2019; Buchholz, 2023; Rozen, 2023). Indeed, one source, using data from the United States, has estimated that the number of STEM jobs will increase twice as fast compared to non-STEM jobs, reaching more than 11 million jobs in the United States by 2030 (Adecco, 2022).

Among APEC's tertiary-level graduates, in the latest year where data are available (2020), 28.2 percent had received STEM degrees, higher than the OECD (23.6 percent) but lower than ASEAN (30.5 percent).¹⁵ It is important that economies continue with efforts to increase the number of graduates with STEM-related education to enable individuals to better participate in the labour market amid the changing landscape.

While it is important to obtain the right degree, it is equally important that individuals have the appropriate skills required for the job. In fact, STEM workers would need to actively update their skillset over time to match changing industry demand, owing to how quick it is for STEM-related skills to evolve (Deming and Noray, 2019). One way of inferring individuals' success in skill acquisition is through the World Economic Forum (WEF) Global Competitiveness Report indicators.¹⁶ These indicators measure the perception of executives across a wide range

¹² Primary sectors include agriculture, forestry, fishing and mining and quarrying.

¹³ Secondary sectors include manufacturing, electricity and construction.

¹⁴ Tertiary sectors include distribution, transport, hotels and restaurants, media, telecommunications and financial services.

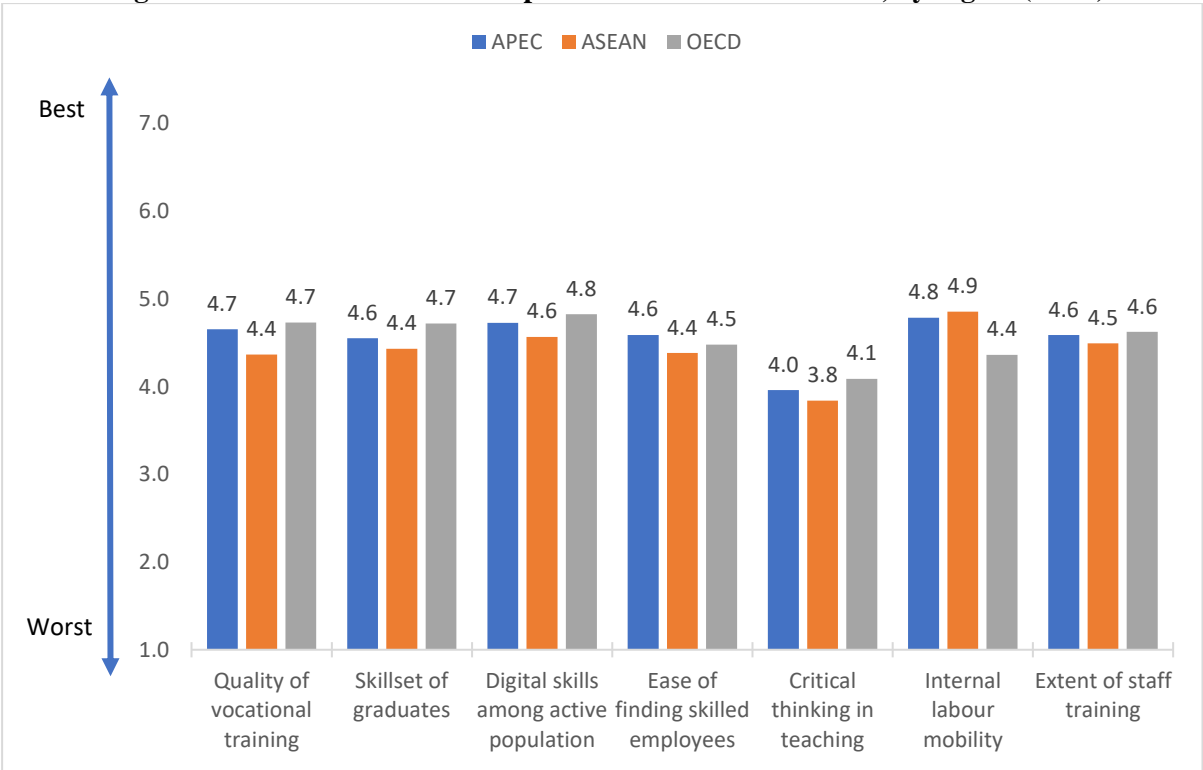
¹⁵ APEC PSU calculations based on data from UNESCO (accessed 29 May 2023) and data directly provided by Chinese Taipei. Aggregates are a simple average. Data for China; Hong Kong, China; Indonesia; Japan; Myanmar; Papua New Guinea; Peru; Thailand; and Viet Nam are unavailable. Data for Cambodia; Lao PDR; Malaysia; and Russia are based on 2019 data.

¹⁶ Indicators presented in the WEF Global Competitiveness Report are typically based on perception surveys among executives. Appendix B provides the exact survey questions and the corresponding interpretations of each indicator used in this report.

of topics, with scores from 1 (worst) to 7 (best).¹⁷ The latest data in 2019 show respondents giving the APEC region an average score of 4.6 out of 7.0 in building the skillset of its graduates (Figure 2.5). This score outperforms ASEAN (4.4) but underperforms the OECD (4.7), indicating that there is room for improvement.

There are other ways of acquiring skills besides formal education, such as through vocational training or in-house training. In 2019, respondents gave the quality of vocational training in the APEC region an average score of 4.7, on par with the OECD and higher than ASEAN (Figure 2.5). In-house training could take the form of workshops for staff or internal assignments to another location. In 2019, respondents gave the APEC region an average score of 4.6 on extent of staff training, outperforming ASEAN (4.5) and on par with the OECD (4.6). On internal labour mobility, respondents gave the APEC region an average score of 4.8, outperforming the OECD (4.4) but underperforming ASEAN (4.9).

Figure 2.5 Selected indicators on pre-labour outcomes in 2019, by region (score)



Note: Aggregates are a simple average. Data for Myanmar and Papua New Guinea are unavailable. Source: APEC PSU calculations based on data from WEF (accessed 29 May 2023).

Regardless of how the skills were acquired, respondents perceived that it is relatively easier to find skilled employees in APEC, giving it an average score of 4.6, higher than both ASEAN (4.4) and the OECD (4.5).

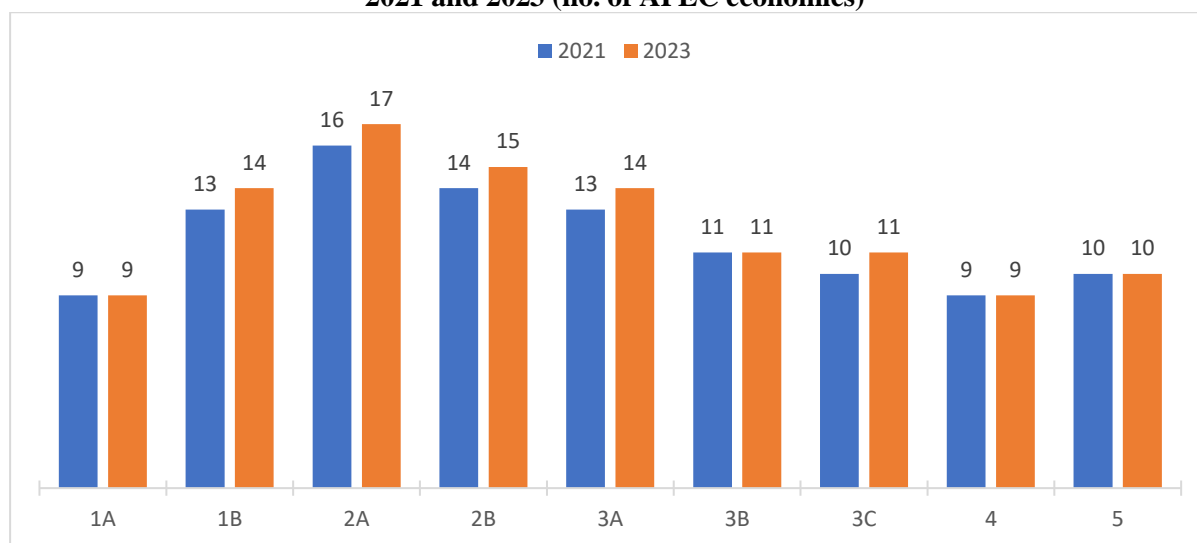
Ensuring that there is equitable access to work opportunities requires economies to also overcome barriers for gender equality. One way of measuring progress in this area is to explore the presence of laws/regulations to protect women against discrimination. While most policies related to mobility, workplace, entrepreneurship and pensions have remained the same between 2021 and 2023, improvements were observed for several policies pertaining to pay (question

¹⁷ The scores for some indicators will have less of a straightforward interpretation. For example, flexibility of wage determination is scored from 1 (by a centralised bargaining process) to 7 (by each individual company). Whether one end or the other is better depends on the value system being used. See also Appendix B.

1B), workplace (2A and 2B) and parenthood (3A and 3C) (Figure 2.6).¹⁸ For instance, more APEC economies had laws/regulations in 2023 that enabled equal work opportunities for men and women or provided paid leave of at least 14 weeks to mothers, compared to 2021.

Despite this progress, relevant laws/regulations, such as laws prohibiting discrimination in access to credit based on sex, or laws that count periods of absence due to childcare as part of pension benefits, continue to be present in only around half (or fewer than half) of APEC economies in 2023. Notably, in 2023, only half of APEC economies appear to have laws/regulations on the government administering 100 percent of maternity leave benefits.¹⁹ This suggests that, while APEC has made some progress toward building more equitable access to work opportunities for women, more can still be done.

Figure 2.6 Presence of selected laws/regulations to protect women against discrimination, 2021 and 2023 (no. of APEC economies)



1A – Does the law mandate equal remuneration for work of equal value?; 1B – Can a woman work in an industrial job in the same way as a man?; 2A – Is there legislation on sexual harassment in employment?; 2B – Are there criminal penalties or civil remedies for sexual harassment in employment?; 3A – Is paid leave of at least 14 weeks available to mothers?; 3B – Does the government administer 100 percent of maternity leave benefits?; 3C – Is there paid parental leave?; 4 – Does the law prohibit discrimination in access to credit based on gender?; 5 – Are periods of absence due to childcare accounted for in pension benefits?

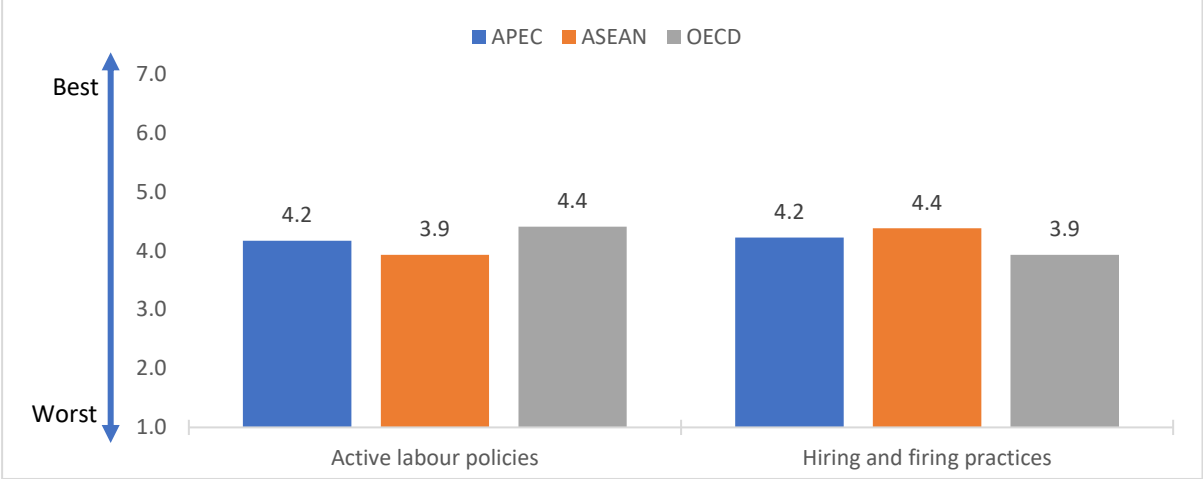
Source: APEC PSU calculations based on data from the World Bank (accessed 29 May 2023).

Supportive labour policies. Active labour policies are critical. Unemployment benefits, for example, allow individuals to reskill without worry, while job search assistance enables them to rejoin the labour force when ready. The value of having active labour policies has been underscored by the COVID-19 pandemic, which has put a spotlight on the coexistence of job vacancies and worker shortages. Indeed, sectoral job mismatch, barriers to returning to work (e.g., health concerns and immigration restrictions) and changing job preferences among workers (i.e., away from contact-intensive work and from low-paying jobs) have resulted in tight labour markets in advanced economies (Duval et al., 2022). The latest data from the WEF Global Competitiveness Report (2019) show that respondents gave the APEC region an average score of 4.2 out of 7.0 on its active labour policies (Figure 2.7). While this outperforms ASEAN (3.9), it underperforms the OECD (4.4), indicating that there is room for improvement.

¹⁸ Appendix C provides summary information of the laws/regulations assessed for this report.

¹⁹ This indicator measures whether leave benefits are fully administered by a government entity, including compulsory social insurance schemes (such as social security), public funds, government-mandated private insurance or employer reimbursement of any maternity leave benefits paid directly to an employee.

Figure 2.7 Selected indicators on supportive labour policies in 2019, by region (score)

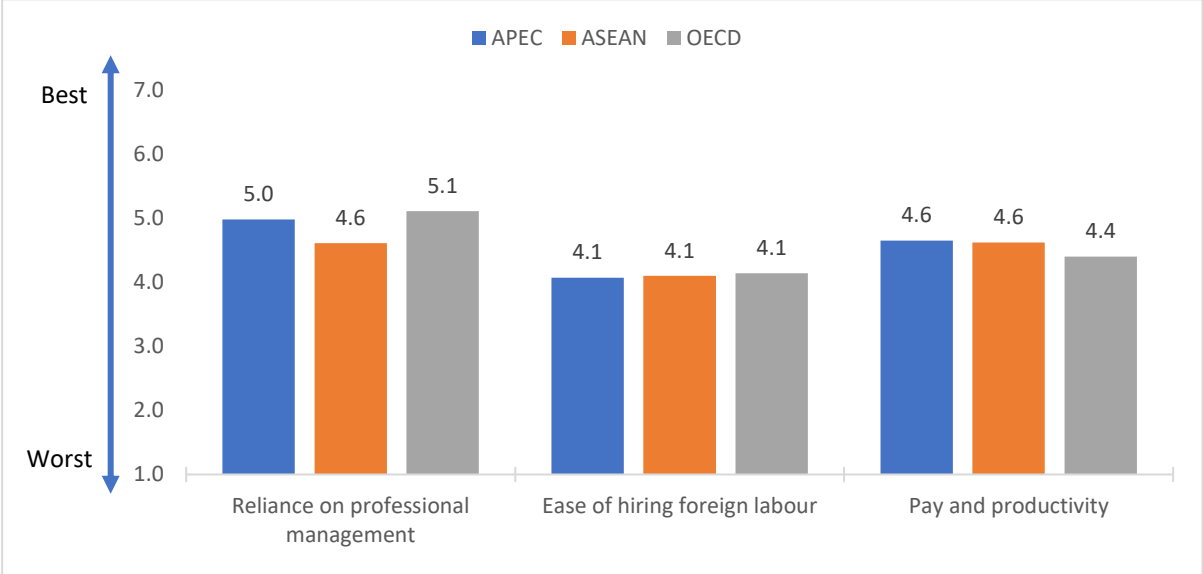


Note: Aggregates are a simple average. Data for Myanmar and Papua New Guinea are unavailable. Source: APEC PSU calculations based on data from WEF (accessed 29 May 2023).

Specifically on hiring and firing practices, respondents perceived the APEC region as being more flexible compared to the OECD (4.2 vs. 3.9 in 2019) (Figure 2.7). Flexible staffing has advantages as well as disadvantages. When there is greater flexibility, businesses are more likely to avoid hiring informally, opting instead to fill staff positions. However, more flexibility in hiring and firing could also mean lower job security and benefits for workers.

Fair treatment. Fair treatment in a competitive labour market could be seen from different angles. One is whether merit comes into the picture at the stage of wage determination and/or selecting management positions. The latest data from the WEF Global Competitiveness Report (2019) shows that respondents perceived the APEC region to be choosing professional managers over relatives or friends (without regard to merit and qualifications) when filling senior management positions in companies (Figure 2.8). The average score of 5.0 outperforms ASEAN (4.6) but underperforms the OECD (5.1). The same could be said for compensation, that is, the APEC region tends to pay by merit (based on employee productivity).

Figure 2.8 Selected indicators on fair treatment in 2019, by region (score)

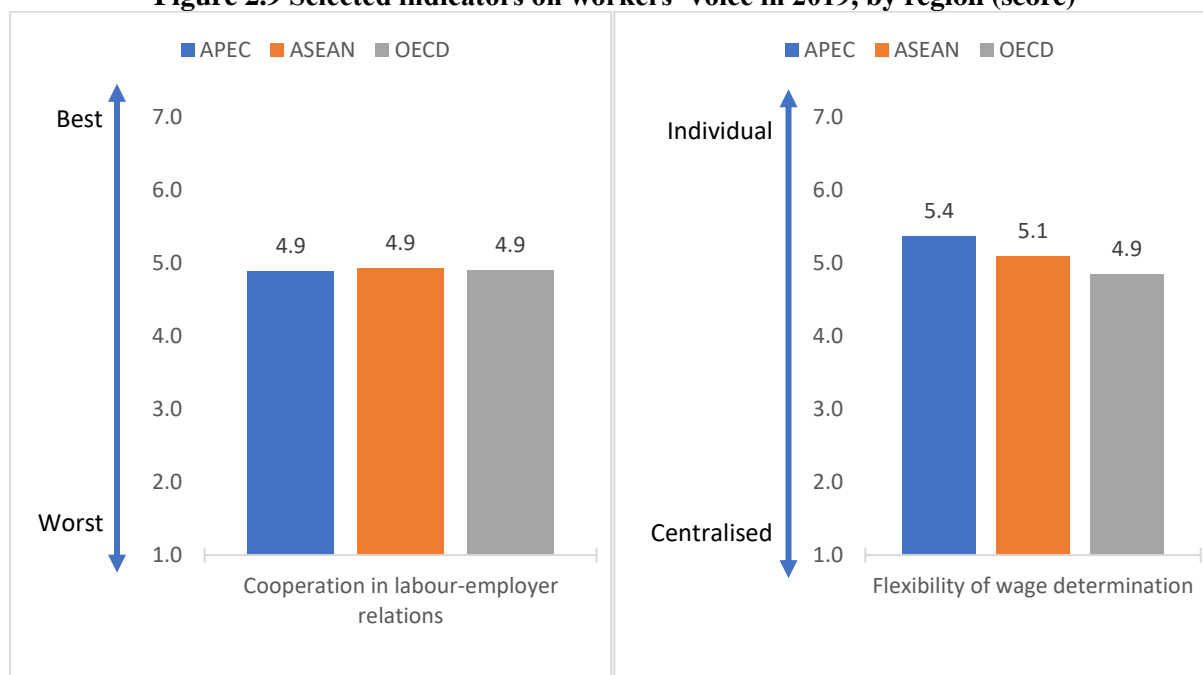


Note: Aggregates are a simple average. Data for Myanmar and Papua New Guinea are unavailable. Source: APEC PSU calculations based on data from WEF (accessed 29 May 2023).

Fair treatment could also be seen in the hiring of foreign labour; it is important that foreign labour is not discriminated against because of their origin or affiliation. The WEF Global Competitiveness Report data show that respondents perceived it to be relatively easy to hire foreign labour in the APEC region, scoring it 4.1 out of 7.0 in 2019. This is on par with both ASEAN and the OECD.

Adequate level of workers' voice. An adequate level of workers' voice in a competitive labour market means workers having some form of representation or involvement in matters that affect their welfare. One area is labour-employer relations. The latest data from the WEF Global Competitiveness Report (2019) shows that respondents perceived the APEC region to lean toward generally cooperative labour-employer relations, scoring it 4.9 out of 7.0 which is on par with ASEAN and the OECD (Figure 2.9). Workplace cooperation can be beneficial to both parties since issues are addressed collectively and challenges are communicated professionally. Another area that can benefit from an adequate level of workers' voice is wage determination. Determining wages can be done through a centralised bargaining process or through each individual company. Each option has its advantages and disadvantages. For instance, a centralised bargaining process can be beneficial for workers with less capacity to negotiate wages individually but disadvantageous for a highly productive individual seeking to have a higher wage relative to others. In 2019, respondents perceived that APEC tends to have wages set by each individual company instead of through a centralised bargaining process, giving it a score of 5.4 out of 7.0, more so than ASEAN (5.1) and the OECD (4.9).

Figure 2.9 Selected indicators on workers' voice in 2019, by region (score)



Note: Flexibility of wage determination is scored from 1 (by a centralised bargaining process) to 7 (by each individual company). Aggregates are a simple average. Data for Myanmar and Papua New Guinea are unavailable.

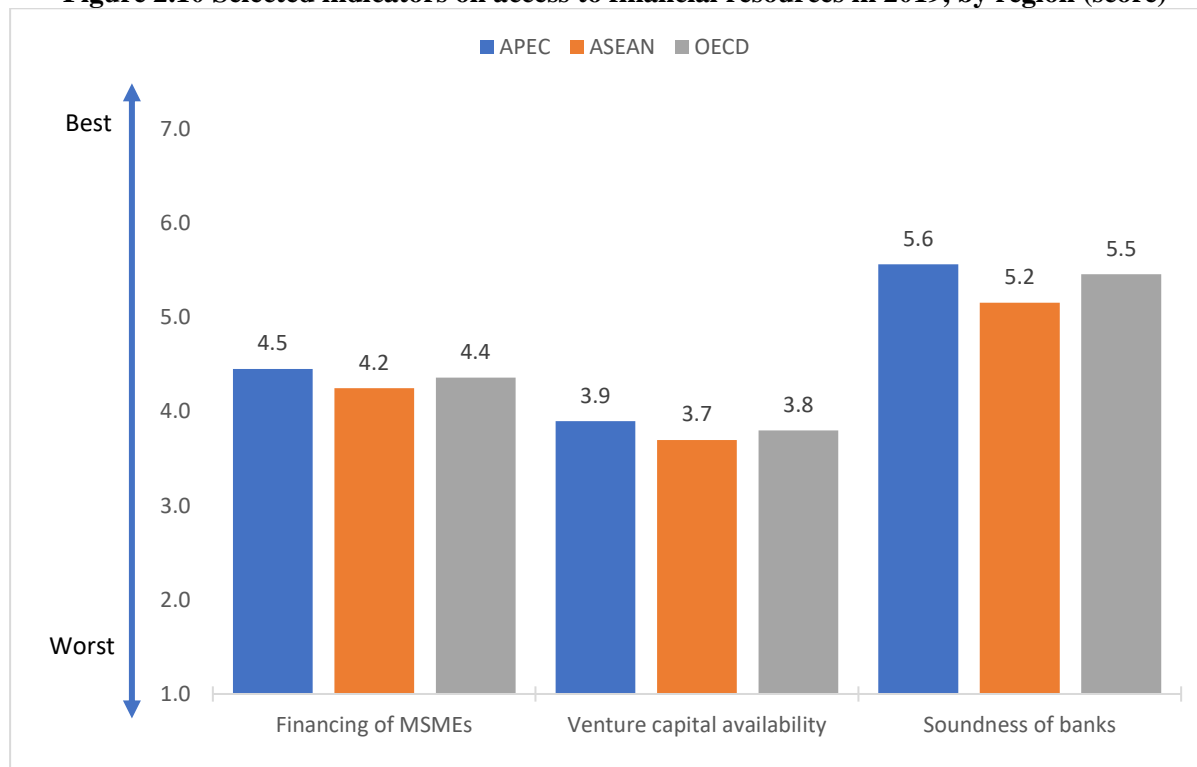
Source: APEC PSU calculations based on data from WEF (accessed 29 May 2023).

Enhancing access to financial resources

Enhancing access to financial resources is important since businesses need to purchase machines, hire skilled labour or restock inventories. Traditionally, most businesses access financial resources through bank loans. Given the role of banks in providing loans, economic managers and/or central banks strive hard to ensure the stability of banks and the broader

financial system. The latest data from the WEF Global Competitiveness Report (2019) shows respondents perceiving APEC as a region where banks are generally sound (Figure 2.10). APEC's average score of 5.6 outperforms both ASEAN (5.2) and the OECD (5.5). Nevertheless, some firms could still encounter difficulties in accessing financial resources because of various reasons, including costly listing requirements, absence of investor demand, financial illiteracy, information asymmetries and lack of collateral (Yoshino and Taghizadeh-Hesary, 2018; Abraham et al., 2019).

Figure 2.10 Selected indicators on access to financial resources in 2019, by region (score)



Note: Aggregates are a simple average. Data for Myanmar and Papua New Guinea are unavailable.

Source: APEC PSU calculations based on data from WEF (accessed 29 May 2023).

Besides bank loans, firms can also gain financial resources through venture capital, that is, equity financing for start-up entrepreneurs with innovative but risky ideas. The latest data from the WEF Global Competitiveness Report (2019) show respondents giving the APEC region an average score of 3.9 out of 7.0 on ease of obtaining venture capital (Figure 2.10). While APEC scored better compared to its peers (3.7 for ASEAN and 3.8 for the OECD), there is still significant room to improve the ease of obtaining venture capital in the region.

Recognizing the critical role of financial resources to firms, economies have introduced various initiatives to improve access to the financial market. One example is broadening financial inclusion using digital solutions, including digital identities that enable the unbanked to open an account and supporting fintech (e.g., open finance, digital banking) (BSP Research Academy, 2022; Wirjo, Calizo, and Balbontin, 2022). Arguably, broadening the funding base through greater financial inclusion not only helps to strengthen the financial market, but also expands what businesses can access through the system (Vo et al., 2021).

Some initiatives can also be targeted. Examples include requiring banks to allocate a certain share of their business loans to MSMEs and mandating financial institutions to provide preferential rates for eligible clients such as women or small farmers. As an illustration, both

Japan and Korea have a history of supporting MSME financing through policies that include incentivising banks to increase the required loans-to-deposit ratio and issuing credit guarantees (UNESCAP, 2022b). Moreover, as part of the APEC Boracay Action Agenda to Globalize MSMEs, many APEC economies implemented projects such as workshops on utilizing a cooperative business model to help MSMEs obtain capital and supporting supply chain financing to optimize MSMEs' cash flow, among others (Quimba and Calizo, 2021). Having targeted programs could help. Indeed, the latest data from the WEF Global Competitiveness Report (2019) show that despite the various challenges that MSMEs may encounter in accessing finance, respondents gave APEC an average score of 4.5 with regard to financing of MSMEs (Figure 2.10), which outperforms ASEAN (4.2) and is on par with the OECD (4.4).

There is value in continuing with these efforts to enhance access to financial resources in the APEC region. Economies could, for instance, have policy dialogues involving regulators, banks and other relevant stakeholders. In August 2022, a policy dialogue was held where participants shared their experience in facilitating lending by considering measures other than the ability to provide collateral and explored the possibility of enabling cross-border credit information sharing.

2.3.1.3 Enhancing innovation and productivity

Ensuring that markets remain competitive and well-functioning in the midst of an evolving landscape requires economies to be innovative and open to adopting new ideas. During the COVID-19 pandemic, for instance, the people and businesses (and by extension economies) less affected by measures enacted by governments to limit physical interactions are arguably those that started to conduct their daily activities virtually. Indeed, the 15th Conference on Good Regulatory Practice focused on the use of 'good regulatory practice' processes to facilitate the use of digital technology in coping with and adapting to a crisis, including the use of new tools such as regulatory sandboxes to promote innovation (Office of the National Economic and Social Development Council, Thailand, 2022). As the world transitions to a green economy, economies with access to key technologies would be in a better position than those that do not.

Average labour productivity is an important indicator of overall economic productivity. It could also reflect the success of economies in promoting and adopting innovation. In 2022, APEC recorded labour productivity per person employed of 60,024.90 (2022 international dollars), higher than both during the pandemic (58,865.10 in 2021) and pre-pandemic (55,856.40 in 2019) baselines.²⁰ This represents an increase of 2.0 percent between 2021 and 2022.

Fostering an environment that is open to innovation necessitates that economies support and encourage research and development (R&D) activities. The latest year with available data (2020) shows that R&D expenditure in the APEC region averaged 2.7 percent of GDP, significantly higher than ASEAN (0.8 percent) but lower than the OECD (2.8 percent).²¹

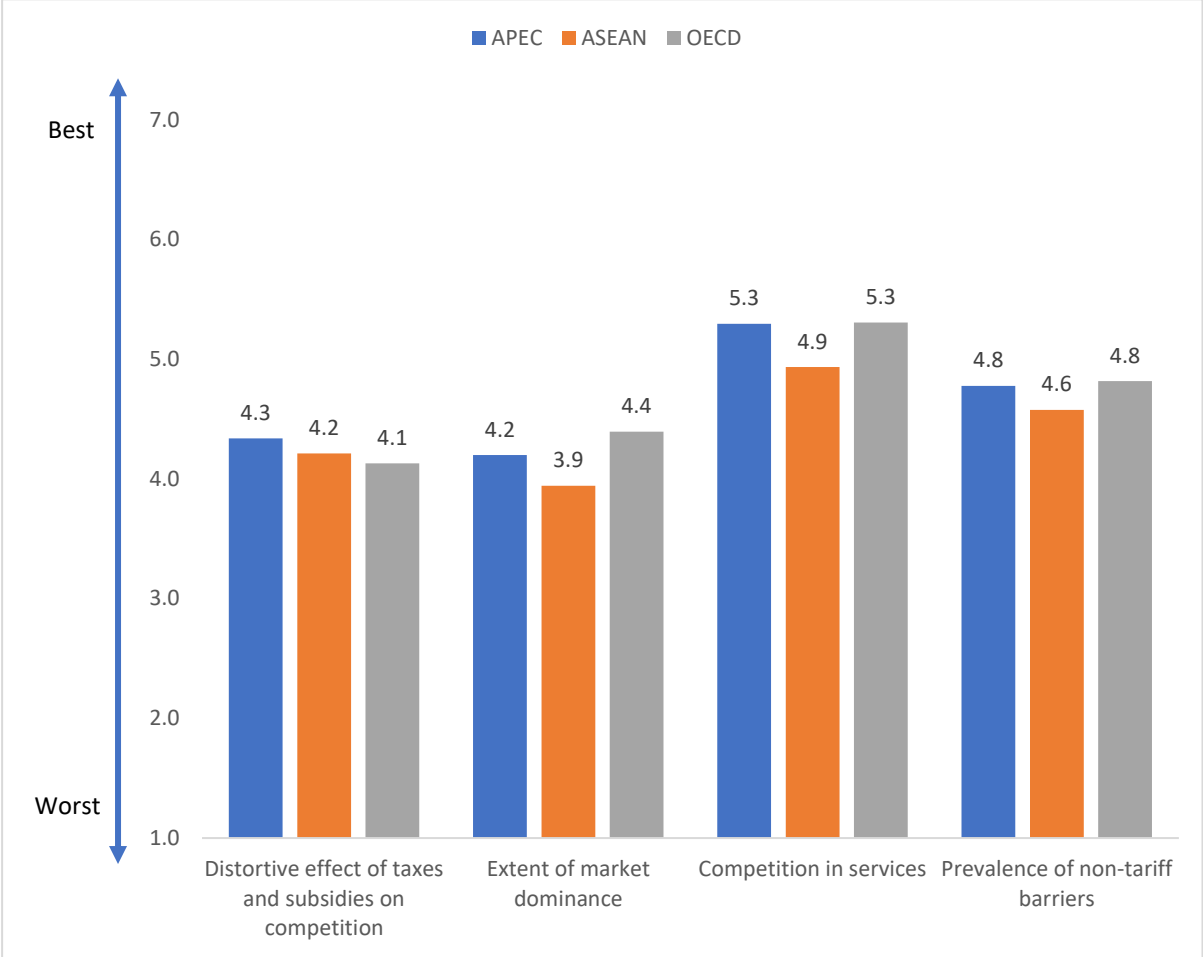
An economy's innovation potential is also mirrored by the efficiency of its product market, which includes the state of competition, market dominance and presence of trade barriers. For example, fiscal measures (such as taxes and subsidies) may distort competition, which can in

²⁰ APEC PSU calculations using data from the Conference Board (accessed 29 May 2023). APEC aggregate is a weighted average based on persons employed. Data for Brunei Darussalam and Papua New Guinea are unavailable.

²¹ APEC PSU calculations based on data from UNESCO, StatsAPEC and the World Bank (accessed 29 May 2023). Aggregates are weighted averages based on real GDP (2015=100). Data for Brunei Darussalam; Cambodia; Costa Rica; Lao PDR; Papua New Guinea; and the Philippines are unavailable. Data for Australia; Chile; New Zealand; Singapore; Switzerland; the United Kingdom; and Viet Nam are based on 2019 data.

turn disincentivise innovation. The latest data from the WEF Global Competitiveness Report (2019) show respondents giving APEC an average score of 4.3 out of 7.0 on whether its fiscal measures distort competition. This means that APEC outperforms both ASEAN and the OECD on this indicator (Figure 2.11). Also, respondents gave APEC an average score of 4.2 out of 7.0 on extent of market dominance, indicating that market power in APEC tends to be spread among many firms rather than dominated by a few business groups; APEC’s score outperforms ASEAN but underperforms the OECD.

Figure 2.11 Selected indicators on product market efficiency in 2019, by region (score)

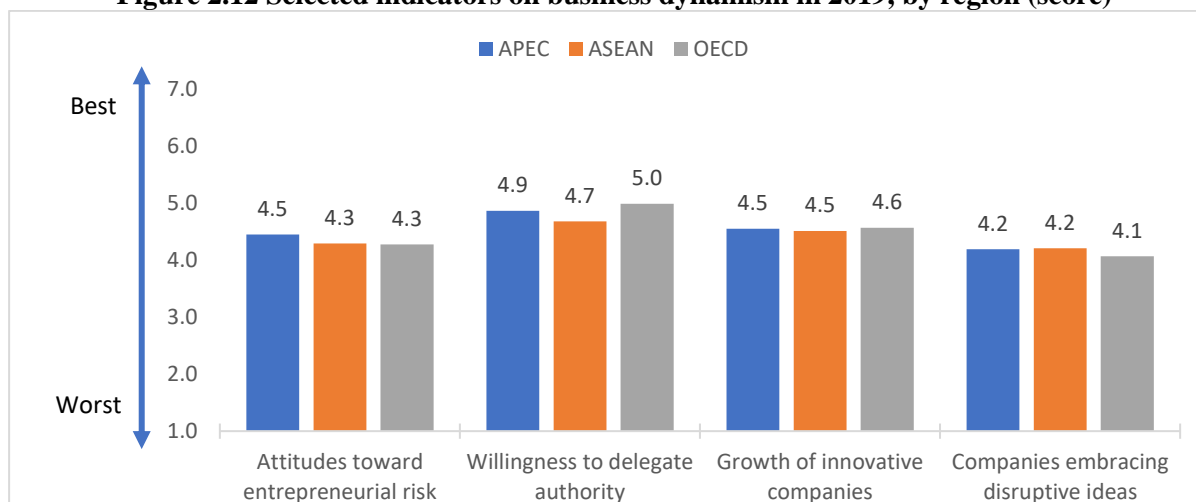


Note: Scores are from 1 (worst) to 7 (best). Aggregates are a simple average. Data for Myanmar and Papua New Guinea are unavailable.

Source: APEC PSU calculations based on data from WEF (accessed 29 May 2023).

An economy’s innovation potential may also be reflected, to a certain extent in the dynamism of its business community. This could include the community’s attitude toward entrepreneurial risk and their willingness to delegate authority, among others. The latest data from the WEF Global Competitiveness Report (2019) reveal that respondents perceived APEC region as being receptive to entrepreneurial risk, scoring it 4.5 out of 7.0, which outperforms both ASEAN and OECD (Figure 2.12). On the willingness of senior management to delegate authority to subordinates, respondents gave APEC an average score of 4.9 out of 5.0, which outperforms ASEAN but underperforms the OECD. On whether companies tend to embrace risky or disruptive business ideas, respondents gave APEC an average score of 4.2, on par with ASEAN and higher than the OECD. With regard to whether companies with innovative ideas grow rapidly, APEC obtained an average score of 4.5, underperforming the OECD and on par with ASEAN.

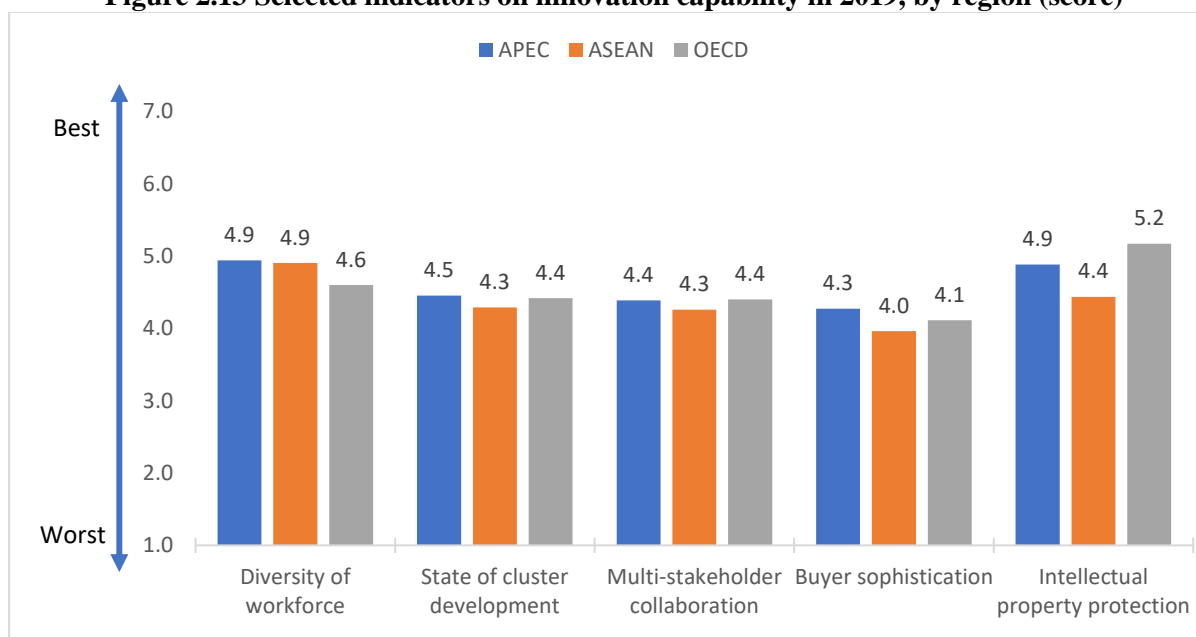
Figure 2.12 Selected indicators on business dynamism in 2019, by region (score)



Note: Aggregates are a simple average. Data for Myanmar and Papua New Guinea are unavailable.
 Source: APEC PSU calculations based on data from WEF (accessed 29 May 2023).

Factors such as workforce diversity, multi-stakeholder collaboration, buyer sophistication and intellectual property (IP) protection can also affect innovation. Workforce diversity, for example, would enable cross-pollination of ideas between workers of different backgrounds, knowledge and skillsets. In a similar vein, the clustering of firms, suppliers and producers of related products and services in a geographic location facilitates collaboration and exchange of ideas. The latest data from the WEF Global Competitiveness Report (2019) show respondents giving APEC an average score of 4.9 and 4.5 (out of 7.0) on diversity of workforce and cluster development, respectively (Figure 2.13). In both cases, APEC’s score either outperforms or is on par with its peer regions. On multi-stakeholder collaboration, respondents gave APEC an average score of 4.4, outperforming ASEAN and on par with the OECD. With regard to IP protection, APEC’s average score of 4.9 outperforms ASEAN but underperforms the OECD.

Figure 2.13 Selected indicators on innovation capability in 2019, by region (score)



Note: Aggregates are a simple average. Data for Myanmar and Papua New Guinea are unavailable.
 Source: APEC PSU calculations based on data from the World Economic Forum (accessed 29 May 2023).

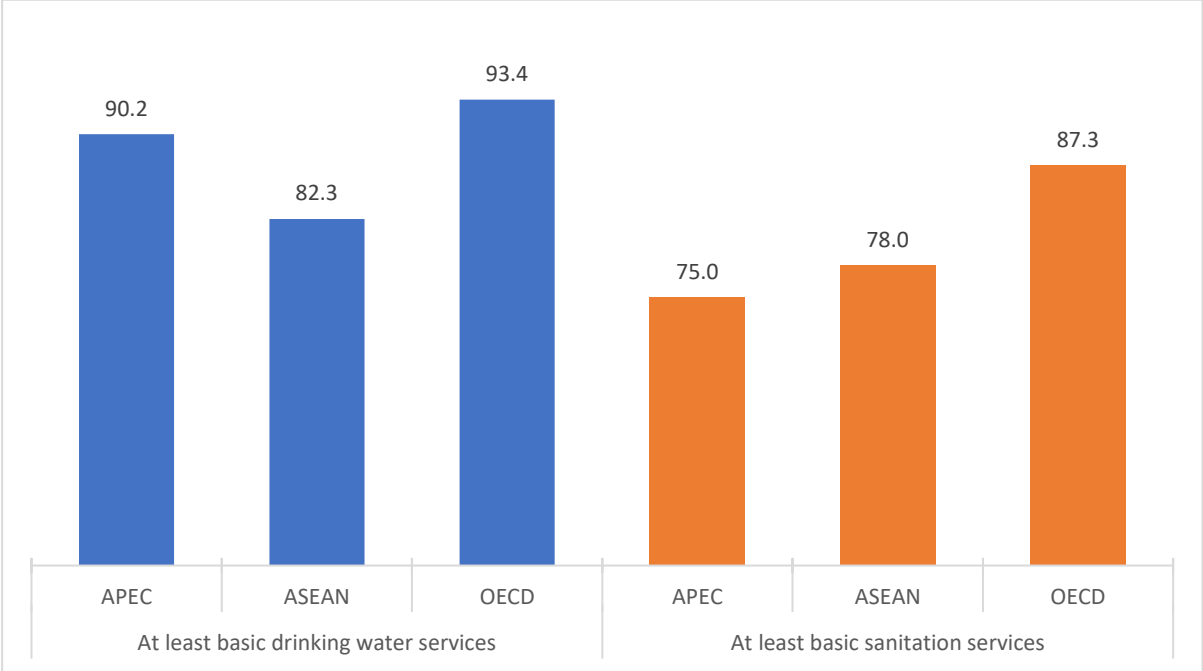
2.3.1.4 Strengthening access to basic services, social protection, and infrastructure

Strengthening access to basic services

Strengthening access to basic services is important for an individual’s overall well-being, which in turn would determine his/her ability to participate in the labour market. At the minimum, access to basic services would entail having access to clean water and proper sanitation facilities. The latest data from the WEF Global Competitiveness Report (2019) show that respondents gave APEC an average score of 5.6 out of 7.0 for the reliability of the region’s water supply.²² APEC outperforms ASEAN (5.1) but underperforms the OECD (6.3).

