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Economic Cooperation

Advancing Free Trade
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Research Outcomes 2021

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Trade Liberalisation and Facilitation

APEC Services Competitiveness Roadmap (ASCR) – Mid-term Review

Link: <https://www.apec.org/Publications/2021/10/APEC-Services-Competitiveness-Roadmap-Mid-term-Review>

This mid-term review report assesses the APEC economies' progress in implementing the ASCR, which was endorsed by APEC Leaders in 2016 along with an implementation plan. It also reflects on the challenges and opportunities posed by the COVID-19 pandemic, and presents some learning points to recalibrate and steer ongoing work in implementing the ASCR towards 2025.

Findings

Progress

APEC has made good strides in advancing ASCR. At the level of overarching targets, it can be observed that certain services sectors in the region have become less restrictive. APEC's services value added as a share of GDP continued to outperform the world on average.

ASCR's 3 OVERARCHING TARGETS



Ensuring an open and predictable environment for access to services markets

- Certain sectors such as logistics, distribution and engineering services have become more open.
- Some sectors such as road freight transport, accounting and telecommunications are becoming more restrictive.



Increasing the share (%) of services exports from APEC economies in the total world services exports

- APEC's share of total world services exports has declined from 38.8% in 2016 to 38.1% in 2019.



Increasing trade in services in the APEC region

- Trade value in commercial services between 2016 and 2019 reflected an annual growth rate of 5.3%, which is lower than the target of 6.8% or more.
- The share of services value-added in the total GDP of the APEC region in 2019 exceeds the global average (65.7% vs 65.0%).

At the level of APEC-wide actions, many accountable fora have undertaken activities to support the implementation of the roadmap. These activities range from organising information sharing workshops and commissioning studies on specific topics of interest, to developing principles and undertaking pilot programmes with regards to specific initiatives. Policy guidance and recommendations arising from these activities are beneficial in making services sectors in the region more competitive. Many also have desirable spillovers into other APEC-wide actions.

Among individual APEC economies, analysis of individual action plans and subsequent updates provided by economies as part of their structural reform plans under the Renewed APEC Agenda for Structural Reform (RAASR) indicated that many have included priorities and actions with potentially positive implications on services sector.

In a way, the positive observations are supported by analysis of the quantitative indicators. For example, comparison of OECD Services Trade Restrictiveness Index (STRI) scores for the years 2016 and 2020 shows that for APEC on average, services sectors such as logistics, architecture, engineering and commercial banking have become more open. Improvements have also been observed in some indicators such as the number of economies and firms participating in the Cross-Border Privacy Rules (CBPR) and Privacy Recognition for Processors (PRP) Systems as well as international tourism arrivals and receipts.

Progress notwithstanding, more work has been done to further support implementation of ASCR and specific APEC-wide actions. Backtracking or lack of progress has been observed for some indicators such as APEC's share of world commercial services export. Mixed performance has also been observed for some indicators – for example, even as OECD STRI shows some sectors in the APEC region becoming less restrictive, it has also shown other sectors such as road freight transport, accounting and telecommunications becoming more restrictive. Other examples include the World Bank's percentage of SMEs having their own website and UNESCO's percentage of women's R&D participation in science, technology and innovation fields, where some economies have registered improvements, while others have regressed. There are also instances where analysis of multiple indicators used to monitor the same action led to different conclusions. This indicates that while progress has been positive from the perspective of one indicator, it was not so from the perspective of another indicator. Such cases show that more efforts may be needed in certain fronts to guarantee overall progress.

The need to redouble efforts is indeed noted by fora and economies in their response to the survey questionnaire circulated as part of

the mid-term review. Depending on individual APEC-wide actions, suggestions identified by economies and fora include: (1) agreeing on concrete actions to take forward various initiatives identified/developed as part of the ASCR implementation; (2) developing activities which are in line with fora's ongoing initiatives and at the same time, can contribute to the ASCR implementation; (3) ensuring that efforts are cross-referenced against other relevant APEC initiatives; (4) organising more targeted capacity building activities aimed at aiding members to adopt and operationalise specific recommendations; and (5) enhancing cross-fora collaboration and engagement with various stakeholders, including the private sector.

Impact and implications of COVID-19 on services sector and trade

COVID-19 pandemic is different to other economic shocks the region has been subject to in the past, because it combines supply and demand aspects in a way that has particular implications for the services sector, given the importance of personal contact for some types of services trade, and the difficulty of those contacts in light of changed preferences and necessary public health measures.

A review of high frequency trade and investment data shows that impacts are very heterogeneous at economy and sectoral levels. While the region as a whole has seen a significant decline in services trade, patterns of impact at a detailed level are much more complex. It is thus important to take a granular view in order to properly understand the situation.

The case study approach highlights ways in which economies and businesses have responded to the challenges of the pandemic period:

- Canada's higher education sector used online instruction methods, while immigration policy developed specific policy flexibilities for international students
- Chile was able to use social support measures to assist workers in its transport sector, and to work with regional partners to develop safe ways of keeping supply chains open
- The Philippines' burgeoning ICT sector was well-placed to continue providing cross-border services, albeit with a demand-side shock
- Singapore's health sector made use of its telehealth regulatory sandbox to shift activity further online
- Thailand's tourism sector was hard hit, but the government provided extensive support, which is important given the significant presence of women and vulnerable communities among potentially displaced workers

A key determinant of economy performance in the crisis has been the ability to shift activity online. Developing digitally-enabled services

trade requires substantial investments in hard and soft infrastructure. There is already a stock of good practice in the region that can be socialised and adapted to other contexts. Other approaches include exercising regulatory flexibility and instituting better health risk management.

