Evaluating Progress on the Aotearoa Plan of Action (APA): Trade and Investment Perspective
Prepared by the APEC Policy Support Unit
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1. INTRODUCTION

In 1994, APEC Leaders declared their common objective of ‘enhancing trade and investment in the Asia-Pacific’ and the adoption of their long-term goal of ‘free and open trade and investment in the Asia-Pacific’ (APEC, 1994). This goal became known as the Bogor Goals. Upon its culmination in 2020, APEC had collectively made progress in growing trade and investment flows, significantly reducing tariff rates for most sectors, and promoting more open policy environments, among others.

APEC Leaders are placing great importance in building on APEC’s past achievements, closing the gap on unfinished business and paying attention to new trends. In fact, in 2020, APEC Leaders committed, through the APEC Putrajaya Vision 2040, that the region will not only continue to strengthen trade and investment but also will promote innovation and digitalization, as well as the specific features to achieve quality growth (APEC, 2020). Accomplishing this commitment was further explored in the Aotearoa Plan of Action (APA), giving rise to six objectives related to topics under the purview of the Committee on Trade and Investment (CTI) to be evaluated in the manner shown in Table 1.

Table 1. APA objectives related to the areas of work of CTI

<table>
<thead>
<tr>
<th>#</th>
<th>Objective</th>
<th>Evaluation of progress</th>
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<tbody>
<tr>
<td>1</td>
<td>To ensure that the Asia-Pacific remains the world’s most dynamic and interconnected regional economy, we acknowledge the importance of, and will continue to work together to deliver, a free, open, fair, non-discriminatory, transparent and predictable trade and investment environment</td>
<td>APEC’s trade and investment environment is free, open, fair, non-discriminatory, transparent and predictable</td>
</tr>
<tr>
<td>2</td>
<td>We reaffirm our support for agreed upon rules of the WTO in delivering a well-functioning multilateral trading system and promoting the stability and predictability of international trade flows</td>
<td>Growth of international trade flows in the region become more stable and predictable including with increased coverage of WTO rules, through APEC members’ effective and transparent implementation of existing and future commitments</td>
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<tr>
<td>3</td>
<td>We will further advance the Bogor Goals and economic integration in the region in a manner that is market-driven, including through the work on the Free Trade Area of the Asia-Pacific (FTAAP) agenda which contributes to high standard and comprehensive regional undertakings</td>
<td>Economic integration occurs in the region by advancing the unfinished business of the Bogor Goals in a manner that is market-driven and through the development of high standard and comprehensive regional undertakings</td>
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<tr>
<td>4</td>
<td>We will promote seamless connectivity, resilient supply chains and responsible business conduct</td>
<td>To promote seamless connectivity, resilient supply chains and responsible business conduct, APEC economies will improve physical, institutional and people-to-people connectivity</td>
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We will strengthen digital infrastructure, accelerate digital transformation, narrow the digital divide, as well as cooperate on facilitating the flow of data and strengthening consumer and business trust in digital transactions.

The region improves digital connectivity among economies, businesses and people including by enhancing trust and security in the use of ICTs, accessibility and affordability of digital infrastructure in the region, broadening participation in the digital economy, and cooperating on facilitating the flow of data and strengthening consumer and business trust in digital transactions.

We will promote economic policies, cooperation and growth, which will support global efforts to comprehensively address all environmental challenges, including climate change, extreme weather and natural disasters, for a sustainable planet.

APEC’s growth and prosperity is achieved on an increasingly environmentally sustainable basis.

The PSU has prepared this report following the APA, which states that “with assistance from the PSU, APEC economies will evaluate progress towards achieving the APEC Putrajaya Vision 2040.” This report evaluates APEC-wide progress across the aforementioned six objectives. The findings in this report can serve as an input for CTI to report to Senior Officials on the progress done by APEC to implement the APA and achieve the APEC Putrajaya Vision 2040.

2. ANALYSIS OF APEC-WIDE PROGRESS

2.1 TRADE AND INVESTMENT

2.1.1 APEC’s trade and investment environment is free, open, fair non-discriminatory, transparent and predictable

*Trade in goods policy environment*

Among the most common trade barriers affecting goods trade is tariffs. Across the years, APEC has successfully lowered the average most-favoured nation (MFN) applied tariff rates from 5.8 percent in 2010 to 5.1 percent in 2022 (Figure 1a). APEC has also made progress in expanding the percentage of duty-free goods (HS 6-digit)\(^1\) in the region. From 45.5 percent in 2010, APEC has increased this to 48.9 percent in 2022 (Figure 1b). Notwithstanding, APEC can continue increasing the prevalence of duty-free goods in the region.

Despite APEC’s progress on these fronts, tariffs have remained high for certain products. For example, in 2022, agricultural goods recorded an average MFN applied tariff rate of 11.3 percent (Figure 1a). These rates are comparably higher than those recorded for non-agricultural goods. Moreover, 17.1 percent of agricultural products had MFN applied tariff rates of above

\(^1\) The Harmonized Commodity Description and Coding System (HS) is an international nomenclature for the classification of products that was developed by the World Customs Organization in 1988. The HS system contains 21 Sections that further categorizes products into Chapters (2-digit level), Headings (4-digit level), and Sub-headings (6-digit level). The HS is particularly useful for analyzing international trade because it provides a common nomenclature for all economies albeit limited to just the 6-digit level. For more on the HS, see: https://unstats.un.org/wiki/pages/viewpage.action?pageId=87426301 (accessed 30 June 2023).
15 percent during the same year (Figure 1b). Economies can take advantage from lowering tariffs on goods subjected to high tariff levels in order to facilitate trade and reap the benefits from it.