Moreover, a significant percentage of the APEC population has access to clean water. In 2020, the latest year where data are available, about 90.2 percent of the APEC population had reliable access to at least basic drinking water services (Figure 2.14). This is higher compared to ASEAN (82.3 percent) but lower compared to the OECD (93.4 percent). APEC lags, however, in terms of access to proper sanitation facilities. Only about 75.0 percent of the APEC population had access to proper sanitation facilities (at least basic sanitation services) in 2020. This is lower compared to ASEAN (78.0 percent) and the OECD (87.3 percent). APEC can benefit from improving access to these basic services, especially access to basic sanitation facilities.

Figure 2.14 Share of population covered by selected basic services in 2020, by region (%)



Note: Basic drinking water services refer to drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing. Basic sanitation services refer to the use of improved facilities that are not shared with other households. Aggregates are a weighted average based on total population.. Basic sanitation services data for Brunei Darussalam; Malaysia; and Chinese Taipei are unavailable. Source: APEC PSU calculations based on data from the WHO/UNICEF, the World Bank and data directly provided by Chinese Taipei (accessed 29 May 2023).

Another critical basic service is healthcare. At a minimum, there should be access to physicians and hospital beds. In 2020, the latest year where data are available, APEC had 2.2 physicians

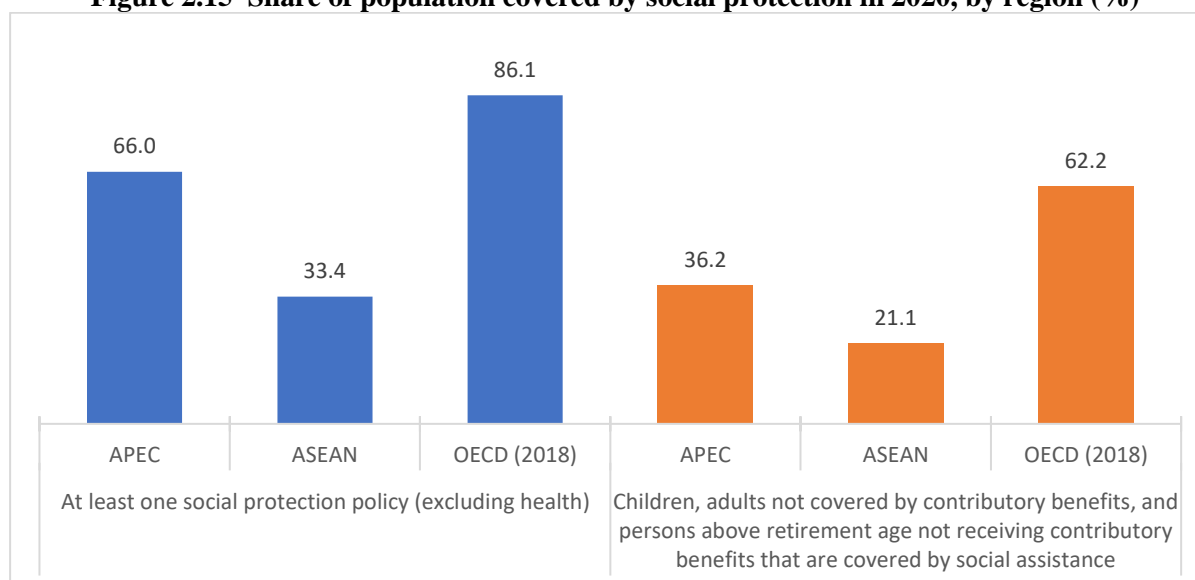
²² APEC PSU calculations based on data from WEF (accessed 29 May 2023). Aggregates are a simple average. Data for Myanmar and Papua New Guinea are unavailable.

per 1,000 people²³ and 5.4 hospital beds per 1,000 people.²⁴ APEC's performance on physicians fell short of the World Health Organization (WHO) recommended threshold of 2.3 physicians per 1,000 people (WHO, 2006). In contrast, APEC's performance on hospital beds exceeded the WHO recommended threshold of 3.0 hospital beds per 1,000 people (Lacsamana, 2021).

Strengthening access to basic social protection

Strengthening access to basic social protection can safeguard the incomes, jobs and well-being of individuals, enabling him/her to continue making positive contributions to the economy even in times of adversity. For example, employment injury benefits can help an injured worker to continue supporting his/her family while recovering. Meanwhile, temporary financial support for retrenched workers could enable him/her to focus on reskilling. In 2020, the latest year where data are available, about 66.0 percent of the APEC population was covered by at least one social protection policy (excluding health) (Figure 2.15). APEC has outperformed ASEAN (33.4 percent) but underperformed the OECD (86.1 percent in 2018).

Figure 2.15 Share of population covered by social protection in 2020, by region (%)



Note: Aggregates are a weighted average based on total population. For data on at least one social protection policy (excluding health): data for Russia are unavailable. Data for Australia; Canada; Chile; Japan; Korea; Mexico; New Zealand; and the United States are based on 2018 data. For data on children, adults not covered by contributory benefits, and persons above retirement age not receiving contributory benefits that are covered by social assistance: data for Papua New Guinea and Russia are unavailable. Data for Australia; Canada; Chile; Japan; Korea; Mexico; New Zealand; and the United States are based on 2018 data.

Source: APEC PSU calculations using data from the ILO Social Security Inquiry Database and the World Bank (accessed 29 May 2023).

Meanwhile, coverage among children, adults not covered by contributory benefits, and persons above retirement age not receiving contributory benefits is low, even as they are among those

²³ Physicians include generalist and specialist medical practitioners. APEC PSU calculations using data from the World Bank, the OECD and Chinese Taipei's Ministry of Health and Welfare (accessed 29 May 2023). Aggregates are a weighted average based on total population. Data for Brunei Darussalam; Hong Kong, China; and Viet Nam are unavailable. Data for Papua New Guinea; Singapore; and the United States are based on 2019 data. Data for Peru are based on 2018 data.

²⁴ Hospital beds include inpatient beds available in public, private, general and specialised hospitals and rehabilitation centres. In most cases, beds for both acute and chronic care are included. APEC PSU calculations using data from the World Bank, the OECD and Chinese Taipei's Ministry of Health and Welfare (accessed 29 May 2023). Aggregates are a weighted average based on total population. Data for Australia; Brunei Darussalam; China; Hong Kong, China; Indonesia; Malaysia; Papua New Guinea; Peru; the Philippines; Singapore; Thailand; and Viet Nam are unavailable. Data for Russia are based on 2018 data. Data for the United States are based on 2019 data.

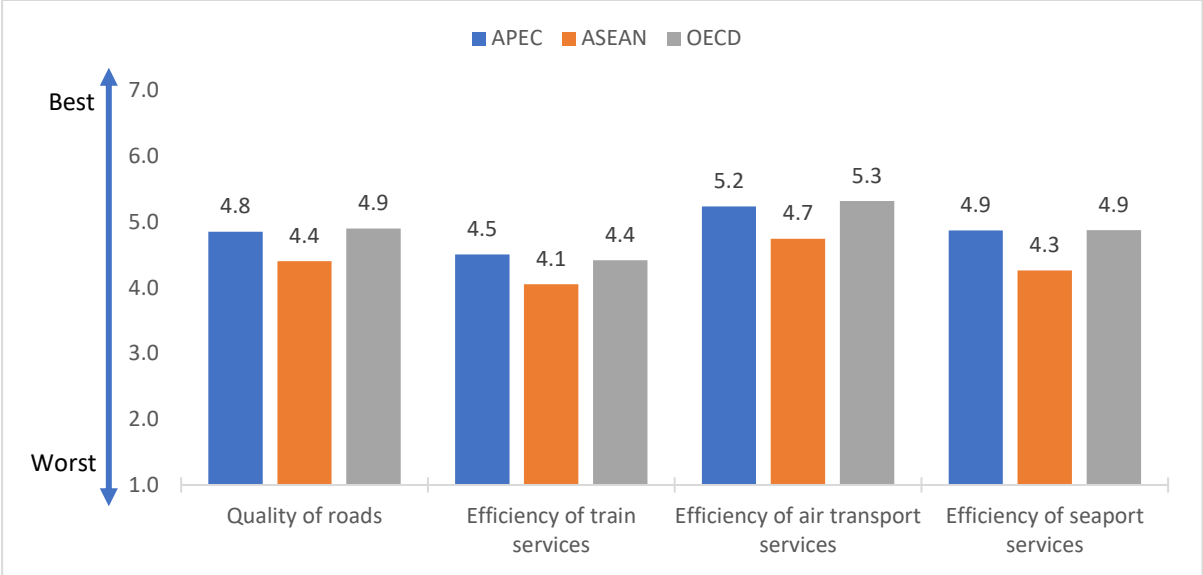
most in need of social protection for different reasons, such as being unable to work due to disability. Indeed, in the APEC region, only 36.2 percent of this group were protected by social assistance in 2020. In comparison, ASEAN had 21.1 percent and the OECD had 62.2 percent (2018 data). In most APEC economies, fewer than half of this group in the economy were covered by social assistance.

APEC’s low coverage ratios relative to the OECD signal a need for the region to improve access to basic social protection. Inadequate access to basic social protection can leave people more exposed, potentially resulting in missed opportunities in particular for groups with untapped economic potential, loss of productivity and poorer overall well-being.

Strengthening access to basic infrastructure

Strengthening access to basic infrastructure is important as it facilitates efficient resource exchanges (e.g., making it easier for people to participate in the labour market). Basic infrastructure includes various types of transport infrastructure. The latest data from the WEF Global Competitiveness Report (2019) show the APEC region scoring 4.8 out of 7.0 on the quality of its roads (measured based on extensiveness and condition), outperforming ASEAN but underperforming the OECD (Figure 2.16). Respondents gave APEC an average score of 4.9 and 4.5 respectively on the efficiency of its seaport and train services (measured based on frequency, punctuality, speed and price). In terms of seaport services, APEC outperforms ASEAN and is on par with the OECD, while in the case of train services, APEC outperforms both ASEAN and the OECD. On air transport services, APEC’s average score of 5.2 outperforms ASEAN but underperforms the OECD.

Figure 2.16 Selected indicators on infrastructure in 2019, by region (score)

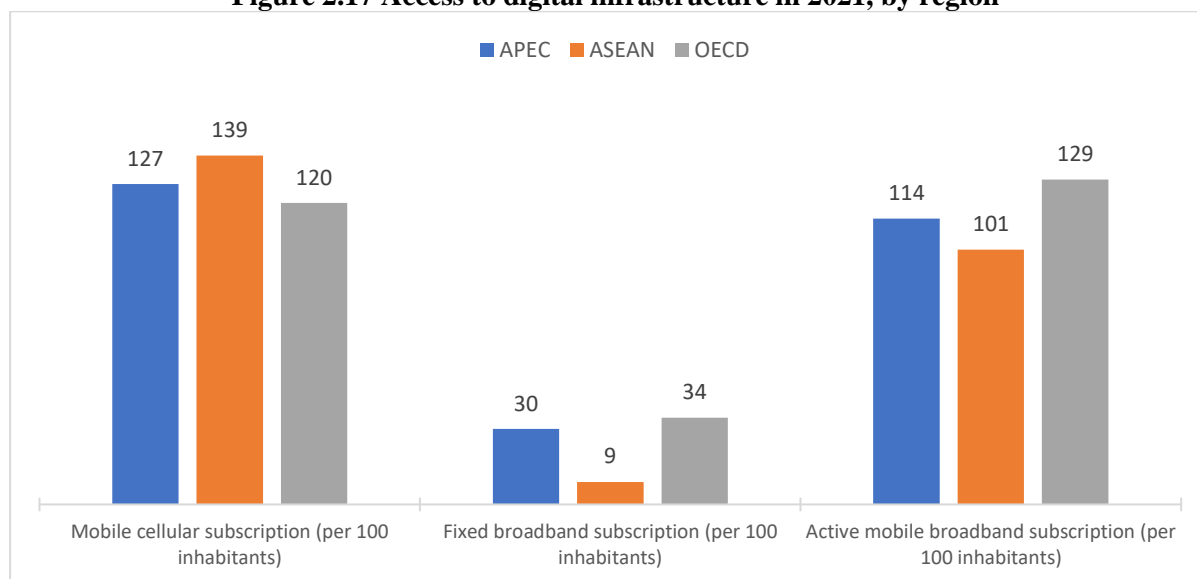


Note: Aggregates are a simple average. Data for Myanmar and Papua New Guinea are unavailable. Source: APEC PSU calculations based on data from WEF (accessed 29 May 2023).

The outsized role of digital technologies in day-to-day activities has made the development of digital infrastructure critical and strategic in many economies. In the APEC region, mobile cellular subscriptions stood at 127 per 100 inhabitants in 2021, which is below ASEAN but above the OECD. Fixed broadband subscriptions stood at 30 per 100 inhabitants, while active mobile broadband subscriptions stood at 114 per 100 inhabitants. In both cases, APEC

outperforms ASEAN but underperforms the OECD, suggesting that there is room for improvement (Figure 2.17).

Figure 2.17 Access to digital infrastructure in 2021, by region



Note: Aggregates are a weighted average based on total population.

Source: APEC PSU calculations using data from the ITU World Telecommunication/ICT Indicators Database and World Bank (accessed 29 May 2023).

2.3.2 Pillar #2: Boosting recovery and resilience against future shocks

The COVID-19 pandemic is arguably one of the most disruptive events in recent history, affecting economies both domestically and internationally. To illustrate, global average delays for late vessel arrivals increased from 4.8 days in March 2020 (the time that COVID-19 was officially declared a global pandemic) to 6.5 days in January 2021 and then to 8.0 days in January 2022, in part because of weakened capacity in ports (Wirjo and Calizo, 2022). These delays were accompanied by an increase in shipping costs, reaching a high of USD 11,109 in September 2021. These developments brought forth questions about the resilience of supply chains considering that most products rely on a complex network of value chains operating across multiple economies. The impact of COVID-19 since 2020 has left a global economy reeling from weakened consumption and production, massive unemployment and changing work patterns. Two keywords rose amid these challenges: recovery and resilience.

As the impacts of the pandemic begun to weaken amid the successful rollout of vaccines, economies started to prioritise recovery. But this recovery was met by slow economic growth, high economic inequality and prolonged inflation (Hernando, 2022b). Discussions on building more resilient economies also became widespread, as economies prepare for the possibility of another health-related pandemic as well as other shocks, such as climate change and uncertain energy security (APEC PSU, 2021; APEC, 2022a).

Boosting recovery and resilience against future shocks necessitate that economies enhance their economic readiness and improve their business environment. Economies would also need to reallocate resources to growth sectors. Regardless of the approach, women's empowerment and digitalisation will likely play a key role in how economies can be more resilient against future shocks (APEC, 2020b; ADB, 2021; Abidi et al., 2022; Wirjo, Nguyen, and Calizo, 2022).

This section explores APEC's progress on pillar #2 across five themes, namely: (1) focusing on sustainable and resilient recovery; (2) enhancing economic readiness; (3) improving the business environment; (4) reallocating resources to growth sectors; and (5) promoting digitalization.

2.3.2.1 Focusing on sustainable and resilient recovery

While massive unemployment was a key challenge that economies had to face amid the pandemic, the situation was exacerbated by the lack of unemployment insurance in many economies (Hernando, 2021). Unemployment insurance would have enabled retrenched workers to reskill and rejoin the workforce once the situation improves, hence contributing to recovery.

As indicated earlier, about 66.0 percent of the APEC population were covered by at least one social protection policy (excluding health) in 2020. Coverage for children, adults not covered by contributory benefits, and persons above retirement age not receiving contributory benefits, who arguably would need the most support, is even lower (Figure 2.15). In 2020, only 36.2 percent of them in APEC were protected by any social assistance. This is in contrast with the OECD, where 62.2 percent of the population was protected (2018 data).

Inadequate access to social protection can prolong the adverse impact created by a crisis and make recovery more challenging. Depending on the nature of the shock, it is important that economies also complement social protection with more specific resources and/or solutions.

Strong access to basic healthcare, for example, is a pre-requisite in responding to health-related shocks. As noted earlier, access to physicians (which include generalist and specialist medical practitioners) and hospital beds are essential. In this regard, in 2020, the latest year that data are available, APEC fell just short of the WHO recommended threshold in terms of the number of physicians but fared relatively well in terms of hospital beds (see data on page 35). It is worth observing that despite exceeding the WHO recommended level for hospital beds, APEC still experienced severe difficulties responding to the initial stages of the COVID-19 pandemic (Hernando and San Andres, 2020). This indicates that APEC needs to further enhance its capabilities and capacity in responding to health-related shocks.

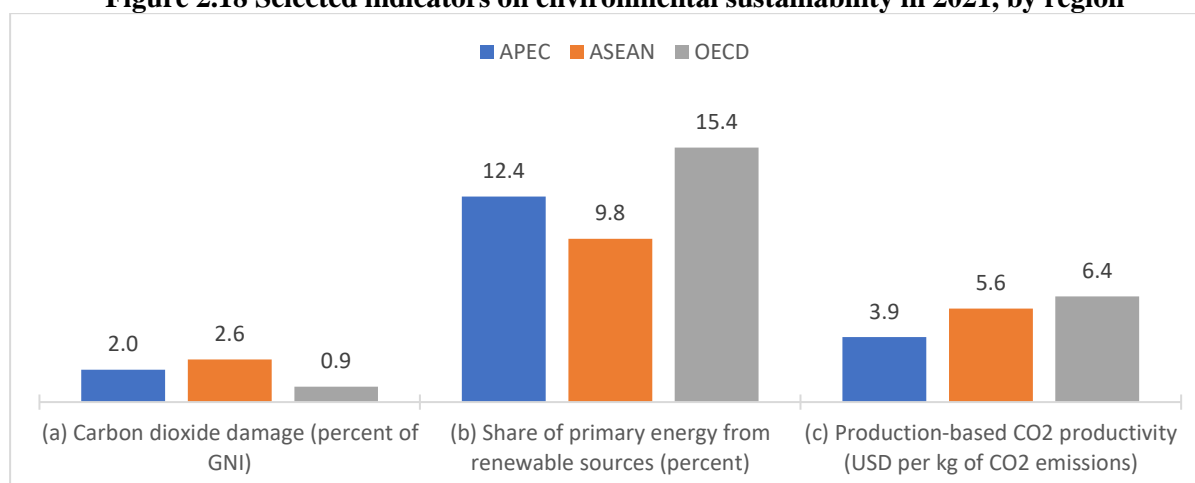
Economies should also be prepared to deal with all environmental challenges, including climate change, extreme weather events and natural disasters. The APEC PSU (2021) estimates that potential losses caused by climate change could reach as high as 18.3 percent of GDP by 2050, far higher than the pandemic-induced 1.8 percent GDP loss in 2020 (Hernando, 2022a).

Recognising the adverse impact of climate change, APEC adopted the Bangkok Goals on BCG Economy in 2022 to cement the region's commitment to advance a sustainable and resilient recovery for the region (APEC, 2022b). The BCG Economy framework integrates the policy approaches of bioeconomy, circular economy and green economy to create cross-cutting, interconnected and collaborative solutions (Calizo, 2022; The Asia Foundation and IDEEA, 2022). Further, the Economic Committee had placed emphasis on structural reform and green recovery from economic shocks in the 2022 APEC Economic Policy Report (AEPR), to understand the role of structural reforms in recovering from the impacts of COVID-19 and to create the market conditions to effectively address climate change and other environmental challenges (APEC, 2022a). Individually, economies have reflected their commitments toward achieving a net zero emissions target in various documents. As of 29 May 2023, seven APEC

economies have reflected this target in their laws, and twelve have reflected it in their policy documents, while one has incorporated it in a declaration/pledge.²⁵ One economy is in discussion but has yet to determine the modality to be used (i.e., as a law, in a policy document or in a declaration/pledge).

To deliver on the various commitments, it has become imperative that economies begin to harness various technologies aimed at facilitating transitions to a green economy (e.g., renewable energy, nuclear energy, green hydrogen). Several indicators could be used to infer the region's success in pursuing transitions to a green economy (Figure 2.18). For instance, in 2021, carbon dioxide (CO₂) damage in APEC was estimated at 2.0 percent of gross national income (GNI), higher than the OECD (0.9 percent) but lower than ASEAN (2.6 percent). On the share of primary energy derived from renewable sources,²⁶ APEC's share of 12.4 percent in 2021 is lower than the OECD (15.4 percent) but higher than ASEAN (9.8 percent). From the perspective of carbon productivity (production-based, measured as USD per kg of CO₂ emissions),²⁷ APEC's value of 3.9 in 2021 was noticeably lower compared to both ASEAN (5.6 in 2020) and the OECD (6.4), suggesting that APEC was less efficient and 'less green' compared to its peer regions. Overall, these indicators indicate that APEC needs to continue with the efforts to transition into the green economy and a more sustainable growth.

Figure 2.18 Selected indicators on environmental sustainability in 2021, by region



Note: (a) Aggregates are a weighted average based on gross national income (GNI), purchasing power parity (PPP), current international dollars. Data for Chinese Taipei are unavailable; (b) Aggregates are a weighted average based on real GDP (2015=100). Data for Brunei Darussalam; Cambodia; Costa Rica; Lao PDR; Myanmar; and Papua New Guinea are unavailable. Data for Singapore are based on 2020 data; (c) Production-based emissions refer to gross direct CO₂ emissions from fossil fuel combustion, emitted within an economy's territory. They exclude bunkers, sinks and indirect effects. Aggregates are a weighted average based on real GDP (2015=100). Data for Hong Kong, China; Papua New Guinea; and Chinese Taipei are unavailable. Data for Brunei Darussalam; China; Indonesia; Malaysia; Peru; the Philippines; Singapore; Thailand; and Viet Nam are based on 2020 data.

Source: (a) APEC PSU calculations based on data from the World Bank (accessed 29 May 2023); (b) APEC PSU calculations based on data from Our World in Data, StatsAPEC, and the World Bank (accessed 29 May 2023); (c) APEC PSU calculations based on data from the OECD Green Growth Indicators and the World Bank (accessed 29 May 2023).

²⁵ APEC PSU calculations based on data and information from Lang et al. (2023) (accessed 29 May 2023) and Chinese Taipei. On February 15, 2023, Chinese Taipei has promulgated the "Climate Change Response Act," so as to set a goal of reaching net-zero emissions by 2050. For Lang et al. (2023), data on net zero commitments are collected by a team of volunteers from publicly available data. Acknowledging that there are different terms for net zero, this database recognises the following synonyms: zero emissions; zero carbon; climate neutral; climate positive; carbon neutral(ity); greenhouse gas neutral(ity); carbon negative; net negative; 1.5°C target; and science-based target.

²⁶ Renewable energy sources include hydropower, solar, wind, geothermal, bioenergy, wave, and tidal. This does not include traditional biofuels.

²⁷ Production-based emissions refer to gross direct CO₂ emissions from fossil fuel combustion, emitted within an economy's territory. They exclude bunkers, sinks and indirect effects.

2.3.2.2 Enhancing economic readiness

All economies felt the adverse effects of COVID-19, but some were able to respond to the challenges better than others. Key to this is economic readiness, which could be reflected in the state of an economy's infrastructure, ease of accessing financial resources and the dynamism of an economy's businesses, among others. Economies that experienced constraints on funds or had undeveloped policies and poor infrastructure appear to have had more difficulty procuring/producing, distributing and administering vaccines compared to economies that were better equipped (Hossain et al., 2022; OECD and WHO, 2022). Indeed, acknowledging the role of different factors in strengthening supply chain resilience for economic recovery, APEC organised a workshop in November 2022 to pull together insights from different stakeholders on issues and challenges faced by industries in their economic recovery process (EC 03 2022S). Another workshop in October 2022 focused on the role of competition policies during the crisis and its aftermath, including economic recovery (Gutierrez, 2023).

On infrastructure, the latest data from the WEF Global Competitiveness Report (2019) show respondents giving APEC an average score of 4.8 out of 7.0 on quality of roads (measured based on extensiveness and condition), outperforming ASEAN but slightly underperforming the OECD (Figure 2.16). Respondents gave APEC an average score of 4.9 and 5.2 on the efficiency of its seaport and air transport services, respectively. APEC's score on the efficiency of its seaport services outperforms ASEAN (4.3) and is on par with the OECD (4.9), while its score on efficiency of its air transport services outperforms ASEAN (4.7) but slightly underperforms the OECD (5.3).

However, despite the generally positive perceptions on the efficiency of the transport infrastructure in APEC, it may not be sufficiently resilient. For example, during the pandemic, shortages in port authority personnel combined with delays in trucking in/out of the port area made it difficult to move goods (Wirjo and Calizo, 2022). The pandemic made it apparent that efficiency should also be accompanied by resiliency. Resiliency could be improved by, for example, utilising digital tools: customs authorities could remotely process documents, thereby minimising the risk of COVID-19 spread.

On access to financial resources, the latest data from the WEF Global Competitiveness Report (2019) show that respondents perceived that it is relatively easy for MSMEs to access financing in the APEC region, giving it an average score of 4.5, which outperforms both ASEAN (4.2) and the OECD (4.4) (Figure 2.10). This is despite MSMEs potentially encountering challenges in accessing finance, such as information asymmetries and lack of collateral.

The dynamism of the business community could also inform on the readiness of an economy to respond to opportunities and challenges during a crisis. After all, businesses willing to adopt new ways of doing things, such as shifting to providing their services digitally, were among those less affected by the COVID-19-related restrictions on physical interactions. To illustrate, 44 percent of respondents across 15 markets in Europe²⁸ observed that remote work arrangements during the pandemic led to more productivity (Parke, 2020).

As noted earlier, the latest data from the WEF Global Competitiveness Report (2019) reveal that respondents perceived the APEC region as being receptive to entrepreneurial risk, scoring it 4.5 out of 7.0 (Figure 2.12). This outperforms both ASEAN and the OECD. Respondents also

²⁸ This survey involved about 9,000 managers and employees in large firms across 15 markets in Europe, with about 600 respondents per economy.

perceived APEC as a region where companies tend to embrace risky or disruptive business ideas and where companies with innovative ideas grow rapidly. On the former, APEC's average score of 4.2 is on par with ASEAN (4.2) and outperforms the OECD (4.1), while on the latter, APEC's average score of 4.5 is on par with ASEAN (4.5) but underperforms the OECD (4.6).

As a measure of overall economic productivity, average labour productivity could also be reflective of the readiness of an economy to seize opportunities arising from a crisis. In 2022, labour productivity was higher than in 2021 as well as in 2019, the year prior to pandemic (see page 32).

2.3.2.3 Improving the business environment

As noted earlier, COVID-19 has been devastating for economies, with reverberating impacts such as slow economic growth, high economic inequality and prolonged inflation (Hernando, 2022b). These challenges make it difficult for businesses to recover. Improving the business environment could boost business recovery.

The services sector had been among the hardest hit, with trade plummeting by 22.3 percent between 2019 and 2020 in the APEC region. In contrast, merchandise trade declined by 5.4 percent over the same period.²⁹ Thus, any meaningful recovery must include the services sector.

How quickly the services sector recovers would depend on several factors, chief among them the policy environment. A supportive environment could also contribute to supply chain resilience given the role of services such as logistics and transport in global value chains. Using the STRI to monitor the restrictiveness of the policy environment affecting services trade shows that in 2022, APEC's average all-sector STRI score was 0.293 (Figure 2.2). While this is an improvement from the more restrictive policy environment in 2021 (0.298), the 2022 score is still above the pre-pandemic level (0.291 in 2019). Analysing the STRI score by sector shows that 19 sectors became less restrictive in 2022 (compared to 2021) (Figure 2.2). Meanwhile, the 2022 score is higher than the 2021 score for commercial banking, courier, and maritime transport, indicating a more restrictive policy environment. This suggests that APEC needs to strengthen efforts to bring the level of restrictions back to the pre-pandemic 2019 level and lower. Among the top two categories of restrictions for various sectors are: restrictions on foreign entry, restrictions on movement of people, barriers to competition, regulatory transparency and/or other discriminatory measures (Table 2.3). Reviewing these policies could go a long way in improving the policy environment for APEC's services sector, possibly promoting recovery.

Strengthening access to FDI can also help businesses recover but doing so would require a supportive policy environment. As indicated earlier, APEC's all-sector FDI RRI score suggests a relatively open policy environment, less restrictive than ASEAN but more restrictive compared to the OECD (0.063) (Figure 2.4). Economies may wish to review policies under the FDI RRI category of equity restrictions, considering that this policy category (of the four policy categories) contributed the most to APEC's all-sector FDI RRI score. Additionally, there are variations in the FDI policy environment across sector groupings, with the primary sector having a more restrictive FDI policy environment relative to the secondary and tertiary sectors.

²⁹ APEC PSU calculations based on total merchandise trade data downloaded from StatsAPEC (<https://statistics.apec.org/>), accessed 14 April 2023.

2.3.2.4 Reallocating resources to growth sectors

Among the many challenges left behind by a crisis is constrained resources. For instance, several economies had to procure loans for their initial response to the pandemic. Government debt reached a high of 97 percent of GDP globally (Rogoff et al., 2021). In APEC, pandemic-related spending has translated into higher government debt, from 55 percent of GDP in 2019 to 65 percent in 2020, possibly remaining elevated well into the medium term (Hernando and Vasquez, 2023). This implies a narrowing fiscal space that would limit the ability of governments to provide much-needed recovery support programmes, such as cash transfers and subsidies. As Estevão and Essl (2022) eloquently phrase it: ‘[It is] time for policymakers to adopt the first law of holes: when [you are] in one, stop digging. Adopting good policies now can still repair a lot of the damage.’

Part of this repair (recovery) is to reallocate resources toward growth sectors. For instance, according to an ADB (2022) study focusing on Southeast Asian economies, electronics³⁰ and digital trade/e-commerce are evolving sectors with high potential for growth. This finding is echoed by others, such as Bharucha (2022), who has highlighted digital trade/e-commerce, fast food franchises, food delivery, and virtual events; the United Nations Industrial Development Organization (UNIDO, 2022), which identifies higher-tech industries (e.g., manufacture of computers, electronics and optical products); and Wirjo, Nguyen, and Calizo (2022), who list DDS sectors as resilient enough to grow despite the pandemic.³¹

Apart from electronics and digital trade/e-commerce (and its related sectors), other growth sectors could include agriculture (e.g., agribusiness), construction, education, the green economy (e.g., renewable and clean energy, green jobs)³², healthcare, and travel (e.g., aviation, hospitality, tourism) (PwC, 2017; Kimbrough, 2021; SkillsFuture Singapore, 2022; Stahl, 2022). Supporting these growth sectors will require economies to reallocate resources.

One approach that economies could consider is to spur investment in the identified growth sectors through grants and other incentives. R&D expenditure could be indicative of success in this regard. Albeit not specific to the growth sectors, the latest year where data are available (2020) shows that R&D expenditure in the APEC region averaged 2.7 percent of GDP, significantly higher than ASEAN (0.8 percent) but lower than the OECD (2.8 percent).

Skilled labour is another resource that economies can reallocate to growth sectors. The latest data from the WEF Global Competitiveness Report (2019) shows that respondents perceive APEC to be a region where it is relatively easy to find skilled employees, more so compared to both ASEAN and the OECD (Figure 2.5). On the skillset of graduates and digital skills among the active population, respondents gave APEC average scores that outperform ASEAN but underperform the OECD across both indicators (Figure 2.5).

One possible reason for APEC’s relatively good performance is the extent of tertiary education in the region. The latest available data indicate that 61.6 percent of APEC’s tertiary school-age population in 2020 was enrolled in tertiary-level education (Figure 2.19). And, slightly more than a quarter (28.2 percent) of APEC’s tertiary-level graduates received STEM degrees in

³⁰ This includes the manufacture of computer, electronic and optical products; and the manufacture of electrical equipment. This would include products from low-end cables and wires to high-end semiconductors and silicon wafers.

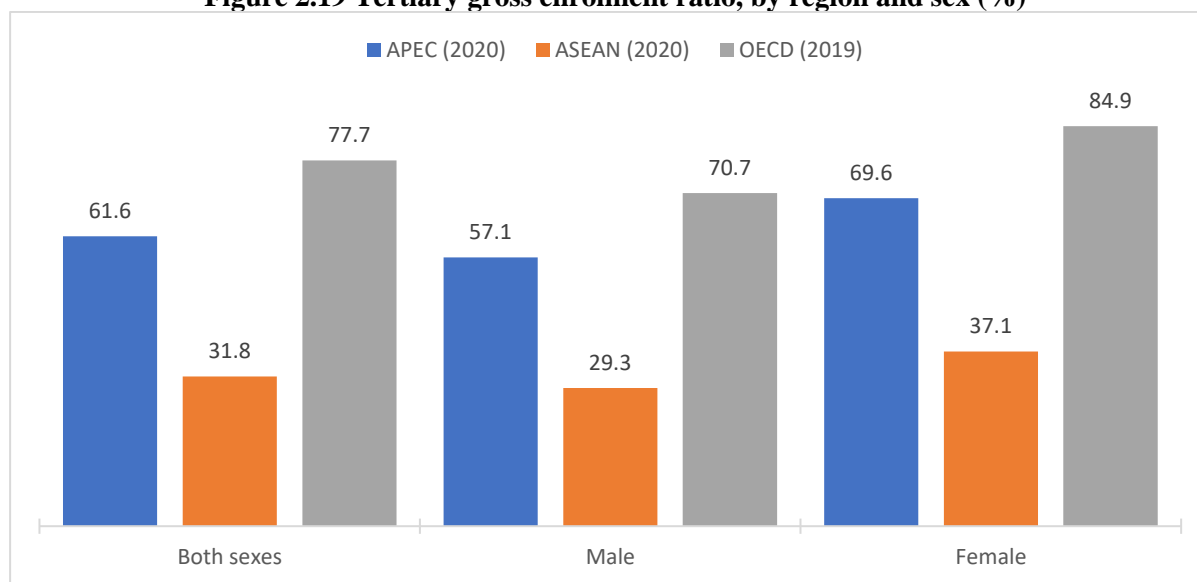
³¹ Technically, not all DDS sectors grew from 2019 to 2020. Other business services declined by 1.7 percent and personal, cultural and recreational services declined by 0.6 percent, which are still better compared to non-DDS sectors.

³² There is currently no internationally-agreed definition on what constitutes a green job. However, examples include solar technologists/specialists, clean energy specialists, and sustainability engineers.

2020. Of concern, women appear to be under-represented in STEM education. While the APEC-specific data mentioned earlier could not be disaggregated by sex, estimates from another source reveal that women comprised under 35 percent of tertiary STEM degree graduates from 2000 to 2018 (Jones-Renaud et al., 2020). This not only marginalises women from participating in most growth sectors but also weakens the diversity of STEM-educated labour.

Policies that empower women to enter STEM fields will be beneficial for boosting recovery after the pandemic and in preparing economies to be more resilient to future shocks. Women with STEM degrees can participate, for example, in sectors traditionally dominated by men,³³ thus broadening the pool of skilled labour. Some policy examples that can improve women's inclusion in STEM include support for female entrepreneurs, such as APEC's Women Connect Programme and hybrid finance models that can stimulate increased public-private sector collaboration to address gender inequities (Jones-Renaud et al., 2020).

Figure 2.19 Tertiary gross enrolment ratio, by region and sex (%)



Note: Aggregates are a weighted average based on tertiary school age population. Data for Indonesia; Japan; Myanmar; the Netherlands; Papua New Guinea; Peru; and Thailand are unavailable. Data (2020) for Cambodia; Canada; Chile; Korea; Mexico; New Zealand; Russia; Singapore; the United States; and Viet Nam are based on 2019 data. Gross enrolment ratio is the ratio of total enrolment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Tertiary education, whether or not to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level.

Source: APEC PSU calculations based on data from UNESCO and Chinese Taipei's Ministry of Education (accessed 29 May 2023).

Certainly, factors such as flexibility of wage determination and whether pay is related to productivity also contribute to the overall availability of skilled labour. On flexibility of wage determination, the latest data from the WEF Global Competitiveness Report (2019) show respondents giving APEC an average score of 5.4, outperforming both ASEAN (5.1) and the OECD (4.9) (Figure 2.9). On the relationship between pay and productivity, respondents gave APEC an average score of 4.6, on par with ASEAN and outperforming the OECD (4.4) (Figure 2.8).

³³ Non-traditional sectors for women can vary depending on culture and customs. One way of identifying these non-traditional sectors is to measure the percentage share of women in total employment. Sectors with women's percentage share of 25 percent or less can be treated as a non-traditional sector for women. APEC (2020a) provides a helpful toolkit focused on improving women's participation in mining, transportation and energy.

2.3.2.5 Promoting digitalisation

A range of evidence, empirical and anecdotal, attests to the role of digitalisation in ensuring resiliency and spurring economic recovery during the pandemic (APEC, 2021d; Abidi et al., 2022; Wirjo, Calizo, and Balbontin, 2022; Wirjo, Nguyen, and Calizo, 2022; Avalos et al., 2023). For instance, a correlation analysis of 134 economies shows that those with a higher share of digitally-deliverable services in total services exports in 2019 tended to be more resilient during the pandemic (measured using the year-on-year change in services exports in 2020). Indeed, evidence from several economies indicates that firms that already had a higher level of technology sophistication before the pandemic were significantly more likely to increase their use of digital solutions, thus helping to keep them afloat despite pandemic-related challenges.

Elsewhere, tourism providers were able to use digital solutions to overcome mobility restrictions by offering virtual tours. Meanwhile, digital platforms (already in existence before the pandemic) gave the unemployed and underemployed more options to engage in non-standard forms of employment (e.g., platform work and crowdwork) in a difficult labour market situation. Financial transactions, which traditionally are conducted in physical proximity, also benefited from the proliferation of mobile wallets and digital finance applications, thereby permitting businesses to continue.

Sufficient access to basic digital infrastructure is necessary to promote digitalisation. Fixed broadband subscriptions in APEC stood at 30 per 100 inhabitants, while active mobile broadband subscriptions stood at 114 per 100 inhabitants in 2021 (Figure 2.17). While APEC outperforms ASEAN, it underperforms the OECD on both measures, suggesting that there is room for improvement.

In terms of access, only about 76.3 percent of the APEC population were online in 2021, the latest year where data are available. APEC outperforms ASEAN (65.2 percent) but underperforms the OECD (87.3 percent).³⁴ Even among those online, there appears to be scope to promote greater use of digital services to help with daily tasks. This is indicated by the data on adoption of digital payments: only about 77.4 percent of the APEC population aged 15+ made or received digital payments in 2021 (Figure 2.20), which outperforms ASEAN (50.8 percent) but underperforms the OECD (91.5 percent).

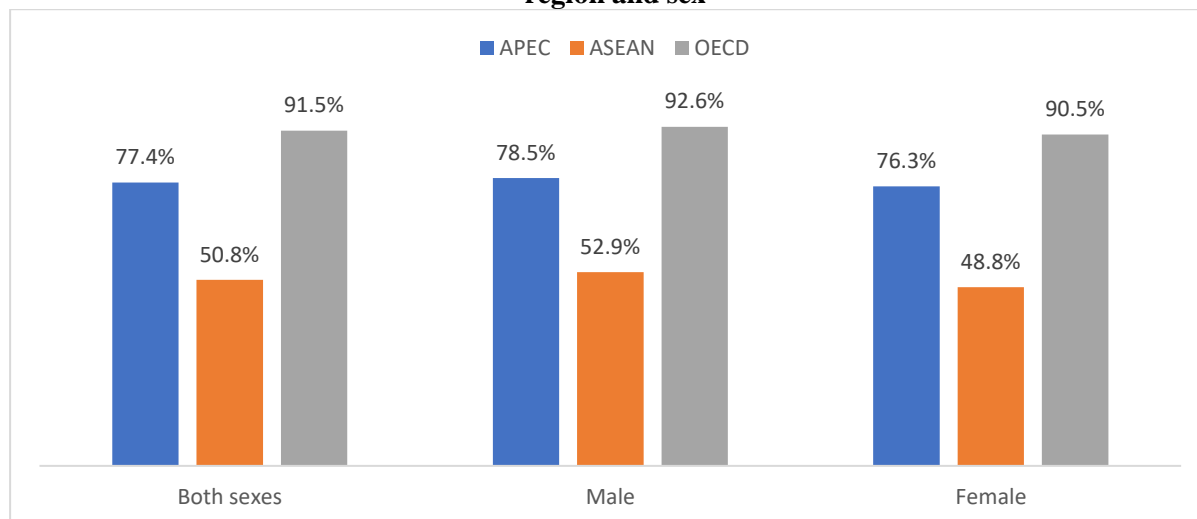
The digital divide could prevent millions of people from utilising the internet and participating in digital activities. This divide can manifest in many ways such as lack of access to computers and poor digital literacy (van Dijk, 2006) and it is critical that economies address the structural issues underlying the divide. Even before the pandemic, Quimba et al. (2020) have observed that people with certain attributes were more likely to derive benefit from digital solutions, such as those living in urban or more affluent areas or those who are more skilled/educated. This is echoed in the empirical evidence of Avalos et al. (2023) suggesting that large firms and those more digitally equipped were more likely to utilise digital solutions, thus keeping them operational during the pandemic.

Promoting digitalisation means that the policy environment should also be supportive of trade in digitally enabled services. In 2022, the average Digital STRI score in APEC was 0.179, reflecting a more restrictive policy environment relative to 2021 (Figure 2.3). Among the main

³⁴ APEC PSU calculations using data from the ITU World Telecommunication/ICT Indicators Database and World Bank (accessed 29 May 2023). Aggregates are a weighted average based on total population.

contributors to the score are policies categorised under infrastructure and connectivity (e.g., restrictions on cross-border data flows, restrictions on use of communication services) and other barriers affecting trade in digitally enabled services (e.g., commercial and/or local presence requirements to provide cross-border services, performance requirements affecting cross-border digital trade). Reviewing policies under these categories could improve access and provision of digital services.