While the economic shocks have been major, the region has a strong framework with which to support recovery in the post-pandemic period. The ASCR is an ambitious general framework for development of the services sector in the region. Its APEC-wide actions cover many areas of services production and trade. Although the pandemic has placed great stress on the region's service providers, it would be unwise to seek to completely redesign the policy environment based on this one, historically very rare, event.

Rather, the approach should be to fine-tune an already comprehensive document so as to better enable economies and firms to respond to large shocks in the future, as well as to deal with regulatory issues that have received greater prominence in light of the shift to online activity during the pandemic.

Recommendations

APEC economies could consider the following recommendations to further advance services work in ASCR:

- Accelerate implementation of specific APEC-wide actions. Several strategies can be considered to accelerate implementation of specific APEC-wide actions. Initiatives such as "Addressing the Unfinished Business of the Bogor Goals: Final Push on Services" which identify certain APEC-wide actions as priority areas can provide more targeted efforts. Moreover, champion economies can provide clearer guidance to accountable fora and economies to deliver significant, tangible outputs within a specified timeline. Linking APEC-wide actions with the work plan of accountable fora could ensure that they consider these actions more prominently in their discussions and deliberations.
- Update set targets and outputs in each APEC-wide action and clearly associate activities with them. Each APEC-wide action has specific targets and outputs associated with it. For better monitoring, accountable fora should consider updating set targets and outputs accordingly, as well as clearly linking activities with designated targets and outputs. Where original targets and outputs have been achieved, accountable fora should deliberate on the next steps. Where progress is lagging behind specified targets, APEC could reconsider and recalibrate their targets. The ASCR was indeed conceived to be a living document which can be updated on a regular basis to quickly respond to the changing landscape and priorities.

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- **Respond to COVID-19 decisively and concretely.** COVID-19 and its implications on services should stimulate efforts to ensure that existing actions are fine-tuned, new actions introduced and targets and outputs duly updated. Steps and updates which economies and fora should consider include:
 - **Rationalisation of policies affecting digital trade.** The ability to substitute towards Mode 1 trade in services (cross-border trade) was a key determinant of business success during the pandemic. APEC has initiatives on digital trade and data flows, and can build on the synergies between the ASCR and these initiatives. Clearly recognising the links between these two areas and developing a joint work stream will help in the development of concrete initiatives in the future.
 - **Further de jure and de facto market opening.** There is a case for a broader approach to liberalisation of services policies on the basis of concerted unilateralism, which has a long and successful history in APEC. The sectoral approach of ASCR is appropriate and helpful for highlighting particular priorities identified by economies, but a broader approach to liberalisation would help lay the groundwork for keeping trade flowing in a wide range of sectors when crises hit. At the same time, it is important to leverage the COVID-19 experience to support the use of sensible regulatory flexibility and forbearance to facilitate trade while not sacrificing other social objectives, such as public health. Convening regional regulators both through existing channels and potentially through new ones could help share experiences in this area, and convene a broader constituency in favour of reform.
 - **Dealing with regulatory heterogeneity.** Part of increased openness to Mode 1 trade is finding creative ways of dealing with regulatory heterogeneity in a way that preserves important social objectives, but also facilitates trade. APEC has procedures and fora for cooperation at the regulatory level, and they provide a strong basis for building on successful programmes that encourage trade even in heavily regulated sectors; APEC Architects and APEC Engineers are examples. Broadening this kind of approach beyond professional qualifications could bring important benefits to the region. As a first step, economies could identify candidate sectors, in the knowledge that modalities may well differ from sector to sector.
 - **Attenuating social costs.** Economists have long recognised the case for supporting vulnerable people in times of economic change brought about by increased trade. But the pandemic makes clear the need for social safety nets on a broader basis. It also highlights the importance of addressing the social

benefits and costs of technological change, in particular as more activity shifts towards Mode 1 trade. Convening a specific dialogue mechanism within APEC on social protections to deal with the challenges of digitalisation, trade, and automation would help build the stock of regional best practice and share experience more widely.

- **Leverage cross-fora collaboration and capture all relevant activities.** Assigning each APEC-wide action to accountable fora helps in strengthening ownership. However, the cross-cutting nature of APEC-wide actions means that assigning ownership may lead certain activities outside the purview of the accountable fora to be left out as contributions. Although some APEC-wide actions were allocated to multiple fora to reflect the APEC-wide actions' cross-cutting nature, more should be done to ensure that all relevant activities are captured accordingly. There are also opportunities to leverage cross-fora collaboration, in particular when some of the deliverables have wide applications beyond the purview of the accountable fora.
- **Ensure better synergy between ASCR and other APEC initiatives.** It is critical that ASCR be realigned to help realise the APEC Putrajaya Vision 2040. There is also a need to ensure better synergy between ASCR and other APEC initiatives such as the APEC Internet and Digital Economy Roadmap (AIDER), the La Serena Roadmap for Women and Inclusive Growth, and the Enhanced APEC Agenda for Structural Reform (EAASR). Many of these cross-cutting initiatives have common elements of interest across them. While ASCR recognises and has made reference to some of these initiatives, the fast evolving landscape and the fact that APEC has introduced additional initiatives since ASCR's inception means that there is wider room to improve synergy.
- **Enhance engagement with the private sector.** The private sector is a critical stakeholder of ASCR. They are after all the main beneficiaries, the providers, and the users of services. While many private entities have provided their views on the progress of ASCR implementation, further and deeper engagement with the private sector to partake in deliberating, calibrating, and executing the ASCR should be continued. For instance, the APEC Group on Services (GOS) and other accountable fora can include a standing agenda item in their meetings, wherein the private sector can share their perspectives and experiences on the ASCR implementation. There is also a case for economies to work with the private sector to develop other modes of engagement in particular sectors of interest, focusing specifically on the value chain dimensions of modern services trade. In the first instance, economies could identify one value chain as a pilot, so that this

approach could be tested at scale with the participation of all relevant stakeholders.