**Figure 1. Selected indicators on APEC tariffs in 2010–2022**

<table>
<thead>
<tr>
<th></th>
<th>(a) Average MFN applied tariffs (%)</th>
<th>(b) Percentage share of HS 6-digit products</th>
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<tr>
<td></td>
<td>2010</td>
<td>2020</td>
</tr>
<tr>
<td>All products</td>
<td>5.8</td>
<td>5.2</td>
</tr>
<tr>
<td>Agricultural products</td>
<td>11.8</td>
<td>11.6</td>
</tr>
<tr>
<td>Non-Agricultural products</td>
<td>4.9</td>
<td>4.2</td>
</tr>
<tr>
<td>Duty-free</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Agricultural products</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: APEC aggregate is a simple average. Data (2020) for Brunei Darussalam; Indonesia; Papua New Guinea; and Peru are based on 2019 data. Data (2010) for New Zealand is based on 2009 data. Source: APEC PSU calculations based on data from the WTO (accessed 26 July 2023).

Lowering the MFN applied tariff rates is beneficial, but complex procedures can make it challenging for businesses to facilitate trade in goods. While the tariff situation in APEC has generally improved since 2010, the same cannot be said for non-tariff measures (NTMs).

According to the Global Trade Alert (GTA) database, since 2008, APEC economies have implemented a cumulative total of 15,586 non-technical NTMs affecting imports by the end of 2022 (Figure 2). Most of these are trade-restricting (red) interventions, comprising 91.6 percent of total non-technical NTMs affecting imports in 2022. Only around 6.4 percent were trade-facilitating (green) interventions.

Meanwhile, APEC economies implemented relatively fewer NTMs affecting exports. In 2022, only a cumulative total of 4,945 NTMs remained in force by year-end. Yet again, red interventions were the most prominent, accounting for 95.2 percent of total NTMs affecting exports. It is worth emphasizing that the cumulative number of trade-restricting interventions have been increasing at an average annual growth rate of 17.9 percent (non-technical NTMs on imports) and 6.6 percent (NTMs on exports) during the period 2019–2022. Attention can be given to reviewing these red interventions since streamlining these policy areas, alongside improving transparency, can help improve trade flows.

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2 The GTA database independently monitors different interventions and, at the same time, evaluates whether it is trade-facilitating (green), possibly trade-restricting (amber), or trade-restricting (red). For more on this methodology, see Evenett and Fritz (2022).
Figure 2. Incidence of selected NTMs implemented by APEC economies in 2019–2022, by category (cumulative number of NTMs in force by year-end)

Note: Includes measures monitored since 2008. Each policy is counted only once, regardless of how many economies were reportedly affected.
Source: APEC PSU calculations using data from the GTA (accessed 26 July 2023).

Trade in services policy environment

Examining regulations affecting trade in services is necessary to monitor progress on this area. The APEC Services Competitiveness Roadmap (ASCR), which runs until 2025, pursues efforts to ensure an open and predictable environment in the region (APEC, 2015). Based on the Organisation for Economic Co-operation and Development (OECD) Services Trade Restrictiveness Index (STRI), APEC had an average all-sector STRI score of 0.293 in 2022 (Figure 3). This is less restrictive compared to 2021 (0.298) in part due to the rollback of regulatory transparency measures between 2021 and 2022. But, despite this progress, APEC’s policy environment for the services sector in 2022 is more restrictive compared to the pre-pandemic 2019 level (0.291).

Figure 3. APEC average all-sector STRI scores in 2019–2022, by policy category

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

3 The STRI evaluates the restrictiveness of different services sectors’ policy environment by using scores ranging from 0 (open) to 1 (closed). The STRI assesses five policy categories: (1) restrictions on foreign entry; (2) restrictions to movement of people; (3) barriers to competition; (4) regulatory transparency; and (5) other discriminatory measures.
By sector, the most restrictive ones in 2022 were air transport (0.425) and broadcasting (0.387), while the most open sectors were architecture (0.205) and engineering (0.215) (Figure 4). Restrictions on foreign entry stood as the topmost restriction across almost all sectors, followed by restrictions to movement of people and regulatory transparency. Efforts to improve the services policy environment in APEC can begin by streamlining these policy areas, for example, by relaxing foreign equity limitations and removing commercial presence requirements to address restrictions on foreign entry or by improving the mutual recognition of qualifications and licensing to address restrictions to movement of people.

Figure 4. APEC average STRI scores in 2022, by sector and policy category

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

Foreign direct investment (FDI) policy environment

Improving access to FDI is important since this gives businesses opportunities to grow and economies to create jobs. However, investments can also be undermined by barriers. Based on the OECD FDI regulatory restrictiveness index (RRI),4 the APEC FDI policy environment became modestly less restrictive in 2020 in comparison to 2019.5 This is evidenced by the decrease in the average all-sector FDI RRI score from 0.179 in 2019 to 0.178 in 2020 (Figure 5).

4 The FDI RRI evaluates the FDI policy environment using a score ranging from 0 (open) to 1 (closed). It assesses four policy categories: (1) equity restriction; (2) key foreign personnel; (3) screening and approval; and (4) other restrictions.
5 However, there is more room for improvement in APEC, as the FDI policy environment remains more restrictive than those in other regions. For example, in terms of foreign equity limitations.
By sector groupings, the primary sector had the most restrictive FDI policy environment in 2020 (0.245) (Figure 5). This is followed by the tertiary sector with an average score of 0.214. For these two sectors, equity restriction was the most restrictive policy area, followed by screening and approval measures. Efforts to improve the FDI policy environment for these sectors can begin by addressing these two policy areas.

Figure 5. APEC average FDI RRI scores in 2019–2020, by sector and policy category

To improve investment conditions, APEC has undertaken many initiatives across the years. Most of these efforts have been consolidated under the Investment Facilitation Action Plan (IFAP), with its latest iteration (phase V) implemented until 2023 (APEC, 2021b). A review of its progress is currently taking place.

2.1.2 Growth of international trade flows in the region become more stable and predictable including with increased coverage of World Trade Organization (WTO) rules, through APEC members’ effective and transparent implementation of existing and future commitments

Trade in goods

After trade suddenly fell due to the pandemic, trade by APEC members has collectively been recovering in value terms, as it increased from USD 18.0 trillion in 2020 to USD 25.1 trillion in 2022 (Figure 6). Notwithstanding, APEC’s share of total world trade declined from 50.7

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6 Sectors evaluated in the FDI RRI can be grouped into three: (1) primary; (2) secondary; and (3) tertiary. Primary sectors include agriculture, forestry, fishing and mining and quarrying. Secondary sectors include manufacturing, electricity and construction. Tertiary sectors include distribution, transport, hotels and restaurants, media, telecommunications and financial services.
percent in 2020 to 49.6 percent in 2022, indicating that the rest of the world may have performed better compared to APEC.