Figure 2.20 Percentage of population 15+ making and receiving digital payments in 2021, by region and sex



Note: Aggregates are a simple average. Data for Brunei Darussalam and Papua New Guinea are unavailable. Data for Luxembourg; Mexico; and Viet Nam are based on 2017 data.

Source: APEC PSU calculations based on data from the World Bank (accessed 29 May 2023).

2.3.3 Pillar #3: Ensuring that all groups in society have equal access to opportunities for more inclusive, sustainable growth, and greater well-being

Creating more inclusive and sustainable growth is one of the key areas highlighted in the APEC Putrajaya Vision 2040 (APEC, 2020c). To achieve this aspirational goal, it is important to ensure that more people including those with untapped economic potential have equal access to opportunities.

MSMEs are one group with untapped economic potential. In APEC, nearly 150 million businesses are considered MSMEs (Hredzak, 2020). Apart from being key employers, MSMEs are also significant drivers of enterprise growth, an important link across sectors and a backbone of local communities. Despite their importance, they contribute only around 40 percent to 60 percent of GDP or of value-added, depending on the economy. This is disproportionately low since MSMEs represent at least 97 percent of total enterprises in APEC.

Women are another group with untapped economic potential. Women represent half of the working-age population in 2022.³⁵ Moreover, women operate around 36.5 percent of APEC MSMEs in 2018 (Quimba and Calizo, 2021).³⁶ One APEC study estimates that excluding women from the digital economy alone would result in losses of about USD 94 billion in 2020 (Radovic et al., 2022).

³⁵ APEC PSU calculations based on data from the ILO (accessed 29 May 2023). Data for Russia are based on 2021 data.

³⁶ Women-led MSMEs are defined as an enterprise that is either: (1) at least 50 percent female-owned or (2) sole proprietorships that are female-owned and/or with female participation in ownership and management (top manager).

Economies can also gain from empowering the youth. In 2022, close to 91 million youths aged 15 to 24 were in APEC's labour force.³⁷ A person's youth is a critical time where skills are acquired and where careers develop. But this is also a challenging time where setbacks can arise, possibly affecting one's prospects during adulthood (Woodhouse and Thorpe, 2018).

In a similar vein, economies also benefit from supporting the elderly. In 2022, there were around 49 million people aged 65+ in APEC's labour force.³⁸ Experience arguably comes with age. But health conditions tend to deteriorate over time. Advancements in technology can help overcome this deterioration, making it possible for the elderly to continue making positive contributions to society.

Empowering these groups could promote greater inclusion. One approach is to improve access to critical factors such as basic services, basic infrastructure, basic social protection, and quality education. Economies could also expand opportunities by improving access to the global economy and supporting upgrading efforts.

This section discusses APEC's progress on pillar #3 across five themes: (1) promoting inclusion of those with untapped economic potential; (2) improving access to basic services, social protection, and infrastructure; (3) enhancing access to quality education; (4); improving access to the global economy; and (5) supporting upgrading efforts.

2.3.3.1 Promoting inclusion of those with untapped economic potential

As economies strive to promote the inclusion of those with untapped economic potential, it is important to be mindful of the income distribution among the population as it could impact social cohesion. Differences in income shares could also have implications on inter-generational wealth and hence the opportunities made available to individuals (e.g., access to quality education and its subsequent effect on access to work opportunities).

Income inequality in APEC is wider compared to the OECD. In 2020, the labour income share of the bottom decile in APEC amounted to just 1.0 percent, far behind the share of the top decile at 32.1 percent.³⁹ This is a considerable gap of 31.1 percentage points, which is lower than ASEAN (33.9 percentage points) but higher than the OECD (27.4 percentage points). This suggests the need for APEC to adopt policies aimed at narrowing the inequality gap. At the same time, it is important for economies to recognise that the specific areas to be tackled could vary depending on the needs of particular groups.

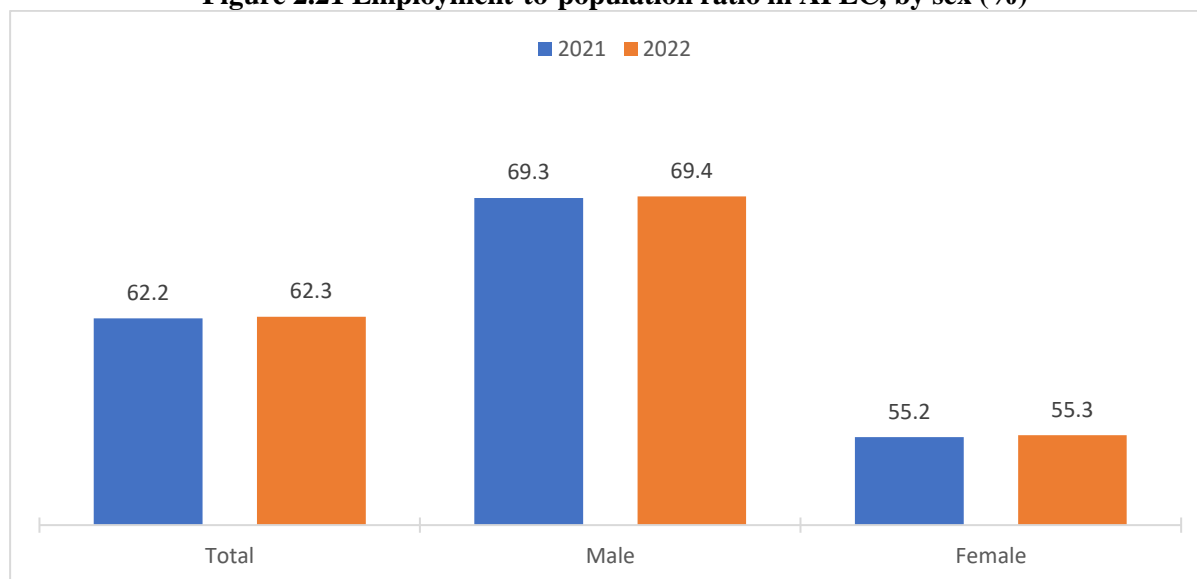
Promoting women's inclusion

Discrimination against women in employment is a challenge in promoting greater women's inclusion. Disaggregating the employment-to-population ratio in APEC by sex shows that in 2022, women had an average ratio of 55.3 percent while men had an average ratio of 69.4 percent (Figure 2.21). The gap is unchanged from 2021 (14.1 percentage points).

³⁷ APEC PSU calculations based on data from the ILO (accessed 29 May 2023) and data directly provided by Chinese Taipei. Data for Brunei Darussalam; the Philippines; Russia; Singapore; and Thailand are based on 2021 data. Data for Malaysia is based on 2020 data.

³⁸ See footnote 37.

³⁹ APEC PSU calculations based on data from the ILO (accessed 29 May 2023). Data based on modelled ILO estimates. Aggregates are a weighted average based on labour force 15+. Data for Papua New Guinea are unavailable.

Figure 2.21 Employment-to-population ratio in APEC, by sex (%)

Note: Aggregate is a weighted average based on working-age population 15+. Data (2022) for Russia are based on 2021 data. Source: APEC PSU calculations based on data from the ILO (accessed 29 May 2023).

Many factors contribute to the gap, including the presence (or absence) of laws/regulations to protect women against discrimination. A report entitled ‘Gender and Structural Reform – Achieving Economic Growth through Inclusive Policies’, which was published in October 2022, notes that legislation such as laws guaranteeing women the same or equivalent position after maternity leave and laws prohibiting women’s exclusion from non-traditional employment in industry could lead to higher annual GDP growth (APEC, 2022c).

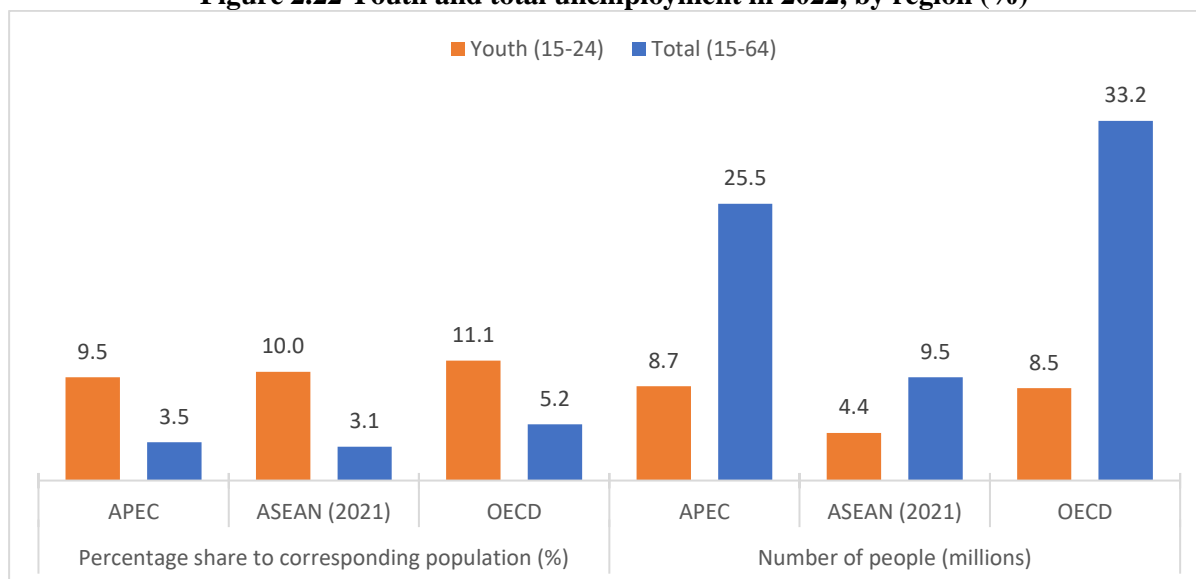
In the APEC region, analysis shows that there has been progress in certain areas. For example, more APEC economies have laws/regulations in 2023 on equal work opportunities between men and women relative to 2021. Nevertheless, certain relevant laws/regulations continue to be present in only around half (or fewer than half) of APEC economies in 2023 (Figure 2.6); examples include laws prohibiting discrimination in access to credit based on sex and laws that count periods of absence due to childcare as part of pension benefits. This suggests that APEC needs to do more to promote women’s inclusion, including through the La Serena Roadmap for Women and Inclusive Growth.

Promoting inclusion among the youth

On youth, the latest data show that although a considerable share of APEC’s youths (aged 15–24) are employed, millions remain jobless. In 2022, more than 8.7 million youths in APEC (9.5 percent of the youth labour force) were unemployed (Figure 2.22). Youth unemployment rates were significantly higher compared to the total unemployment rate (aged 15-64), regardless of the region.

Further, in percentage terms, APEC has relatively lower youth unemployment compared to both ASEAN (10.0 percent in 2021) and the OECD (11.1 percent). However, the number of unemployed youths in APEC is higher compared to both ASEAN (4.4 million in 2021) and the OECD (8.5 million). This suggests the need to adopt policies aimed at getting youths employed (e.g., vocational training, or non-standard but decent forms of employment).

Figure 2.22 Youth and total unemployment in 2022, by region (%)



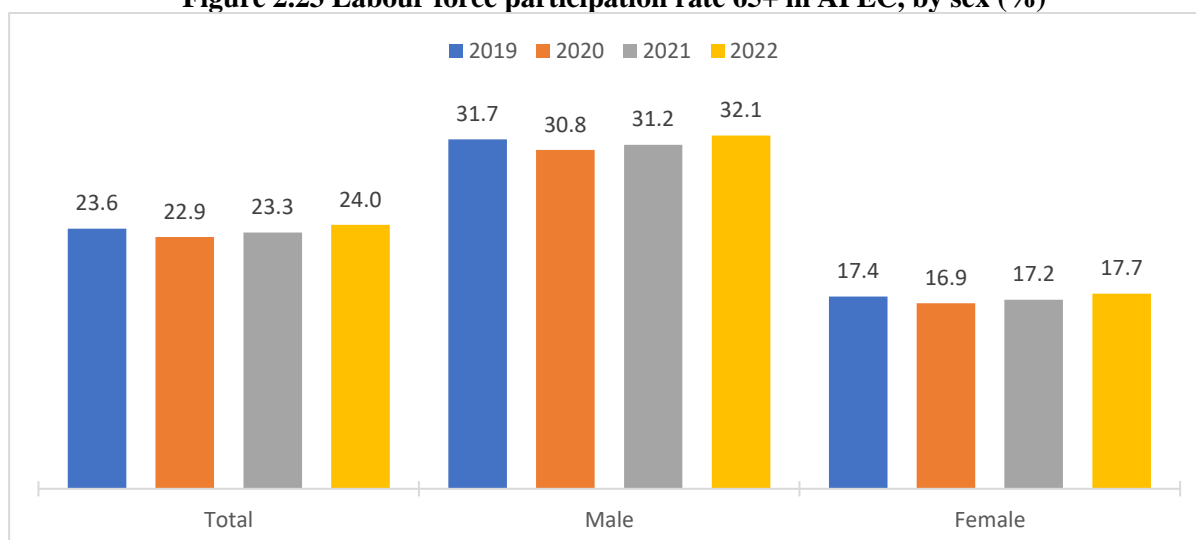
Notes: Aggregates are a weighted average based on labour force 15–24 (for youth unemployment) and labour force 15–64 (for total unemployment). Data for China and Papua New Guinea are unavailable. Data for Brunei Darussalam; the Philippines; Russia; Singapore; and Thailand are based on 2021 data. Data for Malaysia is based on 2020 data.

Source: APEC PSU calculation based on data from the ILO (accessed 29 May 2023) and data directly provided by Chinese Taipei.

Promoting inclusion among the elderly

Advancements in healthcare has improved the life expectancy of people across economies. Improvements in robotics and other technologies has also improved the working environment across industries. Together, these developments enable the elderly to continue making positive contributions to society. In APEC, the labour force participation rate of those aged 65 and above reached 24.0 percent in 2022, which is higher compared to 2021 (Figure 2.23). The male participation rate is generally higher relative to female participation rate. These observations suggest that more could be done to increase the participation of the elderly, especially the elderly female.

Figure 2.23 Labour force participation rate 65+ in APEC, by sex (%)



Notes: Aggregate is a weighted average based on working-age population 65+. Data for China and Papua New Guinea are unavailable.

Source: APEC PSU calculations based on data from the ILO (accessed 29 May 2023).

Recognising that more could be done to ensure that all groups in society have equal access to economic opportunities, a workshop on ‘Equality of Opportunities: APEC Experiences in Furthering Inclusive Economic Growth’ has been planned to share how structural reform can address barriers and promote inclusion, as well as government programmes that promote the participation of all people in the economy (EC 02 2022S).

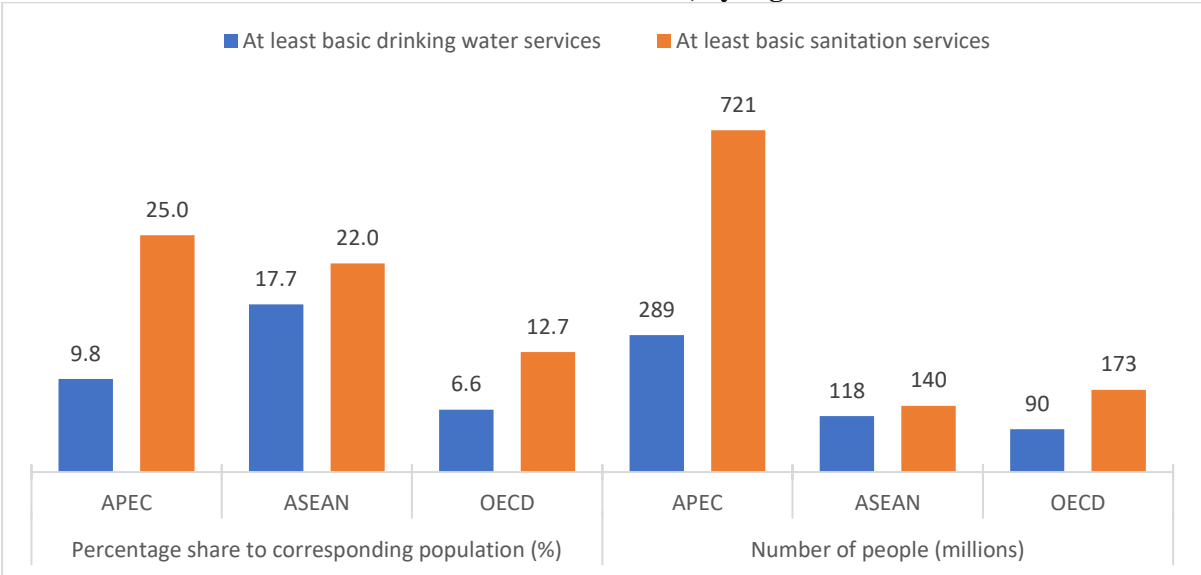
2.3.3.2 Improving access to basic services, social protection, and infrastructure

Promoting inclusion and fostering an environment whereby opportunities are within everyone’s reach require economies to improve access to critical factors such as basic services, basic infrastructure and basic social protection.

Many people in APEC remain disconnected from clean water and proper sanitation facilities (Figure 2.24). In 2020, the latest year where data are available, 289 million people (9.8 percent of the APEC population) did not have reliable access to clean water (at least basic drinking water). This is significantly larger compared to both ASEAN (118 million) and the OECD (90 million). In that same year, about 721 million people (25.0 percent of the APEC population) did not have access to proper sanitation facilities (at least basic sanitation services). Likewise, this is significantly larger compared to ASEAN (140 million) and the OECD (173 million). Providing access to both clean water and sanitation services is important to enhancing inclusion in APEC.

Another basic service is healthcare. As noted earlier, APEC needs to do more in terms of the number of physicians even as the number of hospital beds in the region exceeds WHO recommendations (see data on page 35). Economies also need to look into healthcare affordability, a factor important to inclusion.

Figure 2.24 Share of population and number of people without access to basic services in 2020, by region

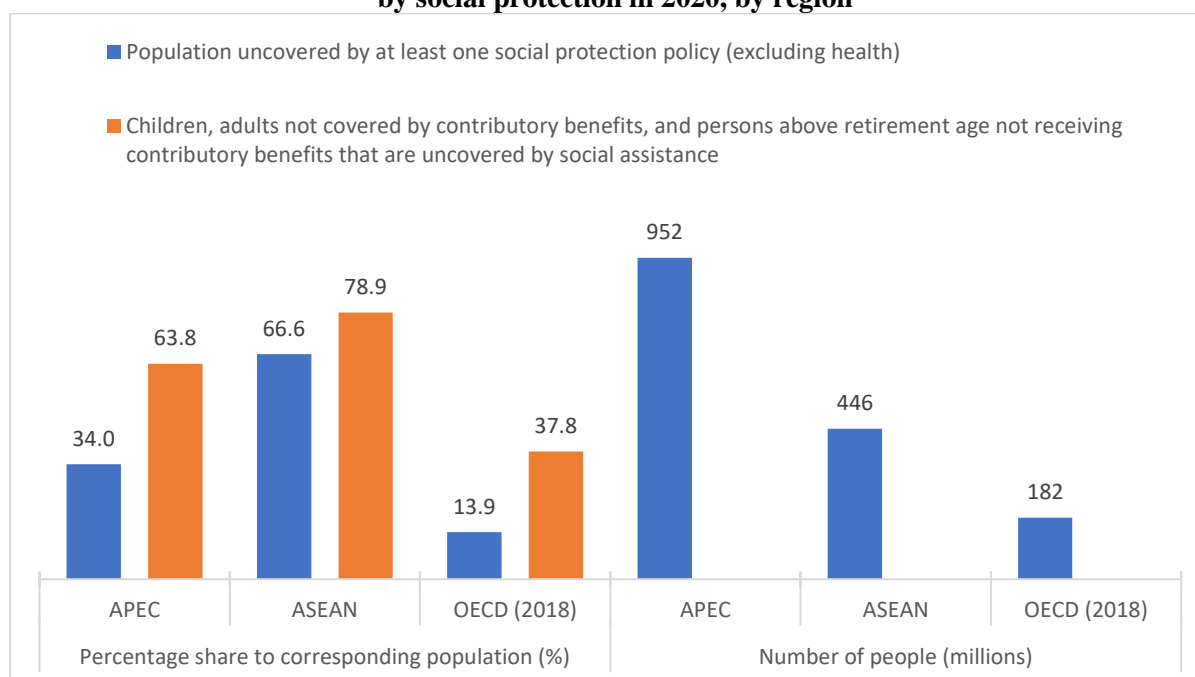


Note: Basic drinking water services refer to drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip, including queuing. Basic sanitation services refer to the use of improved facilities that are not shared with other households. Aggregates are a weighted average based on total population. Basic sanitation services data for Brunei Darussalam; Malaysia; and Chinese Taipei are unavailable.

Source: APEC PSU calculations based on data from the WHO/UNICEF, the World Bank and data directly provided by Chinese Taipei (accessed 29 May 2023).

In 2020, about 952 million people (34.0 percent of the APEC population) remained uncovered by at least one social protection policy (excluding health) (Figure 2.25). This is more than in ASEAN (446 million) and the OECD (182 million in 2018). Children, adults not covered by contributory benefits and persons above retirement age not receiving contributory benefits face particular challenges. According to the data for 2020, 63.8 percent of this group of people in APEC were left unprotected by any social assistance. In comparison, ASEAN had 78.9 percent and the OECD had 37.8 percent (2018 data). In most APEC economies, below half of this group of people were covered. APEC's low coverage ratios suggest that the region needs to redouble efforts to improve access to basic social protection, in particular for groups with untapped economic potential.

Figure 2.25 Share of population and number of people uncovered by social protection in 2020, by region



Note: Aggregates are a weighted average based on total population. For data on population uncovered by at least one social protection policy (excluding health): data for Russia are unavailable. Data for Australia; Canada; Chile; Japan; Korea; Mexico; New Zealand; and the United States are based on 2018 data. For data on children, adults not covered by contributory benefits, and persons above retirement age not receiving contributory benefits that are uncovered by social assistance: data for Papua New Guinea and Russia are unavailable. Data for Australia; Canada; Chile; Japan; Korea; Mexico; New Zealand; and the United States are based on 2018 data.

Source: APEC PSU calculations using data from the ILO Social Security Inquiry Database and the World Bank (accessed 29 May 2023).

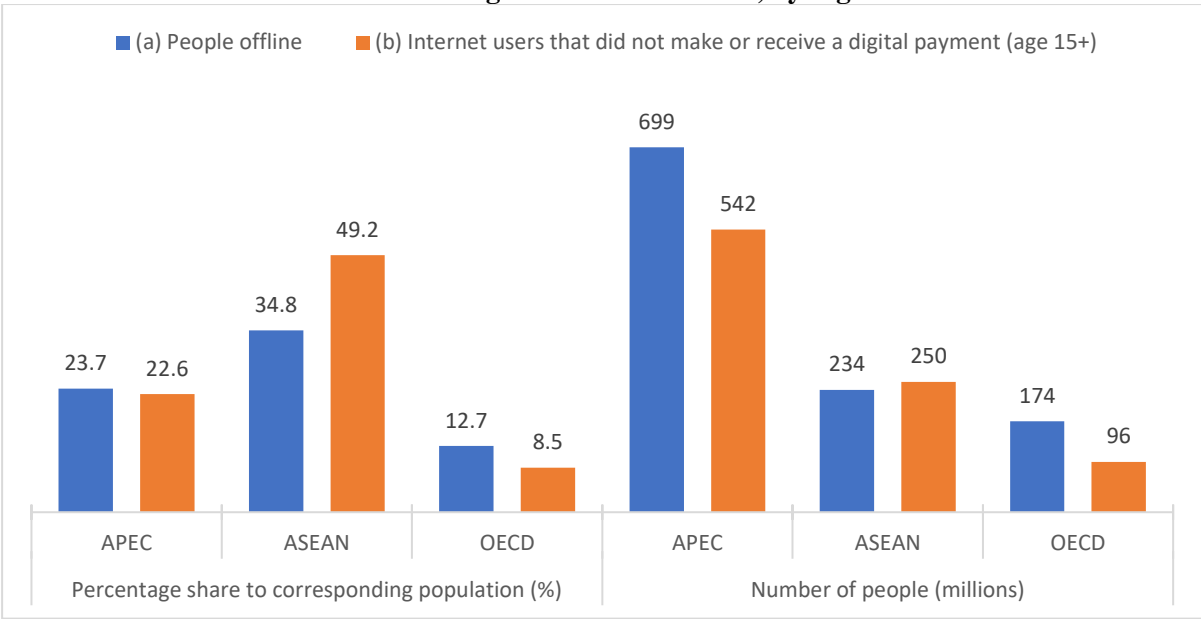
The advent of digitalisation has made access to digital infrastructure crucial. On mobile cellular subscriptions, APEC underperforms compared to ASEAN but outperforms the OECD (Figure 2.17). APEC performs better than ASEAN on fixed broadband subscriptions and active mobile broadband subscriptions but lags the OECD, suggesting that broadband provision needs to be given greater attention (Figure 2.17).

Also, many people in the APEC region do not use the internet. In 2021, approximately 699 million people (23.7 percent of the APEC population) remained offline (Figure 2.26). This is significantly larger compared to both ASEAN (234 million) and the OECD (174 million). The number of those utilising the internet to facilitate their daily tasks could also be further improved, as evidenced from the number of people who did not make or receive digital payments in 2021. For instance, 542 million people (22.6 percent of the APEC population aged

15+) did not make or receive digital payments in 2021. This is much larger compared to ASEAN (250 million) and the OECD (96 million).

Moreover, there is a gender equality element in that the male participation rate is higher relative to the female participation rate (Figure 2.20). As expounded earlier, the digital divide could have contributed to these observations. A thematic seminar on ‘Managing the Long-Term Economic Effects of Flexible Work Arrangements: APEC Practices and Recommendations’ held in February 2021 identified the need to undertake immediate and adequate investment in digital infrastructure and mass digital upskilling to seize the opportunities presented by digitalisation (Ministry of Economic Development, Russian Federation, 2021). Without the proactive involvement of governments, this digital divide would likely result in exclusion for more people.

Figure 2.26 Share of population and number of people inactive in digital activities in 2021, by region



Note: (a) Aggregates are a weighted average based on total population; (b) Aggregates are a simple average. Data for Brunei Darussalam and Papua New Guinea are unavailable. Data for Luxembourg; Mexico; and Viet Nam are based on 2017 data. Source: (a) APEC PSU calculations using data from the ITU World Telecommunication/ICT Indicators Database and World Bank (accessed 29 May 2023); (b) APEC PSU calculations based on data from the World Bank and the ILO (accessed 29 May 2023).

Meanwhile, the latest data from the WEF Global Competitiveness Report (2019) indicate room for improvement as APEC’s average score tends to underperform the OECD in areas such as road and air transport while outperforming ASEAN in these areas (Figure 2.16).

2.3.3.3 Enhancing access to quality education

Education is a game changer. One reason is because education is strongly linked to earnings. For instance, one OECD study has estimated that, on average, adults with a bachelor’s degree and a postgraduate degree earned 44 percent and 91 percent more, respectively, compared to adults with an upper secondary education.⁴⁰ A similar pattern can be seen in other parts of the world (Patrinos and Psacharopoulos, 2018; Nietzel, 2021).

⁴⁰ For more on the earnings advantages gained from education, see OECD (2019).

Given the impact of education on future earnings, it is imperative that everyone has access to it. The latest available data indicate that, in 2020, 38.4 percent of APEC's tertiary school-age population do not proceed to tertiary-level education. Additionally, a considerable gender equality gap exists. In 2020, the female tertiary gross enrolment ratio in APEC was 69.6 percent, which is higher compared to the ratio for males at 57.1 percent (Figure 2.19). This translates to a gender equality gap of 12.5 percentage points in favour of females. It is important that economies improve the tertiary gross-enrolment ratio for men.

There can be many reasons why students do not proceed to tertiary-level education. One study, citing data from one APEC economy, identifies several potential reasons (Parker, 2021). Chief among them is that students simply do not have the means to afford a four-year degree. This is followed by the need to work to help support the family. Both males and females cited these reasons similarly. But there can also be sex-asymmetric reasons. For instance, more males simply did not want to pursue tertiary education and/or did not think they needed further education for the career they wanted. Differences in programme orientation and changes in course offerings can also influence this gender dynamic (OECD, 2021).

STEM-related education has been spotlighted given its role in the digital economy. In 2020, the latest year where data are available, slightly more than a quarter of APEC's tertiary-level graduates received STEM degrees. Jones-Renaud et al. (2020) has estimated that women comprised under 35 percent of tertiary STEM degree graduates from 2000 to 2018. These observations called for economies to undertake initiatives aimed at increasing the number of female graduates with STEM-related education.

While a significant portion of APEC's school-age population had access to education, it is important that access is accompanied by quality. One way to measure the quality of education is through perception of teaching style. According to the latest data from the WEF Global Competitiveness Report (2019), respondents perceived that the teaching style in the APEC region tends to encourage creative and critical individual thinking more than memorising, as evidenced by the region's average score of 4.0 out of 7.0. Meanwhile, respondents gave the region an average score of 4.6 out of 7.0 on its performance in building the skillset of graduates (Figure 2.5). Both these scores outperform ASEAN but underperforms the OECD.

Despite progress on many fronts, APEC needs to continue enhancing access to quality education, which can take many forms and approaches. Policies can, for example, target factors directly related to education such as the amount of public funding, school curricula, school buildings and facilities, and faculty size. Policies can also take a broader approach by addressing issues related to poverty, digital infrastructure, cultural barriers and geographical restrictions, among others.

One way of enhancing access to quality education is through utilising digital solutions. This can include the use of augmented and virtual reality, AI and wireless technology (ADB, 2017; Dumaua-Cabautan et al., 2018; Marchant, 2021). For example, remote locations can be reached by dedicated platforms as long as there are reliable internet connections, a particularly significant advance especially for archipelagos where rural island communities are often separated from urban areas by sea.

Another way of enhancing access to quality education is through public-private partnerships since these can help address the education needs of underserved (often rural) areas (UNICEF and ADB, 2011; Patrinos, 2023). These partnerships can take the form of independent schools,

non-governmental organisations, faith-based providers and private schools, among others. To be successful, these partnerships would need to be well-designed and properly supported (e.g., government recognition, access to public funding, academic autonomy balanced by an accountability framework, adequate supply of capable teachers, etc.).

2.3.3.4 Improving access to the global economy

Creating opportunities means more chances to promote inclusion. Economies can create these opportunities by improving access to the global economy. Firms participating in global value chains require access to many inputs. Ensuring such access generates jobs and raises the demand for skilled workers, hence creating opportunities for inclusion (Taglioni and Winkler, 2016; Mitra et al., 2020; Yameogo and Omojolaibi, 2021). The latest data from the WEF Global Competitiveness Report (2019) suggest that respondents found APEC to be a region where it is relatively easy to find skilled employees (Figure 2.5), more so than ASEAN and the OECD. APEC is also in par with ASEAN and the OECD on ease of hiring foreign labour (Figure 2.5).

While APEC appears to be well-positioned in this respect, economies could still act to improve access to skilled labour by strengthening ways for people to acquire skills. This could be through vocational or in-house training. On vocational training, respondents gave APEC an average score that outperforms ASEAN and is on par with the OECD in 2019. On in-house training such as workshops for staff, respondents gave APEC an average score that is on par with the OECD (Figure 2.5).

Attracting FDI and enhancing trade are some of the ways to tap into the global economy. In 2020, the all-sector FDI RRI score suggests a policy environment that is relatively supportive of FDI (Figure 2.4). However, when disaggregated by sector groupings, the analysis shows that the FDI environment for the primary and tertiary sectors are more restrictive than that for the secondary sector. The main contributors to the restrictive FDI policy environment in the former sectors are equity restrictions, and, in the latter sector, screening and approval requirements. Specifically on services trade, APEC's average all-sector STRI score in 2022 improved from 2021 (Figure 2.2). However, the score remains above the pre-pandemic level, reflecting the need to strengthen efforts to bring the level of restrictions back to the pre-pandemic 2019 level and look at overcoming restrictions beyond that.

2.3.3.5 Supporting upgrading efforts

As previously mentioned, improving access to the global economy can create opportunities. However, these opportunities have to be properly capitalised, and economies can help firms to do so by supporting their upgrading efforts.

One way that economies can support firms is by improving access to financial resources. These resources are important for firms to purchase equipment, employ skilled labour and connect with foreign markets. Investments and bank loans are among the most common types of financial resources. But accessing these can be difficult for MSMEs because of barriers such as poor financial literacy (Yoshino and Taaghizadeh-Hesary, 2018).

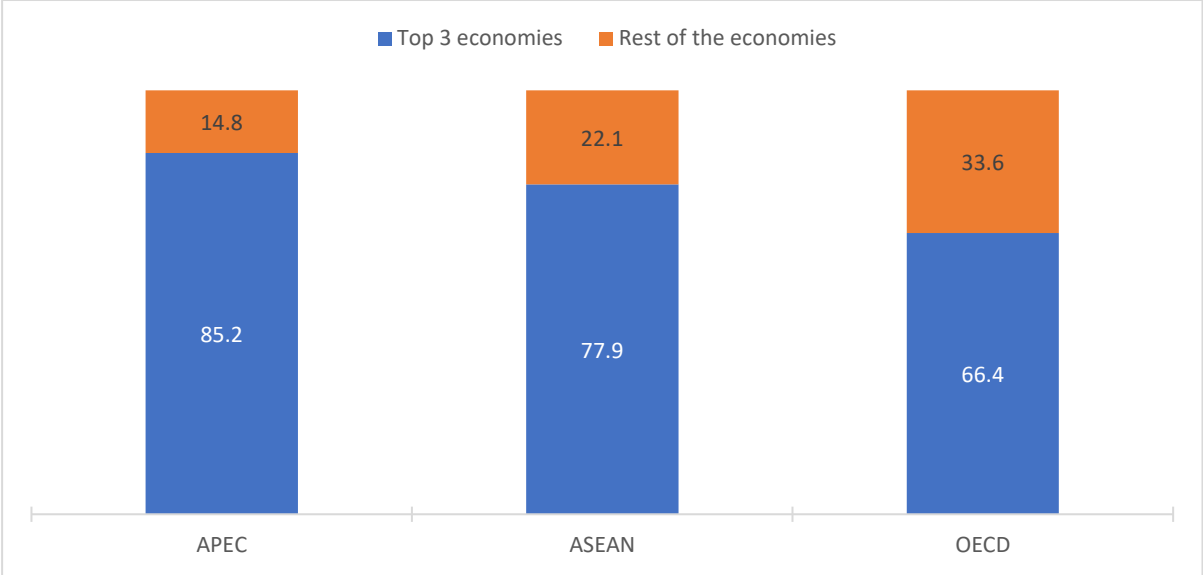
Despite the difficulties faced by MSMEs, the latest data from the WEF Global Competitiveness Report show respondents generally perceiving APEC as a region where MSMEs have better access to financial resources compared to ASEAN and the OECD (Figure 2.10). The rise of fintech in the region could have had an impact on this favourable perception. Fintech has opened

up the possibility of alternative ways for MSMEs and those without a formal credit history to secure funds and have their creditworthiness assessed (Wirjo, Calizo and Balbontin, 2022). Indeed, a workshop on ‘Crowdfunding: An Alternative Economic Tool to Promote Innovation in This Digital Era for Inclusive Growth’ has looked into the fundamentals and different models of crowdfunding, and provided opportunities for APEC regulators to share their experiences in developing their respective crowdfunding regimes (EC 04 2019A). Nevertheless, regulating fintech could be challenging. For example, the digital nature of fintech means that multiple jurisdictions could be involved, and there may also be data gaps resulting from unaligned reporting requirements (FSB, 2022).

Economies can also help support firms’ upgrading efforts by improving access to technology. Technology is a key component determining the competitiveness of firms. But ensuring inclusive access is a challenge because of resource asymmetry. Firms with less human capital and financial resources are likely to face difficulties developing and accessing new technologies.

Governments can support the R&D activities of firms through grants and other incentives. In 2020, the latest year with available data, average R&D expenditure in the APEC region was 2.7 percent of GDP, which amounted to USD 1.4 trillion (constant 2015 prices). In percentage terms, APEC’s R&D expenditure is higher than ASEAN’s (0.8 percent) but lower than the OECD’s (2.8 percent). However, R&D expenditure is concentrated in only three APEC economies. Collectively, these three economies contributed 85.2 percent to APEC’s total R&D expenditure (Figure 2.27). This is larger compared to the share accounted by the three highest spending economies in ASEAN (77.9 percent) and the OECD (66.4 percent).

Figure 2.27 Percentage share of the top 3 economies to total R&D expenditure in 2020 (%)



Note: Aggregates are weighted averages based on real GDP (2015=100). Data for Brunei Darussalam; Cambodia; Costa Rica; Lao PDR; Papua New Guinea; and the Philippines are unavailable. Data for Australia; Chile; New Zealand; Singapore; Switzerland; the United Kingdom; and Viet Nam are based on 2019 data. Source: APEC PSU calculations based on data from UNESCO, StatsAPEC and the World Bank (accessed 29 May 2023).

Governments can also support firms’ ability to access technology through other means. Participation in global value chains, for example, creates opportunities for technology diffusion (Taglioni and Winkler, 2016). Indeed, foreign linkages have been empirically observed to inspire many types of innovation activities, technology transfers among firms, and technology spillovers (within the industry and vertically) (Jordaan, 2017; Quimba and Calizo, 2019;

Fujimori et al., 2020). For example, multinational corporations, in building local facilities and conducting capacity building, help to also improve the local industry. Recognising the importance of strengthening support for these avenues, an APEC workshop on ‘Catalyzing the Growth of Inclusive and Sustainable Start-up Ecosystems’ was held in September 2021. The workshop considered the overall impact of start-up ecosystems and identified key policies to promote inclusive and sustainable ecosystem growth (Goodacre, 2022).

It should also be noted that access to FDI and trade leads to a virtuous cycle. Economies are able to gain technological know-how and enhance their labour productivity, which in turn could lead to more FDI and trade. Perhaps as a measure of the region’s success in tapping into the global economy and supporting upgrading efforts, APEC labour productivity in 2022 was higher than the baselines both during the pandemic and the pre-pandemic period (see page 32). Moreover, the gap between the most productive and the least productive APEC economy has narrowed. In 2022, the labour productivity gap reached more than 166,000, lower than the gap in 2021 (approximately 170,000). Despite this progress, the 2022 labour productivity gap remains wider than the pre-pandemic level (around 156,000 in 2019). This gap could be indicative that some economies are facing challenges in capitalising on the opportunities created by improved access to the global economy.

2.3.4 Pillar #4: Harnessing innovation, new technology and skills development to boost productivity and digitalisation

Boosting productivity and digitalisation are beneficial to achieving many policy objectives. As previously discussed, highly productive firms compete and participate better in global value chains, while digitally enabled firms survived better during the pandemic. These observations imply that productivity and digitalisation are tied to achieving policy objectives such as promoting inclusion (pillar #3) and boosting business recovery and resilience (pillar #2).

Harnessing innovation and maximising the use of new technologies are some of the ways to boost productivity and digitalisation. Among the technologies, special recognition could perhaps be given to those contributing to the Fourth Industrial Revolution (4IR) as these technologies are driving the advancements in many fields (Wang et al., 2022). For example, automating a greenhouse can boost agricultural productivity whereas smart factories can produce goods more efficiently.

Many factors are needed to better harness technologies. These include a predictable regulatory environment, skilled human capital, adequate innovation capability and sufficient digitalisation. This section explores APEC’s progress on pillar #4 across four themes: (1) creating a predictable regulatory environment; (2) enhancing human capital development; (3) boosting innovation and digitalisation; and (4) harnessing environment-friendly and sustainable technologies.

2.3.4.1 Creating a predictable regulatory environment

A predictable regulatory environment is important for boosting innovation and digitalisation. Specifically, on fintech, APEC held a workshop in September 2022 focused on how to build an enabling environment for fintech (Ministry of Business, Innovation and Employment, New Zealand, 2022a). A fintech scoping study report led by Australia was also published in March 2023 to provide an overview of policies and regulations that are foundational and enabling to the growth of the sector (APEC, 2023). Furthermore, a report led by Russia was published in March 2021 to highlight the principles of functioning of the APEC fintech regulatory sandboxes

and the impact of sandboxes' piloting on the market (APEC, 2021e). On competition policies, the APEC Competition Policy and Law Group has created a database to gather information about competition policies and laws in the APEC region so as to narrow the information gap among economies.⁴¹ A two-day workshop was also held in September 2021 to examine approaches by APEC economies towards competition and regulatory issues arising from the digital economy (CPLG 01 2020A) (Ministry of Business, Innovation and Employment, New Zealand, 2022b).

In many economies, FDI is a source of innovation and new technologies. This means that policies affecting the FDI policy environment could determine the success of economies in attracting the relevant innovative activities. The all-sector FDI RRI score for APEC in 2020 shows a policy environment leaning toward openness (Figure 2.4). A comparison between the level in 2020 and 2019 (pre-pandemic) also shows a movement toward a less restrictive policy environment. Relative to its peers, APEC's all-sector FDI RRI score is less restrictive than ASEAN but more restrictive than the OECD, suggesting that more could be done to improve the competitiveness of the region in attracting FDI.

Furthermore, while APEC's FDI policy environment is generally open, variations can be seen across sector groupings. The primary sector had the most restrictive policy environment, scoring 0.245, followed by the tertiary sector with a score of 0.214. Equity restrictions were these sectors' most prominent category contributing to the restrictiveness of the FDI policy environment, representing 64.4 percent (primary) and 60.5 percent (tertiary) of the overall score. Meanwhile, the secondary sector in the APEC region had a relatively less restrictive FDI policy environment, scoring 0.082. Screening and approval measures were the most prominent contributor to the overall FDI policy environment in the secondary sector (38.7 percent of the overall score).

The regulatory environment would also need to be supportive of cross-border services trade since businesses and people wishing to take advantage of innovation and new technologies may need access to services outside their own borders. While it is encouraging that APEC's average all-sector STRI score improved in 2022 compared to the 2021 score, it has yet to recover to the pre-pandemic level (Figure 2.2). A review of certain policies could be helpful in moving the region's regulatory policy environment in the right direction. Of significance in this regard are restrictions on foreign entry, which accounted for 51.2 percent of the all-sector average. In fact, such restrictions were the most prominent type in the case of 18 sectors, taking a share of the overall score ranging from 31.2 percent (architecture) to 78.5 percent (broadcasting).