- **Continue to improve services data and statistics.** Despite their limitations, the indicators used in this mid-term review show if various activities undertaken by fora and economies have led to tangible improvements. While some indicators have seen progress, other indicators remain far from ideal. Improving the state of services data and statistics in the region would assist in monitoring the roadmap implementation, and also in better equipping policymakers to plan and make more evidence-based decisions.
- **Undertake complementary, measurable, concrete activities.** By their nature, activities such as information-sharing workshops do not automatically lead to improvement in the indicators used to monitor particular APEC-wide actions. This suggests that in addition to the activities taken by the accountable fora, there needs to be supplementary follow-up through concrete activities. These activities can support economies in undertaking tangible, measurable reforms that can eventually be reflected as improvements in the indicators. The need for these follow-up activities is further underscored by the observation that while many activities aim to advance work on APEC-wide actions, there continues to be a wide range of gaps among individual economies for specific indicators.

Promoting Trade in Vaccines and Related Supplies and Equipment

Link: <https://www.apec.org/Publications/2021/05/Promoting-Trade-in-Vaccines-and-Related-Supplies-and-Equipment>

This Policy Brief studies the importance of trade in vaccines and their related supplies and equipment, as well as identify issues affecting COVID-19 vaccine trade. It analyses existing tariff levels and non-tariff measures affecting those products in the APEC region. It also provides policy recommendations to facilitate the provision of COVID-19 vaccines and related products.

Findings

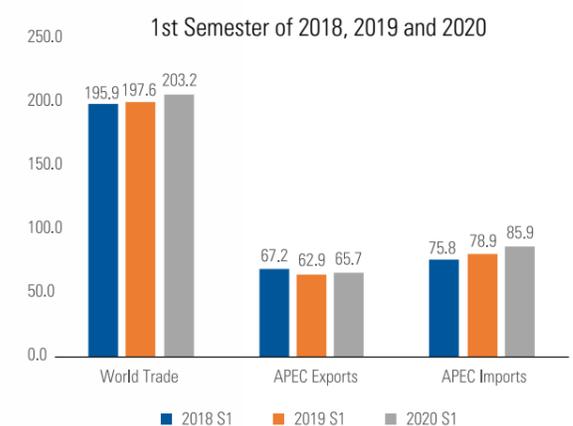
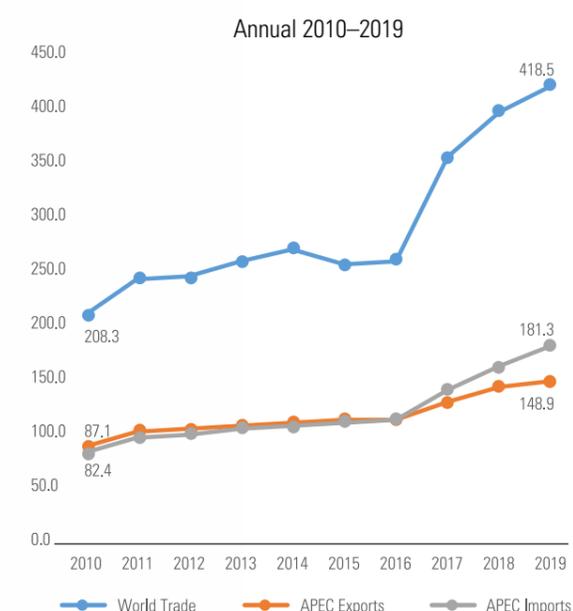
Trade in vaccines and related supplies and equipment

To estimate the amount of trade in vaccines and related supplies and equipment, this Policy Brief takes into account 42 products from the list developed jointly by the WCO and WHO on vaccines and related supplies and equipment, and the list included in a 2021 OECD study

on selected vaccine-related inputs. Among the products, 11 are categorised as vaccine ingredients; 7 as vaccines, test kits, instruments and apparatus used in diagnostic testing; and 24 as disinfectants, medical consumables and equipment related to vaccines.

At the global level, the amount of trade in vaccines and related supplies and equipment is significant. The world trade of these products doubled from USD 208.3 billion to USD 418.5 billion between 2010 and 2019 and have been increasing since the start of the pandemic. Similarly, APEC economies increased their exports of vaccines and related supplies and equipment by 70.9% over the same period. APEC imports also expanded 120.1%.

Trade in vaccines and related supplies and equipment, World and APEC (USD billion)



Note: For comparison purposes, data in the chart at the bottom for the first half of 2018, 2019 and 2020 only takes into account 79 economies, including 15 APEC members. Within APEC, 2020 quarterly data are not available yet for Brunei Darussalam; Hong Kong, China; Indonesia; Mexico; Papua New Guinea; and Viet Nam. Source: International Trade Centre (ITC) Trade Map; APEC Policy Support Unit (PSU) calculations.

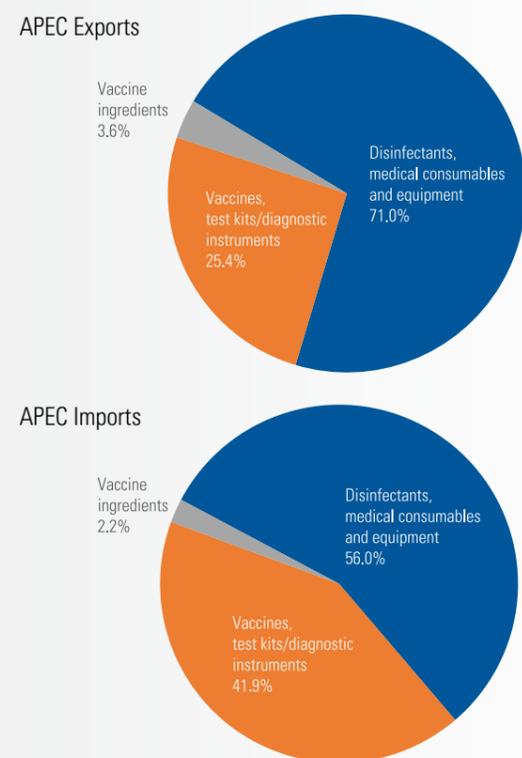
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While data for year 2020 is only available for the first half of the year, it is very likely that the trade flows of these products increased worldwide in 2020, as their trade flows grew 2.9% year-on-year in the first half of 2020. Likewise, APEC exports and imports increased by 4.3% and 8.9%, respectively.