Another indication that APEC’s trade performance has been relatively weak recently can be observed from the annual change in APEC’s merchandise trade volume, which grew by just 0.3 percent (exports) and 1.4 percent (imports) in 2022 (Figure 7). These levels of growth are lower compared to the world.

Figure 6. APEC total goods trade in 2019–2022

Note: APEC aggregate is a sum of total trade (gross exports and gross imports).

Figure 7. Merchandise trade volume annual change (percent)

Note: APEC aggregate is a simple average. Data for Brunei Darussalam and Papua New Guinea are unavailable.

Ensuring that international trade in goods remain predictable and stable amid shocks is important, especially after what economies experienced during the pandemic. One way to contribute toward this goal is by increasing the coverage of WTO rules through APEC members’ effective and transparent implementation. As of 26 July 2023, all APEC economies had already ratified the WTO Trade Facilitation Agreement (TFA), which entered into force in February 2017. The WTO TFA seeks to simplify, modernize, and harmonize export and import
processes to aid trade in goods. Several measures in the WTO TFA helps to improve institutional connectivity (see discussion in Section 2.1.4). Besides the WTO TFA, many APEC economies also participate in various WTO Joint Statement Initiatives (JSIs). For example, as of 26 July 2023, APEC economies participate in the JSI on E-Commerce (19 economies) and the JSI on micro, small, and medium-sized enterprises (MSMEs) (18 economies).

**Trade in services**

Services trade during the pandemic was heavily affected by policies designed to limit people’s exposure to COVID-19. While many services adapted by innovating on its mode of delivery (that is, through digital or remote means), total commercial services trade in APEC still decreased substantially from USD 4.7 trillion in 2019 to USD 3.7 trillion in 2020, or a decrease of 20.4 percent (Figure 8). APEC recovered slightly to USD 4.3 trillion in 2021 and then to USD 4.9 trillion in 2022, already above the pre-pandemic level. Despite this recovery, APEC’s share of total world trade continued to fall. From 38.3 percent in 2019, APEC’s share became just 36.0 percent in 2022. This suggests that APEC’s performance during the pandemic and its subsequent recovery was comparably weaker than the rest of the world.

**Figure 8. APEC total commercial services trade in 2019–2022**

![Graph showing APEC total commercial services trade from 2019 to 2022](image)

Note: APEC aggregate is a sum of total trade (exports and imports). Data (2022) for Hong Kong, China is based on 2021 data. Source: APEC PSU calculations using data from the WTO (accessed 26 July 2023).

Like trade in goods, APEC economies can also benefit from increasing the coverage of WTO rules in services trade. One example is through the JSI on Services Domestic Regulation, which aims to increase transparency, predictability and efficiency in the authorization procedures for cross-border services providers. As of July 2023, 16 APEC economies are already participating in this joint initiative.

**FDI**

Despite the hardships felt during the pandemic, both inward and outward FDI stocks in APEC still recorded succeeding increases relative to the previous year, moving from USD $19.6 trillion

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7 FDI stock is the accumulated value held at the end of a reference period (typically a year or quarter). This can either be inward (for foreign affiliates resident in an economy) or outward (for residents making an investment to a foreign economy).
in 2019 to USD 25.1 trillion in 2021 (inward) and from USD 18.7 trillion to USD 22.9 trillion (outward) during the same period (Figure 9). In addition, APEC’s share of world total FDI stocks also increased from 53.6 percent in 2019 to 55.2 percent in 2021 (inward) and from 54.2 percent to 54.7 percent (outward) during the same period. This suggests that APEC has performed relatively better compared to the rest of the world.

![Figure 9. APEC FDI stocks in 2019–2021, by direction](image)

Note: APEC aggregate is a sum. Data for Brunei Darussalam is unavailable.

While APEC’s FDI stocks had performed relatively well, it seems that the rest of the world has been performing better than APEC in attracting greenfield FDI (i.e., investments that generate new jobs). In recent years, the value of APEC’s greenfield FDI increased from USD 396 billion in 2019 to USD 434 billion in 2022 (inward) and from USD 453 billion to USD 539 billion (outward) during the same year (Figure 10). Despite this increase in valuation, APEC’s share of world total greenfield FDI fell down from 44 percent in 2019 to 36 percent in 2022 (inward) and from 50 percent in 2019 to 44 percent in 2022 (outward).

![Figure 10. APEC greenfield FDI in 2019–2022, by direction](image)

Note: APEC aggregate is a sum. Data refers to estimated amounts of capital investment.
International investment agreements (IIAs) are a useful tool to promote and attract FDI. As of July 2023, APEC economies had a total of 891 bilateral investment treaties (BITs), of which 761 (85.4 percent) were in force (Figure 11). Apart from BITs, treaties with investment provisions (TIPs) can also be similarly helpful. As of July 2023, APEC recorded a total of 483 TIPs, of which 419 (86.7 percent) were in force (Figure 11). APEC’s total number of IIAs represent 15.5 percent and 12.6 percent of global BITs and TIPs, respectively. Besides IIAs, economies can also benefit from participating in investment facilitation-related initiatives in the WTO. One example is the WTO JSI on Investment Facilitation for Development, which 17 APEC economies participate in, as of 26 July 2023.

Figure 11. Participation in IIAs, by category (number of agreements)

<table>
<thead>
<tr>
<th>Category</th>
<th>APEC</th>
<th>World</th>
</tr>
</thead>
<tbody>
<tr>
<td>BITs</td>
<td>891</td>
<td>5,732</td>
</tr>
<tr>
<td>In force</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not in force</td>
<td>3,827</td>
<td></td>
</tr>
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</table>

Note: Data as of 26 July 2023.