Attention should also be paid to the fact that some cross-border services are delivered digitally. This means that the regulatory environment should be supportive of digital trade/e-commerce across borders. In 2022, the overall Digital STRI score in APEC reached 0.179, which is more restrictive compared to 2021 (Figure 2.3). Restrictions related to infrastructure and connectivity had the largest impact on the overall Digital STRI score in 2022, contributing about 56.6 percent. This is followed by other barriers affecting trade in digitally enabled services (21.1 percent). Relooking these restrictions can help build a more supportive policy environment for digital services.

⁴¹ For more on the APEC Competition Policy & Law Database, visit: <https://www.apeccp.org.tw/index.do>.

2.3.4.2 Enhancing human capital development

Being able to access the right human capital is critical to harnessing new technologies, and quality education is an important element of human capital development. One way of measuring the success of economies in providing education is through the extent of tertiary education in the region. The data show that the APEC region has good access to tertiary-level education, with a majority of students proceeding to that level (Figure 2.19, see also discussion on page 53). Still, there remains a substantial percentage (38.4 percent) that did not go on to tertiary-level studies, a gap that could be addressed through policy. In terms of quality of education, arguably as important as access, APEC also performs well in terms of perceptions of the teaching of critical thinking in the region (Figure 2.5, see also discussion on page 53).

STEM-related education plays a critical role in developing the right skills to support innovation and digitalisation. However, in 2020, only 28.2 percent of tertiary-level graduates in APEC received STEM degrees. Statistics, information security, epidemiology and computer science are among the fastest growing fields (Adecco, 2022).

While increasing the number of STEM degree graduates is important, there is a decided benefit to STEM degrees having a multidisciplinary curriculum that also includes non-STEM subjects. For example, in developing AI-augmented programs for identifying cash-transfer beneficiaries, it would be helpful, perhaps even necessary, to be well-versed in not just technical STEM subjects but also non-STEM subjects such as social science, law and ethics.

Another source of human capital would be foreign labour. Respondents to the WEF Global Competitiveness Report perceived that it is relatively easy to hire foreign labour in the APEC region, scoring it 4.1 out of 7.0 in 2019 (Figure 2.8), which is on par with ASEAN and the OECD.

2.3.4.3 Boosting innovation and digitalisation

Economies could also promote innovation and adoption of new technologies in various other ways. One is to encourage R&D activities through innovation grants and incentives. If carried out successfully, R&D could lead to the development of new products by firms, potentially increasing its valuation. For example, OpenAI's ChatGPT, an AI chatbot, helped to more than double the company's valuation, from USD 14 billion in 2021 to around USD 29 billion just a few months after ChatGPT was launched in November 2022 (Rosen, 2023). In 2020, R&D expenditure in the APEC region averaged 2.7 percent of GDP or about USD 1.4 trillion (constant 2015 prices), which is higher than ASEAN (0.8 percent) but lower than the OECD (2.8 percent).

Two is to improve access to digital infrastructure, which is a key ingredient of any digitalisation effort. As previously mentioned, approximately 2.3 billion people (76.3 percent of the APEC population) had access to the internet in 2021. Fixed broadband subscriptions in the region were 30 per 100 inhabitants in 2021, while mobile cellular subscriptions were 127 per 100 inhabitants (Figure 2.17). Across all these indicators, APEC sits between ASEAN and the OECD, indicating that there is room for improvement.

Access to digital infrastructure is one thing but being able to use it to improve daily life is another. In the area of digital payment, for example, the data show that about 542 million people (22.6 percent of APEC's population aged 15+) did not make or receive digital payments in 2021

(Figure 2.26). This could be indicative of the presence of the digital divide, which calls for governments to complement efforts to enhance digital infrastructure with initiatives aimed at boosting digital literacy, for instance.

Access to financial resources is another area that economies could look into. Without the necessary capital, it would be challenging to upgrade existing processes or purchase new equipment. Specifically on access to venture capital, respondents gave the APEC region a score of 3.9 out of 7.0, which could reflect that the situation could be improved despite APEC outperforming its peers (Figure 2.10).

Another way to strengthen innovation capability is to encourage workforce diversity, promote multi-stakeholder collaboration and ensure better IP protection. According to the latest data from the WEF Global Competitiveness Report (2019), APEC scored well in all three areas, that is, respectively 4.9, 4.4 and 4.9 out of 7.0 (Figure 2.13; see page 34 for a discussion on how APEC compares with ASEAN and the OECD on these indicators).

One way of inferring the success of economies in promoting innovation and adoption of new technologies is through their labour productivity. Labour productivity per person employed in APEC has been trending higher: 55,856.40 international dollars (2019), 58,865.10 (2021), 60,024.90 (2022). This is suggestive of the deployment of new technologies and processes. The use of chatbots, for example, has enabled businesses and workers to handle more enquiries per unit time. And AI-guided cranes, aquadrones and sensors could help ports automate repetitive tasks, hence improving the productivity of port personnel (Wirjo and Calizo, 2022).

2.3.4.4 Harnessing environment-friendly and sustainable technologies

Environmental challenges, such as climate change and uncertain energy security (APEC PSU, 2021; APEC, 2022a), are among the world's foremost challenges. For example, rising temperatures caused by global warming will elevate sea levels, inundating coastal areas. Specifically in the context of APEC, this could lead to the displacement of around 167 million people, with some economies being more negatively affected than others (Calizo, 2022). APEC PSU (2021) estimates that potential losses caused by climate change and global warming could reach as high as 18.3 percent of GDP by 2050.

Mitigating these losses necessitates that economies begin to harness various technologies aimed at facilitating transitions to the green economy. 4IR technologies such as sensors, for example, could help in better measuring carbon footprints, which in turn could lead to more efficient emissions control systems. Meanwhile, access to renewable energy technologies as well as other cleaner technologies (e.g., nuclear energy, green hydrogen) could gradually reduce dependence on fossil fuels.

Accessing these technologies, however, may not be easy. Fichter and Clausen (2021) indicate that environmental technologies tend to be found in niche markets, and their average diffusion rates was only around 21.7 percent. More specifically, technologies for biogas plants, large- and small-scale hydropower, and onshore wind power had higher diffusion rates (ranging between 32 percent and 80 percent), while for technologies related to solar thermal power plants, geothermal and hydrothermal cooling, and deep geothermal energy, diffusion rates were generally less than 0.1 percent. Such variations could be reflective of the complexity of technological diffusion, possibly being influenced by factors such as IPR, trade barriers and access to FDI, some of which have been discussed above. It is critical that APEC economies

remain vigilant of the role of policies in affecting technology diffusion and to respond accordingly to speed up the transition by, for example, facilitating the trade in environmental goods and services, such as through liberalizing non-tariff measures (Kuriyama et al., 2023).

There are several indicators that could be used to infer the APEC region's success in pursuing the transition to a green economy (Figure 2.18). From the perspective of carbon productivity (production-based measured as USD per kg of CO₂ emissions), APEC's value of 3.9 in 2021 is noticeably lower compared to both ASEAN (5.6 in 2020) and the OECD (6.4 in 2021), suggesting that APEC is less efficient and less 'green' compared to its peers (Figure 2.22). In 2021, APEC's share of primary energy derived from renewable sources reached 12.4 percent, lower than the OECD (15.4 percent) but higher than ASEAN (9.8 percent).⁴² Meanwhile, CO₂ damage in APEC is an estimated 2.0 percent of GNI in 2021, higher than the OECD (0.9 percent) but lower than ASEAN (2.6 percent).

⁴² Renewable energy sources include hydropower, solar, wind, geothermal, bioenergy, wave, and tidal. This does not include traditional biofuels.

3. REVIEW OF PROGRESS MADE BY INDIVIDUAL ECONOMIES

3.1 OVERVIEW

Twenty economies provided progress updates on their Enhanced APEC Agenda for Structural Reform (EAASR) key initiatives related actions. Sixteen economies provided full updates, that is, they provided progress information on all the ‘key initiatives’ reflected in the 2022 IAP report and subsequent revisions. They were Australia; Canada; Chile; China; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; New Zealand; Peru; the Philippines; Singapore; Chinese Taipei; Thailand; and Viet Nam. Partial updates were provided by Brunei Darussalam; Papua New Guinea; Russia; and the United States.

Collectively, updates were provided for 136 key initiatives, or 96 percent of the 141 key initiatives reflected in the 2022 IAP report and subsequent revisions. Of the updates, 44 percent pertain to pillar #1 (creating an enabling environment for open, transparent and competitive markets) while 41 percent pertain to pillar #2 (boosting business recovery and resilience against future shocks), 53 percent pertain to pillar #3 (ensuring that all groups in society have equal access to opportunities for more inclusive, sustainable growth, and greater well-being) while 51 percent pertain to pillar #4 (harnessing innovation, new technology and skills development to boost productivity and digitalisation). It should be noted that many of the key initiatives are multi-pillar in nature, that is, they have been identified by economies as contributing to more than one pillar.

In terms of the focus of the reforms or policies, emphasis continues to be placed on core structural reforms in areas constituting the main work of the Economic Committee, that is, competition policy and law; strengthening economic and legal infrastructure; ease of doing business; regulatory reform; public sector governance; and corporate law and governance. Close to 70 percent of the key initiatives address these issues. Yet, economies are increasingly recognising the importance of areas such as supporting policies⁴³ and supplementary structural reforms⁴⁴, as reflected by 29 percent and 51 percent of the key initiatives, respectively. The key initiatives identified by economies are diverse and have wide-ranging objectives (Table 3.1).

Table 3.1 Examples of objectives identified by economies in their key initiatives

Pillar	Examples of objectives
1	<ul style="list-style-type: none"> ▪ Requiring agencies to evaluate laws/regulations on a regular basis ▪ Establishing online platforms to provide public services digitally ▪ Promoting competition by giving people greater access and control of their data ▪ Strengthening economic partnerships
2	<ul style="list-style-type: none"> ▪ Ensuring the reliability and resilience of supply chains through infrastructure investments ▪ Instituting a debt management strategy for economic recovery and resilience against future shocks ▪ Strengthening health and welfare services at the local government level ▪ Promoting smart use of energy in different sectors

⁴³ Supporting policies are policies required to advance government objectives but that generally do not involve changes in laws or institutions. They often (but not always) involve government expenditures (e.g., programs, grants, incentives). When deployed along with core and supplementary structural reforms, they can be part of an integrated package designed to promote inclusive growth or attain other broad policy goals.

⁴⁴ Supplementary structural reforms can range from macroeconomic policy to a variety of changes to laws, regulations and institutions that directly or indirectly improve the functioning of markets, but do not fall under the Economic Committee’s core structural reform areas. For more details, see: <https://www.apec.org/-/media/Files/Groups/EC/Structural-Reforms-for-Inclusive-Growth---Three-Approaches.docx?la=en&hash=BD201A724890FAADE32D3A9A0E5999A8A6F51C10>.

3	<ul style="list-style-type: none"> ▪ Improving the rollout of broadband projects with a focus on rural and remote communities ▪ Launching special employment programmes to enhance the employability of various disadvantaged groups ▪ Increasing venture capital funding to firms owned by under-represented groups ▪ Supporting high-quality early learning and affordable childcare
4	<ul style="list-style-type: none"> ▪ Boosting the accessibility and deployment of technologies such as clean energy and AI ▪ Supporting the commercialisation of transformative projects ▪ Conducting research projects to increase readiness in issuing central bank digital currencies (CBDCs) ▪ Providing firms with support for technology adoption.

Source: APEC PSU compilation based on economies’ IAP submissions.

3.1.1. Key findings from economies’ mid-term review submissions

Deeper reading of the EAASR mid-term review (MTR) submissions shows that **many economies have made progress in advancing their key initiatives**. Pertaining to efforts to develop laws/regulations, economies have solicited views from relevant stakeholders and are advancing draft laws (including amendments to existing laws) through domestic processes. Where laws/regulations have been enacted and programmes have been launched, economies are at varying stages of implementation: allocating and disbursing funds, collaborating with different groups to organise an array of activities, raising awareness about the programmes, providing subsidies to promote uptake and taking a phased approach by rolling out to certain regions/sectors first. Where laws/regulations and programmes have been in place for some time, economies are assessing implementation by setting up committees and undertaking surveys, and, based on the outcomes of their reviews, making the necessary adjustments, including formulating roadmaps, revising templates and introducing new features to platforms. Some have established governance structures (e.g., councils or boards) and instituted processes (e.g., regular reporting) to improve accountability, transparency and integrity in decision making.

Economies made use of both qualitative and quantitative indicators to monitor progress.

In some cases, such as when enacting laws/regulations or when programmes are still in the early stages of implementation, it is challenging to use quantitative indicators for progress monitoring – although it would be good practice to begin considering the quantitative indicators that could be used even as programmes are being rolled out, as has been done by some economies. Quantitative indicators can come in handy in many instances. Where funding has been allocated (or enhanced over time), for example, quantitative indicators could be used to determine the total available funding and the amount already disbursed at any point in time. Such indicators could also be used to determine the profile of firms and individuals accessing the funds available through a programme, and adjustments could be made in a timely manner where it could be shown that the funds were not reaching the intended firms and individuals. Quantitative indicators could also be used to define abstract terms such as ‘quality’ and ‘awareness’ and provide more clarity on what needs to be adjusted.

Related to the use of quantitative indicators is the importance of identifying the baseline against which the latest data and information could be compared.

A baseline enables economies to track implementation over time and correct course if necessary. For example, comparing the uptake of a programme in 2023 with its uptake in 2021 and 2022 would allow economies to determine if uptake had increased, decreased, or remained stagnant. Likewise, identifying a baseline year for exports or income (in addition to stating the latest values for them) would enable economies to determine rate of increase over time.

The broad and specific quantitative indicators used by economies have their respective strengths and limitations. Specific indicators enable better tracking of a particular key initiative (or even a specific activity within the key initiative) and provide the basis for tweaking the initiative or activity. Yet, specific indicators are unlikely to inform on broader implications at the economy level. This is where broad indicators (headline numbers) could add value. Certainly, looking only at broad indicators comes with its own limitations such as attribution issues, and time lag between key initiatives and intended outcome. Where possible, economies could use both broad and specific indicators in monitoring progress of a key initiative as they complement one another. Although data collection and processing could be costly, there is merit to having indicators that are updated regularly to ensure that they reflect as closely as possible the situation on the ground; the data could help economies develop more appropriate responses and finetune policies. The increasing availability of alternative data sources could be leveraged by economies to reduce the cost of data collection and, at the same time, increase the number of data points to base their decisions.

Many economies readily share the lessons learnt from implementing these key initiatives. **One important lesson is the value of staying the course.** Some key initiatives identified by economies are major, complex schemes spanning years and involve many pieces falling into place. Implementing them may require changing mindsets and engaging with multiple stakeholders, each with their own interests. There are also situations when systems are operational but the number of users remained low for various reasons (e.g., nature of service, awareness, trust). Staying the course can also involve going beyond the initial scope of a key initiative. One economy shared about developing a strategy to strengthen financial education among the public to supplement its key initiative on regulating fintech. Overall, dedication, enthusiasm and perseverance are key attributes for economies to keep in mind.

Another important lesson is **the need to respond and adapt to challenges.** The submissions by various economies have no lack of examples of issues arising during implementation and how they had to make adjustments to address them, although it is also worth mentioning that reporting on implementation gaps and challenges could be improved. During the COVID-19 pandemic, capacity constraints led to economies having to reprioritise their investments to ensure that spending is responsible, affordable and sustainable. One economy shared about having to adjust and enhance programmes to raise employability when the labour market faced significant pressure during the pandemic. Where the intended target population is not familiar with digital services, economies have to raise awareness, change mindsets and offer non-digital options to complement digital ones to ensure that the benefits reach them. Related to this is the recognition that there is no one-size-fits-all approach. One economy mentioned applying an adaptive management approach, having solid feedback loops and responding to behavioural insights when implementing the work programme. Another economy mentioned that each community enterprise needs different forms of support depending on its background and experiences, and development courses should be tailored accordingly. When it comes to ensuring that the reforms are aligned with best practices around the world, one economy shared that it actively conducts international benchmarking and makes the necessary adjustments to stay in the right direction.

Critical to being able to respond and adapt to challenges is undertaking community engagement. As one economy aptly puts it, knowledge of the common pain points faced by the private sector helps the government to identify the right policy interventions. Another economy shared about the need to build understanding of the needs of those served by a programme, and to involve them in improving the benefits, services and programmes. To that end, the economy

gathered feedback and tested new approaches to ensure that systems are designed with them in mind. Yet another economy conducted satisfaction surveys and used them to optimise its platform interface. One economy conducted early and ongoing engagement to understand community values, concerns and aspirations when planning the development of certain sectors, while another economy noted that active participation from the community is essential to realising goals laid out in its plan. It is worthwhile to note that ‘community’ can include other government agencies that may be affected by the rollout of certain measures. One economy, for example, shared that the assessment template for monitoring impacts of policies under its quality of life (QoL) framework has undergone several revisions following consultation and feedback. Another economy noted the need to prioritise the involvement of people with disabilities, those living in remote areas and women as it carries out its key initiatives.

Implementing holistic approaches to overcome issues is another important lesson. One economy noted that undertaking reforms in an integrated manner is key to ensuring that the regulatory and administrative systems are ready for the digital age. Other economies have noted that cooperation and collaborations between ministries and agencies are important to implement cross-cutting laws/regulations. One approach is to establish a coordinating body comprising of representatives from different ministries and agencies to steer and oversee implementation. Efforts to involve officials at regional and local levels are also critical considering that implementation may have to be taken at these levels. In this regard, one economy shared that a common direction by the government could spur greater collaboration across agencies.

Yet another important lesson is to have a clear implementation plan. There are examples of programmes and initiatives being held back for reasons such as unclear guidelines, resource constraints and the absence of basic requirements (e.g., lack of electricity to introduce digital technology, lack of skills to implement programmes), issues that could have been minimised with the formulation of an implementation plan where potential issues could be identified and possible solutions proposed before rollout. In some cases, a successful rollout requires a phased approach to pilot/trial certain features and make the necessary adjustments before expanding the programme. Proper planning is required to ensure that the different pieces come together without one acting as a bottleneck for another.

While the APEC PSU has summarised the lessons here, there is no substitute to hearing directly from the various economies as they progress their key initiatives. The efforts by the Economic Committee to invite economies to showcase their key initiatives in moderated sessions should be continued.

3.2 SERVICES AND STRUCTURAL REFORM

The services sector is an important one in many economies. Besides being a sector in its own right, services ensure the proper functioning of global value chains as well as other sectors in the economy. Services make up more than half of GDP and total employment in many APEC economies (Wirjo, Nguyen, and Calizo, 2022). However, despite its contributions to economic growth, there remain impediments to greater services competitiveness in the region for various reasons, including regulatory gaps.

Regulatory reform is a critical element of the APEC region’s efforts to enhance its services competitiveness. Recognising this, and given that regulatory reform is a key pillar of the APEC structural reform agenda, EAASR explicitly encourages economies to nominate reform actions targeted at the services sector in their IAPs (APEC, 2021b). This section analyses the EAASR

IAPs (and subsequent updates) submitted by economies and determines if economies have included key initiatives with potentially positive implications for the services sector.

3.2.1 Services-specific key initiatives

The titles of the key initiatives submitted by economies are highly indicative of their areas of focus. And, indeed, the services sector appears in the titles of a number of the key initiatives submitted by economies. Viet Nam, for example, has a key initiative to improve the legal framework for the services sector, noting that a more efficient and innovative services sector would help reduce the cost of business activities and improve the economy's resilience to future shocks. Some of the activities that Viet Nam is looking at include reviewing regulations that may create unnecessary regulatory burden and formulating plans/strategies for key sectors such as information and communications technology (ICT), logistics and professional services. Korea, meanwhile, has a key initiative aimed at boosting the competitiveness of its services industries by proactively fostering the growth of key emerging services sectors such as healthcare, content and logistics. It plans to invest in services industry infrastructure, R&D and human capital, and intends to enact the Framework Act on Services Sector Development.

Some economies, again as indicated by the titles of the key initiatives that were submitted, have chosen to focus on specific parts of the services sector. For example, the Philippines' NEHEMIA programme for the telecommunications sector aims to decrease the number of procedures and requirements to deploy critical ICT infrastructure (e.g., additional cell towers, software and wireless technologies) and in doing so, facilitate the delivery of ICT services throughout the economy. Recognising fintech as an emerging business model, Chile's Fintech and Open Banking Bill promotes innovative financial regulation as well as competition and inclusion through an open banking system. Likewise, one of Hong Kong, China's key initiatives is to encourage the financial sector to adopt technology and to promote the provision of fair and efficient financial services. Meanwhile, the implementation of the People's Financial Institutions Act, B.E. 2562 (2019) in Thailand aims to encourage qualified community-based financial institutions (CBFIs) to register as people's financial institutions (PFIs), a legal status that would enable their clients to access safe and secure financial services.

In addition, in some cases, the services sector, while not being encoded in the title of a key initiative, has been mentioned as potential beneficiaries in the write-up. An example is New Zealand's new legislative framework introducing a consumer data right, which has as one of its aims enhancing services sector competitiveness by ensuring more open services markets, beginning with the banking sector. Another example is Canada's key initiative to make it easier to do business in the economy, which enhances the enforcement capacity of its Competition Bureau, enabling it to take actions to strengthen competition, which would apply to, among others, the telecommunications sector.

China's key initiative on promoting the market-based allocation of production factors mentioned gradually lifting restrictions on access to the financial services sector by foreign investors, while its key initiative on building a more competitive and inclusive digital economy indicated that it hopes to accelerate the digital transformation of industries such as transportation, logistics, energy and medical care. Meanwhile, Indonesia's key initiative on improving its creative economy and digital economy aims to attract FDI in the digital sector, which includes telecommunications and computer consulting services, while its key initiative on green growth and the green economy puts forward a development model that catalyses economic growth through improvements in environmental quality and identifies energy and tourism as sectors that could contribute.

Elsewhere, the Philippines' Inclusive Innovation Industrial Strategy (i3S) aims to support the growth of services industries, along with manufacturing and agriculture, by building an innovation and entrepreneurship ecosystem and removing obstacles to attract more investments. In the case of Thailand, its key initiative on developing the potential of community enterprises post-COVID-19 involved selecting an enterprise from the services sector, helping that enterprise to formulate a development plan and organising workshops to help it improve its business. Learning points and recommendations were later disseminated to other community enterprises for capacity building.

By developing competency frameworks for critical sectors including tourism, Brunei Darussalam hopes to better equip its labour force with the skills and knowledge necessary for a changing economic landscape. The United States' key initiative on promoting competition in the American economy aims to, among others, have regulations/laws on allowing customers to be able to easily move, copy or transfer their financial transactions data from one bank to another ('data portability') and on allowing individuals or third-party businesses to repair products ('right to repair'), hence making the financial and repair services sectors more competitive.

3.2.2 Non-services-specific key initiatives

Many of the key initiatives included do not explicitly mention the services sector as a focus/beneficiary. Yet, these initiatives could have positive implications for the services sector by virtue of their reform activities and actions.

3.2.2.1 Facilitating business conduct

Numerous economies have introduced reforms to facilitate business conduct, which could potentially also benefit the services sector. Good regulatory practices (GRP) stood out in this regard. Brunei Darussalam, for example, included a key initiative focused on the review and amendment of outdated laws and regulations affecting specific sectors, to foster a more open and transparent business environment. And Chile has produced the Chilean Guide for Good Regulation (through its Office of Productivity and National Entrepreneurship) to act as a reference for regulators when formulating new regulations. China, meanwhile, has launched a pilot programme on innovative ways to improve ease of doing business; the programme has identified several key tasks, including eliminating unreasonable restrictions and exploring new methods of regulation. And, Thailand's Act on Criteria of Law-Making Process and Evaluation of Laws, B.E. 2562 (2019) makes it an obligation for every agency to evaluate laws/regulations under its charge on a regular basis.

Simplifying procedures is one aspect of GRP mentioned in several economies' key initiatives. Indonesia's bureaucratic and regulatory reform aims to simplify licensing requirements by implementing a risk-based approach to licensing, while Malaysia's key initiative to reduce regulatory burdens and barriers facing starting businesses include digitalisation and automation as strategies. The introduction of the Philippine Identification System (PhilSys) would simplify transactions and reduce unnecessary processes and costs, potentially contributing to easier means of doing business in the economy. In Russia, the implementation of a regulatory guillotine is already reducing administrative burdens to businesses.

Having public consultations is yet another aspect of GRP mentioned in economies' key initiatives. In Chinese Taipei, the use of an online platform has enabled the public consultation stage of laws and regulations to be more inclusive, transparent and convenient. Likewise, Viet

Nam sought to use online public consultation tools more effectively to engage stakeholders in the policymaking process.

Enhancing competition in the market is another element indicated in the key initiatives of many economies. Papua New Guinea's Consumer Protection and Competition Reform aims to improve and modernise the related framework in the economy through workstreams such as formulating the National Competition Policy and developing the capacity of the Independent Consumer and Competition Commission. The issuance of relevant guidelines on pre-merger notification by Peru aims to create an enabling environment for open and competitive markets.

3.2.2.2 Human capital development

Initiatives to promote human capital development are important to increase the labour pool and labour productivity. In turn, this would be beneficial to businesses, including potentially those in the services sector. Workforce Australia supports human capital development for the unemployed, including via a digital platform. Individuals with complex needs, such as the long-term unemployed, receive more personalized and tailored services from employment services providers. Through its key initiative on strengthening investment in people, Japan has implemented a five-year policy package of JPY 1 trillion to invest in human capital and reskill workers in fields such as digitalisation. Malaysia, meanwhile, has provided a skills training fund for platform workers to improve their skills to gain more favourable employment. Thailand, on its part, has implemented several projects aimed at enhancing workers' skills and capabilities. Each project would usually begin with an analysis of labour demand trends conducted with the participation of multiple agencies and organisations, which would inform the development of the relevant training programme. Elsewhere, Viet Nam is promoting the implementation of science, technology, engineering, the arts and mathematics (STEAM) model in education with the goal of producing people who are adaptable to the future of work.

Many economies have also introduced initiatives to provide support to specific segments of society. For example, Hong Kong, China has launched programmes to enhance the employability of various disadvantaged groups including the elderly and middle-aged, young people and persons with disabilities by encouraging employers to hire and provide them with on-the-job training through the provision of an allowance to employers. It has also commissioned two non-governmental organisations (NGOs) to assist in implementing the Racial Diversity Employment Programme on a pilot basis to provide one-stop employment support services for ethnic minorities. After review, the implementation of the Racial Diversity Employment Programme will be regularised. Through the Women's Reemployment Centers, Korea is providing comprehensive support systems in the form of career counselling, vocational training, internships and job-matching. Elsewhere, Thailand has introduced many programmes aimed at promoting work opportunities for the elderly, enabling many participants to be employed and receive a stable income upon completion. Under its Plan of Action on Persons with Different Abilities 2020–2024, Brunei Darussalam plans to improve the quality of skills training so as to maximise the employability and marketability of persons with different abilities. The United States' key initiatives on gender equity aims to address barriers faced by women in education and the workplace, while the initiative on racial equity aims to close the gaps in wages and education experienced by the underserved and marginalised.

3.2.2.3 Enhancing MSME development and competitiveness

A significant share of businesses in most economies are micro, small and medium enterprises (MSMEs) and many are in the services sector. Key initiatives to enhance MSME development and competitiveness would therefore have positive implications on the services sector. Enhancements to the Canada Small Business Financing Programme would help small businesses in various ways, including, for example, increasing the maximum amount businesses can borrow and introducing a new line of credit product. Canada also has a range of initiatives and programmes to reduce the cost of running a business, including allowing immediate expensing of up to CAD 1.5 million of firms' eligible capital investments; providing mentorship, financial planning services and training to support certain groups of entrepreneurs; and establishing the Canada Digital Adoption Programme to help SMEs with technology adoption in the form of micro grants and advisory services.

Meanwhile, Thailand has established Business Development Service providers across the economy to provide consultation to SMEs on different areas, such as productivity improvement, loans, and quality assurance and control. In a similar vein, Papua New Guinea's new MSME Policy 2022 and MSME Medium-term Development Plan 2022–2026 endeavours to enable business incubation centres to provide various forms of support to firms, including overcoming barriers to expanding their businesses.

Specifically on support for digitalisation, Chile's Digitise your SME guides firms through their digital transformation process by offering a range of events, workshops and tools. The same can be said for Malaysia's key initiative on expanding digitalisation, which provides incentives and grants to MSMEs to adopt digital technology. Both Hong Kong, China and Viet Nam have sought to reduce the cost of resolving disputes between SMEs through the introduction of technologies such as online dispute resolution (ODR) platforms.

3.2.2.4 Innovation promotion

Firms in relevant sectors, including services, could potentially avail themselves of the support provided by government to promote innovation. One aspect is on the green economy that relevant businesses (e.g., those providing green services) may be able to access. For example, Australia's clean energy innovation has established different funds (Powering the Regions Fund, National Reconstruction Fund) to support the decarbonisation of existing industries and creation of new clean energy industries and jobs.

Economies also have key initiatives to support innovation more broadly. Singapore's Research, Innovation and Enterprise 2025 Plan aims to continue supporting firms to leverage cutting edge technologies to build new products and solutions, including via public–private partnership. The vision of New Zealand's Reform of Research Science and Innovation (Future Pathways), which is still early in the process, is to create a research, science and innovation system that supports the well-being of the population in a low emissions economy and in a thriving, protected environment.

3.2.2.5 Investing in infrastructure

Infrastructure investment could benefit the services sector. By helping to rebuild roads, bridges and rails in the economy, the United States' Infrastructure Investment and Jobs Act would strengthen services access and provision. Canada's key initiative on accelerating broadband for

everyone would provide an additional CAD 1 billion over six years to support more rapid rollout of broadband projects. This is expected to improve access to broadband internet to more communities with a focus on those in rural and remote areas, enabling them to access and provide digital services. Similarly, Japan's key initiative to undertake concentrated investment and implementation of digitalisation is expected to support deployment of digital technologies (including the 5G platform) to a wider population, hence enabling certain services to be more within reach.

3.2.2.6 Enhancing market access

Enhancing market access would be beneficial to firms, including those in the services sector. Japan noted that it led discussions on maintaining the high standards and steady implementation of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). Korea updated that it continued to participate in discussions on relevant Joint Statement Initiatives (JSIs) in the World Trade Organization (WTO), including WTO negotiations on Investment Facilitation for Development, e-commerce, Trade and Environmental Sustainability Structured Discussions (TESSD) and the Dialogue on Plastics Pollution. Korea is also advancing discussion/implementation at the regional level and has signed a Digital Partnership Agreement with Singapore to further promote digital trade.

Additionally, free trade agreements (FTAs) often act as a driving force for economies to undertake structural reforms in areas such as trade and investment barriers and competition, as indicated by Brunei Darussalam in its key initiative on improving market access and trade liberalization.

3.2.3 Food for thought: Strengthening IAP development and reporting

Analysis of the EAASR IAPs shows that economies have included key initiatives that explicitly mention the services sector in their title or in their write-up and whose activities aim to benefit the sector. However, these key initiatives are relatively fewer than those that do not explicitly mention the services sector as a focus or beneficiary.

It may be that the services sector may still benefit from the reform activities and actions associated with a key initiative, even where they are not specifically identified as a focus or beneficiary, as the discussion in this chapter has sought to highlight. Nevertheless, economies are in a better position to share if their key initiatives are indeed benefitting the services sector. To avoid second-guessing an economy's goal/objective, economies could clearly indicate if a particular key initiative would benefit the services sector and how so.

Economies might also need to note that the services sector, like other sectors, has its idiosyncrasies that would need to be taken into account when undertaking activities to ease business formation and operations, for instance. In developing the IAPs, a potentially useful approach is to take a value-chain perspective to services, where economies endeavour to understand how bottlenecks in parts of the value chain could have detrimental effects on the overall provision of and access to certain services, and based on the findings, craft appropriate responses.

Related to this are the inter-linkages that exist between certain laws and regulations, which may affect decisions to invest in an economy. As an illustration, while there are no foreign equity restrictions on operating in certain services sectors, there may be restrictions on recognition of

professional qualifications obtained overseas and/or limitations on stay by foreign staff. This calls for a holistic approach to services regulations, including better coordination among agencies, which could be better reflected (or showcased) in the IAPs.

The private sector is a critical stakeholder. They are after all the main beneficiaries, the providers, and the users of services. While it should be recognised that economies have engaged the private sector on different occasions, as reflected in the IAPs of many economies, deeper and more regular engagement could shed light on contemporary services-related issues and how economies could help overcome them. In turn, this could help in developing IAPs with more tangible impacts, particularly in services.

It is also worthwhile noting that the IAPs (and associated key initiatives) formulated by the various member economies make only limited reference to the APEC Services Competitiveness Roadmap (ASCR), perhaps indicating that more effort needs to be expended to increase awareness of the alignment between EAASR and ASCR, as attempted by one APEC policy brief (Drake-Brockman et al., 2022).

3.3 SUMMARY OF PROGRESS REVIEW BY INDIVIDUAL ECONOMIES

3.3.1 Australia

For the 2022 IAP report, Australia identified four key initiatives, associating each of the initiatives with a pillar or multiple pillars of the EAASR, as shown in Table 3.2.

Table 3.2 Australia’s EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Data and Digital Capability	■			■
2	Infrastructure Investment and Advocacy	■	■	■	
3	Workforce Australia				■
4	Clean Energy Innovation				

Note: In the 2023 update, Australia updated key initiative 1 to Data and Digital Capability, renamed key initiative 3 to Workforce Australia and replaced key initiative 4 with Clean Energy Innovation.

Australia provided updates for all key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Data and Digital capability

In its 2023-2024 Budget, the Australian government allocated AUD 2 billion to investments in digital and information communication and technology (ICT). Activities are being established and will be rolled out in the coming years, but several are now underway. They include: (1) Establishing a National Anti-Scam Centre within the Australian Competition Consumer Commission from 1 July 2023 to improve cooperation between the government and industry on scam protection and prevention; (2) Commencing public consultation on the Data and Digital Government Strategy that aims to leverage technology in the provision of public services. The final version of the strategy is targeted for release by the end of 2023; (3) Expanding the voluntary Digital ID system, including increasing the services that can be accessed using the Digital ID, introducing a Digital ID legislation in 2023, and setting up a Digital ID regulator; (4) Continued investment of AUD 88.8 million over two years in the Consumer Data Right (CDR), a scheme that gives consumers the option to share their data safely with accredited Australian businesses. The CDR, which has been rolled out in the banking sector, is expanding into the energy sector, with the non-bank lending sector to follow; and (5) Increasing the number of technology related jobs to 1.2 million by 2030, from around 934,800 as of February 2023.

Key initiative 2 – Infrastructure Investment and Advocacy

A key element of Australia’s fiscal strategy is investing in infrastructure to support economic growth and productivity. The government is investing around AUD 120 billion over 10 years starting in 2022–2023 in land transport infrastructure across Australia through its rolling infrastructure pipeline, including the infrastructure investment programme which is part of its broader strategy to reduce congestion, better connect regional areas, improve freight links, and build a stronger and more resilient Australia. The projects are at varying stages of development and delivery, and the Department on Infrastructure reports periodically to the government on the progress. Noting that the domestic infrastructure sector is experiencing market capacity constraints, the government is reprioritising its investments to ensure that infrastructure spending is responsible, affordable and sustainable.

The government has committed to an independent strategic review of the Infrastructure Investment Program being undertaken in 2023 to improve its sustainability and ensure that the government's investment is focused on delivering nationally significant land transport infrastructure projects that support long-term productivity and economic growth. The independent strategic review will also complement the review into the national partnership agreement for land transport infrastructure projects in 2023 to inform Australia's strategic infrastructure priorities, future investment decisions and how the government interacts with the States and Territories. In late 2022, the government reviewed the functions of Infrastructure Australia to ensure it had the capacity to identify infrastructure priorities, manage market capacity concerns and facilitating private sector involvement in the construction of vital infrastructure.

Australia is also committed to supporting quality infrastructure investment internationally. As co-chair of the G20 working group and a member of the OECD Taskforce on Long-term Investment, Australia noted that the G20 endorsed the Principles for Quality Infrastructure Investment in 2019. Additionally, Finance Ministers and Central Bank Governors endorsed the Compendium of Quality Infrastructure Investment Indicators and associated Guidance Note in July 2022. The International Finance Corporation (IFC) has applied the indicators to various pilot projects submitted by G20 members (including Australia) to pilot the Quality Infrastructure Investment indicators and will develop a deliverable by October 2023.

Key initiative 3 – Workforce Australia

In July 2022, Australia introduced the largest reform to employment services since 1998 known as Workforce Australia. The objective is to reduce long-term unemployment by providing employment services via a digital platform and investing in quality, tailored services for unemployed Australians. This started with an online employment services trial known as the New Employment Services Trial, which was undertaken in two regions from July 2019 to establish the effectiveness of the service. Workforce Australia also includes a new provider payment structure to encourage greater investment in disadvantaged jobseekers. Essentially, providers will receive progress fees and bonus payments for achieving employment outcomes for long-term unemployed jobseekers whose data would be managed by the Department of Employment and Workplace Relations. In August 2022, the House of Representatives Select Committee on Workforce Australia Employment Services was established to inquire into and report on matters related to Workforce Australia. The report findings will provide lessons from the recent rollout of Workforce Australia as well as recommendations to potentially guide future plans.

Key initiative 4 – Clean Energy Innovation

In 2022, Australia formally lodged an enhanced nationally determined contribution (NDC) under the Paris Agreement, which set a 43 percent emissions reduction target by 2030. This emissions reduction target as well as the net zero 2050 target were enshrined in Australia's Climate Change Act 2022. Powering Australia is the government's key strategy to create jobs, cut power bills and reduce emissions by boosting the accessibility and deployment of clean energy technologies across the economy. Along with current measures, it aims to drive the uptake of technology and innovation in existing industries, while investing in the technology and industries of the future to help meet the goals of the Paris Agreement. To date, key initiatives on clean energy innovation include: (1) the establishment of the AUD 1.9 billion Powering the Regions Fund to support the decarbonisation of existing industries and the

creation of new clean energy industries and jobs; (2) the commitment of AUD 15 billion in the October 2022–2023 Budget to establish National Reconstruction Fund, with up to AUD 3 billion for renewables and low emissions technologies; (3) the commitment of AUD 20 billion in the October 2022–2023 Budget for low-cost finance through Rewiring the Nation, and AUD 300 million to support community batteries and solar banks; (4) the commitment of AUD 2 billion in the 2023–2024 Budget for Hydrogen Headstart, a competitive hydrogen program; and (5) the commitment for funding the Capacity Investment Scheme, aiming to underwrite the development of dispatchable renewable generation and storage. To improve integrity in decision making and transparency on climate change policy and progress, the government has introduced the Annual Statement to Parliament by the Prime Minister or Minister for Climate Change and Energy on climate policy to measure progress on its emissions reduction target, with the first one being delivered at the end of 2022. Furthermore, the role of the Climate Change Authority has been expanded by the Climate Change Act 2022, giving them responsibility to provide independent, expert advice to the government on annual progress toward Australia’s emissions reduction targets.

3.3.2 Brunei Darussalam

For the 2022 IAP report, Brunei Darussalam identified 13 key initiatives, associating each of the initiatives with a pillar or multiple pillars of the EAASR, as shown in Table 3.3.

Table 3.3 Brunei Darussalam’s EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Implementation of Digital ID				■
2	National Information Hub (NIH)			■	■
3	Personal Data Protection Order for Private Sector	■			■
4	Creating Policy and Standards for Education Big Data			■	■
5	To Enhance Trade Facilitation Through Single Window	■			
6	Expand Competency Framework Development and Sectoral Manpower Planning to Address the Ever-Changing Economy and Manpower Needs				■
7	Expanding Programmes and Initiatives in Building Resilient and Sustainable Human Capital with Industry-Ready Capabilities		■	■	
8	Formulate and Review Policies to Address the Impact and Factors that Cause Poverty			■	
9	Ensuring a Comprehensive Social Security System for Persons with Different Abilities (PWDs)			■	
10	To Produce Value-driven, World-class Youth Who are Future-ready Agents of Change for Development, Rooted in Inclusivity			■	
11	Provide Business Supportive Governance Through a Relevant Regulatory Framework	■			
12	To Improve the One Village One Product (1K1P) Programme to Ensure Resilient Community		■		■
13	Improving Market Access and Trade Liberalisation	■	■	■	■

Brunei Darussalam provided updates for 11 key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Implementation of Digital ID

This project is aimed at building an ecosystem where residents of Brunei Darussalam can access government services online using a blockchain-powered digital identity (ID), with the resulting output being the launch of a mobile app called iDentiti. The Project Steering Committee is co-chaired by the Minister of Home Affairs and Minister of Transport and Infocommunications. Brunei Darussalam updated that the project is still in the planning/implementation stage, and that funding for the project has switched from the previously planned public–private partnership model to an outright purchase approach. Brunei Darussalam also noted that future plans include onboarding the private sector as well as further including relevant common data into the digital ID for the benefit of e-Know Your Customer (e-KYC).

Key initiative 2 – National Information Hub (NIH)

The NIH, launched in 2020, is a repository of common data such as address, identity card numbers and names that can be shared among government agencies and selected organisations, subject to certain requirements and agreements among the parties. As of February 2023, 10 agencies are participating as data providers, and 11 systems have utilised the NIH data. Brunei Darussalam shared that ongoing work to enhance the NIH includes integrating the databases of various government agencies. There are also ongoing discussions on potential data integration

between government agencies and other organisations, such as financial institutions. Future plans include adding application programming interface (API) features so that the repository can be more widely used and equipping the platform with data analysis capabilities.

Key initiative 3 – Personal Data Protection Order (PDPO) for Private Sector

Brunei Darussalam is working toward enacting the PDPO for private sector organisations in 2023. To that end, efforts to develop subsidiary legislation, advisory guidelines and guidance documents are now underway. Stakeholder consultations and outreach activities have also begun. This includes gathering feedback on the types of guidance needed by private sector organisations to prepare for the new law; measuring the awareness and knowledge of personal data protection principles among private sector organisations (the survey has reached 5 percent of the target audience); and raising awareness of ASEAN standards on data management and best practices for sharing personal data across borders. Brunei Darussalam shared that the feedback received has been pivotal in shaping policy on the new law and developing outreach and awareness activities to familiarise firms with the new law and ensure compliance. Future plans to encourage accountability and compliance include building the competencies of its Data Protection Officers and introducing certification schemes for the private sector.