With COVID-19 vaccinations beginning to roll out at the end of 2020, it is possible that the emerging COVID-19 vaccine trade had a significant positive effect on the trade statistics of vaccines and related supplies and equipment during the second half of 2020.

In APEC, a majority of trade in vaccines and related supplies and equipment is explained by disinfectants, medical consumables, and equipment related to vaccines. In 2019, most of APEC exports of vaccines and related goods is explained by disinfectants, medical consumables and equipment related to vaccines (71.0%). In other words, a majority of these exports in terms of value are related to goods that are critical for the distribution and administration of vaccines. From the import perspective, 56.0% of those APEC imports correspond to disinfectants, medical consumables and equipment related to vaccines.

Distribution of APEC trade in vaccines and related supplies and equipment by category, 2019



Note: Percentages obtained from trade data expressed in nominal USD.

Products related to diagnostic test kits, vaccine distribution and administration are more traded by APEC economies than vaccines for human use. In 2019, the most exported products by the APEC region in the vaccine supply chains were related to the stages of vaccine distribution and administration. Vaccine carriers, ultra-violet irradiation equipment for disinfection purposes and needles used for medical science accounted for nearly 45% of the exports of the products in the vaccine supply chain. On the other hand, test kits based on immunological reactions topped the list of imports of vaccines and related goods, representing 23.4% of the total. Similar to the top products in the export list, the main imported products were related to vaccine distribution and administration.

A few APEC members account for a significant percentage of APEC exports and imports of vaccines and related goods. In 2019, the top five APEC exporters accounted for 82.4% of APEC exports while the relative share of the five APEC importers were slightly slower at 75.8% of APEC imports.

A majority of the APEC imports of all types of vaccines for human use and related supplies and equipment come from within the APEC region, followed by Europe. In 2019, 55.6% of APEC imports of vaccines and related supplies and equipment originated within the APEC region while 39% of APEC imports came from Europe. In fact, the top 10 economies supplying those products to the APEC region comprised five APEC members and five European partners, accounting for nearly 75% of APEC imports.

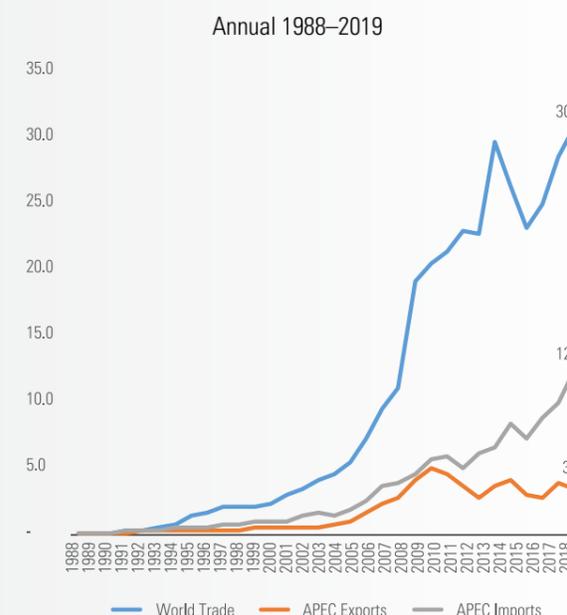
Trade in vaccines for human use has increased significantly worldwide. Imports by APEC members have risen considerably. In 2019, vaccine trade worldwide reached USD 30.2 billion, a 50.7% growth from the level recorded in 2010. APEC imports of vaccines also jumped from USD 5.5 billion to 12 billion during the same period, equivalent to an increase of 120.6%. On the other hand, APEC exports of vaccines declined by 32.9%, falling from USD 4.8 billion to 3.2 billion.

Data from the first half of 2020 show a global increase in the vaccine trade, as well as a higher level of APEC imports in comparison to similar periods in 2018 and 2019. This suggests that global trade and APEC imports of vaccines would record a higher value in 2020 than in 2019, particularly since COVID-19 vaccines only became available at the end of 2020.

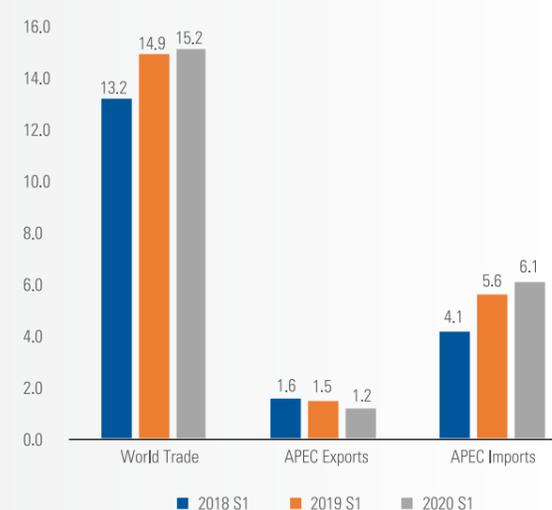
European partners dominate the world trade of vaccines for human use. Most of the APEC imports of vaccines for human use are purchased from those partners. Members of the EU and European Free Trade Association (EFTA), and the UK, exported collectively

86.5% of the global trade of vaccines in 2019. Only 10.7% of the total exports of vaccines originated from the APEC region.