2.1.3 Economic integration occurs in the region by advancing the unfinished business of the Bogor Goals in a manner that is market-driven and through the development of high-standard and comprehensive regional undertakings

Both trade in goods and trade in services can benefit from the use of free trade agreements (FTAs) and/or regional trade agreements (RTAs). These FTAs/RTAs can, for example, give traders options to utilize preferential tariff rates or for economies to better facilitate the movement of people. Since the early 1990s, the number of FTAs/RTAs in APEC has grown substantially. From just 8 signed agreements counted in 1990, the cumulative number increased to 212 signed agreements as of July 2023, representing an increase of 25-fold (Figure 12). From these 212 signed agreements, 74 can be considered as intra-APEC.8

Some of these agreements were also mega-trade agreements that involved more than 10 economies (e.g., AANZFTA, CPTPP and RCEP). Apart from including several economies, these mega-trade agreements also included chapters that were uncommon from older FTAs/RTAs. Examples of such chapters are government procurement, intellectual property, state-owned enterprises and designated monopolies, labor, environment, competitiveness and business facilitation, development, small and medium-sized enterprises, regulatory coherence,

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8 An FTA/RTA can be considered as intra-APEC when it involves at least two APEC economies.
and transparency and anti-corruption, among others. This expansion of scope is indicative of FTAs/RTAs getting deeper. The growing number of FTAs/RTAs, especially of mega-trade agreements, contributes to the Free Trade Area of the Asia-Pacific (FTAAP) agenda. Over the past decade, APEC has initiated several workshops, studies, and projects supporting the FTAAP agenda. A recent example is the project titled “A New Look at the FTAAP,” which would produce a 2023 review of progress and a study on areas of convergence and divergence across selected high standard and comprehensive undertakings (forthcoming in 2024).

Despite the growing depth of FTAs/RTAs, some areas may still have gaps. With intent to address these gaps, some economies have negotiated new types of agreements. For example, Chile; New Zealand; and Singapore signed the Digital Economy Partnership Agreement (DEPA) in June 2020, seeking to improve cooperation in digital trade issues. Elsewhere, Australia and Singapore signed the Singapore–Australia Green Economy Agreement in October 2022, which aims to accelerate the adoption of low-carbon and green technologies, low-carbon and renewable energy, and decarbonized production processes, among others.

Figure 12. Cumulative number of APEC FTAs/RTAs in pre-1990–July 2023

Note: Data as of 26 July 2023.
Source: APEC PSU calculations based on compiled data from economy sources, the Asian Development Bank, and the WTO (accessed 26 July 2023).

2.1.4 To promote seamless connectivity, resilient supply chains and responsible business conduct, APEC economies will improve physical, institutional and people-to-people connectivity

Physical connectivity

Promoting resilient supply chains and responsible business conduct can benefit from improved connectivity across economies in APEC. This connectivity can involve physical factors, institutional elements, and people-to-people components. One way to measure physical
connectivity is through the liner shipping connectivity index (LSCI), which captures an economy’s level of integration into global liner shipping networks. In APEC, the average LSCI value has increased from 42.7 in Q1 2006 (the base period) to 65.0 in Q1 2023 (Figure 13). This indicates an improvement of about 52.2 percent, suggesting that APEC has become more integrated with the global liner shipping networks compared to the base period.

![Figure 13. APEC average LSCI values in Q1 2006–Q1 2023](image)

Note: APEC aggregate is a simple average.

Another way to infer physical connectivity is through the logistics performance index (LPI). The LPI scores economies from 1 (low) to 5 (high). In APEC, the average LPI score rose slightly from 3.4 in 2018 to 3.5 in 2022 (Figure 14). APEC’s performance is relatively better compared to the world, which scored 2.9 and 3.0 in 2018 and 2022, respectively.

![Figure 14. LPI scores in 2018 and 2022](image)

Note: APEC aggregate is a simple average. Data for Brunei Darussalam and Chinese Taipei are unavailable.

9 The LSCI is an index that measures maritime connectivity. The LSCI value of an economy in any given quarter is measured relative to the economy with the highest average in Q1 2006. All other data points are valued in relation to this base, which means that the higher the LSCI value, the better an economy has performed. The LSCI evaluates six components: (1) the number of scheduled ship calls per week in the economy; (2) deployed annual capacity in twenty-foot-equivalent units (TEU); total deployed capacity offered at the economy; (3) the number of regular liner shipping services from and to the economy; (4) the number of liner shipping companies that provide services from and to the economy; (5) the size in TEU of the largest ship deployed on services from and to the economy; and (6) the number of other economies that are connected to the economy through direct liner shipping services (note that a direct service is defined as a regular service between two economies; it may include other stops in between, but the transport of a container does not require transshipment).

10 The LPI score is a weighted average of an economy’s scores across six key dimensions: (1) efficiency of the clearance process (i.e., speed, simplicity and predictability of formalities) by border control agencies, including customs; (2) quality of trade and transport-related infrastructure (e.g., ports, railroads, roads, information technology); (3) ease of arranging competitively priced shipments; (4) competence and quality of logistics services (e.g., transport operators, customs brokers; (5) ability to track and trace consignments; and (6) timeliness of shipments in reaching their destination within the scheduled or expected delivery time.
While the LSCI and the LPI both provide good insights, these observations can be complemented by perceptions from the business community. One way of gauging people’s perception is through the World Economic Forum (WEF) Global Competitiveness Report (GCR) indicators. Scores are generally interpreted from 1 (worst) to 7 (best). In APEC, there are four key areas relevant to physical connectivity: road infrastructure; train services; air transport services; and seaport services. In 2019, APEC scored the highest in the efficiency of air transport services, where respondents gave a score of 5.2 (Figure 15). This is followed by seaport services (4.9), road infrastructure quality (4.8), and train services (4.5).

**Figure 15. Selected indicators on APEC transport infrastructure in 2019 (score)**

![Bar chart showing scores for transport infrastructure in APEC](chart.png)

Note: Aggregates are a simple average. Data for Papua New Guinea is unavailable. Train services are not assessed for Brunei Darussalam.