Key initiative 4 – Creating Policy and Standards for Education Big Data

Education Big Data refers to data on students, teachers and stakeholders as well as data on the resources held in schools, institutions and the Ministry of Education. Through data analytics and machine learning, this data could be used to track students at risk of dropping out of school and to measure competencies.

An action plan has been laid out for two main activities: (1) development and application of data quality measures and standards; and (2) development of data policies. A stocktake of existing data standards and procedures, as well as economy-wide and international data policies, was completed in June 2022. Further progress has since been seen, including efforts underway to identify variables for the relevant stakeholders and the project scope; ensure data completeness, validity, accuracy and consistency; and develop a data dictionary that contains variable definitions. On the second activity, Brunei Darussalam shared that one of its challenges has been the lack of human resources and capacity within the Ministry of Education. Nevertheless, it plans to establish a taskforce to review and develop relevant policies under this key initiative.

Key initiative 5 – To Enhance Trade Facilitation Through Single Window

Customs transit formalities, such as transit declarations, payment of service charges and customs transit processes, can now be carried out online with the successful implementation of a transit module within the Brunei Darussalam National Single Window in July 2022. Stakeholders were given a one-month transition period, and full implementation has been in place since August 2022. The measure has increased custom revenue collections, reduced clearance times, improved transparency and governance while reducing corruption, and aligned Brunei Darussalam's customs procedures with recommended best practices in ASEAN. Brunei Darussalam shared some lessons from the implementation, such as the need for strong coordination management among stakeholders, especially those affected by the changes, and that the one-month transition period might not have been sufficient.

Key initiative 6 – Expand Competency Framework Development and Sectoral Manpower Planning to Address the Ever-Changing Economy and Manpower Needs

Brunei Darussalam aims to develop competency frameworks that list the technical and soft skills needed for critical occupations in five sectors. The sectors are energy; construction; hospitality and tourism; transportation and logistics (previously known as marine); and ICT. These frameworks will form the basis for the development of training programmes aimed at equipping the local workforce with the right skills to meet industry's needs. Brunei Darussalam updated that since the EAASR IAP submission, it has developed thirteen competency frameworks for the energy sector, two for construction, three for transportation and logistics, six for ICT, and five for hospitality and tourism. Brunei Darussalam seeks to streamline the process of developing and approving the remaining frameworks (the nine to twelve months it takes to complete the entire process is deemed too long).

Training programmes have been established to help workers learn new skills and gain employment. The programmes ranged from language courses for licensed tourist guides, to professional certifications for the construction and energy sectors. The iSkill Programme, introduced to bridge technical skills gap in the energy sector, has trained 343 workers in 2021 and another 271 in 2022, according to figures as of January 2023. More training programmes to help workers upgrade their skills will be developed, while more focus can be placed on lower skilled jobs to cater to vulnerable groups and those with lower qualifications or the unemployed.

Key initiative 7 – Expanding Programmes and Initiatives in Building Resilient and Sustainable Human Capital with Industry-Ready Capabilities

Brunei Darussalam seeks to inculcate a culture of lifelong learning among its workforce and develop a pool of local professionals for various sectors. To achieve that, the Secretariat of the Manpower Planning Employment Council runs short training courses in 14 identified focus areas. Existing programmes include SkillsPlus, which is open to those aged 16–55 (previously 16–45) and offers 204 courses aimed at jobseekers and employees in the private sector (including freelance workers); SPIN in Accountancy, which has enrolled three batches for training to attain Association of Chartered Certified Accountants (ACCA), Foundation in Accountancy (FIA) and Certified Accounting Technician (CAT) qualifications; and *Program Jati Diri*, a three-month training programme to nurture and strengthen resilience, integrity, discipline and spirituality. Brunei Darussalam plans to introduce more courses as well as review and update existing ones to ensure they remain relevant in a fast-changing environment. More marketing and social media initiatives are also in the works to increase participation in the programmes.

At the same time, JobCentre Brunei (JCB), an online careers portal by the government, is being expanded to intensify the recruitment of the local workforce. JCB has extended its operations from five days a week to six days, opened its first satellite office in the Belait district in the fourth quarter of 2022, and conducted 114 outreach programmes in 2022 in various institutions and counties. It is also working with grassroot leaders such as village heads to disseminate information on the job opportunities and services offered by JCB. To accelerate such efforts, JCB plans to digitise some of its outreach and services, such as holding virtual engagements with companies and conducting virtual courses for jobseekers.

Key initiative 8 – Formulate and Review Policies to Address the Impact and Factors that Cause Poverty

A major feature of Brunei Darussalam's poverty reduction strategy is facilitating employment and entrepreneurship opportunities among monthly welfare recipients. Measures that have been taken include identifying suitable job opportunities, matching monthly welfare recipients to available jobs, providing skills training programmes to improve marketability and employability, and promoting entrepreneurship as a potential career choice. Brunei Darussalam updated that 475 monthly welfare recipients have attended skills training programmes, close to its target of 500. Meanwhile, 145 monthly welfare recipients have gained employment, and 39 others have started their own businesses with the assistance of the government. However, factors such as lack of transportation, low qualification and limited access/support for childcare have made it challenging for some of the monthly recipients to gain employment, while the participation in entrepreneurship programmes has been lacklustre (only 37 people have attended, short of the targeted 200). Brunei Darussalam will work with the relevant stakeholders to overcome these barriers in order to help more monthly welfare recipients find jobs and remain employed.

Key initiative 9 – Ensuring a Comprehensive Social Security System for Persons with Different Abilities (PWDs)

The Plan of Action on PWDs 2020–2024 is developed as an economy-wide approach that aims to create an enabling environment and to strengthen mechanisms for policy formulation and the implementation of initiatives to advance the interests of PWDs, promote their rights and ensure their effective participation in the community. In line with the plan, a National Registry for PWDs was established in October 2021. As of January 2023, a total of 4,141 PWDs have been registered and will be issued PWD identification cards. The Ministry of Culture, Youth and Sports through the Community Development Department, has gathered inputs on contents, design and uses of the card, and has identified a government-certified printing agency to print the cards.

Another aspect of the action plan involves helping PWDs access more employment opportunities and providing skills training to maximise their employability and marketability. In financial year 2022/2023, 75 and 37 PWDs were employed in the civil service and private sector, respectively. In terms of skills training, the Community Development Department cooperates with NGOs, social enterprises and other government agencies to provide courses on key daily skills such as communication, and pre-vocational skills such as baking, sewing and computing. Brunei Darussalam acknowledged that the success of many of its programmes hinges on greater awareness and empathy toward disability issues, so it plans to increase cooperation with strategic partners to promote inclusivity and empower PWDs.

Key initiative 10 – To Produce Value-driven, World-class Youth Who are Future-ready Agents of Change for Development, Rooted in Inclusivity

The National Youth Policy and Strategy (NYPS) 2020–2035 aims to strengthen youth entrepreneurship and to pioneer initiatives centred on youth development. Since its launch in 2020, more than 41 out of 109 activities under the NYPS Plan of Action 2020–2024 have been completed. Notably, the proportion of youth-led initiatives increased from around 35 percent in 2019 to 45 percent in 2021, while a total of BND 26,500 has been awarded to eight youth-led organisations to hold town halls and forums on topics such as Youth on Mental Health,

Meaningful Work, Creativity and Innovation. The NYPS also has an emphasis on encouraging entrepreneurship among the youth, and has driven an increase in the number of youth-led start-ups through the Youth Entrepreneurship Ecosystem programme that provides training, financing and guidance on tapping overseas markets.

Beyond the NYPS, young entrepreneurs are also supported through micro grants and capacity-building programmes by the Ministry of Culture, Youth and Sports. In addition, the ministry has proposed to create a new fund to support volunteering programmes in Brunei Darussalam.

Key initiative 11 – Provide Business Supportive Governance Through a Relevant Regulatory Framework

To help businesses better understand how competition laws are applied and interpreted, the Competition Commission Brunei Darussalam has published a guide titled ‘Applying for Confidential Treatment’. Information covered in the guide include the definition of confidential information and ways to preserve the information deemed confidential as prescribed under existing regulations. More guidelines are planned, including those related to anti-competitive regulation. Brunei Darussalam shared that in developing the guidelines, it has gained many lessons about the best practices by competition authorities globally.

A related activity targeted at policymakers is the issuance of policy advisories to ensure regulations are aligned to achieve pro-competition market outcomes. Three policy advisories have been issued, and Competition Commission Brunei Darussalam seeks to be more proactive in identifying areas that policymakers may need advice on.

3.3.3 Canada

For the 2022 IAP report, Canada identified 14 key initiatives, associating each of the initiatives with a pillar or multiple pillars of the EAASR, as shown in Table 3.4.

Table 3.4 Canada's EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Renewed Venture Capital Catalyst Initiative	■	■	■	
2	Building Infrastructure to Boost Trade	■	■		
3	Making It Easier to Do Business in Canada	■	■		
4	Enhancing the Canada Small Business Financing Programme		■		
5	Supporting Business Investments		■		■
6	Canada's New Quality-of-Life Framework			■	
7	Inclusive Support to Canada's Entrepreneurs		■	■	
8	Canada's New Early Learning and Child Care Plan			■	
9	Valuing Canada's Workers			■	
10	Growing Canada's Net-Zero Economy	■			■
11	Investing in Skills and Training		■	■	■
12	Supporting Innovation and Industrial Transformation				■
13	Canada Digital Adoption Programme		■		■
14	Accelerating Broadband for Everyone	■		■	■

Canada provided updates for all key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Renewed Venture Capital Catalyst Initiative

Canada planned to commit up to CAD 450 million over five years to renew and enhance the Venture Capital Catalyst Initiative (VCCI). The objective of this initiative is to increase venture capital funding and support the continued growth of Canada's innovative companies, including life science technologies and firms owned by under-represented groups, such as women and racialised communities. Canada updated that funding for the initiative has been allocated to administering government departments, and programmes are being rolled out. For instance, in October 2022, Canada announced up to CAD 350 million to be invested in four venture capital funds-of-funds under the renewed VCCI with emphasis on greater access to capital for women and under-represented groups. Besides requiring all recipients to collect gender and diversity metrics, the renewed VCCI also expects them to implement policies and practices that promote diversity, equity and inclusion principles internally and in the broader venture capital ecosystem.

Key initiative 2 – Building Infrastructure to Boost Trade

Canada has plans to invest more than CAD 10 billion over 10 years in trade and transportation projects. The goals of the investment include enhancing the flow of goods along trade corridors, modernising transportation systems and improving the information system. In addition, Canada intends to spend CAD 656.1 million over five years to enable the Canada Border Services Agency to improve border-crossing processes and strengthen border integrity. Canada updated that funding for the initiative has been allocated, and the support is being rolled out. For instance, in 2022, funding for the National Trade Corridors Fund Canada was increased by an additional CAD 450 million over five years, bringing total funding to CAD 4.7 billion. This is expected to support the reliability and resilience of Canada's trade corridors and help ensure the efficient movement of goods through Canada's transportation system.

Key initiative 3 – Making It Easier to Do Business in Canada

Canada announced an additional CAD 96 million over five years to enhance the Competition Bureau's enforcement capacity and equip it with the necessary digital tools to help ensure a competitive marketplace. The additional funding has allowed the Competition Bureau to improve enforcement of anti-competitive rules and curb anti-competitive practices. Actions include bid-rigging investigations to protect the integrity of the marketplace, merger reviews to preserve competition in the oil and gas, waste, pulp and paper and agricultural industries, and strengthening competition in pharmaceuticals and telecommunications. The Bureau has also established the Digital Enforcement and Intelligence Branch (CANARI) to boost intelligence gathering efforts and support existing work on digital business practices. Also, Canada amended the Competition Act in June 2022 to strengthen the Competition Bureau's enforcement powers.

Key initiative 4 – Enhancing the Canada Small Business Financing Programme

Canada amended the Canada Small Business Financing Regulations and Canada Small Business Financing Act, which came into force in July 2022. The amended Act and Regulations facilitate greater access to financing for small businesses with additional financing products, a new class of loans, increased loan amounts and terms, improved loan conditions and a less burdensome administrative process. Financial institutions are in the process of rolling out the enhanced features offered under the programme. These amendments are projected to increase annual financing by CAD 560 million, supporting approximately 2,900 additional small businesses each year.

Key initiative 5 – Supporting Business Investments

Canada introduced immediate expensing of up to CAD 1.5 million of eligible capital investments made by Canadian-controlled private corporations on or after 19 April 2021, and that becomes available for use before 1 January 2024. Immediate expensing enables businesses to deduct the cost of eligible capital investments for income tax purposes in the first year the property is available for use, providing a time value of money benefit to firms and making it more attractive for them to invest in assets that drive growth and create jobs. Eligible investments add up to over 60 percent of capital investments typically made by these private corporations and could include investments in a broad range of assets, such as digital assets and intellectual property. Canada shared that the incentive was further expanded in 2022 to include immediate expensing of eligible property acquired by a Canadian-resident individual (other than a trust) or a Canadian partnership.

Key initiative 6 – Canada's New Quality-of-Life Framework

Canada has been working on better integrating quality-of-life considerations into its policy and budgetary decision making. Under its new Quality of Life Framework, all policies proposed for the federal budget would have to undergo an assessment of how they would impact the prosperity, health, environment, social cohesion and good governance for Canadians. This is expected to assist policymakers in thinking about policy impacts 'beyond GDP'. As of 2022, all funding requests to the government now include a Quality of Life assessment. The Quality of Life impacts are published annually in an Impacts Report which forms part of the federal budget documents. Canada noted that the template for Quality of Life impacts has undergone

several revisions following consultations and feedback to ensure that it is clear, comprehensive and captures the right information without being administratively burdensome.

Key initiative 7 – Inclusive Support to Canada’s Entrepreneurs

Canada intends to provide more than CAD 450 million over the next couple of years to support women and Black and Indigenous entrepreneurs who are important to Canada’s economic success, but face barriers to starting and growing a business. Canada updated that funding for this activity has been allocated, and the programmes are being rolled out. For example, in 2021, Canada allocated an additional CAD 146.9 million for the Women Entrepreneurship Strategy to provide additional access to financing, mentorship and training for women entrepreneurs, and fund additional ecosystem support and research. In the same year, Canada also provided an additional CAD 51.7 million for the Black Entrepreneurship Programme to increase support, mentorship, financial planning and business training for Black entrepreneurs.

Key initiative 8 – Canada’s New Early Learning and Child Care Plan

Canada will make new investments totalling up to CAD 30 billion over the next five years to complement the CAD 8.3 billion already allocated to ongoing investments to support high-quality early learning and affordable childcare. The federal government has signed agreements with all 13 provinces and territories on a Canada-wide early learning and childcare system. By 1 April 2023, six provinces and territories would provide regulated childcare for an average of CAD 10 a day or less, while the remainder have announced fee reductions of about 50 percent. All provinces and territories have committed to achieving CAD 10 a day childcare by March 2026. The federal government will also continue to work with provinces and territories to create 250,000 new childcare spaces across Canada by March 2026 to give families more affordable childcare options for their children.

Key initiative 9 – Valuing Canada’s Workers

Canada has introduced various measures to support workers. In November 2022, Canada expanded the Canada Workers Benefit with CAD 4 billion over six years, part of which would be used to top up the income of up to 4.2 million of the lowest-paid Canadians. On 1 April 2023, the federal minimum wage will increase to CAD 16.65 per hour. For those working in provinces or territories where the general minimum wage rate is higher, the higher rate will continue to apply. The change would apply to workers and interns in federally regulated private sectors, including banks, postal and courier services, and interprovincial air, rail, road and marine transportation. This covers approximately 18,500 employers in federally regulated industries, including federal Crown corporations, which together employ 955,000 people (about 6 percent of all employees in Canada). Furthermore, the federal minimum wage would be adjusted automatically (based on the average annual increase of the consumer price index) on 1 April of every year to ensure that the federal minimum wage keeps pace with inflation.

Key initiative 10 – Growing Canada’s Net-Zero Economy

Canada has introduced various initiatives to support clean technology development in the next few years. For example, Canada announced a 30 percent refundable tax credit effective March 2023 for capital investments in low-carbon energy generation and technology equal to an investment of CAD 6.7 billion over five years. Canada also announced the establishment of a tax credit effective March 2023 for hydrogen production that meets labour requirements. These

initiatives are expected to lower capital costs for businesses seeking to decarbonise, and to lower costs for businesses seeking to produce clean technologies.

Key initiative 11 – Investing in Skills and Training

Canada's interim Sustainable Jobs Plan comprises of investments in skills and training programmes, including: (1) The Sectoral Workforce Solutions Programme (to help key economic sectors connect workers with the training they need to access good jobs and help employers attract and retain a skilled and diverse workforce); (2) The Community Workforce Development Programme (to identify high growth areas, upskill and reskill workers, as well as connect employers and training providers to jobseekers); (3) The Union Training and Innovation Programme (to support union-based apprenticeship training, innovation and enhanced partnerships in the Red Seal trades); (4) The Skills Partnership Fund (a project-based fund to support partnerships between Indigenous organisations and industry employers to provide skills training for Indigenous peoples); and 5) The Opportunities Fund for Persons with Disabilities (to assist persons with disabilities to prepare for, obtain and maintain employment). The complete Sustainable Jobs Plan, which will build on the current interim version, will be forthcoming in 2025.

Key initiative 12 – Supporting Innovation and Industrial Transformation

Canada expanded the Global Innovation Clusters programme to support innovative projects across the economy. In the Advanced Manufacturing Cluster, up to CAD 177 million has been allocated to support the commercialisation of transformative projects that develop, scale up and apply advanced technology solutions in manufacturing, attracting talent and investments from within Canada and around the world. For the Protein Industries Cluster, up to CAD 150 million has been allocated to facilitate investment in Canada's plant-based food and feed ecosystem and in the creation of new products and services while reducing the greenhouse gas emissions associated with agricultural production and food processing. In the Digital Technology Cluster, up to CAD 125 million has been allocated to mobilise Canadian industry to build world-leading digital technologies that will make Canada a global leader in clean, healthy economic growth and see Canadian companies become digital anchor enterprises. With regard to the Scale AI Cluster, up to CAD 125 million has been allocated to establish Canada as a global hub for AI dedicated to business productivity and intelligent supply chains, with Canadian technology setting the world standard and providing a competitive advantage for Canadian businesses. The Ocean Cluster is expected to receive up to CAD 125 million to accelerate solutions to address global ocean opportunities, building a stronger Canadian economy and a healthier planet. As of December 2022, the clusters have supported more than 500 projects worth CAD 2.37 billion, involving more than 2,465 partners and generating over 855 patent applications, copyrights, trademarks or trade secrets. The clusters are also on track to meet or exceed the overall job creation target of 15,000 direct, indirect and induced jobs by 2023, and 50,000 by 2028.

Key initiative 13 – Canada Digital Adoption Program

Canada launched the CAD 4 billion Canada Digital Adoption Programme in March 2022. The programme will provide CAD 1.4 billion over four years to help businesses with technology adoption, including access to skills, training and advisory services, work opportunities, and microgrants. In addition, the Business Development Bank of Canada would provide up to CAD 2.6 billion in loans over four years to help businesses finance technology adoption.

Key initiative 14 – Accelerating Broadband for Everyone

Canada intends to build on the CAD 6.2 billion made available for universal broadband since 2015 by providing an additional CAD 1 billion over six years to support more rapid rollout of broadband projects, with a focus on rural and remote communities. To date, the Broadband Fund has committed approximately CAD 226.5 million to improve fixed and mobile wireless broadband internet access service for 205 communities. This represents approximately 32,655 households and nearly 560km of major transportation roads.

3.3.4 Chile

For the 2022 IAP report, Chile identified five key initiatives, associating each of the initiatives with a pillar or multiple pillars of the EAASR, as shown in Table 3.5.

Table 3.5 Chile's EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Fintech and Open Banking Bill	■			■
2	Taxonomy Roadmap for Chile	■	■	■	
3	Trade and Gender Chapters into Free Trade Agreements	■	■	■	
4	Digitize your SME			■	■
5	Office of Productivity and National Entrepreneurship	■	■	■	■

Chile provided updates for all its key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Fintech and Open Banking Bill

Chile published the Fintech and Open Banking Law on 4 January 2023. The law aims to create a level playing field for providers of financial services and encourage the development of the financial technology sector. There are two main components to the law. First, it expands the list of technology-based financial services to be regulated by the Commission for the Financial Market, the financial regulator, and second, it establishes the Open Finance System to allow participating financial services providers to share customer-consented information.⁴⁵

Chile estimated that more than 200 fintech start-ups would come under the new regulation. Since the law was enacted, the Ministry of Finance has been focusing its efforts on the implementation of the National Financial Inclusion Strategy that sets out to improve the access of individuals and businesses to regulated financial services and services; promote responsible, sustainable and tailored provision of financial services; as well as foster greater financial education.

Key initiative 2 – Taxonomy Roadmap for Chile

The taxonomy roadmap serves as a guide for Chile to develop an economy-wide taxonomy, become a greener economy and explore opportunities in sustainable finance. Chile updated that the Green Taxonomy Preliminary Committee was created to carry out strategies in the roadmap, and the committee held its first regular session in June 2022. Attendees at the meeting included representatives from the Ministry of Finance, Ministry of Environment, the Chilean central bank, the Commission for the Financial Market, and the Pension Superintendency. The committee is working on coming up with the structural elements for an economy-wide taxonomy and is exploring collaborations with development banks and strategic partners.

Key initiative 3 – Trade and Gender Chapters into Free Trade Agreements

Several of Chile's free trade agreements include a trade and gender chapter that seeks to promote economic equality and the inclusion of women in international trade. Chile updated that it has enacted a 24-month work plan to implement the trade and gender chapter under its

⁴⁵ Customer-consented information is data collected with the knowledge and consent of the customer.

free trade agreement with Canada. Similar work plans have been developed under the agreements with Argentina; Brazil; and Ecuador. Meanwhile, Chile has continued to incorporate a trade and gender chapter in new and updated treaties, such as the ones with Paraguay and the European Union. The chapter spells out cooperation in areas such as promotion of female entrepreneurship, development of women's networks and leadership, and collection of gender-focused data.

In Chile, the proportion of women applying for senior positions has remained at an average 25 percent in the current decade. In terms of appointments to senior positions, women represented 30.2 percent in 2021 – a slight increase from an average of 29 percent over the previous 10 years. Chile plans to prioritise gender issues in trade negotiations.

Key initiative 4 – Digitise your SME

Digitise your SME is an initiative by Chile's Ministry of Economy that offers a wide range of events, workshops, training and tools to help SMEs adopt digital technologies. The initiative includes the Digital Route programme, which consists of online courses on incorporating technology in business management. SMEs that complete the training can apply for a 'digital kit' of subsidies worth USD 1,000 for the purchase of software and hardware to transform their businesses. The programme has set aside USD 2 million to benefit 1,095 SMEs. Chile shared that of the 11,073 people registered on the Digital Route platform in 2021, around 2,100 have graduated and 963 have received the subsidies.

Key initiative 5 – Office of Productivity and National Entrepreneurship

The Office of Productivity and National Entrepreneurship (OPEN) oversees initiatives to increase productivity, encourage competition, facilitate entrepreneurship and reduce barriers. Chile shared that productivity growth came to a halt between 2014 and 2021, and it now aims to improve productivity by an average 1.5 percent per year through microeconomic and financial reforms. To achieve that, the Chilean Guide for Good Regulation has been created to guide regulators when formulating new regulations. In January 2023, Chile presented its productivity agenda that consists of over 40 measures to improve the economy's productivity. The measures include streamlining some legal and administrative procedures, creating a venture capital fund to support innovative companies and digitalising international trade processes.

3.3.5 China

For the 2022 IAP report, China identified five key initiatives, associating each of the initiatives with a pillar or multiple pillars of the EAASR, as shown in Table 3.6.

Table 3.6 China's EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Building a more competitive and inclusive digital economy	■	■	■	■
2	Launching the Pilot Program on EoDB Innovation	■			
3	Promoting the market-based allocation of production factors				
4	Reaching peak carbon dioxide emissions by 2030				■
5	Driving inclusive growth			■	

China provided updates for all key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Building a more competitive and inclusive digital economy

China has drawn up a set of action plans for the period 2021 to 2025 to foster a more competitive and inclusive digital economy. One action that China has taken is to promote greater adoption of digital technologies across the economy through building an integrated online government service platform, encouraging cloud-based services to traditional companies and expanding broadband internet services to all administrative villages. To this end, China has built a number of industrial internet platforms and digital transformation promotion centres with the aim of introducing new scenarios, new models and new forms of business, among others.

China also noted the importance of responsible digital innovation and is working to refine anti-monopoly regulations, as well as establish ethical standards and governance rules to guide the proper management of data security and the responsible use of new technologies such as AI. Laws that have been promulgated and implemented include the Cybersecurity Law, E-commerce Law, Personal Information Protection Law and revised Anti-Monopoly Law. Recognising the importance of aligning domestic digital economy policies and regulations with international ones, China has actively pursued accession to the Digital Economy Partnership Agreement. China also continues to cooperate with other economies in areas such as industrial digital transformation and smart city construction under the Digital Silk Road. With regard to enhancing digital literacy, China has implemented an action plan to overcome the obstacles faced by the elderly in accessing public services via the internet.

At the same time, China is focused on providing the infrastructure needed for the digital economy over the long term. Besides promoting upgrades to existing infrastructure, this also includes building 5G networks and integrated computing hubs. In February 2022, China officially launched the east-to-west computing resource transfer project, where it plans to build eight computing hubs and ten data centre clusters. Relevant policies have been issued to guide the development of information infrastructure and its safe operations.

Key initiative 2 – Launching the Pilot Program on EoDB Innovation

The Ease of Doing Business (EoDB) initiative involves implementing reform measures to enhance the business environment in China by reducing restrictions, improving market access and exit mechanism, providing stronger support to innovative entities, as well as strengthening and creating new methods of regulation. Since 2021, reforms have been rolled out in six pilot

cities, namely, Beijing, Shanghai, Chongqing, Hangzhou, Guangzhou and Shenzhen. China shared that it has actively conducted international benchmarking for the programme, and promoted the reforms adopted in the pilot cities to other regions. In particular, China is focused on promoting 50 policies and measures designed to ease restrictions. Future plans under the programme includes streamlining administrative processes, enhancing property rights protection for private enterprises, and safeguarding the rights and interests of entrepreneurs to promote fair competition in China.

Key initiative 3 – Promoting the market-based allocation of production factors

A more efficient allocation of production factors can promote more business participation in the economy. China has set out a plan for the period 2021–2025 that focuses on enhancing the flow of labour, promoting the development of a sound and inclusive financial market, as well as strengthening the implementation of science and technology. China provided updates on the first two areas.

The first measure involves deepening reforms of the household registration, or *hukou*, system. China updated that by 2022, restrictions on obtaining permanent urban residency would have either been eased or removed in a several large cities. This has benefitted about 100 million people, who have been granted residency in those cities, allowing them to live, work and utilise public services there. China is committed to continue with such reforms in other large cities to further improve the mobility of its labour force.

The second measure involves improving the functioning of capital markets, opening up the financial sector further and reforming financial regulation. In February 2023, the China Securities Regulatory Commission published a set of regulations for the comprehensive implementation of the registration-based initial public offering (IPO) system. China has also made progress in lifting the limits on foreign ownership in banking, securities, fund management, futures and life insurance. These have encouraged more foreign participation in its financial sector, and it will persist with efforts to open up the sector more while managing risks that may come with further liberalisation.

Key initiative 4 – Reaching peak carbon dioxide emissions by 2030

China is pursuing the ‘dual carbon’ goal of peak emissions and carbon neutrality. Its action plan to achieve the goal involves 10 major tasks: (1) making the transition to green and low-carbon energy; (2) improving efforts on energy saving, carbon emission mitigation and efficiency improvement; (3) pushing key industries to reach peak carbon emissions; (4) accelerating green and low-carbon transformation in both urban and rural development area; (5) promoting green and low-carbon transportation; (6) encouraging the development of a circular economy; (7) advancing green and low-carbon technological innovation; (8) consolidating and enhancing carbon sink capacity; (9) advocating for a green and low-carbon society; and (10) formulating plans to reach peak carbon emissions according to local conditions.

China updated that progress has been made on each measure. An improvement is seen in China’s total energy mix: share of non-fossil fuels increased by 0.8 percentage from 2021 to reach 17.5 percent in 2022. During the same period, the economy’s energy consumption per unit of GDP decreased by 0.1 percent and carbon emissions per unit of GDP fell 0.8 percent.

Key initiative 5 – Driving inclusive growth

A major area that China has worked on to drive inclusive growth is in strengthening regulations to protect the rights and interests of women. The Ministry of Human Resources and Social Security, along with five other departments, issued the Special Labour Protection System for Female Workers in the Workplace and the System for Eliminating Sexual Harassment in the Workplace to serve as reference documents for employers. These are regulations that aim to guide employers in improving labour protection for female workers and eliminating sexual harassment in the workplace.

China also updated on its efforts to improve services for the elderly, such as developing community and at-home elderly care services. In 2022, more than 50 percent of Grade II and above general hospitals have a geriatrics department. This is an improvement from around 15 percent in 2020.

Additionally, China has focused its efforts on supporting entrepreneurship, in particular in services sectors with high employment potential and societal demand such as domestic services, elderly care and rural tourism. In 2022, China issued several documents, including the Notice on Advancing Entrepreneurship and Employment Opportunities for College Graduates through Entrepreneurship-Driven Employment. China has also formulated and implemented policies to safeguard the rights and interests of workers engaged in flexible and other non-traditional employment arrangements.

Since 2021, China has consistently been promoting income distribution reform. These include revising measures for special additional deductions for individual income tax and enhancing the mechanism for adjusting the minimum wage. To overcome the impact of COVID-19 on low-income groups, China has introduced policies aimed at expanding social security coverage – more than 10 million of the unemployed have received unemployment insurance benefits, while about 67 million low-income individuals have received price subsidies. Furthermore, in 2022, China exempted the interest on student loans for college graduates facing financial difficulties and allowed principal repayment to be postponed.

3.3.6 Hong Kong, China

For the 2022 IAP report, Hong Kong, China identified six key initiatives, associating each of the initiatives with a pillar or multiple pillars of the EAASR, as shown in Table 3.7.

Table 3.7 Hong Kong, China’s EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	To support and strengthen the rule of law through enhancing community understanding	■	■	■	
2	To promote the development and adoption of law technologies	■	■	■	■
3	To drive the development of financial technology (fintech) through implementing the Fintech 2025 strategy	■	■	■	■
4	To set up a fully-fledged Trade Single Window	■			■
5	To continue to launch special employment programmes for enhancing the employability of various disadvantaged groups			■	
6	To promote the smart use of energy in different sectors		■		

Hong Kong, China provided updates for all key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – To support and strengthen the rule of law through enhancing community understanding

The Department of Justice of Hong Kong, China established a Steering Committee on Rule of Law Education in February 2023 to reinforce the core value of the rule of law in the community. The objective of the committee is to work in collaboration with representatives from the relevant government bureaux, legal professional bodies, law schools and other members of the legal sector to coordinate and collaborate on the promotion of the awareness and proper understanding of the rule of law, hence strengthening rule of law education and training on all fronts. The committee will also advise on and assist the Department of Justice in launching the Rule of Law Education Train-the-Trainers Programme, which aims to impart to trainers in various sectors of the community the skills and knowledge to enhance their ability to effectively promote consistent and correct messages relating to the rule of law to youths and the general public. The programme is expected to be launched in 2023, with trainers expected to reach out to the community in the latter half of 2023.

Additionally, the Department of Justice will continue collaborating with relevant groups to organise or support an array of rule of law capacity-building activities and educational projects for youths and the general public. The Department of Justice held a number of large-scale events/conferences to promote understanding and exchange on topics relating to the rule of law, including the Vision 2030 for Rule of Law International Symposium in May 2022 and the Rule of Law Congress: Rule of Law and Justice for All during Hong Kong Legal Week 2022 in November 2022. It also organised various activities to promote understanding of the rule of law to students and other members of the community in 2022, including school talks, “Rule of Law Journeys” guided tours, drama shows and rule of law education workshops, attracting a total of over 27,000 participants.

Key initiative 2 – To promote the development and adoption of law technologies

Hong Kong, China has undertaken several measures to promote the use of law technologies (LawTech) and enhance the capability of the legal profession to harness modern technology. The COVID-19 Online Dispute Resolution (ODR) Scheme was launched in June 2020 to provide a speedy and cost-effective means to the general public and businesses to resolve COVID-19 related disputes. Hong Kong, China updated that, as of December 2022, the scheme had received over 500 enquiries and handled about 28 cases, with a total estimated dispute amount of around HKD 2.8 million.

Hong Kong, China has also supported the implementation of the APEC ODR Framework in collaboration with eBRAM International Online Dispute Resolution Centre, a not-for-profit ODR provider established by Hong Kong, China's Bar Association and Law Society. eBRAM launched ODR procedural rules tailored-made for the APEC ODR Framework in June 2021. In May 2022, eBRAM was listed as an ODR service provider under the APEC ODR Framework.

Hong Kong, China also mentioned the Hong Kong Legal Cloud, a document platform launched in March 2022. The Hong Kong Legal Cloud Fund provides subsidies to local legal and dispute resolution professionals who subscribe to the Hong Kong Legal Cloud services for up to three years. As of January 2023, there were over 590 subscribers.

In collaboration with the United Nations Commission on International Trade Law (UNCITRAL), Hong Kong, China set up the Inclusive Global Legal Innovation Platform for Online Dispute Resolution (iGLIP on ODR) in 2021 to keep track of the latest developments in the ODR landscape and explore/develop innovative legal tools to address potential issues. The platform has around 30 member experts from around the world, and has held two meetings to date, in March and November 2021.

Key initiative 3 – To drive the development of financial technology (fintech) through implementing the Fintech 2025 strategy

To support banks in adopting fintech, Hong Kong, China rolled out a Tech Baseline Assessment to take stock of banks' current and planned adoption of fintech in the coming years, and to identify fintech business areas or specific technology types that may be underdeveloped and therefore would benefit from the support of the Hong Kong Monetary Authority. Based on the results of the assessment published in June 2022, the Hong Kong Monetary Authority sees merit in further promoting developments in the fintech business areas of wealthtech, insurtech and greentech as well as the technology types of AI and distributed ledger technology (DLT) in the coming years. The Hong Kong Monetary Authority is formulating a detailed roadmap of initiatives that complement its existing work related to fintech development.

Hong Kong, China has conducted various wholesale CBDC (wCBDC) and retail CBDC (rCBDC) research projects to increase the economy's readiness in issuing CBDCs, in the event that it decides to do so in the future. Examples of wCBDC-related projects include the successful completion of a pilot under Project mBridge on an international trade settlement use case (2022) and the publication of a report to deliver the results and key lessons learnt from the pilot (2022). Examples of rCBDC-related projects include the ongoing preparations for possible future issuance of e-HKD through a three-rail approach (2022) and the publication of a report by the Bank for International Settlements Innovation Hub (BISIH) on Project Aurum that set out a high-level technical design for rCBDC implementation (2022).

The Hong Kong Monetary Authority is also supporting the Digital Currency Institute of the People's Bank of China on technical pilot testing on using e-CNY for cross-boundary retail payments. The first phase was completed in December 2020. The second phase commenced in July 2022, with more banks from Hong Kong, China participating and the use of the Faster Payment System to top up e-CNY wallets.

In its efforts to create next-generation data infrastructure, the Hong Kong Monetary Authority launched Commercial Data Interchange in 2022 to form an ecosystem for secure and seamless data exchange in Hong Kong, China. Commercial Data Interchange has attracted the participation of 23 banks with material SME business and 10 data providers, seven of which have consented to provide access to the banks. Since its production launch, Commercial Data Interchange has facilitated more than 4,900 loan applications and reviews, with an estimated credit approval amount exceeding HKD 4.4 billion as of end June 2023. With the full support of the Hong Kong Monetary Authority, the industry associations consisting of the Hong Kong Association of Banks, the Hong Kong Association of Restricted Licence Banks and Deposit-taking Companies and the Hong Kong S.A.R. Licensed Money Lenders Association Limited launched the Credit Reference Platform, a DLT-based credit data sharing platform, in November 2022 to enhance the service quality of consumer credit reference agencies and reduce the operational risk of having only one commercially run service provider in the market.

To continue nurturing fintech talents, the Hong Kong Monetary Authority launched the Industry Project Masters Network scheme and upgraded the Fintech Career Accelerator Scheme to version 3.0 in 2022. Moreover, the Enhanced Competency Framework on Fintech became the first set of fintech professional qualifications to be recognised under the government's Qualifications Framework. Practitioners holding this professional qualification are eligible for training subsidy under the Pilot Scheme on Training Subsidy for Fintech Practitioners, which was announced in the 2022-2023 Budget and launched by the Hong Kong Monetary Authority in September 2022 for the banking sector. As of June 2023, around 310 banking practitioners have enrolled for the training programme under the Enhanced Competency Framework on Fintech.

The Hong Kong Monetary Authority also launched the Fintech Supervisory Sandbox 3.1 Pilot in collaboration with Cyberport, a digital community comprising start-ups and technology companies, to promote commercialisation and wider adoption of the successful projects under the Fintech Proof-of-Concept Subsidy Scheme in 2022. As of June 2023, five eligible projects have been approved.

Key initiative 4 – To set up a fully-fledged Trade Single Window

Hong Kong, China has continued to progress the development of the Trade Single Window to provide a one-stop electronic platform for lodging business-to-government trade documents for trade declaration and cargo clearance. Implementation of the Trade Single Window is in three phases. Phase 1 has been implemented since 2018 and is well-received by stakeholders. Actions are being taken to implement Phase 2, which has been rolled out progressively from mid-2023. In June 2022, the Legislative Council approved the funding for the Phase 3 IT system. A tender exercise is underway to engage a contractor to develop and implement the system. Phase 3 services are expected to be rolled out in batches from 2026, with a view to fully implementing the Trade Single Window by 2027.

Key initiative 5 – To continue to launch special employment programmes for enhancing the employability of various disadvantaged groups

Hong Kong, China continues to launch special programmes to increase the employability of various disadvantaged groups. Enhancements have also been made to promote greater participation in the programmes. Additionally, the ceiling of the on-the-job training allowance payable to employers under the special employment programmes was raised in September 2020 to further encourage employers to hire the elderly and middle-aged, young people and persons with disabilities and provide them with on-the-job training. According to surveys conducted to evaluate the effectiveness of on-the-job training under the Employment Programme for the Elderly and Middle-aged, about 81 percent of the cases recorded a retention period of four months or more and 67 percent stayed in employment for six months or more (as of June 2023). With regard to persons with disabilities, a survey conducted in 2022 shows 94 percent of the employers who had participated in the programme agreeing that the scheme and financial incentive could encourage them to try or continue to employ persons with disabilities. On youth employment, a survey conducted on young people who had enrolled under the special programme and completed the 12-month support services in the 2021/22 programme year shows that around 65 percent of them were in employment at the time of survey.

Hong Kong, China commissioned two NGOs to assist in implementing the Racial Diversity Employment Programme on a three-year pilot basis in November 2020. The programme provides one-stop employment support services for ethnic minority jobseekers using a case management approach. The services include canvassing vacancies suitable for ethnic minority jobseekers, providing support in their job search and offering post-placement follow-up services to them and their employers. After review, the implementation of the programme will be regularised. The total number of ethnic minority jobseekers who participated in the programme between November 2020 and June 2023 was 806, while the number of placements recorded under the programme over the same period was 465, 111 of which were achieved through the referral services of the NGOs commissioned. According to surveys conducted up to June 2023, participants generally considered the employment support service under the Racial Diversity Employment Programme useful and appreciated the case management service rendered by the service providers.

Key initiative 6 – To promote the smart use of energy in different sectors

Hong Kong, China has undertaken many measures to implement its Climate Action Plan 2050, which was launched in October 2021. For example, the government reviews and upgrades the energy efficiency standards for four key types of central building services installations (air-conditioning, lighting, electrical installations, lifts and escalators) in various types of buildings once every three years, through tightening the Building Energy Code and Energy Audit Code. The latest edition of the codes was published in December 2021, increasing the energy efficiency standards by more than 15 percent compared with the 2015 edition. Hong Kong, China regularly reviews the Mandatory Energy Efficiency Labelling Scheme, which currently covers eight types of electrical appliances, representing 49 percent of the total energy consumption in the residential sector. The latest update of the scheme was fully implemented in December 2021, increasing the energy efficiency grading standards for single package type room air-conditioners, dehumidifiers and compact fluorescent lamps to encourage suppliers to introduce more energy-efficient models and help consumers select such products. Hong Kong, China launched the Online Building-based Electricity Utilisation Index Benchmarking Tool in

June 2022 to help commercial building owners and professionals benchmark their building energy performance with similar types of buildings and recommend energy-saving measures.

The design and construction of Hong Kong, China's first waste-to-energy facility turning municipal solid waste into electricity was started at the end of 2017, with operation expected to commence in 2025. Other measures include: (1) The HKD 2 billion EV-charging at Home Subsidy Scheme launched in 2020 (with a further injection of HKD 1.5 billion in 2022) to subsidise installation of electric vehicle charging-enabling infrastructure in car parks of existing private residential buildings; (2) The HKD 1.1 billion New Energy Transport Fund (including the latest injection of HKD 0.8 billion in 2020) to help the transport sector reduce carbon emissions, of which HKD 0.2 billion is set aside to trial hydrogen fuel cell double-decker buses and heavy vehicles; and (3) The allocation of HKD 350 million to subsidise four local ferry operators to construct and conduct trial run of four electric ferries. Hong Kong, China is monitoring the implementation progress of various initiatives using quantitative indicators. For example, Hong Kong, China noted that its energy intensity had decreased by 30 percent from 2005 to 2020. As of end June 2023, more than 690 applications have been received under the EV-charging at Home Subsidy Scheme, covering over 141,000 parking spaces.

3.3.7 Indonesia

For the 2022 IAP report, Indonesia identified four key initiatives, associating each of the initiatives with all the EAASR pillars, as shown in Table 3.8.