Trade in vaccines for human use (HS 300220) (USD billion)



1st Semester of 2018, 2019 and 2020



Note: For comparison purposes, data in the bottom chart for the 1st half of 2018, 2019 and 2020 only takes into account 79 economies, including 15 APEC members. Within APEC, 2020 quarterly data are not available yet for Brunei Darussalam; Hong Kong, China; Indonesia; Mexico; Papua New Guinea; and Viet Nam. Source: ITC Trade Map; World Integrated Trade Solution (WITS); APEC PSU calculations.

Most of the vaccines imported by APEC also came from Europe, with 81.8% of the imports of vaccines coming from their European partners. Only 17.4% of the APEC imports of vaccines were sourced from within the APEC region.

COVID-19 vaccine production in the APEC region

COVID-19 vaccine production is ramping up quickly in the APEC region and Europe, but production levels are clearly insufficient to meet demand. Some APEC economies have already started manufacturing COVID-19 vaccines. Data as of early March 2021 show that four APEC members account for 62.2% of the global COVID-19 vaccine production.

The current production capacity falls short of meeting the global demand for COVID-19 vaccines, including in the APEC region. According to the Duke Global Health Innovation Center, an optimistic forecast by the end of 2021 is to produce 12 billion doses of COVID-19 vaccines. To achieve this, producers have to ramp up their production capacity. There are difficulties however, such as the shortage of trained staff; intellectual property rights (concerning the manufacturing of COVID-19 vaccines and vaccine components) being in the possession of a few firms; lack of laboratories with the capacity to meet Good Manufacturing Practices (GMP) to produce safe vaccines; trade barriers affecting vaccine components and related goods; and other unexpected events disrupting the COVID-19 vaccine supply chain.

Since vaccine production relies on a specialised supply chain with multiple inputs originating from across the APEC region and the rest of the world, this further underscores the importance of ensuring that global supply chains are functional and resilient. The economic interdependence invariably means that free and open trade will help ramp up COVID-19 vaccine production quickly. This, together with addressing supply chain challenges, is critical to ensure that vaccine distribution is not jeopardised.

MFN tariffs on vaccines and related supplies and equipment

MFN tariffs on vaccines and related supplies and equipment are low in a majority of APEC members. Most APEC members impose low average MFN tariff rates on vaccine ingredients. Twelve APEC economies impose an average MFN tariff of 5% or less on all vaccines and their related supplies and equipment. Just four APEC economies still maintain an average MFN tariff above 10%.

In the case of vaccine ingredients, the average MFN tariff is low in most APEC economies. Eighteen APEC economies impose an average MFN tariff equivalent to 5% or below.

In APEC, the average MFN tariff duty on vaccines for human use is very low. However, vials and rubber stoppers, which are essential to

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produce vaccines, are subject to higher average MFN tariff duties. The average MFN tariff rate on vaccines for human use is very low in the APEC region, equivalent to only 0.8%. In fact, 15 APEC economies do not charge any tariff duty on vaccines and only one economy imposes an MFN tariff duty above 5%.

However, the situation is different for other essential products in vaccine manufacturing, such as glass vials and rubber stoppers, which have average MFN tariff rates of 6.3% and 5.1%, respectively.

The highest MFN average tariffs are on disinfectants, medical consumables and equipment related to the production, distribution, storage or administration of vaccines. A review of the 10 products with the highest average MFN tariff in the APEC region shows that almost all of them are disinfectants, medical consumables, or materials or equipment that are required in the stages of vaccine production, distribution, storage or administration.

Three types of alcohol solutions, which are important to disinfect the area where vaccines are administered, recorded average duty rates of 77.2%, 29.5% and 14.6%. These average MFN tariffs are high because many economies implement high non ad-valorem duties, as those products could also be used for purposes unrelated to health. Other important products with high MFN tariffs in some economies are freezing equipment and packaging materials for vaccine storage and distribution.

APEC could further facilitate trade on vaccines and related supplies and equipment by reducing or eliminating tariffs on those products that are important in the vaccine supply chain on a permanent basis. This could help in tackling the COVID-19 pandemic and getting the APEC region more prepared when other pandemics emerge in the future.

Since the emergence of the pandemic, several APEC economies have implemented measures to facilitate trade of medical products, including those that are part of the vaccine supply chain. According to the WTO, nine APEC economies have reduced or eliminated import tariffs below reported MFN tariff rates on a temporary basis. Those facilitating measures are usually for alcohol solution, vaccine ingredients, test kits, syringes and needles. While those measures could help facilitate access to vaccines on a temporary basis, a better outcome could be obtained by making those measures long-lasting.

Other measures affecting trade in vaccines and related supplies and equipment

While export restrictions on vaccines and related supply and equipment are in place in few APEC economies, export controls

in the EU may also affect supplies to the APEC region. Export restrictions place on vaccines in either the APEC economies or the EU could affect the provision of vaccines to APEC members, given that APEC and the EU export vaccines to APEC members and the importance of several economies in the two regions as COVID-19 vaccine producers. Such restrictions could affect negatively vaccine production capacity as well, by discouraging investments and restricting the use of economies of scale. If export restrictions are also applied to important products in the vaccine supply chain, vaccine production could be further affected.

Bottlenecks on intellectual property rights could affect plans to expand the production of COVID-19 vaccines in the short term. Trade in COVID-19 vaccines is being affected by bottlenecks that are affecting their production, and one of them concerns the intellectual property rights. Producing a vaccine requires a number of processes and components, which means that ownership of intellectual property could be scattered among several companies. Hence, negotiating those licences to enable a vaccine to be produced could take some time. In addition, the intellectual property rights for some vaccine components could be held by very few companies.