**Institutional connectivity**

Institutional connectivity is closely linked with the quality of each economy’s institutions. For example, this can include the performance of key cross-border agencies, such as customs offices handling trade facilitation. Reviewing the progress of economies in implementing measures under the WTO TFA can provide insights to the level of institutional connectivity in the region.

The WTO TFA contains general measures related to four key areas: formalities, transit, institution, and transparency. As of 2021, almost all APEC economies had already fully implemented most of these provisions (Figure 16 and Figure 17). Notwithstanding this progress, some areas may require additional attention. These measures include those that had less than or barely half of APEC economies having fully implemented the provision. Those among formalities and transit trade facilitation measures are: the establishment and publication of average release times (Q11); limiting the physical inspections of transit goods and use risk assessment (Q36); supporting pre-arrival processing for transit facilitation (Q37); and cooperation between agencies of economies involved in transit (Q38).

11 Indicators presented in the WEF GCR are typically based on perception surveys among executives. Appendix A provides the exact survey questions and the corresponding interpretation of each indicator used in this report.
Figure 16. APEC implementation of formalities and transit trade facilitation measures in 2021 (number of economies)

Q6 – Risk management; Q7 – Pre-arrival processing; Q8 – Post-clearance audits; Q10 – Separation of release from final determination of customs duties, taxes, fees and charges; Q11 – Establishment and publication of average release times; Q12 – TF measures for authorized operators; Q13 – Expedited shipments; Q14 – Acceptance of copies of original supporting documents required for import, export or transit formalities; Q36 – Limit the physical inspections of transit goods and use risk assessment; Q37 – Supporting pre-arrival processing for transit facilitation; Q38 – Cooperation between agencies of [economies] involved in transit.

Note: Data from Hong Kong, China; Chinese Taipei; and the United States are unavailable. Information about Papua New Guinea’s electronic exchange of customs declaration is unavailable.


Meanwhile, institution trade facilitation measures that can benefit from more attention are: having a domestic legislative framework and/or institutional arrangements for border agencies cooperation (Q31); alignment of working days and hours with neighboring economies at border crossings (Q33); and alignment of formalities and procedures with neighboring economies at border crossings (Q34).

Figure 17. APEC implementation of institution and transparency trade facilitation measures in 2021 (number of economies)

Q1 – [Domestic] trade facilitation committee or similar body; Q2 – Publication of existing import-export regulations on the internet; Q3 – Stakeholders’ consultation on new draft regulations (prior to their finalization); Q4 – Advance publication/notification of new trade-related regulations before their implementation; Q5 – Advance ruling on tariff classification and origin of imported goods; Q9 – Independent appeal mechanism; Q31 – [Domestic] legislative framework and/or institutional arrangements for border agencies cooperation; Q33 – Alignment of working days and hours with neighboring [economies] at border crossings; Q34 – Alignment of formalities and procedures with neighboring [economies] at border crossings.

Note: Data from Hong Kong, China; Chinese Taipei; and the United States are unavailable. Information about Papua New Guinea’s electronic exchange of customs declaration is unavailable.

Apart from general measures, the WTO TFA also features digital trade facilitation measures, which could be grouped broadly into paperless and cross-border paperless trade. As of 2021, most APEC economies had already fully implemented all the paperless trade measures, except for the electronic application for customs refunds (Q24) (Figure 18). However, in terms of cross-border paperless trade measures, less than half of APEC economies had fully implemented all cross-border paperless trade measures, except for having a recognized certification authority (Q26). Notwithstanding, most APEC economies had initiated implementation efforts in some capacity (whether in full, partial, or as a pilot stage) across all digital trade facilitation measures.

Figure 18. APEC implementation of digital trade facilitation measures in 2021 (number of economies)

Q15 – Automated customs system; Q16 – Internet connection available to customs and other trade control agencies; Q17 – Electronic single window system; Q18 – Electronic submission of customs declarations; Q19 – Electronic application and issuance of import and export permit; Q20 – Electronic submission of sea cargo manifests; Q21 – Electronic submission of air cargo manifests; Q22 – Electronic application and issuance of preferential certificate of origin; Q23 – E-payment of customs duties and fees; Q24 – Electronic application for customs refunds; Q25 – Laws and regulations for electronic transactions; Q26 – Recognized certification authority; Q27 – Electronic exchange of customs declaration; Q28 – Electronic exchange of certificate of origin; Q29 – Electronic exchange of sanitary and phyto-sanitary certificate; Q30 – Paperless collection of payment from a documentary letter of credit

Note: Data Hong Kong, China; Chinese Taipei; and the United States are unavailable. Information about Papua New Guinea’s electronic exchange of customs declaration is unavailable. Information about Malaysia’s paperless collection of payment from a documentary letter of credit is unavailable.


People-to-people connectivity

Facilitating the safe cross-border movement of people is at the core of people-to-people connectivity. One way of inferring progress in this area is through international tourism indicators. Latest data has shown that tourist arrivals in APEC plummeted from 678 million arrivals in 2019 to 166 million in 2020, or a fall of 75.5 percent due to the pandemic. Also, both tourism receipts and expenditures naturally declined. For APEC, tourism receipts (as a percent of total exports) dropped by 61.5 percent, while tourism expenditures (as a percent of total imports) fell by 68.0 percent (Figure 19).
2.2 INNOVATION AND DIGITALIZATION

2.2.1 The region improves digital connectivity among economies, businesses and people including by enhancing trust and security in the use of ICTs, accessibility and affordability of digital infrastructure in the region, broadening participation in the digital economy, and cooperating on facilitating the flow of data and strengthening consumer and business trust in digital transactions

Broadening participation in the digital economy

The digital economy can create new opportunities to promote inclusion, strengthen foreign linkages, and induce economic growth. One way to gauge participation is through the trade in digitally deliverable services (DDS). In 2021, total commercial DDS trade reached USD 2.6 trillion, higher than the 2019 level of USD 2.2 trillion (Figure 20).