Table 3.8 Indonesia’s EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Creative Economy and Digital Economy Improvement	■	■	■	■
2	MSMEs Development and Financial Inclusion	■	■	■	■
3	Bureaucratic and regulatory reform	■	■	■	■
4	Green Growth and Green Economy	■	■	■	■

Indonesia provided updates for all key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Creative Economy and Digital Economy Improvement

To raise digital adoption across its economy, Indonesia formulated the Concept of Digital Economy Development Framework 2023–2030. The framework aims to develop the necessary infrastructure, improve human resource digital capabilities, build an ecosystem for research and innovation, foster a business-friendly digital environment, as well as increase funding and investment opportunity.

To improve digital literacy, Indonesia has developed the MSMEs Go Digital and Pre-Employment Card Programmes. In 2022, the number of MSMEs that use digital technology was 19.5 million, an increase from 15.3 million in 2021. Meanwhile, the number of Pre-Employment Card participants was 4.98 million in 2022, a slight fall from 5.93 million in 2021.

Indonesia shared that to improve internet connection, it has planned to build data centres in several locations. Construction of a National Data Center in the Greater Jakarta area is expected to be completed in October 2024, and similar facilities have been planned for Batam, Balikpapan (to support the new national capital Nusantara) and Labuan Bajo.

Key initiative 2 – MSMEs Development and Financial Inclusion

After launching the National Strategy for Financial Inclusion in 2020, Indonesia has taken further steps to foster the access of MSMEs to financial services. Activities included the enactment of Law No. 4 on the development and strengthening of the financial sector and a capacity-building workshop held with APEC members on enhancing policy responses to help MSMEs increase demand in the wake of the COVID-19 pandemic.

In its update, Indonesia shared that the economy’s 2022 National Financial Literacy and Inclusion Survey found improvements in both financial literacy and financial inclusion. The financial literacy index increased from 38.03 percent in 2019 to 49.68 percent in 2022, while the financial inclusion index improved from 76.19 percent in 2019 to 85.10 percent in 2022. Indonesia plans to enhance the use of digital and social media to disseminate knowledge and information related to financial literacy and inclusion, as well as implement financial education programmes for priority target groups such as persons with disabilities, people living in remote areas and women.

Key initiative 3 – Bureaucratic and regulatory reform

Indonesia has been working to streamline processes and reform regulations to raise productivity among businesses. This has culminated in a climb in Indonesia's ranking in the United Nations' E-Government Development Index, from 88th in 2020 to 77th in 2022. The index measures provision of online services, telecommunication connectivity and human capacity by governments.

Indonesia noted the importance of continuous evaluation and timely adjustments to reform initiatives to provide certainty to businesses. For example, Indonesia drafted PERPPU 2/2022, a new law aimed at simplifying regulatory requirements for conducting business, to rectify the predecessor Job Creation Act. From 2023, Indonesia plans to focus bureaucratic reforms on five areas: (1) poverty alleviation; (2) increasing investment; (3) digitising services; (4) spending on domestic products; and (5) controlling inflation.

Key initiative 4 – Green Growth and Green Economy

Aiming to achieve net-zero emission by 2060 or sooner, Indonesia has pledged larger cuts to greenhouse gas emissions. In 2022, Indonesia committed to reduce emissions by 31.89 percent unconditionally or 43.20 percent conditionally – more ambitious than the 29 percent or 41 percent that it pledged in the 2015 Paris climate change agreement. To achieve the target, it introduced the Green Economy Index to track and measure the economy's green transformation using 15 indicators. Indonesia has also implemented the Green Industry Standard/SNI/ISO 14001 to support sustainability efforts by the private sector. A total of 34 businesses were certified in 2022, an increase from 28 in 2019. Indonesia also launched the Forestry and Other Land Use Net Sink 2030 Agenda, which aims to reduce the sector's emission levels by 140 million tons. Overall, Indonesia targets a 540 million tons reduction in emissions of CO₂ equivalent across all sectors.

3.3.8 Japan

For the 2022 IAP report, Japan identified five key initiatives, associating each of the initiatives with single or multiple pillars of the EAASR, as shown in Table 3.9.

Table 3.9 Japan’s EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Concentrated Investment and Implementation of Digitalisation and Creating Its Environment	■	■		■
2	Growth of the Green Sector and Creating Its Environment			■	■
3	Strengthening Investment in People	■		■	■
4	Strengthening Firm Growth and Creating Its Environment	■	■		■
5	Strengthening and Expanding the Economic Partnerships, and Taking in Overseas Markets through Them	■	■	■	

Japan provided updates for all key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Concentrated Investment and Implementation of Digitalisation and Creating Its Environment

Japan has promoted concentrated investment in digitalisation and its implementation to create an economic and social structure suitable for the digital age. Noting the importance of undertaking digital, regulatory and administrative reforms in a holistic manner, Japan established the Digital Agency in 2021, revised the Local Government DX Promotion Plan in 2020, and enforced the Act on Improving Transparency and Fairness of Digital Platforms in 2021. Additionally, Japan has formulated several documents: (1) Cybersecurity Strategy (2021); 2) Plan for Mass Overhaul of Regulations in line with Digital Principles (2022); (3) Priority Policy Programme for Realising Digital Society (2022); and (4) Comprehensive strategy for the Vision for a Digital Garden City Nation (2022). Japan shared that 72 percent of all citizens had applied for issuance of Individual Number Cards as of February 2022, while 5G platform deployment has reached 93 percent population coverage as of 2022.

Key initiative 2 – Growth of the Green Sector and Creating Its Environment

Japan recognised that it has to undertake various measures in order to realize net-zero greenhouse gas emission by 2050. The GX Executive Council was set up to formulate a basic policy and introduce novel policy initiatives. Besides formulating the Basic Policy for Realization of GX in 2023, Japan has implemented the Green Innovation Fund Project, revised the Plan for Global Warming Countermeasures and the Long-Term Strategy under the Paris Agreement, and formulated the Sixth Strategic Energy Plan in 2021. Japan noted that as of FY2021, it has reduced greenhouse gas emissions and removals by 20.3 percent compared to FY2013 levels.

Key initiative 3 – Strengthening Investment in People

Japan implemented a five-year policy package worth JPY 1 trillion to invest in human capital. This would include reskilling workers for growth areas such as digitalisation and promoting labour mobility. Several related laws have also come into force: (1) A law that mandates making efforts to secure work opportunities until the age of 70 (2021); (2) A law that mandates equal pay for equal work (2021); and (3) The amended Act on the Promotion of Female Participation

and Career Advancement in the Workplace (2022). Moreover, Japan has prepared additional vacancies in nursery schools for about 32,000 infants in financial year 2021 to support parents in childcare activities. Japan shared that in 2021, the employment rate for people aged 65 to 69 reached 50.3 percent, while the employment rate of women aged 25 to 44 reached 79 percent.

Key initiative 4 – Strengthening Firm Growth and Creating Its Environment

Japan recognised the critical role of start-ups in solving social issues such as climate change and in innovating, which in turn is the driving force for economic growth. Japan has introduced several measures to support the establishment and growth of firms, including start-ups. Among the measures are: (1) Formulation of the 6th Science, Technology, and Innovation Basic Plan (2021); (2) Revision of Japan’s Corporate Governance Code and Guidelines for Investor and Company Engagement (2021); (3) Formulation of the Start-up Development Five-year Plan (2022); (4) Revision of angel tax incentives, open innovation tax incentives and R&D tax incentives (2022); and (5) Enhancement of the Key and Advanced Technology R&D through Cross Community Collaboration Programme (2022).

Key initiative 5 – Strengthening and Expanding the Economic Partnerships, and Taking in Overseas Markets through Them

Japan noted the importance of continuing work to expand a free and fair economic zone as well as to maintain and strengthen the rules-based multilateral trading system. In this regard, Japan has led discussions on maintaining the high standards, and the steady implementation, of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). Japan also noted the entry into force of the Regional Comprehensive Economic Partnership (RCEP) Agreement in 2022.

3.3.9 Korea

For the 2022 IAP report, Korea identified six key initiatives, associating each of the initiatives with single or multiple pillars of the EAASR, as shown in Table 3.10.

Table 3.10 Korea's EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Promoting proactive response to the changing trade environment	■			
2	Boosting competitiveness of service industries	■			■
3	Encouraging skills development and employment opportunities for women			■	
4	Supporting the work-life balance of working women			■	
5	Narrowing the gap between regular workers and non-regular workers	■		■	
6	Strengthening the social safety net through outreach programmes for health and welfare			■	

Korea provided updates for all key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Promoting proactive response to the changing trade environment

Korea has contributed to global discussions and made policy efforts to create an enabling trade environment for open, transparent and competitive markets that is more reactive to emerging trade issues such as the environment, labour and the digital economy. In multilateral fora, Korea continued to participate in discussions in relevant JSIs in the WTO, including WTO negotiations on Investment Facilitation for Development, e-commerce, Trade and Environmental Sustainability Structured Discussions (TESSD) and the Dialogue on Plastics Pollution. Korea also contributed to the conclusion of WTO agreement on fisheries subsidies at the 12th Ministerial Conference (MC12) and has joined the Coalition of Trade Ministers on Climate as a collective effort to vivify the role of trade in dealing with environmental challenges. Korea continues to engage at regional (e.g., joined the Regional Comprehensive Economic Partnership) and bilateral level (e.g., signed the Digital Partnership Agreement with Singapore to further promote digital trade). Korea noted that its participation in free trade agreements in effect has increased from 17 (with 57 economies) in 2021 to 21 (with 59 economies) as of the end of February 2023.

Key initiative 2 – Boosting competitiveness of service industries

Korea plans to continue investing in service industry infrastructure, through funding R&D, standardisation and human capital. For example, Korea has set a target of KRW 7 trillion in government expenditure on services R&D in 2021–2025, which is higher than the KRW 4 trillion spent in 2016–2020. Korea noted that government expenditure on services R&D has reached KRW 5.3 trillion in 2021–2023 and is on track to meet the target. Korea shared that low public perception of the need for R&D in the services sector is the biggest barrier to expansion, and that this needs to be changed in order to boost productivity in the services sector. Korea also plans to promote key emerging service industries (such as healthcare, content and logistics) as a new growth engine. There are currently whole-of-government plans to systemically nurture major sectors in public health including bio-health and digital healthcare, while various policy tools including system reform, financial and tax support have been put in place to nurture the content industry. Korea's services value added as a percentage of GDP increased from 62.5 percent in 2021 to 63.4 percent as of March 2022. New cumulative decent

jobs in key service industries increased from 446,000 in 2021 to 895,000 in 2022, exceeding the set target. To build the foundation for the services industries, the Korean government is negotiating with the National Assembly to introduce a piece of legislation titled the Service Industry Development Act.

Key initiative 3 – Encouraging skills development and employment opportunities for women

The Women's Reemployment Centers in Korea provide women experiencing career interruptions with comprehensive employment services, including employment counselling, vocational training, internship opportunities, job placement support and follow-up management support. Korea noted that the initiative which provides support for women's vocational skills development is also in line with the La Serena Roadmap for Women and Inclusive Growth. The satisfaction with the Women's Reemployment Centers has increased year-on-year: users' satisfaction level increased from 85.4 points in 2021 to 86.2 points in 2022, while that of employers had remained consistently above 95 out of a total of 100 points over the same period.

Key initiative 4 – Supporting the work–life balance of working women

Korea continues to provide various job-seeking support services, including targeted programmes. The number of participants in the Saeil Center (Career Development Center for Women)'s group counselling programme increased from 26,669 in 2021 to 26,807 in 2022, while the number of participants in the Women's Career Gap Training of Korea Polytechnics increased from 1,200 in 2021 to 1,700 in 2022. Korea has also extended the reduced working hours scheme, from workplaces with more than 30 employees to all workplaces. Pursuant to the Equal Employment Opportunity and Work–family Balance Assistance Act, the 'right to request reduction of working hours for family care' was expanded to workplaces with one or more employees from January 2022.

Key initiative 5 – Narrowing the gap between regular workers and non-regular workers

Korea has put in place comprehensive policy efforts to narrow the gap between regular and irregular workers. These include inspection of unreasonable discrimination according to the types of employment; offering consultations to improve the labour conditions of non-regular workers; and establishing the standard for reasonable wages and benefits as grounds for the actual condition survey and analysis. In 2022, Korea conducted inspections on discriminatory treatment to non-regular workers at 700 workplaces. Korea has also converted 200,000 non-regular workers into permanent positions in the public sector as of December 2022.

Key initiative 6 – Strengthening the social safety net through outreach programmes for health and welfare

Korea has strengthened the regional administrative base of its health and welfare services by establishing dedicated teams at the basic local government level to provide health and welfare services. As of end 2022, 3,352 out of 3,503 local government areas already have the dedicated teams. Korea also expanded the number of people eligible for the welfare membership system to the entire economy in September 2022. To raise awareness and overcome welfare blind spots, Korea has endeavoured to explain to people about the welfare system and is expanding the outreach gradually. Between the launch of the service in September 2022 and February 2023, 6.1 million households have been informed about the existence of this system. The number of

cases where the unreachable were referred to a service scheme through the outreach programmes for health and welfare reached 2.5 million in the first seven months of 2022.

3.3.10 Malaysia

For the 2022 IAP report, Malaysia identified 11 key initiatives, associating each of the key initiatives with one pillar or multiple pillars of the EAASR, as shown in Table 3.11.

Table 3.11 Malaysia’s EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Strengthening Service Delivery Mechanism			■	
2	Narrowing Household Income Inequality			■	
3	Ensuring Equitable Access to Internet		■	■	■
4	Expanding Digitalisation		■	■	■
5	Reducing Regulatory Burdens and Barriers to Starting Businesses	■	■		■
6	Providing an Enabling Environment for the Growth of Digital Economy	■	■	■	■
7	Expanding Digitalisation Initiatives in Public Service Delivery		■	■	■
8	Boosting Productivity Growth - Skills Development to Boost Productivity				■
9	Regulatory Experimentation Programmes to Boost Malaysia’s Competitiveness through Public-Private Sectors Collaborative Innovation	■			■
10	Provide Decent Work for Gig Workers			■	

Note: In the 2023 update, Malaysia dropped key initiative 11 – Develop Talent in the Platform Economy.

Malaysia provided updates for all key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Strengthening Service Delivery Mechanism

Addressing poverty and inequality is the focus of this key initiative, with public service delivery being identified as an area that could benefit from improved policies. To that end, Malaysia recognised the need to measure outcomes in this area, and it is conducting a study with the World Bank to obtain a comprehensive understanding of the extent of inequality in Malaysia, how the situation has evolved, and the forces driving inequality. The study is due to be completed in June 2024 and will be used as a key reference in formulating the 13th Malaysia Plan, which will contain Malaysia’s development strategies for five years from 2026. Malaysia is also developing a centralised database called PADU that integrates the various official data sources. Testing of PADU is expected to take place in 2024. The database would allow policies to be more targeted and would also enable better monitoring of policy implementation.

Key initiative 2 – Narrowing Household Income Inequality

Several strategies to reduce income inequality were outlined by Malaysia: (1) improving access to basic infrastructure such as electricity, water and telecommunication, raising skills and capabilities through high-quality education; and promoting affordable and quality healthcare; (2) investing in underserved areas and supporting MSMEs and entrepreneurial activities, as well as instituting policies on fair wages and protecting the rights of workers; (3) exploring making the tax system more progressive in line with international best practices, while adopting more targeted subsidies; and (4) providing affordable and quality financial services to all segments of the society, while enhancing financial literacy through education programmes.

Key initiative 3 – Ensuring Equitable Access to Internet

Malaysia completed the first phase of its National Digital Network action plan, or JENDELA, in December 2022. The action plan is aimed at enhancing digital connectivity and boosting the efficiency of existing infrastructure. Upon completion of the first phase, internet coverage in Malaysia stood at 96.92 percent in populated areas with 7.74 million premises having access to fixed broadband services, while the speed of mobile broadband reached 116 Mbps. The second phase has commenced with a focus on deploying 5G network services. Malaysia also shared that it is working on enhancing internet connectivity in rural areas, to achieve a 100 percent coverage in rural populated areas.

Key initiative 4 – Expanding Digitalisation

Digital economy centres, or PEDi, have been set up across Malaysia to enhance digital literacy. These centres provide training and development programmes focused on digitalisation, multimedia skills as well as entrepreneurship, available for free or at a minimal cost. More than 900 PEDi centres are in operation, and Malaysia shared that the training programmes have helped many from vulnerable groups, including the urban poor, to participate in and reap the benefits of the digital economy.

Key initiative 5 – Reducing Regulatory Burdens and Barriers to Starting Businesses

In July 2020, Malaysia launched the MyMUDAH portal to assist businesses facing unnecessary regulatory burdens as a way to support the economic recovery from the COVID-19 pandemic. The portal was found to be an effective channel to resolve business concerns, and it has been expanded since November 2021. Malaysia plans to establish a MyMUDAH unit within all ministries and agencies at the federal, state and local levels. Already, MyMUDAH units have been set up in 86 government bodies and 36 business associations. Malaysia shared that close to 600 issues have been submitted through the portal since 2020, and 51 percent of these were resolved within three months. The raising of these issues has also helped Malaysia improve the implementation of its policies and regulations, which includes standardizing them across agencies and levels of government. Overall, Malaysia aims to reduce regulatory compliance costs affecting businesses by 25 percent per annum.

Key initiative 6 – Providing an Enabling Environment for the Growth of Digital Economy

Malaysia provided updates on several initiatives that focus on growing the digital economy. MyDIGITAL Corporation was established in 2021 to monitor the implementation and evaluate the outcome of the Malaysia Digital Economy Blueprint 2021-2025. With the ongoing National eCommerce Strategic Roadmap 2.0, e-commerce contributed 13 percent to GDP in 2021 and more than 1 million MSMEs adopted e-commerce as of 2022. The Sharing Economy Committee was set up in 2022 and has overseen the accreditation of 10 local sharing economy platforms in accordance with international standards and certifications. The National Security Council's Directive No. 26 was endorsed in 2021 and the Malaysia Cyber Security Strategy 2022-2024 is being implemented. A national master plan on cyber security awareness is being developed and a study is being carried out on a cyber security bill.

Key initiative 7 – Expanding Digitalisation Initiatives in Public Service Delivery

Malaysia updated that 81.3 percent of end-to-end federal government services are now available online, exceeding the 80 percent target that it set out to achieve by 2025. Going forward, the government will focus on strengthening its digital services by simplifying work processes, increasing data sharing and boosting the ease of doing business. It will also help state-level authorities to digitalise more of their services, to improve overall service delivery in the public sector.

In addition, Malaysia is working to raise the digital competencies of its civil servants so that they can effectively use technology to carry out their daily responsibilities. Malaysia aims to have 100 percent of its civil servants digitally literate by 2025 and will carry out assessments in phases, starting at the federal government level, to identify gaps and areas for improvement.

Key initiative 8 – Boosting Productivity Growth - Skills Development to Boost Productivity

One way that Malaysia is boosting productivity growth is by encouraging the professional services sector to leverage existing free trade agreements to expand into international markets. This can help the sector to be more competitive, which adds to overall economic productivity. Malaysia shared that the Professional Services Productivity Nexus, set up to drive productivity growth in the sector, has proposed several initiatives to spur internationalisation and improve the competitiveness of the sector.

Key initiative 9 – Regulatory Experimentation Programmes to Boost Malaysia's Competitiveness through Public-Private Sectors Collaborative Innovation

The Malaysia Productivity Corporation and the Special Task Force to Facilitate Business (PEMUDAH) have been put in charge of facilitating projects aimed at boosting the economy's competitiveness. One project seeks to expedite regulatory approval for drone flights from 21 days to just one day, removing a key obstacle to the drone industry's growth in Malaysia. To achieve that, a new drone regulatory framework has been established, with a one-stop centre to streamline flight applications and a risk-based approach being adopted so that low-risk drone flights can be instantly approved.

Key initiative 10 – Provide Decent Work for Gig Workers

Given the growing gig economy, Malaysia in 2020 expanded the Self-Employment Social Security Act 2017 (Act 789) to more sectors, requiring a greater number of gig workers to make compulsory social security contributions. Malaysia shared that the Ministry of Human Resources continues to engage with stakeholders to address pain points raised by relevant parties, explore ways to improve the social safety net for gig workers and gather inputs toward new legislation to better protect this group of workers.

3.3.11 New Zealand

For the 2022 IAP report, New Zealand identified four key initiatives, associating each of the key initiatives with one pillar or multiple pillars of the EAASR, as shown in Table 3.12.

Table 3.12 New Zealand’s EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Consumer Data Right	■			■
2	Climate Change Response (Zero Carbon) Amendment Act 2019		■	■	
3	Reform replacing the Resource Management Act	■	■	■	
4	Reform of Research Science and Innovation (Future Pathways)		■	■	■

New Zealand provided updates for all key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Consumer Data Right

New Zealand announced it would create a new legislative framework for consumer data right in July 2021. The regime would require designated data holders (for example, banks and electricity retailers) to share data safely and securely with third parties (for example, fintech companies) following consent from the consumer. In August 2022, New Zealand made a number of further decisions regarding the implementation of consumer data right, and agreed to designate banking as the first sector subject to the consumer data right. In June and July 2023, New Zealand consulted on an exposure draft of the Customer and Product Data Bill, which creates the legislative framework for a consumer data right, with the aim of introducing it to the Parliament in 2023.

Key initiative 2 – Climate Change Response (Zero Carbon) Amendment Act 2019

In 2019, New Zealand introduced a legislative framework for reducing domestic greenhouse gas emissions and contributing to global efforts to limit temperature rise to 1.5 degrees Celsius above pre-industrial levels. Measures indicated in the framework include: (1) legislating a target that requires biogenic methane emissions to reduce to 24-47 percent below 2017 levels by 2050 (and 10 percent by 2030) and all other greenhouse gases to reach net zero by 2050 (‘2050 target’); (2) requiring the government to set five-year emissions budgets to progressively reduce emissions in line with the 2050 target and publish emissions reduction plans that outline policies and strategies to meet successive emissions budgets; (3) requiring the preparation of a national climate change risk assessment every six years, followed by a national adaptation plan that respond to the risks identified; and (4) establishing the Climate Change Commission to provide independent expert advice on climate change matters and to monitor progress towards the government’s mitigation and adaptation goals.

New Zealand published its first emissions reduction plan in May 2022. The plan sets out over 300 actions needed to achieve the first emissions budget and puts New Zealand on a path to meeting its 2050 target. Alongside the emissions reduction plan, New Zealand has set and gazetted its first three emissions budgets, which are stated as a net amount of million tonnes of carbon dioxide equivalent (Mt CO_{2e}), and applied to all greenhouse gases, all sectors and all regions. Additionally, New Zealand published its first national adaptation plan in August 2022, which responds to all the priority risks identified in the first domestic climate change risk assessment published in August 2020. It brings together existing actions and proposes future

work in a multi-year work programme to enable all levels of government, sectors and communities to better understand the risks and take action to address them over the next six years.

The Climate Change Commission is responsible for monitoring and reporting on progress toward the emissions budgets and the 2050 target, as well as the success of the emissions reduction plan (the first annual report is due mid-2024) and the national adaptation plan (first report due August 2024). New Zealand noted that its emissions and removals data is reported annually by the Ministry for the Environment in New Zealand's Greenhouse Gas Inventory, and that there are different measures for success across the economy-wide plan (for example, the Ministry of Transport produces a sustainability monitoring report which can be used to assess progress against the four transport targets for 2035 within the emissions reduction plan).

Key initiative 3 – Reform replacing the Resource Management Act

New Zealand plans to repeal the Resource Management Act 1991 as it has not delivered on its desired environmental or development outcomes. It would be replaced by three new pieces of legislation: (1) Natural and Built Environment Act to protect and restore the environment while better enabling development (Note: this is intended to be the primary piece of legislation to replace the Resource Management Act 1991 and will include a new National Planning Framework to provide consistent domestic policy, outcomes, limits and targets.); (2) Spatial Planning Act requiring the development of long-term regional spatial strategies to help coordinate and integrate decisions made under relevant legislation; and (3) Climate Adaptation Act to address complex issues associated with managed retreat.

The Natural and Built Environment Bill and the Spatial Planning Bill were introduced to Parliament in November 2022 and are being examined by a select committee process. New Zealand anticipated that the Bills will be enacted in the second quarter of 2023. The Climate Adaptation Bill is expected to be introduced by the end of 2024. An independent Māori Entity has been proposed to monitor Te Tiriti o Waitangi (The Treaty of Waitangi) performance in the system, provide input into the National Planning Framework, and provide recommendations to central and local government. New Zealand has identified steps to be taken once the Bills have been passed, including developing regional spatial strategies under the Spatial Planning Act and regional natural and built environment plans under the Natural and Built Environment Act, as well as monitoring, reporting and evaluating the natural and built environment system framework.

Key initiative 4 – Reform of Research Science and Innovation (Future Pathways)

Te Ara Paerangi – Future Pathways is a multi-year programme focused on the future of New Zealand's research, science and innovation (RSI) system. A white paper was released in November 2022 to serve as a single enduring policy reference point for the Te Ara Paerangi reform programme. Four key reform objectives provide a framework for achieving the reform vision: (1) Creating new futures – an RSI system that makes an impact of domestic and global significance and continuously grows the adaptive capacity of society; (2) Embedding Te Tiriti – an RSI system that embeds Te Tiriti o Waitangi in its design; (3) Valuing our people – an RSI system that attracts, retains and develops an excellent and diverse workforce at all career stages; and (4) Building system agility – a sustainable, resilient and cohesive system that adapts to new challenges and opportunities. New Zealand periodically publishes an RSI report that provides an overview of how the system is performing. The latest report was published in 2021 and has

a variety of relevant quantitative indicators, including: R&D spend as a proportion of GDP, patents granted to resident inventors, and diversity of researchers at tertiary education organisations.

3.3.12 Papua New Guinea

For the 2022 IAP report, Papua New Guinea identified seven key initiatives, associating each of the key initiatives with one pillar or multiple pillars of the EAASR, as shown in Table 3.13.

Table 3.13 Papua New Guinea’s EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Electronic Transaction Act	■	■	■	■
2	Higher and Technical Education Reform Act 2020				■
3	Development of New MSME Policy 2022 and MSME Medium Term Development Plan 2022–2026	■		■	
4	Investment Opportunity Profiling and Papua New Guinea Market Condition Survey		■		■
5	Amendments to Harbours Act	■			
6	Consumer Protection and Competition Reform	■		■	
7	National Competition Policy	■			

Papua New Guinea provided updates for six key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Electronic Transaction Act

Papua New Guinea noted that the Electronic Transaction Act sets the foundation for the redevelopment of e-commerce and digital trade in the economy through an efficient and competitive domestic market. The legislation aims to enhance transparency and legal predictability, to facilitate better connectivity of its local SMEs to the global marketplace, and to further grow its internet and digital economy. Papua New Guinea is currently working in close collaboration with both the public and private sector to progress the implementation of the Act, including identifying important issues for possible amendments. Papua New Guinea is also working with them to develop its e-commerce policy and strategy. Papua New Guinea noted that resource constraints make it challenging to share information and raise awareness about important issues related to this topic. For example, lack of information is affecting the trust and confidence in using online platforms.

Key initiative 2 – Higher and Technical Education Reform Act 2020

The Higher and Technical Education Reform Act 2020 and related amended Acts legally transfers the oversight of public higher educational institutes from the Ministry for Education and other agencies (Department of Health and Department of Agriculture and Livestock) to the Ministry of Higher Education, Research, Science and Technology (MHERST) and Department of Higher Education, Research, Science and Technology (DHERST). Regulatory oversight of private higher educational institutes formerly under the National Training Council has also been transferred to the MHERST and DHERST. DHERST had established a Higher Education Transition Secretariat and relevant technical working groups to oversee and coordinate the implementation of reform activities.

A Transitional Work Plan has been developed to implement the Higher and Technical Education Reform Act 2020 that identifies five key result areas: (1) Transfer of budgetary allocations from affected agencies to DHERST; (2) Establishment of governing councils for transferred higher educational institutes and rollout of the governance manual; (3) Transfer of registration and accreditation functions from the National Training Council to DHERST; (4) Establishment of new salary terms and conditions for higher educational institutes, transfer of

functions from the National Department of Education (NDoE) to DHERST; and (5) digitalisation rollout strategy and support systems.

Papua New Guinea noted some progress in implementing the Higher and Technical Education Reform Act 2020. For example, the number of registered higher educational institutes has increased from 53 in 2020 to 62 in 2022 as a result of all higher educational institutes now operating under one regulatory framework. The number of accredited programmes has also increased, from 237 in 2021 to 248 in 2022. At the same time, Papua New Guinea has identified some challenges such as limited funding to support reform implementation and delay in the approval of the new organisational structure for the transferred higher educational institutes.

Key initiative 4 – Investment Opportunity Profiling and Papua New Guinea Market Condition Survey

Papua New Guinea is embarking on a project to gather relevant information pertaining to investment opportunities in the economy that could be shared with potential investors. The information could also be used to assist the government to plan for future business disruptions and shocks in the economy. One element of the project is for the Investment Promotion Authority to identify and package investment-ready projects, and promote them online through the UNIDO web portal and its international network partners. Despite the manpower and coordination challenges, the Investment Promotion Authority team successfully profiled 24 projects from source entities and after verification, the projects have now been published on UNIDO's Invest in ACP portal.

Key initiative 5 – Amendments to Harbours Act

Following a study on the competitiveness of its ports industry in 2016, Papua New Guinea is in the midst of amending its Harbours Act to grant the Independent Consumer and Competition Commission more powers to regulate ports where required and hence protect the interests of customers in both declared and undeclared ports. To date, the Independent Consumer and Competition Commission has completed the public consultation on the proposed amendment. The office of the state solicitor has also provided the Certificate of Necessity to effect the relevant processes to amend the Harbours Act. The Independent Consumer and Competition Commission has also prepared a brief on the amendment that would be presented to the Minister of Treasury together with a Submission prepared by the National Executive Council (NEC) for the purpose of seeking approval for the tabling of the NEC Submission.

Key initiative 6 – Consumer Protection and Competition Reform

Papua New Guinea sanctioned a review of the consumer and competition landscape in the economy in 2014. The Consumer and Competition Framework Review extended into overall policies, laws and key agencies/departments that play a role in Papua New Guinea's consumer and competition environment, including the institutional capacity of the Independent Consumer and Competition Commission as the primary agency in charge of administering the Independent Consumer and Competition Commission Act 2002. The Consumer and Competition Framework Review Final Report and Recommendations was approved by the National Executive Council in March 2018.

To support the review outcome and recommendations, activities to be undertaken between 2020 and 2030 have been grouped into five key workstreams, noted here with their respective

progress: (1) National Competition Policy – this has been developed and is currently being implemented; (2) Legislative and legal changes/amendments – the Treasury, with technical assistance from Asian Development Bank (ADB)–Pacific Private Sector Development Initiative and in partnership with the Independent Consumer and Competition Commission, are working to reform the existing consumer and competition legislation; (3) Regulator operational changes/improvements – operational improvements are ongoing to ensure that the Independent Consumer and Competition Commission could deliver on its core responsibilities; (4) Regulator capacity development and coordination – there are ongoing in-house training provided by external technical assistance partners to develop the capacity of the Independent Consumer and Competition Commission; and (5) Government policy coordination – several memorandums of understanding (MOUs) were signed between the Independent Consumer and Competition Commission and other government agencies to work collaboratively in addressing competition and consumer issues.

Key initiative 7 – National Competition Policy

The development of the National Competition Policy is one of the key recommendations arising from the Consumer and Competition Framework Review discussed above. Its objectives are to improve economic efficiency, promote sustainable and inclusive economic growth, increase consumer welfare and enhance total welfare by promoting and maintaining fair and effective competition in all markets across Papua New Guinea. The National Competition Policy, which was developed by the Treasury with technical assistance from the Pacific Private Sector Development Initiative, was approved by the National Executive Council in July 2020. The Treasury and the Independent Consumer and Competition Commission plan to conduct economy-wide activities to raise awareness on the National Competition Policy. The Independent Consumer and Competition Commission will also be raising awareness on cartels and the Commission’s Leniency Policy.

3.3.13 Peru

For the 2022 IAP report, Peru identified two key initiatives, associating each of the key initiatives with one pillar of the EAASR, as shown in Table 3.13.

Table 3.14 Peru’s EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Issuance of relevant guidelines on Pre-Merger Notification in order to facilitate the comprehension and ongoing merger procedures for creating an enabling environment for open and competitive markets	■			
2	Reforms to design quality regulations, decrease regulatory and cost burden for business in executive power entities	■			

Peru provided updates for all key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Issuance of relevant guidelines on Pre-Merger Notification in order to facilitate the comprehension and ongoing merger procedures for creating an enabling environment for open and competitive markets

Peru’s Congress issued Law 31112 in 2021, establishing a regime to review mergers and acquisitions across all economic sectors to ensure compliance with competition legislation. On 1 June 2021, the Peruvian Competition Authority or Indecopi issued the Notification Thresholds Calculation Guidelines to increase understanding of the pre-merger notification criteria. Included are examples and graphics to provide economic agents with clarity and legal certainty on merger control procedures. In December 2022, Indecopi issued guidelines on the definition and analysis of merger transactions to help economic agents identify the transactions that would qualify as merger transactions and to inform the analysis that Indecopi would perform to evaluate the effects of any merger transaction on the market (based on the evaluation, a merger transaction would be authorised, authorised with conditions, or denied). Peru noted that both sets of guidelines included comments and opinions from citizens, legal professionals and economic agents. Additionally, Indecopi received 20 merger notifications in 2022, which is higher relative to 2021. Indecopi plans to issue another set of guidelines in 2023 to explain the procedures involved in pre-merger control.

Key initiative 2 – Reforms to design quality regulations, decrease regulatory and cost burden for business in executive power entities

Peru created the Community of Practice for Regulatory Improvement in 2022 to involve various stakeholders in promoting regulatory impact assessments (RIAs). Eighty-two percent of the members of this community of practice are public officials from the executive branch, with the rest being officials from district and provincial municipalities, the judicial branch, Congress and the Office of the Comptroller General. Peru also undertook various activities in 22 and 2023 to share the importance of RIA, including distributing bulletins, organising talks on regulatory improvement and issuing guidelines on various related topics, such as stakeholder engagement and methodologies for ex ante RIA. Peru also conducted workshops for 55 public entities of the executive branch and 632 public officials, including those from multidisciplinary technical teams of said public entities and from specialised technical teams in charge of supervising the implementation of regulatory improvement reforms in the economy. Last but not least, Peru piloted a technical assistance programme for eight executive branch entities that was carried out by an international consulting firm with experience in RIA.

3.3.14 The Philippines

For the 2022 IAP report, the Philippines identified five key initiatives, associating each of these key initiatives with a pillar or multiple pillars of the EAASR, as shown in Table 3.15.

Table 3.15 The Philippines' EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Inclusive Innovation Industrial Strategy (i3S)	■	■	■	■
2	Philippine Action Plan for Sustainable Consumption and Production		■	■	■
3	Implementation of the Philippine Identification System (PhilSys)			■	■
4	Institutionalisation of the Social Protection Floor			■	
5	NEHEMIA programme (measures for the telecommunications sector)	■			■

The Philippines provided updates for all key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Inclusive Innovation Industrial Strategy (i3S)

The Inclusive Innovation Industrial Strategy (i3S) aims to nurture high-growth and innovative industries, remove growth obstacles to attract investments and deepen linkages between domestic and global value chains across the manufacturing, agriculture and services sectors. The initiative was relaunched to put science, technology and innovation at the centre of the Philippines' industrialisation strategy.

One of the main objectives of i3S is embracing Industry 4.0 through wider adoption of innovation and new technologies. On this front, a National Artificial Intelligence (AI) Strategy Roadmap was launched in May 2021. The roadmap outlined strategies to employ AI technologies in ways that benefit the Filipino people and economy, and the government has partnered with private consultancy firms to conduct capacity-building programmes to increase the pool of AI experts in the economy. The Philippines plans to set up a body comprising the Department of Trade and Industry, other government agencies as well as representatives from industry and academia to steer and oversee implementation of the roadmap.

Other i3S programmes that have been implemented include: (1) Established Regional Inclusive Innovation Centres in nine regions to drive regional industrialisation, with another three regions in the early stages of setting up their centres; (2) Performed Smart Industry Readiness Index (SIRI) assessment to help Philippine manufacturers keep track of their digitalisation efforts and identify areas for improvement (SIRI also consists of a suite of framework and tools to help firm start, scale and sustain their digitalisation journey); (3) Launched the Philippine Skills Framework for the digital animation and game development sector in March 2021 as part of a holistic approach to develop the creative industry, with plans to develop more Philippine Skills Frameworks targeted at other sectors; and (4) Expanded the Department of Trade and Industry's support for local start-ups. Through various initiatives, the Department has nurtured 25 start-ups as they increased their market and investment readiness; helped nine others kickstart their expansion into other ASEAN markets; and promoted 28 start-ups in international markets.

Key initiative 2 – Philippine Action Plan for Sustainable Consumption and Production

The Philippines aims to steer consumers and producers towards green goods and services, promote the adoption of sustainable lifestyle, and drive resilient and inclusive economic growth. The Philippine Action Plan for Sustainable Consumption and Production sets out the relevant initiatives and policy reforms to achieve those goals.

A major thrust of the Action Plan concerns the institutionalisation of natural capital accounting, and a roadmap was launched in February 2023 to guide the Philippines toward that goal. Several legislative bills have been filed in the Philippine Congress to strengthen legal and institutional mandates to support the implementation of national capital accounting at the national and sub-national levels. A related thrust of the Action Plan involves assessing the ecological thresholds and negative externalities of development activities, with a view to promoting more affective management of the environment and natural resources. Tourism is a key priority area, and the Department of the Environment and Natural Resources is updating the carrying capacity of Boracay Island, while the National Economic and Development Authority has produced a manual on undertaking urban carrying capacity assessments.

To promote sustainable mobility solutions, a total of 564 kilometres of bicycle lanes were constructed in 13 cities in Metro Manila, 4 cities in Metro Cebu and 1 city in Metro Davao. Other initiatives include the EDSA Greenways Project to connect pedestrian networks to key train stations, and the Public Utility Vehicle Modernization Project that requires the engines of new fleets of public transit vehicles to be environment friendly.

Other updates on the Philippine Action Plan for Sustainable Consumption and Production by the Philippines include: (1) the first auction under the Green Energy Auction Programme on 17 June 2022, which generated a total of 1,966.93 MW of renewable energy capacity from hydro, biomass, solar and wind; (2) enactment of the Extended Producer Responsibility Act 2022, which mandates that large companies should better manage waste; (3) setting up the Green Packaging Laboratory to develop and commercialise bio-based packaging materials; (4) a report prepared by the Department of Science and Technology assessing the life cycle and environmental impact of single-use plastic products; and (5) implementation of the National Ecolabelling Programme–Green Choice Philippines, a voluntary certification and labelling initiative that helps consumers identify products and services that meet environmental standards.

Key initiative 3 – Implementation of the Philippine Identification System (PhilSys)

The Philippine Identification System (PhilSys) Act was enacted on 6 August 2018 to provide all citizens and residents with an economy-wide ID, with an aim to digitalise government transactions and improve the delivery of public services. Registration efforts commenced in October 2020, and as of 31 December 2022, more than 75.7 million Filipinos had completed Step 2 registration or the process of capturing biometric information. The Philippine Postal Corporation delivered more than 21.4 million physical Philippine Identification (PhilID) cards to registrants, while around 13.7 million of ePhilIDs – the digital version of PhilID – were printed and issued.

Registration centres have been set up in 81 provinces and 5 National Capital Region districts to facilitate Step 2 registration processes. Activities at these centres will expand to allow those

already registered to update their demographic and biometric information. The Philippines is also developing a system to enable the use of biometric authentication in online transactions.

Key initiative 4 – Institutionalisation of the Social Protection Floor

The Social Protection Floor is a set of basic social security guarantees for all Filipinos. The Philippines has been consulting stakeholders and revising recommendations for the Social Protection Floor, with a revised framework approved by the Social Development Committee in December 2022. The Department of Labour and Employment is finalising the recommendations and will issue a resolution to institutionalise the Social Protection Floor upon completion.

Key initiative 5 – NEHEMIA programme (measures for the telecommunications sector)

NEHEMIA stands for the National Effort for the Harmonization of Efficient Measures of Inter-related Agencies. The aim of NEHEMIA is to streamline government processes in priority sectors. For the telecommunications sector, measures are targeted at making it easier to construct and install critical infrastructure such as cell towers, software and wireless technologies, as well as deliver ICT services throughout the Philippines.

The streamlined processes for the telco sector are outlined in Joint Memorandum Circulars signed between the Anti-Red Tape Authority, the agency overseeing NEHEMIA, and various key government agencies. The Anti-Red Tape Authority is monitoring the implementation of the circulars through consultations with public and private stakeholders. The Philippines reported that telco players confirmed there have been substantial improvements in the turnaround time in obtaining permits, licenses, certifications and authorisations.

To identify further pain points faced by telco players, the Anti-Red Tape Authority has hired a consultant to conduct business process mapping for the sector. The consultant will analyse existing processes and requirements, including monitoring the issuance of permits, licenses and clearances from government offices for the construction of underground fibre ducts and installation of underground cables. The consultant will also identify areas for improvement and recommend strategies to improve the regulatory environment in the telco sector.

Given the positive outcome of the NEHEMIA programme for the telco sector, the Philippines' Office of the President sought inputs from the Anti-Red Tape Authority in drafting an Executive Order to adopt the Joint Memorandum Circulars in whole. The Anti-Red Tape Authority is also working on raising awareness of the NEHEMIA programme among telco players, by distributing information kits at industry events and holding information drives around the economy.

3.3.15 Russia

For the 2022 IAP report, Russia identified five key initiatives, associating each of the initiatives with a pillar or multiple pillars of the EAASR, as shown in Table 3.16.

Table 3.16 Russia’s EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Development of regulatory impact assessment tools and reducing the administrative burden	■			
2	National Competition Development Plan 2021–2025	■			
3	National Project on MSMEs and Support for Individual Entrepreneurship 2018–2024		■		
4	Low Emissions Development Strategy 2021-2050			■	
5	National Program “Digital Economy” 2018-2024				■

Russia provided updates for four key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Development of regulatory impact assessment tools and reducing the administrative burden

In 2020, a ‘regulatory guillotine’ was carried out to update the legal and regulatory framework. The objective was to institute a new, modern and efficient system of mandatory requirements for businesses that would reduce socially significant risks and provide a balance between the interests of the economy, population and business. The reform was based on two principles: (1) Acts established before 2020 cannot be the subject of state control (supervision) after 1 January 2021, with several exceptions; (2) new regulations would be enacted containing updated requirements that would take into account a risk-based approach and the current level of technological development. Russia noted that the introduction of a regulatory cycle⁴⁶ in Federal Law No. 247 has improved the quality of ex-post assessment of the legal Acts as it is a requirement for extending the validity of regulations. The regulatory guillotine involved 39 ministries and agencies, over 1,300 experts, and 43 working groups. A total of 3,025 regulations containing mandatory requirements were cancelled, while 9,319 legal Acts of the Soviet Union were invalidated. Following the regulatory guillotine, 447 Acts were adopted and entered into force on 1 January 2021.