There are regulatory challenges to meet GMP. Divergence in protocols among economies could further complicate plans to ramp up production of vaccines. To expand vaccine production is not an easy task as facilities need to meet GMP to produce safe vaccines and other vaccine-related components. Biosecurity conditions to produce vaccines for human use are stringent and one of the biggest regulatory challenges for vaccine developers is ensuring that GMP in vaccine manufacturing facilities are met. In addition, further complications may appear because of differences in the protocols that economies put in place to assure that the vaccine meets proper quality criteria.

Recommendations

APEC economies could take action in the following areas:

- Trade liberalisation. APEC economies should discuss initiatives involving the reduction or elimination of tariffs on vaccines and those goods that are essential to the production, distribution and administration of vaccines. This is crucial as several goods in the vaccine supply chain such as disinfectants, freezing equipment, vials and stoppers still face MFN tariff rates of above 5% in a number of APEC economies. APEC economies could also commit to refraining from implementing unnecessary non-tariff measures, such as export restrictions and prohibitions affecting trade in vaccines and related goods.

- Trade facilitation. APEC economies should keep supply lines open even as movement restrictions on passenger travel have led to fewer flights, and thus less cargo capacity and higher prices. Strategies will also be needed to ensure that vaccines and their components can be procured from more than one source in order to prevent any unexpected events from affecting the provision of any goods in the vaccine supply chain. In addition, vaccines and other components are sensitive to temperature and require special equipment during the transportation and distribution process. Efforts to implement cold chain equipment and storage at strategic locations, including in communities far from the main urban centres, are required to keep several types of vaccines in good condition

- Intellectual property. Intellectual property on components and processes in the case of the COVID-19 vaccines are held by several firms. Technology transfer is an important aspect that APEC economies should promote to ramp up production levels. Licensing intellectual property rights to third parties within a short time could also play an important role in increasing vaccine production. In addition, as identified by the WTO, some intellectual property-related actions are already being implemented by a number of parties to assist in the development and manufacturing of vaccines, such as committing to non-exclusive and royalty-free licensing, or issuing non-enforcement declarations in relation to patent rights in some or all jurisdictions, publishing scientific data on a free-to-use basis, publishing technical specifications of vital equipment and sharing knowledge.

Currently, there is a proposal at the WTO on a temporary waiver on certain TRIPS obligations in response to COVID-19, with the intention of accessing vaccines and medicines in a timely and affordable manner and to scale up production of essential medical products.

APEC economies could bring a common position to the discussions at the WTO on the matter.

- Standards and conformance. To facilitate the production of vaccines, APEC economies need to ensure that their domestic regulations incorporate the WHO's GMP guidelines. In addition, they could collaborate on mutually recognising GMP inspections and approvals to ensure that the quality assurance for vaccines produced in one economy is valid for the other economies as well.

A Review of the APEC List of Environmental Goods

Link: <https://www.apec.org/publications/2021/10/a-review-of-the-apec-list-of-environmental-goods>

This Policy Brief evaluates the evolution of the trade in environmental goods on the APEC List of Environmental Goods (or 'APEC List') and analyse the main barriers affecting their trade. It discusses the significance of updating the list, as well as some considerations that APEC economies would have to keep in mind when discussing the addition of goods to the list.

Findings

The APEC List includes 54 sub-headings at the 6-digit level in the HS nomenclature concerning different type of products. Around three quarters of the list are goods related to renewable energy production, environmental monitoring analysis, and management of solid and hazardous waste and recycling systems. The list covers a small number of products for air pollution control, wastewater management and potable water treatment. It also includes one environmentally preferable product and one associated with natural risk management.

APEC List of Environmental Goods, by product category

Category	Sub-headings		Examples
	Number	Share	
Total HS (harmonised system) sub-headings	54	100.0%	
Environmentally Preferable Products	1	1.9%	Bamboo flooring panels
Air Pollution Control	5	9.3%	Filtering and purifying machinery and apparatus for gases
Management of Solid and Hazardous Waste and Recycling Systems	12	22.2%	Furnaces, ovens and incinerators to dispose of solid waste and mitigate pollutants
Renewable Energy Production	15	27.8%	Products for the generation of energy from wind, solar, biomass, biogas and geothermal sources
Waste Water Management and Potable Water Treatment	5	9.3%	Sludge driers, water filters, water purification machines, parts of UV disinfection instruments
Natural Risk Management	1	1.9%	Surveying instruments and appliances
Environmental Monitoring Analysis and Assessment Equipment	15	27.8%	Manometers, gas and smoke analysers, spectrometers, chromatographs, microtomes

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Trade flows

Since the endorsement of the list in 2012, the trade of products in the APEC List has grown significantly worldwide and within the APEC region. APEC's exports and imports of those products increased by 5.7% and 13.5%, respectively, between 2012 and 2019. Similarly, intra-APEC trade in these products, expanded by 7% during the same period. The relevance of this list is very significant, as global trade in these products rose by 6.4%. In contrast, overall global trade (all products) grew by only 1.9%.

Trade of products in the APEC List of Environmental Goods (USD billion)



EG=environmental goods
Source: World Integrated Trade Solutions (WITS), World Bank; APEC PSU calculations.

Looking at exports and imports in the APEC region with respect to the environmental goods on the list, the largest increase took place among goods for the management of solid and hazardous waste and recycling systems, followed by goods for environmental monitoring analysis, wastewater management and potable water treatment.