Despite this growth, APEC’s share of world total commercial DDS trade slightly fell from 33.8 percent in 2019 to 33.5 percent in 2021. Notably, APEC’s total commercial DDS trade has become larger compared to non-DDS trade ever since the pandemic happened, which may be indicative of how fast the pandemic has accelerated the uptake of DDS.
Figure 20. APEC total commercial services trade in 2019–2021, by DDS category

<table>
<thead>
<tr>
<th>Year</th>
<th>Non-Digitally Deliverable Services</th>
<th>Digitally Deliverable Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value (trillion USD)</td>
<td>Percentage share to world total</td>
</tr>
<tr>
<td>2019</td>
<td>2.5</td>
<td>43.6%</td>
</tr>
<tr>
<td>2020</td>
<td>1.4</td>
<td>42.6%</td>
</tr>
<tr>
<td>2021</td>
<td>1.8</td>
<td>42.3%</td>
</tr>
<tr>
<td>2019</td>
<td>2.2</td>
<td>33.8%</td>
</tr>
<tr>
<td>2020</td>
<td>2.3</td>
<td>34.2%</td>
</tr>
<tr>
<td>2021</td>
<td>2.6</td>
<td>33.5%</td>
</tr>
</tbody>
</table>

Note: APEC aggregate is a sum. Source: APEC PSU calculations using data from UNCTAD and the WTO (accessed 26 July 2023).

Promoting DDS trade across the region requires a conducive policy environment. One way to gauge this policy environment is through the OECD digital STRI. In 2022, APEC had an average digital STRI score of 0.179, which indicates a growingly more restrictive policy environment for digital services trade that can undermine growth. Infrastructure and connectivity was the topmost restriction. (Figure 21).

Figure 21. APEC average digital STRI scores in 2019–2022, by policy category

Note: Aggregates are a simple average. Data for Hong Kong, China; Papua New Guinea; and Chinese Taipei are unavailable. Source: APEC PSU calculations using data from the OECD (accessed 26 July 2023).

One area of concern for the smooth facilitation of DDS trade is cross-border data flows. A policy environment with a low number of restrictions helps to facilitate better flows. Examples of possible restrictions are local storage requirements, data privacy laws, cybersecurity laws, data localisation requirements, and various forms of bans, among others. In 2019, a total of 54

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12 The digital STRI evaluates the restrictiveness of the policy environment by using scores ranging from 0 (open) to 1 (closed). The digital STRI assesses five policy categories: (1) infrastructure and connectivity; (2) electronic transactions; (3) payment system; (4) intellectual property rights; and (5) other barriers affecting trade in digitally enabled services. Note that digitally enabled services have a broader context compared to DDS.
restrictions were implemented by APEC economies (Figure 22). This represents 52.4 percent of the number of restrictions recorded across all 64 economies being monitored. It is worth emphasizing that the number of restrictions affecting cross-border data flows has steadily been increasing over the past two decades.

**Figure 22. Cumulative number of restrictions to cross-border data flows from before 2000 to 2019**

![Graph showing cumulative number of restrictions to cross-border data flows from before 2000 to 2019](image)


Participation in the digital economy can also be inferred by looking at the percentage of total population online and, among them, those that actively engage in digital transactions. In 2021, 76.3 percent of APEC’s population were online (Figure 23). Among those online (aged 15+), 77.4 percent made or received a digital payment. For both indicators, APEC has performed better compared to the world average. Nevertheless, almost a quarter of the population was offline in the APEC region — an area where more work needs to be done considering that this translates to around 699 million people unable to participate in the digital economy.

**Figure 23. Selected indicators on digital participation in 2021**

![Graph showing internet users and digital payments](image)

Note: (a) Aggregates are a weighted average based on total population; (b) Aggregates are a simple average. Data for Mexico; and Viet Nam are based on 2017 data. Data for Brunei Darussalam and Papua New Guinea are unavailable.

Source: (a) APEC PSU calculations using data from the ITU, World Bank, and Chinese Taipei (accessed 26 July 2023); (b) APEC PSU calculations using data from the World Bank (accessed 26 July 2023).

Broadening the participation in the digital economy requires that APEC economies have easy access to ICT goods. Currently, 17 APEC economies participate in the WTO Information Technology Agreement (ITA), which eliminates tariffs to zero for all goods included in the agreement. Similarly, 13 APEC economies are participating so far in the ITA expansion agreed in 2015.
Overcoming the digital divide

Having an unreliable connection to the internet or low confidence and trust in utilizing digital solutions are challenges that need to be overcome to broaden participation in the digital economy.

Access to digital infrastructure is an important aspect to bridge the digital gap. Looking at broadband subscriptions, APEC registered 30 fixed broadband subscriptions per 100 inhabitants in 2021, an improvement from the 28 subscriptions in 2020 (Figure 24). Interestingly, APEC’s number of active mobile broadband subscriptions was noticeably higher compared to fixed broadband. In 2021, APEC registered 114 active mobile broadband subscriptions per 100 inhabitants, which meant that some individuals had more than one subscription. For both areas, APEC has consistently outperformed the world average.

![Figure 24. Access to digital infrastructure in 2020 and 2021 (per 100 inhabitants)](image)

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

Improving physical access to digital infrastructure is important, but this must also be accompanied by an improvement in affordability. In APEC, a fixed-broadband basket of 5GB costed 32.7 international dollars in 2022, while data-only mobile broadband baskets of 2GB costed 22.5 international dollars during the same year (Figure 25). Both services became more expensive in 2022 relative to 2021. Despite this increase, APEC’s fixed-broadband basket in 2022 remained more affordable compared to the world average. However, data-only mobile broadband baskets are more expensive in APEC in comparison to the world average.

![Figure 25. Affordability of selected broadband services in 2021 and 2022 (PPP, current international dollars)](image)

Note: Aggregates are a weighted average based on GDP, PPP (current international dollars). Data for Chinese Taipei is unavailable.
Apart from material access, closing the digital divide requires improving people’s trust in the use of information and communications technologies (ICTs) and their confidence to utilize them. As of 26 July 2023, almost all APEC economies already had laws and regulations related to preventing cybercrime, ensuring consumer protection, facilitating e-transactions (both domestic and cross-border), and implementing data protection and privacy (Figure 26). Only one APEC economy had a draft legislation on e-transactions. Noticeably, both consumer protection and data protection and privacy had two APEC economies with no legislation.