Key initiative 2 – National Competition Development Plan 2021—2025

Russia has undertaken various measures to ensure that domestic markets are able to operate, prevent shortages of goods and support businesses. These include: (1) strengthening control over prices in the markets of socially significant goods; (2) preventing and suppressing violations and reducing administrative barriers for those receiving subsidies in food markets and eliminating discrimination against them; (3) improving exchange trading and adjusting the parameters of the balance between supply and demand; (4) considering the possibility of reducing by half any administrative fine incurred by micro and small business entities; and (5) simplifying the procedure for granting preferential treatment to entrepreneurs.

Moreover, Russia developed a number of draft federal laws that were adopted by the State Duma at the first reading: (1) No.160278-8 on Amendments to the Code of Administrative Offences of the Russian Federation (adopted 21 December 2022) – to improve anti-monopoly

⁴⁶ Regulatory cycle limits the period of validity of legal Acts containing mandatory requirements to a maximum of six years.

regulation of digital markets, and clarify administrative liability for violations related to monopolistic activity in digital commodity markets; (2) No. 160280-8 on Amendments to the Federal Law on Protection of Competition (adopted 11 October 2022) – to improve anti-monopoly regulation in the context of development of digital economy; (3) No. 848246-7 on Amendments to Article 178 of the Criminal Code of the Russian Federation and Article 151 of the Criminal Procedure Code of the Russian Federation (adopted 15 December 2022) – to strengthen responsibility for entering into or participating in a cartel; and (4) No. 848369-7 on Amendments to the Code of Administrative Offences of the Russian Federation (adopted 15 December 2022) – to strengthen the punishment for obstructing anti-cartel inspections, setting it in the form of a turnover fine for legal entities of up to RUB 50,000 for officials, and up to RUB 30,000 for citizens.

Russia has continued to improve its tariff regulation through various laws and regulations, including: (1) Federal Law No. 391-FZ on Amendments to Article 5 of the Federal Law on Production and Consumption Waste (adopted 7 October 2022) – to introduce a procedure for pre-trial consideration of disputes and disagreements on fixed prices (tariffs) in the field of solid municipal waste management; (2) No. 988 on Amendments to Certain Acts of the Government of the Russian Federation (adopted 30 May 2022) – to amend the rules for regulating prices (tariffs) in the field of heat supply; and (3) FAS Order No. 263/22 (adopted 31 March 2022) – to establish requirements for regulated organisations.

In terms of implementation, Russia has continued to implement a set of measures to curb prices (tariffs). In 2022, the Board of the Federal Antimonopoly Service (FAS) Russia had 41 meetings where the following tariff decisions were made in different fields: gas supply – 404 decisions (68 orders), transportation of oil and petroleum products – 112 decisions (8 orders), air transport – 13 decisions (13 orders), water transport – 2 decisions (2 orders), railway transport – 10 decisions (10 orders), communications – 9 decisions (9 orders), electric power and housing – 8,601 decisions (34 orders).

Key initiative 4 – Low Emissions Development Strategy 2021–2050

To create an economy-wide system to support emissions reductions and sustainable development, including those within the mechanisms provided in Article 6 of the Paris Agreement, Russia adopted in June 2021 Federal Law No. 296-FZ on limiting greenhouse gas emissions. The law establishes a greenhouse gas emissions accounting system and introduces mandatory reporting from the year 2023 for companies with annual emissions of over 150,000 tons of CO₂ equivalent, and from 2025 for those with over 50,000 tons of CO₂ equivalent, to be recorded in the domestic registry of greenhouse gas emissions. The law also establishes a federal carbon offsetting system that comprises legal procedures for the development and implementation of the greenhouse gas emissions reduction/removal projects, their verification and registration, as well as the issuance of carbon units and their circulation. Russia also adopted Federal Law No. 34-FZ on pilot schemes to limit greenhouse gas emissions in certain regions (called ‘subjects’) in 2022. The first regional emissions trading system was introduced in Sakhalin region, where the infrastructure for a voluntary carbon market had been created.

In 2021, Russia approved the federal taxonomy of criteria for sustainable projects, including green development and the requirements for project verification. The taxonomy of sustainable projects comprises two sections: (1) taxonomy of green projects, which includes a list of projects recognised as green in accordance with global practice; and (2) taxonomy of adaptation projects, which includes a list of projects aimed at adapting the economy to climate change.

The number of criteria may differ depending on the type of projects. For example, waste management under green projects has four criteria while under adaptation projects has one criterion. The approval of the federal taxonomy sets the stage for Russia to develop its green finance instruments market.

Furthermore, Russia has formulated a multi-level system of adaptation planning to effectively adapt to climate change. Elements of the system include (1) Federal plan that is regularly updated; (2) Sectoral plans that focus on the climate risks and adaptation needs in each economic sector; and (3) Regional plans that reflect the special circumstances of the different regions (subjects) of Russia. Among the sectors where plans have been developed are transport, the fuel and energy complex, construction, housing and communal services, the agro-industrial complex and fishing, and environmental management. In 2021, Russia also approved common methodological recommendations and indicators on climate change adaptation. Russia is currently finalising the economy-wide action plan for the second stage of adaptation to climate change (2023–2025).

Key initiative 5 – National Program on Digital Economy 2018–2024

Russia has continued to make progress in implementing its national program on the digital economy. A unified register of Russian programs for electronic computers and databases was created to expand their use, to confirm their origin and to provide government support measures to software copyright holders. A total of 3,668 and 3,745 programs were included in the register in 2021 and 2022, respectively. Russia has a federal project aimed at creating conditions for the start-ups dealing with developing IT solutions. It provides grants to technological start-ups for the purpose of development, application and commercialisation of Russian IT solutions as well as their accelerated development. It also provides co-financing to facilitate the introduction of innovative IT products to the market. By the end of 2022, support has been provided to 706 projects.

On information infrastructure development, Russia updated that, by 2022, Wi-Fi networks covered 9,000 schools across the economy and 96.7 percent of educational organisations are able to access the internet connection at maximum speed. To ensure affordability, schools are connected at a unified tariff under a federal contract. Additionally, all socially significant infrastructure facilities were connected to the internet in 2021. With regard to bringing access to remote areas, 26,900 communities with 100 to 500 residents have been connected to the internet, while mobile communication became available in 1,201 small communities in 2021. On 5G deployment, pilot networks have been deployed in cities with a population over a million people and work is currently underway to deploy networks with equipment fully made in Russia.

On digital public administration, Russia updated that, within the framework of the Unified Portal of State and Municipal Services, more than 1,200 state services are provided online by federal authorities, while the number of regional and municipal services stood at more than 7,700 and 20,850, respectively. By the end of 2022, 99.97 percent of socially significant services have been shifted to the digital format. Russia noted that e-government has been a major success in the economy because of a holistic ‘superservice’ approach, that is, a one-stop centre for multiple services by different agencies.

On human resources for the digital economy, IT training has been conducted in more than 470 universities to date, and more than 343,000 people had been admitted to higher education

programmes in the field of IT with federal support since 2019. Furthermore, more than 110,000 people are currently being trained in additional professional IT education programmes. About 34,300 teachers of higher and secondary education have also completed advanced training under new programmes for IT specialisations since 2021. Last but not least, more than 24,500 officials and public employees have obtained digital skills under the Russian Presidential Academy of National Economy and Public Administration (RANEPA) University programmes starting from 2021.

3.3.16 Singapore

For the 2022 IAP report, Singapore identified three key initiatives, associating each of the initiatives with one pillar or multiple pillars of the EAASR, as shown in Table 3.17.

Table 3.17 Singapore’s EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Singapore Green Plan 2030		■		■
2	Research, Innovation and Enterprise 2025 Plan		■		■
3	Equal Opportunities in the Workplace as proposed by the White Paper on Singapore Women’s Development			■	

Singapore provided updates for all key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Singapore Green Plan 2030

Launched in 2021, the Singapore Green Plan 2030 is a whole-of-economy movement to advance a sustainable development agenda. It charts ambitious, concrete targets over the next 10 years, which will strengthen ongoing efforts toward achieving the United Nation’s 2030 Sustainable Development Agenda and Singapore’s commitments under the Paris Agreement. Singapore has identified several activities under the ‘City in Nature’ pillar of the plan. These include: (1) Growing its nature park networks, with 200 additional hectares of new nature parks by 2030 to cushion the impact of urbanisation and create complementary habitats; (2) Restoring nature into urban areas, with 200 hectares of skyrise greenery island-wide by 2030; and (3) Connecting green spaces through networks of ecological corridors linking nature reserves to heartland gardens and parks, hence bringing together plants, wildlife and people. Singapore aims to have 300 kilometres of nature ways and 500 kilometres of park connectors by 2030, connecting every Singaporean to within 10 minutes of a park. Singapore is working with stakeholders toward the targets and noted that active participation from the community is essential to realising the goals laid out in the plan.

Singapore would diversify its energy supply through four ‘switches’: (1) Ensure more efficient use of natural gas for electricity generation; (2) Deploy 1.5 gigawatt-peak (GWp) of solar by 2025 and at least 2 GWp by 2030; (3) Facilitate the development of regional power grids; and (4) Explore emerging low-carbon alternatives that can decarbonise the power and industry sectors significantly in the longer term, such as carbon capture, utilisation and storage, and low-carbon hydrogen technologies.

Singapore recognises that the global transition to a low-carbon economy brings new opportunities, and would continue to partner businesses and workers, with the goal of enabling them to remain competitive and seize opportunities in the green economy. The Enterprise Sustainability Programme (ESP) was launched in 2021 by EnterpriseSG to support Singapore businesses on sustainability initiatives. In 2022, EnterpriseSG launched the first series of ESP Sustainability Courses with three partners (Global Compact Network Singapore, PwC Singapore and the Singapore Environment Council), and developed a small and medium-sized enterprise Decarbonisation Programme with Schneider Electric. A new Energy Efficiency Grant for the food services, food manufacturing and retail sectors has also been launched as part of support measures to encourage businesses to use energy-efficient equipment. As of December 2022, the ESP has benefitted over 650 enterprises through training, initiatives from

trade associations and chambers, partner programmes, as well as funding and financing support for enterprise projects.

To ensure a resilient future, actions taken by Singapore include: (1) Shoring up its coastal and flood defences to guard against the threat of rising sea levels; (2) Enhancing the resilience of the food supply, including through its 30-by-30 vision to build up the capability and capacity of its agri-food industry to produce 30 percent of Singapore's nutritional needs locally and sustainably; and (3) Taking steps to mitigate the effects of rising temperatures due to climate change and the 'urban heat island' effect.

With regard to sustainable living, Singapore is reducing carbon emissions and embracing sustainability by encouraging the community to consume less, recycle more and take public transport. The vision of a Zero Waste Nation would be powered by a circular economy, with Reduce, Reuse and Recycle as a societal norm. Singapore has closed its water loop by recycling used water to produce NEWater and is similarly making a push toward circularity in waste materials to transform trash into treasure. The Green Commutes Plan would see 8 in 10 households within a 10-minute walk of a train station by 2030, with a corresponding 50 percent increase in the rail network. Singapore would also be expanding its cycling networks by three times the current size.

Key initiative 2 – Research, Innovation and Enterprise 2025 Plan

Investment in innovation and enterprise is a key pillar of Singapore's development into a knowledge-based, innovation-driven economy and society. The Research, Innovation and Enterprise 2025 Plan (2021–2025) is the latest phase in Singapore's R&D strategy.

Singapore, through this SGD 25 billion plan, has continued to build its research, innovation and enterprise capabilities and economic competitiveness. For example, the investments have supported companies in leveraging cutting-edge technologies to build new products and solutions, including via public–private partnership. Over the last decade, there has been about a threefold increase in sales revenue from commercialised products attributed to R&D performed in Singapore (from SGD 10.9 billion in 2010 to SGD 30.8 billion in 2020). Singapore's start-up ecosystem has also grown in vibrancy, driven by entrepreneurship and incubation programmes in the universities and public partnership with private sector accelerators and venture capital firms. Over SGD 11.4 billion of venture capital funding was raised in Singapore in the first three quarters of 2022, an increase of more than 20 times from the SGD 530 million raised in 2011.

Singapore's research, innovation and enterprise investments have been crucial in addressing economy-wide imperatives and overcoming challenges, such as COVID-19. An example is the Diagnostics Development (DxD) Hub, a research translation platform that brings together universities, industry and public agencies to accelerate the commercialisation of medical diagnostics technologies. The Hub facilitated the development of Fortitude test kits for COVID-19, which have since been exported to over 45 economies.

To deepen investments in low carbon energy research, the Research, Innovation and Enterprise 2020 Plan awarded SGD 55 million for Phase 1 of the Low Carbon Energy Research Programme. A further SGD 129 million has been set aside for Phase 2 under the 2025 plan. Research, innovation and enterprise events in Singapore continue to reflect Singapore's position as a Global-Asia node in the international innovation community. These include the

Singapore Week of Innovation and Technology and The Global Young Scientists Summit organised in October 2022 and January 2023, respectively. Singapore's gross expenditure on R&D (GERD) increased from SGD 9.7 billion in 2019 to SGD 10.4 billion in 2020, registering a year-on-year growth of 7.3 percent. While Singapore has made good progress, it noted that most of the private sector R&D in Singapore is driven by multinationals. Therefore, Singapore is working toward providing more targeted support to local enterprises to embark on R&D and innovation activities.

Key initiative 3 – Equal Opportunities in the Workplace as proposed by the White Paper on Singapore Women's Development

Endorsed by the Singapore Parliament in April 2022, the White Paper on Singapore Women's Development is informed by insights gained from the year-long, economy-wide Conversations on Singapore Women's Development that had the participation of Singaporeans from various walks of life, both women and men. The action plans in the White Paper will be implemented over a 10-year roadmap, with a mid-point review to be conducted in 2027. One action plan is introducing workplace fairness legislation. Since July 2021, the Tripartite Committee on Workplace Fairness has been consulting widely to solicit views from workers, employers, the human resources (HR) community and NGOs. The Committee is expected to complete its deliberations in 2023 and legislation is expected to be rolled out in 2024.

On expanding flexible work arrangements, Singapore noted that over 9 in 10 employers provided at least one flexible work arrangement to employees on a sustained basis in 2022. Activities on this front include: (1) The economy's tripartite partners (government, unions and employers) continuing to encourage and support employers to sustain flexible work arrangements post-pandemic; (2) The tripartite partners strengthening training to equip companies with the know-how to implement flexible work arrangements in a win-win and sustainable manner; and (3) Stepping up efforts to bring more companies onboard the voluntary Tripartite Standard on Flexible Work Arrangements so that more companies adopt best practices in implementing such arrangements. Singapore noted that these efforts will stand companies in good stead to comply with the new Tripartite Guidelines on Flexible Work Arrangements that the tripartite partners will introduce by 2024 to make it a requirement for employers to fairly and properly consider requests for flexible work arrangements.

3.3.17 Chinese Taipei

For the 2022 IAP report, Chinese Taipei identified three key initiatives, associating each of the initiatives with multiple pillars of the EAASR, as shown in Table 3.18.

Table 3.18 Chinese Taipei’s EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Fostering green finance for sustainable development – Green Finance Action Plan		■	■	■
2	Utilising digital technologies to facilitate inclusive health promotion – Precision Health Initiative	■	■	■	■
3	Using Online Platform to Expedite the Consultation Process	■		■	

Chinese Taipei provided updates for all key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Fostering green finance for sustainable development – Green Finance Action Plan

To overcome the challenges of financing the green economy and tackling climate change risks by financial institutions, the Financial Supervisory Commission promoted the Green Finance Action Plan 2.0 from August 2020 to August 2022, and launched the Green Finance Action Plan 3.0 in September 2022. Its goal is to encourage financial institutions to wield their influence (through investing and financing decision making) to guide enterprises to make decarbonisation and sustainability transition plans.

The Financial Supervisory Commission formulated the Program to Encourage Lending by Domestic Banks to Enterprises in Six Core Strategic Industries, and started its implementation from April 2022. The six core strategic industries include those engaged in green and renewable energy. As of the end of June 2023, the balance of loans by domestic banks to green and renewable energy industries was about USD 83 billion, up by about USD 15.5 billion compared to the end of March 2022. Additionally, Chinese Taipei promulgated the Operation Directions for Sustainable Bonds on 29 April 2021, and launched the Sustainable Bonds Market, which contains green bonds, social bonds and sustainability bonds. Sustainability-linked bonds were incorporated into the Market in July 2022. As of the end of June 2023, there were 164 sustainable bonds, which had raised a total of USD 15 billion, including green bonds, social bonds, sustainability bonds and sustainability-linked bonds.

The Financial Supervisory Commission also announced the Sustainability Taxonomy of Chinese Taipei in December 2022. The taxonomy sets out a list of technical screening criteria to be considered when determining whether an economic activity contributes substantially to the objective of climate change mitigation and makes no significant harm to any other environmental objective and social safeguard. The Financial Supervisory Commission has encouraged financial institutions and companies to incorporate the taxonomy as a reference in their decision-making process for investment and financing evaluations and business strategy planning. In cooperation with relevant government agencies, the Commission is also planning to expand the number of industries and economic activities included in the taxonomy.

Key initiative 2 – Utilising digital technologies to facilitate inclusive health promotion – Precision Health Initiative

To encourage industry to invest in precision prevention, diagnosis, treatment and care, Chinese Taipei launched the Act for the Development of Biotechnology and Pharmaceutical Industries since 2022. The Act provides tax incentives to innovative medical industries such as regenerative medicine, precision medicine and digital medicine, and serves to promote the biotechnology industry in the economy. Chinese Taipei has also established the Gateway to Health Data⁴⁷ across government ministries to integrate citizen biodata and thematic databases such as lung cancer, hence providing a one-stop service for search and counselling. Chinese Taipei plans to accelerate the development of the precision health industry by building on its R&D and manufacturing capabilities in diagnostics, drugs and vaccines (e.g., for influenza and enterovirus). Chinese Taipei noted that coordination between government ministries and public-private collaborations are important to amend the relevant legislation and to lift restrictions affecting the precision health industry.

Key initiative 3 – Using Online Platform to Expedite the Consultation Process

Chinese Taipei has established the online platform Join to expedite the consultation process, and to enable people to participate in the policy development and rule-making process. Join has three main functions: (1) Let's talk! – Policies, draft laws and regulations that are under planning would be published in this section for the public to comment and discuss online; (2) Let's supervise! – This section shows the information of the implementation progress of related policy recommendations since 2018; and (3) Let's propose! – The public could submit their policy recommendations online through this section, and people who are interested in specific issues could endorse the proposal directly.

To improve efficiency in conducting public consultations, the Participation Officials Network comprising representatives from 32 ministries has been adopted by Join. For example, by organising cross-ministerial working-level meetings, the Participation Officials' Network could gather a range of opinions and have a joint discussion with stakeholders. Chinese Taipei conducts an annual evaluation to monitor the effectiveness of Join and survey the satisfaction of users (both those proposing policies and those supporting or endorsing a policy on the platform). As of 30 June 2023, 16,295 proposals had been submitted, 8,514 of which have entered into the 'registration of support' stage. There are 309 cases posted on Join with over 5,000 expressions of support that the government could consider for further action. Satisfied users reached 88.3 percent in 2022.

⁴⁷ See <http://www.ghd.tw>.

3.3.18 Thailand

For the 2022 IAP report, Thailand identified 24 key initiatives, associating each of the initiatives with a single pillar or multiple pillars of the EAASR, as shown in Table 3.19.

Table 3.19 Thailand's EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Driving e-Services for Doing Business Easily	■		■	■
2	Thailand Digital Economy and Society Development Plan or Digital Thailand Plan				■
3	Facilitating the implementation of the Act on Criteria of Law-Making Process and Evaluation of Laws, B.E. 2562 (2019)	■			
4	Business development services to boost SME productivity				■
5	Policy Guidance for Specialised Financial Institutions 2021–2025		■	■	
6	Implementation of the People's Financial Institutions Act, B.E. 2562 (2019)			■	
7	Medium-term Public Sector Borrowing Requirement Plan (five years)		■		
8	Sustainable Borrowing for Economic Recovery and Supporting Government Portfolio		■		
9	Medium-Term Debt Management Strategy for Economic Recovery and Resilience against Future Shocks		■		
10	Exchange of Electronic Delivery Order (e-D/O) via the National Single Window	■			
11	The Improvement of Electronic Tax Filing and Payment (New e-Filing)	■			
12	The Study on Tax Incentives to Promote the Development of the Eastern Economic Corridor	■			
13	Expanding MSMEs' trade and investment to an international level		■		■
14	Developing community enterprise potential to enhance the Thai local economy in the post-COVID-19 era		■		
15	Applying blockchain to improve business integrity and efficiency phase 3				■
16	Digitalisation of all procedures to obtain trade-related documents from the Department of Foreign Trade of Thailand to enhance competitiveness and promote global supply chains				■
17	Promotion of employment of the elderly under National Action Plan on Business and Human Right Phase 1 (2019–2022)			■	
18	Informal, elderly and disabled worker management under the 2023–2027 Action Plan on Informal Workers Management*			■	
19	Sending workers abroad for overseas jobs or internships			■	
20	The help system for the unemployed to re-enter the labour market				■
21	Developing skills for workers in targeted industries to improve labour productivity and boost competitiveness				■
22	Enhancing workers' skills and capabilities for technological change**				■
23	Developing 'new normal' worker's technological skills				■
24	Developing workers' technological skills for twenty-first century work				■

Note: *title renamed in 2023, earlier title (2022) is 'Action Plan on Informal Workers Management 2023–2027'; ** title renamed in 2023, earlier title (2022) is 'Increasing workers' skills and capabilities'.

Thailand provided updates for all key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Driving e-Services for Doing Business Easily

The Office of the Public Sector Development Commission has supported government agencies to transform their public services from paper-based to a fully digitalised one. It has also set digital transformation as a key performance indicator in monitoring their organisational performance. The Commission also guides the government agencies in developing their e-Services, including digitising and sharing data and digitalising processes. The e-Services project comprises two frameworks: (1) Process re-engineering for e-Services – to enhance public services to be fully digital (e.g., e-Form, e-Payment, e-License); and (2) developing 12 key agenda-based services – 12 high-impact services would be developed for citizens (including Digital ID, Social Welfare Notification and Digital Health Pass). Thailand noted that legal restrictions were the major barrier in developing e-Services, and the Electronic-means Administrative Functions Act B.E. 2565 (2022) had taken away the obstacles on providing e-Services. A total of 1,395 e-Services were available in 2022.

Thailand is currently developing the National Digital Trade Platform to support trading across borders which is a key part of doing business. A pilot platform has been developed to test the accuracy of data linking among government agencies when the system goes live. In October 2022, the pilot platform was linked with platforms beyond Thailand (for example, Japan's TradeWaltz and Singapore's Networked Trade Platform), and electronic documents under the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) standards, such as electronic purchase orders, electronic invoices and electronic packing lists, were linked successfully. Thailand's National Digital Trade Platform is expected to be operational by 2024.

Key initiative 2 – Thailand Digital Economy and Society Development Plan or Digital Thailand Plan

The Village Broadband Internet Project (Net Pracharat) is Thailand's flagship digital infrastructure development project to promote availability, accessibility and affordability to access broadband internet services for people in rural areas. The National Broadband Network currently covers almost 75,000 villages across Thailand, including over 24,700 rural villages. This has allowed people in rural areas to access useful information and services in a variety of fields, such as education, public health and government services. As of 2 June 2022, there are a total of 11,028,223 users registered to access the Net Pracharat Wifi, with new registration increasing by around 200,000 to 300,000 users every month. The Ministry of Digital Economy and Society has also developed the Digital Volunteer Project, where selected volunteers help drive the mission of improving the digital knowledge of Thais. Moreover, the Ministry is promoting e-commerce activities to be undertaken by people located in remote areas, SMEs and farmer communities.

Key initiative 3 – Facilitating the implementation of the Act on Criteria of Law-Making Process and Evaluation of Laws, B.E. 2562 (2019)

The Act on Criteria of Law-Making Process and Evaluation of Laws, B.E. 2562 (2019) obligates every government agency to evaluate the Acts of Parliament under its charge on a regular basis. If an Act was enacted prior to 1 January 2020, it must be reviewed by 31 December 2024. All Acts that were enacted after 1 January 2020 shall be reviewed within five years from the date of enforcement. The Office of the Council of State assists and monitors all

government agencies in the review process to ensure that all Acts of Parliament are reviewed according to the time frame stipulated by the 2019 Act. All currently enforced Acts of Parliament that are up for review must be published on the publicly accessible online platform⁴⁸ along with the deadlines for the review, the result (or summary) of the review and the way forward (continued enforcement of the law, amendment or repeal). Thailand updated that at least three review projects are completed according to the standard prescribed in the Recommendation of the Council on Regulatory Policy and Governance.

The 2019 Act also sets out a legislative framework for the implementation of the better regulation principles. In this regard, the Law Reform Commission (the body responsible for overseeing the implementation of the 2019 Act) has been entrusted with the duty to issue, as appropriate, guidelines, manuals or recommendations to assist the government agencies in complying with the law. The Office of the Council of State will continue monitoring the implementation of the 2019 Act and assess if and when it is appropriate to advise the Law Reform Commission to issue additional guidelines, manuals and recommendations.

Key initiative 4 – Business development services to boost SME productivity

Thailand's business development services provide consultation on a variety of areas to meet the needs of SMEs, including productivity improvement, tax and accounting, and market and loan services. Interested SMEs could register through the Office of SME Promotion (OSMEP) application and its website. More than 90 institutes from government and private sectors have registered between October 2021 and October 2022. As of January 2023, approximately 200 SMEs have benefited from the business development services.

Thailand has also launched SME Access, a portal that provides four types of services to SMEs: (1) SME ONE – an information and news web portal; (2) SME Academy 365 – an e-learning platform; (3) SME Coach – a database of business experts who can offer both online and offline business consultation; and (4) SME Connex – a mobile application containing important information for SMEs. Between November 2021 and December 2022, more than 600,000 users accessed and utilised the various services. As of January 2023, more than 3,000 users have enrolled in courses offered via the system. OSMEP continues to improve the portal, including adding more functions.

Key initiative 5 – Policy Guidance for Specialised Financial Institutions 2021–2025

The five-year Policy Guidance for Specialised Financial Institutions was approved by the Minister of Finance in 2020. Since then, according to the update from Thailand, the guidance has been consistently used to assess and approve the annual strategic and action plans of the economy's seven specialised financial institutions. Indeed, the annual business plans of all the specialised financial institutions from 2021 to 2023 are approved by the director general of the Fiscal Policy Office as they are aligned with the frameworks in the guidance.

Key initiative 6 – Implementation of the People's Financial Institutions Act, B.E. 2562 (2019)

Thailand has encouraged qualified community-based financial institutions to register as 'people's financial institutions' from 2020 onwards. Community-based financial institutions with high potential have also received guidance from the coordinating banks in their respective

⁴⁸ See: <https://law.go.th/>.

areas on applying for this designation. With this legal status, clients of the financial institution would have access to safe and secure financial services. As of January 2023, all community-based financial institutions who possess the required qualifications and voluntarily apply for registration have been successfully registered as people's financial institutions within the specified period (60 days).

Key initiative 7 – Medium-term Public Sector Borrowing Requirement Plan (5 years)

Thailand noted that government agencies and state-owned enterprises are obliged to propose their borrowing plan for the next five years to the Public Debt Management Office if they need to raise loans for infrastructure projects. In response, the Public Debt Management Office proposed the Medium-term Public Sector Borrowing Requirement Plan (B.E. 2566–2570) (2023–2027) to the Public Debt Policy and Supervision Committee, and this was approved in August 2022. The Annual Public Debt Management Plan for fiscal year B.E. 2566 (the first revision) for infrastructure project investment totals THB 113,113.37 million. As of January 2023, about THB 22,200.00 million or 19.63 percent of the total loan has been disbursed.

Key initiative 8 – Sustainable Borrowing for Economic Recovery and Supporting Government Portfolio

The Public Debt Management Office issued debt securities to refinance existing debt incurred to provide economic relief during the COVID-19 pandemic. In fiscal year 2021–2022, the Public Debt Management Office refinanced a total of THB 241.5 million of short-term debt using a combination of loan bonds and environmental, social and governance (ESG) bond issuance. This strategic and sustainable financing plan has enabled the Public Debt Management Office to extend the government debt portfolio up to 14.3 years, make the fiscal space for other fundraising projects (if necessary), expand the investor base (especially ESG investors) and develop the ESG bond market, which could be a main source of funds for both public and private sectors in the long term.

Key initiative 9 – Medium-Term Debt Management Strategy for Economic Recovery and Resilience against Future Shocks

Thailand noted that the risk indicators under the Medium-Term Debt Management Strategy are monitored monthly to ensure that they are in line with the five-year target. Additionally, despite being legally required to review the strategy once a year, the Public Debt Management Office reviews the yield curve and the Medium-Term Debt Management Strategy and portfolio benchmarks (risk indicators) three times a year to ensure their appropriateness in a fast-changing economic and financial market situation. The Public Debt Management Office uses both the World Bank's Medium-Term Debt Management Strategy Analytical Tool as well as the in-house risk model developed by its staff.

Key initiative 10 – Exchange of Electronic Delivery Order (e-D/O) via the National Single Window

Thailand recognises that the use of hardcopy delivery orders adds cost to businesses and slows down the process of goods clearance. To kickstart the development of the electronic delivery order (e-D/O) system, Thailand has undertaken several activities, including: (1) Understand the processes related to the document; (2) Formulate the electronic data structure of the delivery order based on international standards; and (3) Establish a form and process for exchanging the e-D/O between relevant stakeholders.

Key initiative 11 – The Improvement of Electronic Tax Filing and Payment (New e-Filing)

In the fiscal year 2022, Thailand's Revenue Department added two functions to the electronic tax filing system: (1) Taxpayers filing tax returns online can pay their taxes with the digital tax compensation issued by the Customs Department from 6 am to 10 pm every day; (2) Taxpayers can file for overdue tax returns online. The new system makes tax payment easier as fines, surcharges or criminal fines can be calculated immediately after a tax return is filed.

Key initiative 12 – The Study on Tax Incentives to Promote the Development of the Eastern Economic Corridor

Thailand's Revenue Department has issued several tax measures to support the development of the Eastern Economic Corridor, including: (1) Tax measure to encourage investment in the Corridor – A reduced personal income tax rate of 17 percent for income derived by employees of companies in the target industries operating in Chachoengsao, Chonburi and Rayong Provinces (Royal Decree No. 641); (2) Tax measure to promote investment in automation systems – Companies are allowed an additional deduction of 100 percent of expenses for investments in automatic machines and software linked to the automation systems (Royal Decree No. 710); (3) Tax measure to encourage employee development – Companies are allowed an additional deduction of 150 percent of expenses incurred from sending employees on training courses certified by specified authorities (Royal Decree No. 712); and (4) Tax measure to attract highly skilled professionals to live and work in Thailand - A reduced personal income tax rate of 17 percent for income derived by employees who hold the Long-term Resident visa for highly skilled professionals of companies in the target industries (Royal Decree No. 743). From 2019 to 2022, the value of investments in automation systems has increased to THB 1,854 million, while wages paid to highly skilled personnel has increased to THB 943 million.

Key initiative 13 – Expanding MSMEs' trade and investment to an international level

Thailand's Department of International Trade Promotion has undertaken several measures to internationalise Thai creative MSMEs and entrepreneurs, including: (1) providing training and capacity building to MSMEs and creative entrepreneurs via programmes such as the Thai Brand Incubation Programme; (2) driving development of local innovative products via the Thailand Innovation and Design Promotion Programme; and (3) introducing products to international markets through different marketing channels such as internationally recognised trade fairs, online platforms and business matching activities. In 2022, the programmes under the Department of International Trade Promotion benefitted 665 MSMEs and creative entrepreneurs, while sales volume generated from its trade promotion activities was more than THB 228 million. In 2023, the Department of International Trade Promotion plans to continue enhancing MSMEs' potential to access global value chains, while putting more emphasis on sustainability among Thai MSMEs by promoting the Bio-Circular-Green (BCG) economy model.

Key initiative 14 – Developing community enterprise potential to enhance the Thai local economy in the post-COVID-19 era

Thailand has identified community enterprises for potential development in the post-COVID-19 era. The selected community enterprise for the product sector is the Integrated Agricultural Community Enterprise towards Innovative Processing located in Phayao Province in Northern Thailand, while the selected community enterprise for the service sector is Ban Laem Homestay

Mangrove Forest Conservational Community Enterprise located in Nakhon Si Thammarat Province in Southern Thailand. Six criteria were used in the selection process: (1) leadership and group development direction; (2) management; (3) production and service; (4) marketing; (5) competitiveness; and (6) sustainability of the group. Workshops and training courses covering areas such as product quality, packaging, branding and accounting were organised for the two community enterprises in May 2022. Furthermore, a seminar was held to disseminate the learnings and to discuss ways to apply the model in other community enterprises. Videos, lessons learnt and policy recommendations were also distributed to various agencies in Thailand and via online channels.

Key initiative 15 – Applying blockchain to improve business integrity and efficiency phase 3

TraceThai.com is developed to enable the traceability of organic rice and other organic products and hence increase confidence and trust among importers and consumers. The system also helps to facilitate trade and reduce unnecessary administrative barriers such as document reviews from certification bodies. Phase 3 of the system focuses on organic products accredited by certification bodies such as Organic Thailand or international standards such as the standards developed by the European Union, the United States Department of Agriculture (USDA) or the International Federation of Organic Agriculture Movements (IFOAM). There are several new organic products in the system, including those with the geographical indication (GI) standard (e.g., GI Tea from Chiang Rai Province, GI onion from Sisaket Province, GI garlic from Sisaket Province and GI coconut from Prachuab Khirikhan Province).

The Trade Policy and Strategy Office hosted workshops in three regions attended by 205 people to create awareness and encourage the use of the system. Training courses were also conducted in 18 provinces, and these attracted the participation of 335 people. Cooperation to promote the system was also sought from the Provincial Agricultural Cooperative, the Provincial Commercial Office and the branch offices of the Bank for Agriculture and Agricultural Cooperatives. Furthermore, a seminar was organised to share the results of the study on the use of blockchain technology for organic product traceability and to collect inputs from stakeholders.

Key initiative 16 – Digitalisation of all procedures to obtain trade-related documents from the Department of Foreign Trade of Thailand to enhance competitiveness and promote global supply chains

Thailand's Department of Foreign Trade has upgraded its licensing and certification service, with a paperless format for all 40 goods. Paperless licenses and certificates made up 90.91 percent of the total number issued. The Department has also linked electronic data through the National Single Window system.

To encourage the use of electronic signature and seal (ESS) for certificates of origin in all trade agreements, the Department of Foreign Trade has provided 11 certificate-issuing forms that utilise this system, including Form AJ (ASEAN – Japan), Form FTA Thailand–Australia, Form AANZ (ASEAN–Australia–New Zealand), Form AK (ASEAN–South Korea), Form AHK (ASEAN–Hong Kong, China), Form D (ASEAN), Form TC (Thailand–Chile), Form E (ASEAN–China) and Form RCEP.

Key initiative 17 – Promotion of employment of the elderly under National Action Plan on Business and Human Right Phase 1 (2019–2022)

Thailand has conducted a skills training programme (Ease of Employment's Difficulties Programme) to make it easier for elderly to gain employment. In 2021, 68 elders participated as a group in the programme, while 1,454 elders participated as individuals. In 2022, the numbers were 32 and 761, respectively. Thailand also introduced another programme to enhance employment opportunities of elderly workers, the Elder Worker Training Program for Enhancing Employment Opportunities (2019–2022), which saw between 8,659 and 9,654 people participating annually, with the percentage gaining a pass ranging between 98.31 and 99.18 percent annually. Separately, the Social Security Office has launched its own initiative to promote employment of the elderly. The number of elders working with the Office has increased steadily, from 153 in 2019, to 357 and 446 in 2021 and 2022, respectively.

Thailand has also rolled out various programmes aimed at promoting the employment of the elderly. Some of the programmes and their highlights are: (1) Programme for Encouraging the Employment of the Elderly (2019) – 2,313 of 2,850 participants had been employed; (2) Programme for Promoting Work Opportunities for the Elderly (2020) – 1,398 of 1,641 participants in the training activity for this programme had obtained a job; (3) Programme for Promoting Work Opportunities for the Elderly (2021) – 888 of 1,742 participants in the training activity for this programme had gained employment and were receiving a stable income; (4) Programme for Promoting Work Opportunities to the Elderly (2022) – 1,588 participants became local entrepreneurs while 1,080 participants had had gained employment and were receiving a stable income.

Key initiative 18 – Informal, elderly and disabled worker management under the 2023-2027 Action Plan on Informal Workers Management

Thailand is in the process of enacting the Promotion of Informal Workers' Quality of Life and Protection Development Act. The Ministry of Labour has worked closely with the Office of the Council of State to inspect and revise the draft. To date, the draft has been modified in the following ways: (1) Expand the coverage to the self-employed and gig workers; (2) Create a supporting programme, a training programme and access to the social security system, and specify working conditions and a minimum income; (3) Include a registration system and a unionisation process; (4) Establish a specialised committee and its local offices; and (5) Establish a related fund. As the draft is relatively novel, the Office of the Council of State would have to gather additional information, both domestically and overseas. The ministry expects the draft to be sent to the Thai Parliament in March 2023.

Key initiative 19 – Sending workers abroad for overseas jobs or internships

To provide Thai workers with the opportunity to work abroad and achieve a good quality of life, Thailand's Ministry of Labour is allowing its officers to grant permission for overseas employment and internships by jobseekers and at recruitment companies' requests. In the 2022 fiscal year, 35,694 Thai workers were allowed to work and do internships overseas. Thailand's Department of Employment is also coordinating with relevant organisations in recipient economies regarding the working conditions or requirements to be stipulated in MOUs. In the 2022 fiscal year, the Department issued permits for 11,745 Thai workers to work overseas. To support workers who have made arrangements to work overseas themselves, Thailand has

developed a self-arrangement and re-entry registration system. In fiscal year 2022, 24,314 Thai workers registered using this system.

Key initiative 20 – The help system for the unemployed to re-enter the labour market

Thailand has undertaken several measures to help the unemployed re-enter the labour market. These include: (1) Coordinating with the relevant agency and private company to outline an action plan and indicators for implementing of the system in the 2023 fiscal year; (2) Partnering with the leading recruitment companies in Thailand; (3) Promoting an English proficiency examination and skills training activities on a platform run by the Office of the Basic Education Commission; and (4) Integrating economy-wide information on students into the Ministry of Labour's data system for analysing the labour market.

Key initiative 21 – Developing skills for workers in targeted industries to improve labour productivity and boost competitiveness

Thailand's Department of Skill Development has established four excellence training centres to develop workers' skills in targeted industries: (1) Automotive Human Resource Development Academy; (2) Manufacturing Automation and Robotics Academy; (3) Automation and Mechatronics Academy; and (4) Digital Skill Development Academy. A total of 9,991 workers had enrolled in the programmes offered by the training centres between 2019 and 2021. The programmes conducted in the 2020 fiscal year saw the following outcomes: (1) 72.10 percent of participants were employed with an average income of THB 11,554 (approximately USD 340) per month, which is 23.05 percent higher than the minimum wage in Thailand; (2) Labour productivity increased by 4.36 percent, higher than the 2.5 percent set by the Ministry; and (3) Labour efficiency of the participants improved by 44.67 percent, better than projected in the Ministry's action plan.

Key initiative 22 – Enhancing workers' skills and capabilities for technological change

Thailand introduced a project aimed at enhancing workers' skills and capabilities in times of technological change. A training programme was developed based on an analysis of labour demand trends conducted with the participation of multiple agencies and organisations (such as the Ministry of Education, the Office of the Vocational Education Commission, universities, the Federation of Thai Industries, the Board of Trade of Thailand, career organisations and career guides). A total of 12,143 participants attended the programme, higher than the target of 10,500 people. Of these, 10,248 completed the training and 6,066 gained employment. The average income of those hired was THB 13,424 (approximately USD 395) per month. Another training programme targeting 8,000 participants is slated to be held between October 2022 and September 2023.

Key initiative 23 – Developing 'new normal' workers' technological skills

Thailand has a project to provide specialised training to participants with the goal of enhancing their career opportunities in a 'new normal' environment. The project has two main parts: (1) The training part aims to develop participants' knowledge and enhance their skills in three areas, namely, job preparation, skills improvement and secondary skills development; training are offered either in person, virtually or both; and (2) The evaluation part was conducted three months after completion of training; the objectives were to examine how participants apply their knowledge in the workplace, whether they use the technological skills for the new normal

in their work, and assess the success of the project. A total of 9,490 participants engaged in the programme, higher than the target of 7,000. Of these, 9,345 completed the training and 4,164 gained employment. The average income of those hired was THB 9,189 (approximately USD 270) per month. Another programme targeting 10,000 participants is in the works.

Key initiative 24 – Developing workers’ technological skills for twenty-first century work

Thailand has a project to develop workers’ skills in four technology fields: (1) Electrical and electronics technology; (2) Digital technology; (3) Manufacturing automation technology; and (4) Automation and robotics technology. Training courses were developed following an analysis of labour demand trends, related workforce development plans, as well as economic and social structure. A total of 7,262 participants engaged with the programme, higher than the target of 7,000. Of these, 6,473 completed the training and 3,414 gained employment. The average income of those hired was THB 16,129 (approximately USD 475) per month. Another programme targeting 6,080 participants is slated for the period October 2022 to September 2023.

3.3.19 The United States

For the 2022 IAP report, the United States identified six key initiatives, associating each of the initiatives with one pillar or multiple pillars of EAASR, as shown in Table 3.20.