Renewable energy products represent the largest product category in the APEC List in USD terms, but their trade declined by 20% (exports) and 10.5% (imports) in terms of value between 2012 and 2019, mostly explained by the fall in trade of solar heliostats, which could not be offset by the growing trade of other renewable energy products in recent years, such as solar photovoltaic cells (panels).

A more thorough analysis of the APEC List shows that APEC intensified its exports and imports in a significant majority of the

products belonging to this list. From the export perspective, 33 out of 54 HS sub-headings increased their exports during the period 2012–2019. The largest increase in USD terms was in exports of machines and appliances for environmental management (+USD 22 billion). From the import perspective, 35 out of 54 sub-headings increased their imports between 2012 and 2019. The two products with the largest import increments were machines and appliances for environmental management and their parts (+USD 27.1 billion).

In contrast, some products in the list have experienced a decline in their trade. Between 2012 and 2019, APEC exports went down for 21 HS sub-headings. The most significant fall was seen for solar heliostats (–USD 38.5 billion), followed by parts for solar heliostats (–USD 7.1 billion). APEC imports declined for 19 HS sub-headings. As with APEC exports, the largest fall was in solar heliostats and their parts (–USD 21.2 billion).

While trade flows for some environmental goods may have declined as they became obsolete or less cost-efficient, trade in most of the products in the APEC List is increasing. There are several possible reasons for the surge.

- It is possible that tariff reductions are making these technologies available at a lower cost, therefore making trade more affordable, leading to an increase.
- Environmental awareness has become stronger and there is a trend to develop and use less polluting technologies as well as more environmentally friendly products. This has motivated governments to give more attention to environmental policy and regulatory reforms, and to pursue multilateral environmental agreements such as the Paris Agreement.
- The implementation of government regulations to protect the environment requires the use of environmental goods.
- The progress in developing alternative energy sources and energy-efficient goods. Some governments have provided incentives to firms such as tax refunds, temporary subsidies and other supporting measures.
- High international oil prices have motivated the development of new energy-efficient products and new technologies for renewable energy.

Trade barriers

Tariffs. The current MFN average tariff for most APEC economies is below 5%, based on 2020 data from the WTO. Only two APEC economies, Chile and Indonesia, maintain an average tariff of above 5% for products on the APEC List. Examining MFN tariff levels by individual product and economy, Thailand also has MFN tariffs above 5% for three HS sub-headings within the list. However, the data do not reflect the tariff reduction implemented by Indonesia in early

2021 to fulfil the commitment to reduce tariffs on those goods to 5% or less. It should also be noted that Chile and Thailand are working toward implementing the commitment.

Non-tariff measures (NTMs). Trade in environmental goods is also affected by NTMs, both technical and non-technical. This Policy Brief focuses on discriminatory non-technical NTMs affecting products in the APEC List.

Based on Global Trade Alert (as of May 2021), 223 non-technical discriminatory NTMs implemented in the APEC region were affecting products within this list. Most of these NTMs are export-related, such as export subsidies, licences and quotas; discriminatory concessional loans and grants to local exporters; and export tax rebates. Other common non-technical NTMs are subsidies (excluding export subsidies) implemented in the form of: capital injections into firms, in-kind grants, local tax relief and import incentives; local content measures for firms to obtain a benefit; non-automatic import licensing procedures and prohibitions; and contingency trade-protective measures.

Drivers of green growth and sustainable development

Green growth and sustainable development, like economic growth, are multidimensional. This means that there are several factors that are needed to achieve them.

A previous study conducted by the PSU has already shown that an increase of trade in a limited number of specific products alone cannot be expected to generate improved larger outcomes such as economic growth, increased employment and reduced poverty. In other words, picking certain products as targets for specific government policies may not necessarily have a big impact on growth and sustainable development at the economy-wide level.

This suggests that the impact of the 54 sub-headings in the APEC List would not by itself be enough to address and support green growth. The improved market access for environmental goods arising from the implementation of the list is a necessary, but not sufficient condition to generate green growth. Better access for environmental goods will promote their use, which will ensure that economic activity can be handled in a more environmentally sustainable manner; however, to achieve economy-wide green growth, several other factors have to be in place.

A study by the OECD in 2011 identifies additional factors beyond the production and international trade of environmental goods and services as determinants of green growth: (1) R&D and innovation; (2) international financial flows; (3) prices and taxes; (4) regulations and

management approaches; and (5) training and skills development, including raising awareness on environmental issues. Other studies also found factors that could be critical for green growth.

To generate green growth, it is clear that APEC economies will have to take into account the aforementioned factors as well as continue to embrace trade in environmental goods. Improving access conditions for a greater number of environmental goods and services will certainly contribute to generating better and more tangible green growth.

Environmental goods and green growth

A myriad of studies show that international trade could improve the environmental quality of an economy by allowing lower-cost access to the technologies to improve environmental conditions and promote competition to spur the development of environmental goods and services.

The products in the APEC List do support several activities related to environmental protection and resource management. The list describes the environmental features of the agreed products, such as renewable energy production; control and removal of pollutants from the air; destruction of solid and hazardous waste; air and water purification; renewable and environmentally friendly products; and measurement activities to conduct R&D for environmental protection. In addition, environmental goods could benefit specific communities, including those producing those goods, and those needing to utilise those goods to address issues of environmental degradation.

In this context, in 2022, it will be 10 years since the endorsement of the APEC List, and environmental challenges remain. It is clear that more needs to be done in several areas, including trade, to address and support green growth.

Adding new products to the list could help support environmental protection and resource management. Some advantages of exploring an expansion are as follows:

- Technology is changing faster, with new products appearing and others becoming obsolete.
- It represents an opportunity to take a global value chain (GVC) approach to environmental goods that includes not only final goods, but also other intermediate products and components that play an important role in the global value chain of environmental goods. Many developing economies participate in the production of those intermediate products and components.
- Greater market access for firms and consumers could facilitate the production and use of environmental goods and services.
- Promoting more products to support climate change adaptation

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and mitigation and other environmental concerns could help economies meet their environmental targets.