<table>
<thead>
<tr>
<th>Cybercrime</th>
<th>Consumer Protection</th>
<th>E-Transaction</th>
<th>Data Protection and Privacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislation</td>
<td>19</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>Draft Legislation</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>No Legislation</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 26. Presence of online protection laws in 2023 (number of economies)

Note: Aggregates are the number of economies with at least one online protection law/draft legislation (as of 26 July 2023). Data for Hong Kong, China is unavailable, except for data protection and privacy. Data for Chinese Taipei is unavailable.


It is also beneficial for the region to have a common framework that guides on digital areas. One such area is cross-border data privacy. In 2011, APEC Economic Leaders endorsed the APEC Cross-Border Privacy Rules (CBPR) system, which implemented the APEC Privacy Framework. As of June 2023, a total of 9 APEC economies are participating in the CBPR system.13

2.3 STRONG, BALANCED, SECURE, SUSTAINABLE AND INCLUSIVE GROWTH

2.3.1 APEC’s growth and prosperity is achieved on an increasingly environmentally sustainable basis

Environmental sustainability is a pressing global issue. Development needs to keep this in mind in order to continue to improve the standards of living for everyone. One way to measure economies’ effort in this front is through the World Economic Forum’s Global Competitiveness Report on commitment to sustainability. In 2019, respondents scored APEC with 64.7 on energy efficiency regulation and with 64.3 on renewable energy regulation (Figure 27). This suggests that APEC’s regulations on these areas are perceived to be conducive to promoting energy efficiency and renewable energy.

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13 APEC PSU compilation based on the CBPR list of participating economies (accessed 26 July 2023).
To an extent, results from these efforts in promoting energy efficiency and renewable energy can be gleaned from the improvement in the share of primary energy from renewable sources in APEC. The region’s share rose from 10.9 percent in 2019 to 12.5 percent in 2021 (Figure 28). However, from 2019 to 2021, APEC has consistently recorded lower shares compared to the world average.

Positive results are also seen through improvements in carbon productivity. In APEC, carbon productivity has improved from 322 kg per thousand 2017 international dollars in 2019 to 316 kg per thousand 2017 international dollars in 2020 (Figure 29). Despite this improvement, APEC’s carbon productivity remains worse compared to the world average.
Figure 29. Carbon dioxide emissions (kg per thousand 2017 international dollars)

Note: Aggregates are a weighted average based on GDP, PPP (constant 2017 international dollars). Data for Hong Kong, China; and Chinese Taipei are unavailable. Source: APEC PSU calculations using data from World Bank (accessed 26 July 2023).

Apart from reducing carbon emissions, APEC has also championed the increased trade of environmental goods to help facilitate their use and benefit the environment.\(^\text{14}\) At the end of 2011, the APEC average MFN applied tariff rate for these listed products was 2.47 percent, although some products had higher tariffs that reached almost 10 percent. Since the adoption of the APEC Environmental Goods List in 2012, APEC has pursued tariff liberalization for these goods, seeking to reduce MFN applied tariff rates to five percent or less, actively promoted trade in environmental goods, and advocated the reduction of tariffs. On the aggregate, the average MFN applied tariff rate for the 54 products within the APEC List of Environmental Goods decreased from 1.59 percent in 2020 to 1.51 percent in 2021\(^\text{15}\) — well below the target of five percent.

To an extent, this tariff liberalization arguably helped to promote APEC trade of environmental goods across the years. In 2021, trade of those products within the APEC List of Environmental Goods with the world reached USD 790 billion, up from USD 677 billion in 2019 (Figure 30). In addition, APEC’s share of those goods’ world total trade rose from 60.5 percent in 2019 to 61.9 percent in 2021.

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\(^\text{14}\) Environmental goods are defined as the 54 products enumerated in the APEC list of environmental goods. For a complete list of these environmental goods, see APEC (2012).

\(^\text{15}\) APEC aggregate is a simple average. APEC PSU calculations using data from UNCTAD and the WTO (accessed 26 July 2023).
On top of all these initiatives across many fronts, APEC economies are also actively participating in different WTO discussions and initiatives related to environmentally sustainable trade. As of 10 October 2023, eight APEC economies have submitted their formal acceptance of the WTO Agreement on Fisheries Subsidies. Likewise, 13 APEC economies are participating in the Trade and Environment Sustainability Structured Discussions (TESSD), 15 APEC economies are participating in the Dialogue on Plastics Pollution and Environmentally Sustainable Plastics Trade (DPP), and two APEC economies are participating in the Fossil Fuel Subsidy Reform (FFSR) initiative.

3. FINAL REMARKS

In the view of the PSU, the data obtained to evaluate APEC-wide progress across the six objectives related to trade and investment (including the digital economy and sustainable trade) shows that APEC has made good progress in certain areas, but also could work in other areas to get closer to meet these objectives:

- **Tariffs in general continue falling, but APEC economies could encourage trade in goods flows by removing barriers to trade, including non-tariff measures (NTMs) restricting trade:** while APEC total goods trade flows are recovering since the start of the pandemic, its share in global trade fell in 2022. Some actions could be undertaken in tariffs, as APEC average MFN applied tariff rates on agricultural goods remain relatively high compared to non-agricultural goods. On NTMs, the cumulative number of non-technical NTMs affecting imports and NTMs on exports has increased between 2019 and 2022. Streamlining these policy areas and improving transparency, such as in members’ WTO notification, can help promote growth in total goods trade.
- **Boost trade in services flows by pursuing initiatives that liberalize the policy environment affecting trade in services, with particular focus on certain sectors:** While the overall policy environment for services trade has become less restrictive in 2022 (compared to 2021), it remains more restrictive compared to the 2019 pre-pandemic level. Sectors with the most restrictive policy environments (i.e., air transport, broadcasting; rail freight transport, legal, and accounting) can benefit from streamlining restrictions on foreign entry, restrictions to movement of people, and regulatory transparency. On digitally deliverable services (DDS) trade, economies may consider reviewing restrictions related to infrastructure and connectivity and other barriers affecting trade in digitally enabled services. Attention should also be given towards reducing the number of restrictions affecting cross-border data flows.