Table 3.20 The United States’ EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	American Rescue Plan		■	■	
2	Infrastructure Investment and Jobs Act	■	■	■	■
3	Gender Equity			■	
4	Racial Equity			■	
5	Promoting Competition in the American Economy	■	■	■	■
6	President’s Management Agenda		■	■	■

The United States provided updates for five key initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – American Rescue Plan

The American Rescue Plan seeks to change the course of the pandemic and deliver immediate relief for American workers. An economy-level vaccination programme was launched as part of the American Rescue Plan. It also allocated about USD 1 trillion toward building a bridge to economic recovery for working families, which included providing working families a USD 1,400 per person check, increasing the value of the Supplemental Nutrition Assistance Programme benefits, increasing the Child Tax Credit and the Earned Income Tax Credit, expanding childcare assistance and other assistance to working families. Additionally, the American Rescue Plan provided grants and investments to hard-hit small businesses so they could rehire and retain workers, and to support frontline workers. The American Rescue Plan resulted in 4 million more jobs and nearly doubled GDP growth. It provided vital aid to more than 200,000 childcare providers, helping them to keep their doors open to as many as 9.5 million children and, in doing so, enabling their parents to work. Despite its success, lessons learnt include the need to have clear and timely guidance, the need to balance data reporting and transparency with recipient burden and the importance of performance measures.

Key initiative 2 – Infrastructure Investment and Jobs Act

The Infrastructure Investment and Jobs Act is a once-in-a-generation investment in US infrastructure and competitiveness. Its goals include ensuring every American has access to reliable high-speed internet; repairing and rebuilding roads and bridges with a focus on climate change mitigation, resilience, equity and safety for all users; improving transportation options for millions of Americans and reducing greenhouse emissions; upgrading airports and ports to strengthen supply chains and prevent disruptions that have caused inflation; upgrading power infrastructure to deliver clean, reliable energy across the economy; and making its infrastructure resilient against climate change, cyberattacks and extreme weather events. The Act is still in its early stages and funding continues to be released to complete new projects, including the most recent one in October 2022. To date, over 20,000 projects have been launched, including USD 2 billion in investments in upgrading economically significant bridges and USD 1 billion in investments in major infrastructure projects.

Key initiative 3 – Gender Equity

The United States has continued to advance gender equity and equality. It has a National Strategy on Gender Equity and Equality, whose key priorities include economic security; health; education; climate change; science and technology; and full participation and leadership. The Gender Policy Council covers a range of issues (for example, economic security, health, gender-based violence and education) with a focus on gender equity and equality, and particular attention to the barriers faced by women and girls. Additionally, the Executive Order Advancing Diversity, Equity, Inclusion, and Accessibility in the Federal Government establishes an ambitious, whole-of-government initiative that will take a systematic approach to embed diversity, equity, inclusion and accessibility in federal hiring and employment practices. To promote accountability, the Gender Policy Council prepares an annual report for submission to the President on progress made in implementing the abovementioned strategy, which would be made public. The federal government would also put in place mechanisms to track the work that it is doing across the government to advance gender equity and equality, and to assess the progress it is making toward its strategic priorities and the effect of its investments at home and abroad.

Key initiative 4 – Racial Equity

The United States recognises that equal opportunity remains out of reach to individuals and communities despite it being the bedrock of the economy. Several Executive Orders have been issued to progress on this issue, including the Executive Order on Advancing Equity and Support for Underserved Communities through Government; the Executive Order to Reaffirm the Federal Government's Commitment to Tribal Sovereignty and Consultation; the Executive Order to Combat Xenophobia against Asian American and Pacific Islanders; the Executive Order on the White House Initiative on Advancing Educational Equity, Excellence, and Economic Opportunity for Hispanics; and the Executive Order on the White House Initiative on Advancing Educational Equity, Excellence, and Economic Opportunity for Black Americans.

The United States noted that there is no one 'right' path to racial equity, and that the racial equity journey can transform cultures. Responding to the Executive Order on Advancing Equity and Support for Underserved Communities through Government, the Office of Management and Budget issued a Request for Information to seek inputs, information and recommendations from a broad array of stakeholders, with the goal of identifying effective methods for assessing whether agency policies and actions (for example, programmes, services, processes and operations) equitably serve all eligible individuals and communities. Some of the learnings arising from the Request for Information include the need to bring together expertise and experience from across sectors; the need to improve data collection and disaggregation; that many agencies underestimate the volume, variety and significance of barriers that in-need individuals face when learning about and attempting to access public benefits and services; and a strong desire for a no-wrong door or one-stop shop approach to benefit programme administration and streamlining/standardising/modernising application processes and offices to account for as many federal programmes as possible at once.

Key initiative 6 – President's Management Agenda

The President's Management Agenda outlines the United States' roadmap for ensuring an equitable, effective and accountable federal government that delivers results for all. The new

framework is built around three priority areas that are critical for improving the way the federal government does business, restoring the people's trust in government and laying a strong foundation for working families.

On Priority 1 (strengthening and empowering the federal workforce), progress includes: (1) establishing a Chief Human Capital Officers (CHCO) Council Recruitment and Outreach working group and community of practice to focus on strategic recruitment actions across common positions, build outreach pipelines to underserved communities and share tools/practices; (2) launching an Internship Portal on USAJOBS; (3) inviting unions to conduct at least one new employee orientation session in the majority of their bargaining units, where benefits of union membership are discussed; and (4) facilitating the use of IT and other cloud-based collaboration tools that support interoperability.

On Priority 2 (delivering excellent, equitable and secure federal services and customer experience), progress includes: (1) all 35 High Impact Service Providers sharing their designated priority services; (2) development of customer experience (CX) action plans; (3) announcement of the Technology Modernisation Fund to improve customer experience with the federal government; and (4) development of a roadmap for a redesigned USA.gov website so that it could serve as a centralised, digital federal 'front door'.

On Priority 3 (managing the business of government), progress includes: (1) issuance of guidance directing agencies to use a common definition for 'new entrant' as they take steps to find small, disadvantaged businesses and other contractors and measure progress in diversifying the federal supplier base; and (2) issuance of announcement streamlining the hiring of grants management specialists.

3.3.20 Viet Nam

For the 2022 IAP report, Viet Nam identified ten key initiatives, associating each of the initiatives with one pillar or multiple pillars of EAASR, as shown in Table 3.20.

Table 3.21 Viet Nam’s EAASR key initiatives and associated pillars

No.	Key initiative	Pillar #1	Pillar #2	Pillar #3	Pillar #4
1	Improve the legal framework for competitive neutrality between state-owned Enterprises (SOEs) and private firms	■	■		
2	Promoting the use of economic evidence in competition policy enforcement	■			
3	Improve Viet Nam’s rankings of Global Competitiveness Index 4.0 (by the World Economic Forum) and Global Innovation Index (by the World Intellectual Property Organization).	■			■
4	Improve online public consultation during the formulation of policies and legal normative documents	■		■	
5	Building Capacity for Promoting Online Dispute Resolution (ODR) in Viet Nam	■	■	■	■
6	Improve the appraisal of public investment projects		■	■	
7	Improve legal framework for restructuring services sector		■		
8	Promoting Circular Economy Models in Viet Nam		■	■	
9	Promote the implementation of science, technology, engineering, the arts, and math (STEAM) model in education				■
10	Development of Digital Government in Viet Nam				■

Viet Nam provided updates for all initiatives. Below is a summary of progress by key initiative.

Key initiative 1 – Improve the legal framework for competitive neutrality between state-owned Enterprises (SOEs) and private firms

Viet Nam has continued to strengthen the Commission for the Management of State Capital at Enterprises (CMSC), which represents the government. This has helped to separate the function of ownership and the function of management in the areas where SOEs are operating. In collaboration with the OECD and ADB, Viet Nam in April 2023 published the Economic Survey Report; it has a section on Product Market Regulation which noted that there was no “formal statutory discrimination between SOEs and private firms”. Viet Nam shared that it plans to implement the SOE restructuring plan by 2025.

Key initiative 2 – Promoting the use of economic evidence in competition policy enforcement

Viet Nam updated on two major activities under this key initiative, namely: (1) establishing the National Competition Commission in 2023 to improve institutional and technical capacity to handle competition cases; and (2) revising the Law on Statistics in 2022 to improve quality and availability of statistics for economic analysis. Viet Nam shared that it is essential to acknowledge the importance of enforcing the Competition Law because this would encourage greater use of economic evidence in the deliberation of competition cases.

Key initiative 3 – Improve Viet Nam’s rankings of Global Competitiveness Index 4.0 (by the World Economic Forum) and Global Innovation Index (by the World Intellectual Property Organization)

In 2022, Viet Nam issued Resolution No. 02/NQ-CP, which outlines the targets for Viet Nam to be ranked among the top 50 economies in both the WEF’s Global Competitiveness Index 4.0 and WIPO’s Global Innovation Index. The Resolution also set out various tasks for government agencies to undertake to achieve those targets. Viet Nam plans to issue a new Resolution on business environment and competitiveness towards the end of 2023.

In the 2021 and 2022 editions of the Global Innovation Index, Viet Nam ranked 44th and 48th, respectively. The Global Competitiveness Index 4.0 was not published for 2021 and 2022.

Key initiative 4 – Improve online public consultation during the formulation of policies and legal normative documents

The consistent implementation of the Law on Legal Normative Documents has led to the online publication of draft legal documents for comments by stakeholders. Viet Nam shared that doing this helps to improve subsequent drafts of the legal documents, and enhance support from stakeholders while helping them to prepare for the implementation of new laws. Viet Nam plans to continue building capacity to conduct online public consultation in the lawmaking process, including through the sharing of best practices.

Key initiative 5 – Building Capacity for Promoting Online Dispute Resolution (ODR) in Viet Nam

Various ODR platforms have been set up in Viet Nam, such as those by the Vietnam International Arbitration Center and the Hanoi International Arbitration Center. Several activities were implemented by different organizations, including the Vietnam International Arbitration Center and the Central Institute for Economic Management, to build awareness and capacity for ODR. Viet Nam also participated in various workshops and policy dialogues within APEC to share its progress in promoting ODR and related policy recommendations. Viet Nam acknowledged that there is more that it can learn from international best practices and the experience of APEC members in implementing ODR.

Key initiative 6 – Improve the appraisal of public investment projects

Viet Nam has built the capacity to undertake public investment appraisal in line with the Law on Public Investment Management and the Decree No. 40/2020/ND-CP that guides the implementation of several articles of the Law on Public Investment Management. Moving forward, Viet Nam plans to research key areas for improvement in the process of appraising public investment projects.

Key initiative 7 – Improve legal framework for restructuring services sector

In 2022, Viet Nam issued Resolution No. 54/NQ-CP on Action Plan of the government to implement Resolution No. 31/2021/QH15, which outlines an economic restructuring plan for 2021-2025. Since then, Viet Nam has implemented various measures to restructure the services sector. This includes undertaking various studies and policy research on relaxing entry into sectors such as commercial banking and the distribution of pharmaceutical products.

Viet Nam has several ongoing activities under this key initiative, including: (1) A mid-term review of the implementation of the economic restructuring plan (inclusive of services restructuring), which is expected to be completed by end-2023. More policy actions will be identified and updated for implementation based on the mid-term review; and (2) A review of the government's plan to promote night-time economy, which is expected to be completed by end-2023.

Key initiative 8 – Promoting Circular Economy Models in Viet Nam

Viet Nam has committed to achieving net-zero carbon emissions by 2050. In January 2022, the government issued Decree No. 08/2022/ND-CP to guide some articles of the Law on Environmental Protection, including some detailed provisions relating to the circular economy. In June 2022, the Prime Minister issued Decision No. 687/QĐ-TTg approving the Project on Promoting Circular Economy Development. Various work plans to grow the circular economy have been developed at the provincial levels. Future plans include preparing a government Decree on a regulatory sandbox focusing on the circular economy, and formulating and implementing the National Action Plan for Circular Economy Development.

Key initiative 9 – Promote the implementation of science, technology, engineering, the arts, and math (STEAM) model in education

Several plans that Viet Nam has made under this key initiative include: (1) A review of regulations that may foster innovative models for education; (2) Research and policy dialogues to support plans to develop STEAM models for building employable skills in the future of work by 2025; and (3) Proposals to revise related regulations to develop STEAM models. Viet Nam updated that workshops have been implemented to realize the various aspects of STEAM education. Noting that it is critical to align its promotion of STEAM education with the broader program for development of science, technology, innovation (STI) and labour productivity, Viet Nam is developing a plan on labour productivity, which may incorporate activities related to promoting STEAM education.

Key initiative 10 – Development of Digital Government in Viet Nam

In 2021, Viet Nam issued Decision No. 942/QĐ-TTg to approve the Strategy for Development of e-Government towards Digital Government for 2021-2025 with orientation towards 2030. Several action plans to promote the digital transformation of government services have been issued and implemented, such as a plan to apply information technology in the promotion of trade. Various studies and reports related to the development of digital government have also been completed, such as one titled “Readiness Assessment for Cross-border Paperless Trade: Viet Nam” published by ESCAP in 2022.

Viet Nam shared that it is important to have a government-wide program to promote the digitalisation of government services. Future plans include promoting the collection, sharing and maintenance of data by government agencies and building a culture of work and cooperation appropriate for a digital government.

4. CONCLUSION AND RECOMMENDATIONS

The endorsement of the EAASR by APEC's Structural Reform Ministers in 2021 underscores APEC's longstanding commitment to structural reform. EAASR also serves as the Economic Committee's concrete, medium-term response of delivering on the APEC Putrajaya Vision 2040 and Aotearoa Plan of Action, in particular on objectives and actions related to structural reforms. The mid-term review (MTR) of EAASR allows for a timely review of progress. It is hoped that the review would further encourage action by economies as the region moves toward 2025. The APEC Policy Support Unit (PSU) has employed a two-pronged process in undertaking the review: (1) at an APEC-wide level, using the endorsed external indicators and the EAASR Implementation Plan (including a short survey to gather member economies' perceptions on EAASR implementation); and (2) at an individual economy level, through the individual action plans (IAPs) submitted by member economies.

Review of APEC-wide progress using the external indicators shows mixed results. Where it is possible to assess APEC's progress over time, some indicators show the region making progress vis-à-vis the baseline. Yet other indicators have shown backsliding, or at best stagnating performance. Where it is not possible to monitor APEC's progress over time (due to data not being available beyond the baseline years) and the region's performance is compared with its peers instead, some indicators show the APEC region outperforming or on par with its peers. Other indicators show the region underperforming its peers. It is not uncommon to find APEC outperforming or on par with one peer region but underperforming the other on the same indicators.

Collectively, analysis of the external indicators reveals that members could:

- **Continue to improve the business regulatory environment, with a focus on the services sector (pillars #1, 2, 3 and 4):** APEC's policy environment toward foreign direct investment (FDI) is more restrictive relative to the Organisation for Economic Co-operation and Development (OECD), with the primary and tertiary sectors generally having a more restrictive FDI policy environment relative to the region's secondary sector. The policy environment surrounding services trade has become less restrictive in 2022 relative to 2021 on aggregate, but still above the 2019 pre-pandemic level. Sectoral analysis shows that 19 (out of 22) services sectors became less restrictive in 2022 (compared to 2021). The services trade policy environment for commercial banking, courier, and maritime transport, however, became more restrictive in 2022 relative to 2021.
- **Create a thriving and conducive environment for innovation (pillars #1, 2, 3 and 4):** The analysis shows a huge variation in R&D expenditure among APEC economies. On venture capital availability, APEC outperforms both the OECD and ASEAN on venture capital availability, but with significant room to improve on the ease of obtaining venture capital in the region. Although APEC generally outperforms or is on par with its peers across various indicators on business dynamism and innovation capability, there is significant variation in scores between APEC economies.

- **Enhance human capital development (pillars #1, 2, 3 and 4):** More than a third of the school-age population are not enrolled in tertiary-level education in APEC. Further, despite the value of science, technology, engineering and mathematics (STEM) education in a rapidly changing economic landscape, less than 30 percent of tertiary-level graduates in APEC have STEM-related degrees. Additionally, beyond access to education, it is important to continuously improve its quality, and to complement that with other avenues for learning and upgrading such as vocational training, and employee development and training.
- **Intensify efforts toward achieving a more inclusive society (pillars #1, 2, 3 and 4):** More than a third of the APEC population remain uncovered by at least one social protection policy (excluding health). More than 60 percent of children, adults not covered by contributory benefits, and persons above retirement age not receiving contributory benefits are left unprotected by any social assistance. Income inequality in APEC is wider than in the OECD. APEC has a considerable gap of more than 30 percentage points between the top and bottom decile, higher than the OECD (27.4 percentage points). Many people in the region continue to have no access to basic services such as clean water (289 million) and proper sanitation facilities (721 million).
- **Strengthen women’s economic empowerment (pillars #1 and 3):** The female employment-to-population ratio in APEC is lower than the corresponding ratio for males. There continues to be gaps in laws/regulations to protect women against discrimination (e.g., fewer than half of the APEC economies have laws ensuring equal remuneration for work of equal value and prohibiting discrimination in access to credit by sex). Women are also under-represented in STEM-related education.
- **Reinforce digitalisation efforts, including redoubling efforts to overcome the digital divide (pillars #1, 2, 3 and 4):** Close to 700 million people in APEC remain offline. Even among those online, it is important to bolster digital literacy to ensure that people can utilise digital tools to facilitate their day-to-day tasks. Also, the policy environment for digital services trade has become more restrictive in 2022 relative to 2021, with restrictions related to infrastructure and connectivity having the largest impact.
- **Continue the transition to the green economy (pillars #2 and 4):** Fewer than half of the APEC economies have reflected their commitments on the net zero emissions target in their laws. APEC continues to underperform the OECD on measures such as CO₂ damage and share of primary energy derived from renewable sources. APEC is also less efficient and ‘less green’ on carbon productivity compared to its peer regions.

As reflected above and as discussed in this report, work on these areas could contribute to the various EAASR pillars.

Both the EAASR Implementation Plan and the IAPs serve as records of members’ initiatives and actions to deliver on EAASR objectives. Over the years, APEC members have produced APEC Economic Policy Reports (AEPRs) to provide insights on the role of structural reforms in addressing various issues, such as those related to services, human capital development, infrastructure, women’s empowerment, the digital economy, the future of work and green recovery. It is critical that **members revisit the recommendations put forth in the AEPRs**

and consider how they can be incorporated when formulating initiatives and actions to further advance EAASR. More broadly, members may also wish to consider establishing appropriate mechanisms to further institutionalize the implementation of AEPR recommendations.

On the EAASR Implementation Plan, analysis shows that APEC has collectively undertaken a total of 37 initiatives, some of which have been completed while others are still in progress. These initiatives include workshops, toolkits and publications covering range of topics such as good regulatory practices (GRP), online dispute resolution (ODR), services, supply chain resilience, fintech and inclusion. It would be good for **members to build on the findings from completed initiatives and undertake follow-up activities. Members could also propose new initiatives to address gaps and areas of concern identified in this report.** Where relevant, members could consider widening the participation in such initiatives to more groups of stakeholders. This can help to increase the reach and impact of the initiatives.

One objective for the development of the EAASR Implementation Plan is to encourage collaboration across relevant APEC fora on issues related to structural reform. The observation that close to 40 percent of the initiatives identify cross-fora support is a step in the right direction but it also indicates that **members could do more to increase the share of initiatives involving cross-fora collaboration.** Members could have more collaborations with fora on issues of common interest that have gained in importance such as the Group on Services and the Digital Economy Steering Group. They could also proactively explore collaborations with other fora whose engagement with the Economic Committee could be improved, particularly those dealing with inclusion-related issues, such as the Small and Medium Enterprises Working Group and the Policy Partnership on Women and the Economy. Given that fora may oversee other APEC initiatives or have their own cross-cutting initiatives such as the APEC Services Competitiveness Roadmap (ASCR), APEC Internet and Digital Economy Roadmap (AIDER) and La Serena Roadmap for Women and Inclusive Growth, **it is important that members continue to ensure better synergy between EAASR and these initiatives when exploring collaborations.**

The review of progress at the individual economy level saw the participation of 20 economies. Together, they provided updates on 136 initiatives, representing 96 percent of the total of 141 initiatives submitted by economies in support of EAASR. The updates show that members have made good progress on many key initiatives. This would include soliciting views from relevant stakeholders and advancing draft laws through domestic processes. Where laws/regulations have been enacted and programmes have been launched, economies are at varying stages of implementation, including allocating and disbursing funds, collaborating with different groups to organise activities, and raising awareness of programmes, among others. Economies have also assessed the implementation of laws/regulations and programmes by setting up committees and undertaking surveys, among others. At the same time, members have noted challenges in progressing some key initiatives. Reasons include resource constraints (e.g., manpower, equipment and funding), fragmented efforts, unclear implementation guidelines, low public awareness, and external factors (e.g., COVID-19). **Members would benefit greatly from regular sessions where lessons learnt are shared, including the value of staying the course, the need to respond and adapt to challenges, the importance of community engagement, the significance of holistic approaches and the usefulness of clear implementation plan. Member economies can also leverage on the EAASR Sub-fund to advance key initiatives/actions.**

EAASR explicitly encourages economies to nominate reform actions in the services sector in their IAPs. This MTR report noted that economies have included key initiatives that explicitly mention the services sector in their title or in their write-up and whose activities aim to benefit the sector. However, these key initiatives are relatively fewer than those that do not explicitly identify the services sector as a focus. The latter could still have positive implications for the services sector by virtue of their reform activities and actions. On this, **members could do more to ensure that their EAASR reporting reflect whether and how the services sector could benefit even when the sector is not specifically a focus of the initiative. Members are also encouraged to include at least one initiative directly related to the services sector in their IAPs in any future updates.**

Monitoring and evaluation of implementation is a critical part of any initiative. It enables members to determine if meaningful progress has been made and whether any elements of the initiatives need to be tweaked. **Although members have made good use of both qualitative and quantitative indicators to monitor progress, there are areas for improvement, including identifying the baseline against which the latest data and information could be compared, using both broad and specific indicators to complement one another and leveraging alternative data sources.**

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APPENDICES

APPENDIX A. EAASR MID-TERM REVIEW SHORT SURVEY

Table A.1 Compilation of survey responses

Question	Responses
<p>Q1. What areas of EAASR do you think that the Economic Committee has collectively done well in terms of implementing EAASR (you may refer to, for example, specific pillars, topics, or activities)?</p>	<ul style="list-style-type: none"> ▪ Structural reform in relation to the transition to ‘greener economies – many economies have set out their intentions with regard to their domestic transition to net zero in their EAASR IAPs. ▪ The joint Economic Committee and Group on Services project on structural reform and services is a good example of the Economic Committee doing cross-cutting EAASR work in the spirit of cross-fora collaboration. ▪ Pillar 1, especially activities in the APEC Economic Policy Report (AEPR), Competition Policy and Law Group, good regulatory practices, and FinTech. ▪ The Economic Committee has done considerable work on Pillar 1 and 4 under EAASR. Since 2021, when EAASR was endorsed, the Economic Committee has conducted a number of capacity building workshops on promoting and enforcing competition and implementing good regulatory practices, among others. It has produced various policy briefs and guiding documents on competitiveness and structural reform in emerging markets (e.g., FinTech). ▪ We commend the Economic Committee’s efforts to enhance member economies’ capacities on digital technology and harnessing this tool in accelerating structural reform. As the implementation of EAASR is commercially relevant, the Economic Committee has also engaged the private sector through the APEC Business Advisory Council, among others. ▪ In terms of administrative support for the implementation of EAASR, the Economic Committee has done well in leading the development of the EAASR Implementation Plan, which provided a blueprint for economies to work on identified actions, indicators, and timelines. This has enabled the proper monitoring of projects that are aligned with the outcomes of EAASR. ▪ The Economic Committee’s timely coordination of the EAASR Mid-Term Review, which commenced in 2022, has likewise provided ample time for member economies to submit updates on the initiatives included in their IAPs. The support given by the Economic Committee to member economies on the development of their IAPs and projects was also notable. ▪ The Economic Committee has done well to action numerous projects under each of the EAASR pillars. There is no pillar that is noticeably lacking in action. ▪ The initiative to have the AEPR core group to remain on to support the implementation of the AEPR is a useful mechanism to go encourage economies to consider projects that align with the AEPR’s

	<p>recommendations. It has been good to have policy dialogues in the Economic Committee plenary sessions and the Structural Reform Ministerial meeting that support ongoing discussions on the issues raised in the AEPRs. Notably, this happened for the AEPRs on ‘Structural Reform and the Future of Work’ and for ‘Structural Reform and a Green Recovery from Economic Shocks.’</p> <ul style="list-style-type: none"> ▪ The Sub-funds have been helpful to support targeted activities to build capacity (i.e., strengthening economic and legal infrastructure and EAASR). The establishment of the new ‘Structural Reform and Sustainable Green Growth’ will be an important mechanism that we hope will drive activities that support action on sustainability and climate change across the EAASR pillars, contributing significantly to implementing EAASR, the Aotearoa Plan of Action, and the APEC Putrajaya Vision 2040. ▪ The Economic Committee and its work with the Sub-Committee on Standards and Conformance to share holding the Good Regulatory Practice Conference is a useful and productive mechanism to raise and share information on good regulatory practices and support the undertaking of international regulatory cooperation. The cross-institutional cooperation between the OECD and APEC on developing the International Regulatory Cooperation toolkit will support ongoing learning and the sharing of experience in this area. We look forward to its launch. ▪ The Economic Committee has done well in creating plenary discussions that delve into significant policy issues with quality international speakers. It has been useful having cross-fora speakers (e.g., World Bank on the new Business Enabling Environment, or BEE, standards that supports the work of the EoDB Action Plan. ▪ There has been helpful cross-fora collaboration – most recently between the Committee on Trade and Investment and the Economic Committee in the first Senior Officials’ Meeting and Related Meetings (SOM1) to discuss green economy transitions. ▪ Recognising the work of the Competition Policy and Law Group in reporting back on EAASR and other strategy documents/roadmaps is useful, reflecting that it is a subgroup of the Economic Committee. It helps to capture the work of economies and APEC in the competition space that support the implementation of EAASR. ▪ The Economic Committee held a fruitful and detailed discussion on key issues that all economies are recently facing in common, especially in the sectors of green transformation and digitalization. ▪ The Economic Committee held many discussions highlighting structural reform measures in response to the pandemic and this contributed to pillar 2. ▪ The Economic Committee held workshops in a wide range of topics and this well contributed to the capacity building for policymakers in these topics. ▪ The four pillars of EAASR are relevant to the current global dynamics and the challenges APEC economies face nowadays. The concept would enable economies to reflect on their existing structural reform policies, particularly to promote economic recovery in the post-
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	<p>pandemic era. It is also highly relevant to the Aotearoa Plan of Action and the Bangkok Goals on the BCG Economy, which directly support the APEC goals.</p> <ul style="list-style-type: none"> ▪ We highlight the importance of all areas, especially Pillar 1 because it provides insightful knowledge sharing and capacity building through the Conference on GRPs, CPLG workshops, and relevant activities. The outcomes of these activities have played a role as toolkits for policymakers to develop their initiatives, policies, and projects toward structural reform. ▪ We commend APEC's steady effort to promote ODR, which encourages economies' recognition and adoption of ODR.
<p>Q2. What areas of EAASR do you think that the Economic Committee has scope to improve upon in terms of implementing EAASR (you may refer to, for example, specific pillars, topics, or activities)?</p>	<ul style="list-style-type: none"> ▪ The EAASR IAPs would benefit from further examples of future reform in the services sectors and need further referencing to the APEC Services Competitiveness Roadmap (ASCR). ▪ The Economic Committee can improve on efforts in pillar 3. Projects funded by the Economic Committee, such as capacity building workshops, are usually participated in by businesses, policymakers, and government regulators. Moving forward, the Economic Committee may work towards ensuring the participation of other stakeholder interest groups from various sectors, depending on the project scope. In terms of gender equality, projects funded by the Economic Committee commonly include an indicator on the number of women participants. To better measure whether these efforts are improving their access to socioeconomic opportunities, the Economic Committee may coordinate with the APEC PSU in coming up with indicators that measure results post-project. ▪ In terms of overall EAASR implementation, the Economic Committee could provide targeted capacity-building for member economies after the assessment of the EAASR Mid-Term Review. It may identify entry points for support to member economies, which can lead to improved implementation of the key initiatives identified in the IAPs. The Economic Committee could also further promote the use of the EAASR Sub-fund to contribute in the implementation of these key initiatives. ▪ An ongoing and important issue is for the Economic Committee to work on what would support addressing the recommendations of the AEPRs. The Economic Committee invests much time and effort into these quality APEC policy reports, which is a key deliverable of the Economic Committee. Ensuring that there are mechanisms to encourage ongoing focus in outgoing years from the AEPRs will leverage the initial investment. ▪ Pillars 2 and 3: the Economic Committee could benefit from further collaboration with other fora to explore the overlap between sustainability, economic resilience, and trade. ▪ Encouraging the use of satellite website as a living resource for ongoing projects that can be easily updated. There seems to be a difference in the level of understanding among some economies on the purpose and usefulness of the satellite website facility run by APEC, which hampers the implementation of projects because of the perceived concern of how the nature of the relationship satellite website and APEC communications. Static PDF documents have their value to a point but

	<p>ongoing updates of case studies on the satellite is a nimble way of working that supports capacity building.</p> <ul style="list-style-type: none"> ▪ The use of different indicators by each economy may make it challenging to measure the progress of the APEC structural reform initiative. The APEC PSU may provide support to identify indicators or other tools necessary to measure the progress of the APEC structural reform initiative. ▪ The Third EoDB Action Plan is expected to align with the World Bank's new Business Enabling Environment (BEE) in order to measure economies' progress.
<p>Q3. Do you have any specific suggestions for initiatives or activities that the Economic Committee could undertake to improve EAASR Implementation? If so, please detail them.</p>	<ul style="list-style-type: none"> ▪ We should have more joint projects on EAASR between the Economic Committee and other fora (Finance Ministers' Process, Committee on Trade and Investment, Digital Economy Steering Group, Policy Partnership on Science, Technology and Innovation, and Energy Working Group), further to the joint Economic Committee and Group on Services project on EAASR and services. ▪ There should be greater uptake of the EAASR Sub-fund – USD 1.5 million remains available. ▪ The Economic Committee may continue to fund capacity building/knowledge-sharing activities for member economies to share best practices and lessons learned during the implementation of their respective IAPs. For instance, an economy may learn from another economy's progress on green growth and green economy initiatives, or another's work on strengthening the social safety net for health and welfare and on climate change response. Meanwhile, best practices can be shared to help draft policies and initiatives on areas such as FinTech. Such activities may encourage collaboration among member economies, which have similar initiatives, or activities that fall under the same EAASR pillars. ▪ Projects that support those groups with untapped economic potential (e.g., indigenous, gender, marginalised groups) would support the implementation of pillar 3. ▪ Ongoing focus on green policy implementation to support a sustainable economic future for the region. Promotion and use of the Sub-Fund on Structural Reform and Sustainable Green Growth will help economies to focus on areas at the level of capacity building they need to address important issues in this area. The impact of climate change will have enormous implications for the region. APEC, and in particular the Economic Committee, have a great capacity to support discussion and capacity building on this area since it touches right across all aspects of the economy of the region. There is a lot of cross-fora potential due to the impact of climate change and how we address this is broad. With APEC being an idea generator and a consensus-based forum, it allows economies to explore areas of cooperation and builds capacity and knowledge that can support economies meeting their Nationally Determined Contributions. We are also mindful that a balance is important, so we do not duplicate work undertaken in other international fora. Nevertheless, there is much scope for much fruitful work in this area. ▪ The Economic Committee may expedite a workshop to assist member economies to identify a tangible and impactful project proposal. This event was quite effective when it was implemented in previous

	<p>structural reform initiatives (ANSSR and RAASR). The workshop could also be held in conjunction with other sub-funds under the Economic Committee (ODR, Structural Reform and Sustainable Green Growth).</p> <ul style="list-style-type: none">▪ We encourage the incorporation of the Bangkok Goals on BCG into all initiatives or activities to advance sustainable structural reform.▪ We expect cooperation between APEC and the OECD through knowledge-sharing activities that align economies with international standards.▪ The Economic Committee is encouraged to develop a concluding dashboard of the EAASR Implementation Plan, which benefits economies in monitoring structural reform progress.▪ The Economic Committee is suggested to decentralize the organizing of workshops or relevant activities from SOM period to other appropriate time slots throughout the year.
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Note: Some parts of the responses have been edited to keep members' feedback anonymous.

APPENDIX B. GLOBAL COMPETITIVENESS INDEX INDICATORS

Table B.1 Description and interpretation for selected Global Competitiveness Index indicators

Category	Indicator	Description	Interpretation
Pillar 1: Institutions	1.16 Intellectual property protection	Response to the survey question: “In your [economy], to what extent is intellectual property protected?”	1 = not at all 7 = to a great extent
Pillar 2: Infrastructure	2.02 Quality of road infrastructure	Response to the survey question: “In your [economy], what is the quality (extensiveness and condition) of road infrastructure?”	1 = extremely poor, among the worst in the world 7 = extremely good, among the best in the world
	2.04 Efficiency of train services	Response to the survey question: “In your [economy], how efficient (i.e., frequency, punctuality, speed, price) are train transport services?”	1 = extremely inefficient, among the worst in the world 7 = extremely efficient, among the best in the world
	2.06 Efficiency of air transport services	Response to the survey question: “In your [economy], how efficient (i.e., frequency, punctuality, speed, price) are air transport services?”	1 = extremely inefficient, among the worst in the world 7 = extremely efficient, among the best in the world
	2.08 Efficiency of seaport services	Response to the survey question: “In your [economy], how efficient (i.e., frequency, punctuality, speed, price) are seaport services (ferries, boats) (for landlocked [economies]: assess access to seaport services)?”	1 = extremely inefficient, among the worst in the world 7 = extremely efficient, among the best in the world
	2.12 Reliability of water supply	Response to the survey question: “In your [economy], how reliable is the water supply (lack of interruptions and flow fluctuations)?”	1 = extremely unreliable 7 = extremely reliable
Pillar 6: Skills	6.02 Extent of staff training	Response to the survey question: “In your [economy], to what extent do companies invest in training and employee development?”	1 = not at all 7 = to a great extent
	6.03 Quality of vocational training	Response to the survey question: “In your [economy], how do you assess the quality of vocational training?”	1 = extremely poor, among the worst in the world 7 = excellent, among the best in the world
	6.04 Skillset of graduates	Average score of the following two survey questions: (a) “In your [economy], to what extent do graduating students from secondary education possess the skills needed by businesses?” and (b) “In your [economy], to what extent do graduating students from university possess the skills needed by businesses?”	1 = not at all 7 = to a great extent
	6.05 Digital skills among active population	Response to the survey question: “In your [economy], to what extent does the active population possess sufficient digital skills (e.g., computer skills, basic coding, digital reading)?”	1 = not all 7 = to a great extent
	6.06 Ease of finding skilled employees	Response to the survey question: “In your [economy], to what extent can companies find people with the skills required to fill their vacancies?”	1 = not at all 7 = to a great extent
	6.08 Critical thinking in teaching	Response to the survey question: “In your [economy], how do you assess the style of teaching?”	1 = frontal, teacher based, and focused on memorizing

			7 = encourages creative and critical individual thinking	
Pillar 7: Product market	7.01 Distortive effect of taxes and subsidies on competition	Response to the survey question: "In your [economy], to what extent do fiscal measures (subsidies, tax breaks, etc.) distort competition?"	1 = distort competition to a great extent 7 = do not distort competition at all	
	7.02 Market dominance	Response to the survey question: "In your [economy], how do you characterize corporate activity?"	1 = dominated by a few business groups 7 = spread among many firms	
	7.03 Competition in services	Average of the scores of the three components of the survey question: "In your [economy], how competitive is the provision of the following services: (a) professional services (legal services, accounting, engineering, etc.); (b) retail services; and (c) network sector (telecommunications, utilities, postal, transport, etc.)?"	1 = not at all competitive 7 = extremely competitive	
	7.04 Prevalence of non-tariff barriers	Response to the survey question: "In your [economy], to what extent do non-tariff barriers (e.g., health and product standards, technical and labelling requirements, etc.) limit the ability of imported goods to compete in the domestic market?"	1 = strongly limit 7 = do not limit at all	
Pillar 8: Labor market	8.02 Hiring and firing practices	Response to the survey question: "In your [economy], to what extent do regulations allow for the flexible hiring and firing of workers?"	1 = not at all 7 = to a great extent	
	8.03 Cooperation in labour-employer relations	Response to the survey question: "In your [economy], how do you characterize labour-employer relations?"	1 = generally confrontational 7 = generally cooperative	
	8.04 Flexibility of wage determination	Response to the survey question: "In your [economy], how are wages generally set?"	1 = by a centralised bargaining process 7 = by each individual company	
	8.05 Active labour policies	Response to the survey question: "In your [economy], to what extent do labour market policies help unemployed people to reskill and find new employment (including skills matching, retraining, etc.)?"	1 = not at all 7 = to a great extent	
	8.07 Ease of hiring foreign labour	Response to the survey question: "In your [economy], how restrictive are regulations related to the hiring of foreign labour?"	1 = highly restrictive 7 = not restrictive at all	
	8.08 Internal labour mobility	Response to the survey question: "In your [economy], to what extent do people move to other parts of the [economy] for professional reasons?"	1 = not at all 7 = to a great extent	
	8.09 Reliance on professional management	Response to the survey question: "In your [economy], who holds senior management positions in companies?"	1 = usually relatives or friends without regard to merit 7 = mostly professional managers chosen for merit and qualifications	
	8.10 Pay and productivity	Response to the survey question: "In your [economy], to what extent is pay related to employee productivity?"	1 = not at all 7 = to a great extent	
	Pillar 9: Financial system	9.02 Financing of SMEs	Response to the survey question: "In your [economy], to what extent can small- and medium-sized enterprises (SMEs) access finance they need for their business operations through the financial sector?"	1 = not at all 7 = to a great extent
		9.03 Venture capital availability	Response to the survey question: "In your [economy], how easy is it for start-up entrepreneurs with innovative but risky projects to obtain equity funding?"	1 = extremely difficult 7 = extremely easy
9.06 Soundness of banks		Response to the survey question: "In your [economy], how do you assess the soundness of banks?"	1 = extremely low, banks may require recapitalization	

			7 extremely high, banks are generally healthy with sound balance sheets
Pillar 11: Business dynamism	11.05 Attitudes toward entrepreneurial risk	Response to the survey question: “In your [economy], to what extent do people have an appetite for entrepreneurial risk?”	1 = not at all 7 = to a great extent
	11.06 Willingness to delegate authority	Response to the survey question: “In your [economy], to what extent does senior management delegate authority to subordinates?”	1 = not at all 7 = to a great extent
	11.07 Growth of innovative companies	Response to the survey question: “In your [economy], to what extent do new companies with innovative ideas grow rapidly?”	1 = not at all 7 = to a great extent
	11.08 Companies embracing disruptive ideas	Response to the survey question: “In your [economy], to what extent do companies embrace risky or disruptive business ideas?”	1 = not at all 7 = to a great extent
Pillar 12: Innovation capability	12.01 Diversity of workforce	Response to the survey question: “In your [economy], to what extent do companies have a diverse workforce (e.g., in terms of ethnicity, religion, sexual orientation, gender)?”	1 = not at all 7 = to a great extent
	12.02 State of cluster development	Response to the survey question: “In your [economy], how widespread are well-developed and deep clusters (geographic concentrations of firms, suppliers, producers of related products and services, and specialized institutions in a particular field)?”	1 = non-existent 7 = widespread in many fields
	12.04 Multi-stakeholder collaboration	Average score of the following three survey questions: (a) “In your [economy], to what extent do people collaborate and share ideas within a company?”; (b) “In your [economy], to what extent do companies collaborate in sharing ideas and innovating?”; and (c) “In your [economy], to what extent do business and universities collaborate on research and development (R&D)?”	(for a and b) 1 = not at all 7 = to a great extent (for c) 1 = do not collaborate at all 7 = collaborate extensively
	12.09 Buyer sophistication	Response to the survey question: “In your [economy], on what basis do buyers make purchasing decisions?”	1 = based solely on the lowest price 7 = based on sophisticated performance attributes

Source: APEC PSU compilation based on the WEF Global Competitiveness Report 2019 (Schwab, 2019).

APPENDIX C. PROTECTING WOMEN AGAINST DISCRIMINATION

Table C.1 Presence of laws/regulations that aim to protect women against discrimination, by category (no. of APEC economies with relevant laws/regulations)

Category	Indicator	2019	2020	2021	2022	2023
Mobility	Can a woman choose where to live in the same way as a man?	19	19	19	19	19
	Can a woman travel outside her home in the same way as a man?	19	19	19	19	19
	Can a woman apply for a passport in the same way as a man?	19	19	19	19	19
	Can a woman travel outside the economy in the same way as a man?	21	21	21	21	21
Workplace	Can a woman get a job in the same way as a man?	21	21	21	21	21
	Does the law prohibit discrimination in employment based on gender?	18	18	18	18	18
	Is there legislation on sexual harassment in employment?	16	16	16	16	17
	Are there criminal penalties or civil remedies for sexual harassment in employment?	14	14	14	14	15
Pay	Does the law mandate equal remuneration for work of equal value?	7	8	9	9	9
	Can a woman work at night in the same way as a man?	21	21	21	21	21
	Can a woman work in a job deemed dangerous in the same way as a man?	15	15	16	16	16
	Can a woman work in an industrial job in the same way as a man?	13	13	13	14	14
Parenthood	Is paid leave of at least 14 weeks available to mothers?	12	13	13	14	14
	Does the government administer 100 percent of maternity leave benefits?	12	11	11	11	11
	Is there paid leave available to fathers?	14	15	15	15	15
	Is there paid parental leave?	10	10	10	10	11
	Is dismissal of pregnant workers prohibited?	17	17	17	17	17
Entrepreneurship	Does the law prohibit discrimination in access to credit based on gender?	9	9	9	9	9
	Can a woman sign a contract in the same way as a man?	21	21	21	21	21
	Can a woman register a business in the same way as a man?	21	21	21	21	21
	Can a woman open a bank account in the same way as a man?	21	21	21	21	21
Pension	Is the age at which men and women can retire with full pension benefits the same?	17	17	17	17	17
	Is the age at which men and women can retire with partial pension benefits the same?	19	19	19	19	19
	Is the mandatory retirement age for men and women the same?	19	19	19	19	19
	Are periods of absence due to childcare accounted for in pension benefits?	10	10	10	10	10

Source: APEC PSU calculations based on data from the World Bank (accessed 29 May 2023).