- **Attract more investments by improving the FDI policy environment:** While FDI are recovering since the pandemic started, economies can further improve the FDI policy environment, for instance, by streamlining equity restriction and screening and approval measures. Special focus can also be given to both primary and tertiary sectors since these had comparably more restrictive FDI policy environments than the secondary sector. APEC economies can also expand their BITs and TIPs networks to attract more investments.

- **Advance economic integration in the region by developing high-standard and comprehensive regional undertakings and establishing closer regional connectivity:** Since the 1990s, APEC economies have substantially increased the number of RTAs/FTAs, including the signing of mega-trade agreements. In recent years, APEC economies have included a broader range of topics in RTAs/FTAs to adjust to new trade and investment challenges and also negotiated new types of agreements, focusing on areas such as the digital economy and green economy. APEC can continue exploring these areas to improve economic integration in the region. While regional connectivity has improved in APEC, economies can explore options to improve the efficiency of physical connectivity, such as transportation services. On institutional connectivity, economies can strengthen efforts to implement the trade facilitation measures under the WTO TFA, especially those that have less than half or barely half of APEC economies fully implementing them. These efforts should include the implementation of “best endeavour” provisions in WTO TFA. Recovering from the pandemic, APEC economies can revive people-to-people connectivity by adopting tourism-targeted initiatives.

- **People are participating more broadly in the digital economy, but APEC economies need to improve access to digital tools and affordability to eliminate the digital divide:** While most adults in APEC participate in the digital economy, around 699 million people in APEC were still offline in 2021. And, even among those online aged 15+ during the same year, almost a quarter did not make or receive a digital payment. Broadband services in APEC became more expensive between 2019 and 2022 and the absence of certain laws and regulations to enable consumer protection and safeguard data and privacy do not encourage trust among the population to use digital tools in some APEC economies. Public-private partnerships can help improve this situation by overcoming certain aspects of the digital divide.

- **Intensify environmental efforts to achieve sustainable growth and prosperity by adopting clean and green policies:** APEC has implemented initiatives such as the APEC List of Environmental Goods and developed the APEC Reference List of Environmental and Environmentally-related Services. APEC can also work to identify new environmental
goods and services, as well as to further facilitate the use of those goods and services. Subsequently, APEC economies can benefit by working together to identify barriers to trade in environmental goods and environmentally-related services and addressing those barriers.

These remarks by the PSU are shared for consideration of CTI. Besides the objectives listed in this report, the APA also include other objectives that are not directly connected to the CTI agenda, but some of their collective actions are linked to trade. For example, under the Strong, Balanced, Secure, Sustainable and Inclusive Growth pillar, the objective of ensuring resiliency by fostering quality growth, includes a collective action on “advancing inclusive policies, including under the economic drivers of trade and investment […].” Some work done by CTI sub-fora are taking into account issues on women and MSMEs. In addition, APEC economies have included clauses on these issues in recent FTAs (such as articles 23.4 on Women and Economic Growth and Chapter 24 on SMEs in the CPTPP, as well as Chapter 14 on SMEs in RCEP).
4. **BIBLIOGRAPHY**


https://www.dropbox.com/s/i5hnf27nnz21nq/GTA%20handbook.pdf?dl=1

### Appendix A. Description and interpretation for selected Global Competitiveness Report indicators

<table>
<thead>
<tr>
<th>Category</th>
<th>Indicator</th>
<th>Description</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pillar 1: Institutions</td>
<td>1.24 Energy efficiency regulation</td>
<td>Assesses an economy’s policies and regulations to promote energy efficiency. The score is based on an economy’s performance on 12 indicators: national energy efficiency planning; energy efficiency entities; information provided to consumers about electricity usage; energy efficiency incentives from electricity rate structures; incentives and mandates: industrial and commercial end users; incentives and mandates: public sector; incentives and mandates: utilities; financing mechanisms for energy efficiency; minimum energy efficiency performance standards; energy labelling systems; building energy codes; transport; and carbon pricing and monitoring.</td>
<td>0 = not conducive 100 = very conducive</td>
</tr>
<tr>
<td></td>
<td>1.25 Renewable energy regulation</td>
<td>Assesses an economy’s policies and regulations to promote renewable energies. The score is based on an economy’s performance in seven indicators: legal framework for renewable energy; planning for renewable energy expansion; incentives and regulatory support for renewable energy; attributes of financial and regulatory incentives; network connection and use; counterparty risk; carbon pricing; and monitoring.</td>
<td>0 = not conducive 100 = very conducive</td>
</tr>
<tr>
<td>Pillar 2: Infrastructure</td>
<td>2.02 Quality of road infrastructure</td>
<td>Response to the survey question: “In your [economy], what is the quality (extensiveness and condition) of road infrastructure?”</td>
<td>1 = extremely poor, among the worst in the world 7 = extremely good, among the best in the world</td>
</tr>
<tr>
<td></td>
<td>2.04 Efficiency of train services</td>
<td>Response to the survey question: “In your [economy], how efficient (i.e., frequency, punctuality, speed, price) are train transport services?”</td>
<td>1 = extremely inefficient, among the worst in the world 7 = extremely efficient, among the best in the world</td>
</tr>
<tr>
<td></td>
<td>2.06 Efficiency of air transport services</td>
<td>Response to the survey question: “In your [economy], how efficient (i.e., frequency, punctuality, speed, price) are air transport services?”</td>
<td>1 = extremely inefficient, among the worst in the world 7 = extremely efficient, among the best in the world</td>
</tr>
<tr>
<td></td>
<td>2.08 Efficiency of seaport services</td>
<td>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)?”</td>
<td>1 = extremely inefficient, among the worst in the world 7 = extremely efficient, among the best in the world</td>
</tr>
</tbody>
</table>

Source: APEC PSU compilation based on the WEF Global Competitiveness Report 2019 (Schwab, 2019).