- Achieving greater economic growth while also achieving environmental sustainability requires the generation of more renewable energy, cleaner energy sources, the utilisation of more energy-efficient products and the support of circular economy approaches, among others.

An expansion of the APEC List could be a positive signal that APEC could send to the world as a leading forum for proposing options to help address environmental issues. APEC as a non-binding forum has a clear advantage to explore and incubate new ideas.

Expanding the APEC list: Key considerations

Any discussion to expand the list should keep in mind certain considerations.

GVC approach. This approach could benefit more APEC economies. In particular, developing economies producing less technology-intensive products could contribute to the manufacture of environmental products as part of their complex GVCs. For example, around 8,000 parts are needed to produce a wind turbine, and the parts have to be sourced from many different locations.

Such approach would also involve discussing dual-use goods, as some goods could be used for both environmental and non-environmental purpose (e.g., pipes are used as components for sewage treatment plants and for transporting gas and oil).

Adapted goods. APEC economies should contemplate the inclusion of adapted goods, which are 'goods that have been specifically modified to be more "environmentally friendly" or "cleaner" and whose use is therefore beneficial for environmental protection or resource management'. Cleaner and more resource-efficient products like hydrogen compressors are a type of adapted good.

Hydrogen is a clean energy carrier that could reduce carbon emissions, but it is usually not found by itself. To produce hydrogen, it is necessary to separate it from compounds that contain it. While most hydrogen is still produced with fossil fuels, it is expected that more hydrogen will be produced from electricity generated with renewable energy sources in the future.

Between 2012 and 2019, trade of hydrogen compressors (HS 841480) has grown significantly. APEC members increased their export and import of hydrogen compressors by 12.3% and 14.1%, respectively. In addition, the average MFN tariff for hydrogen compressors in the APEC region is low, equivalent to 2.9%.

In terms of the preferential treatment given by some free trade agreements, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) has eliminated tariffs on hydrogen compressors in eight of its eleven members. The three remaining members will fully liberalise these compressors in periods ranging between 3 and 10 years. In the case of the Regional Comprehensive Economic Partnership (RCEP), three of its members will fully liberalise hydrogen compressors from the date of entry into force of the RCEP, and seven members will do so within periods ranging from 10 to 20 years.

Recommendations

The APEC List has been a positive initiative for supporting the growth of trade in environmental goods and promoting their use. Since its endorsement, APEC economies have reduced their tariffs and experienced a significant increase in their trade flows. In parallel, governments are facing increasing environmental challenges, and public awareness is growing on these issues.

Responding to the challenges requires answers from many areas, not just trade. In fact, generating long-lasting green growth needs appropriate policy decisions in a wide range of areas. Within APEC, it is possible to contribute to these efforts by articulating initiatives across these areas of concern. Indeed, one of the economic drivers in the APEC Putrajaya Vision 2040 on 'strong, balanced, secure, sustainable and inclusive growth' already emphasises the need to promote activities to address all environmental challenges.

Currently, the APEC List only covers 54 HS sub-headings, which means that the list remains limited in its product coverage. From a trade perspective, a more meaningful contribution in support of green growth requires a more comprehensive range of products. APEC economies should explore an expansion of its list of environmental goods, to cover new technologies that could contribute to green growth, but did not exist or had limited applications back in 2012; and encourage APEC economies to consider goods that are cleaner or more environmentally friendly. APEC economies could also discuss an approach that takes into account GVCs for environmental goods and services, which could allow more APEC economies to benefit from any future expansion of the list.

The Compendium of Resources for the Facilitation of the Trade and Distribution of Legally Harvested Forest Products in the APEC Region

Link: <https://www.apec.org/Publications/2021/08/The-Compendium-of-Resources-for-the-Facilitation-of-the-Trade-and-Distribution>

This compendium organises a range of resources to provide information on risk profiles, legal information, resources and tools to facilitate the trade of legal forest products in the APEC region.

Findings & Recommendations

Illegal logging and its associated trade reduce economies' revenues that could otherwise be derived from the sustainable management of forests and hurt the price for legally harvested wood products. About 80% of global wood products trade takes place in APEC economies, amounting to over USD 150 billion in value. Given the importance of wood product trade in the region and the emergence of new legal and trade frameworks, there is a growing need for private sector operators to coordinate their approaches to better identify, manage, and minimise timber legality risks when engaging in cross-border supply chains.

The trade of legal timber can be facilitated by a range of resources that provide information on risk profiles, legal information, resources and tools. However, such information is often fragmented and difficult to digest. Additionally, there is a lack of a central resource that can direct forestry product operators to the right place for their specific queries and needs, which are likely to be diverse and determined by the products they are dealing with, their origins and economy-specific laws. The business sector is thus in need of a comprehensive inventory of resources that will assist in the trade of legal forest products.

A range of existing relevant resources, tools and materials have been identified in this compendium that can be used by operators to navigate the economies' legal frameworks and determine legality in order to facilitate the trade of legal forest products. Information included within these resources provide relevant legislation, risk assessments, compendiums, infographics, guides and search tools that equip timber businesses with information relevant to conducting their business. The compendium compiles resources and tools designed to benefit private operators within the APEC region, as well as information from outside the region, given the broad range of resources.

The compendium of legal timber resources is organised by resource type (legislation, risk assessment, due diligence toolkits, for example) and by resource provider (government, international organisations, and NGOs, and civil society organisations). Each resource summary table provides information that was gathered and summarised from the survey, as well as publicly available information and feedback from the APEC Experts Group on Illegal Logging and Associated Trade (EGILAT) members.

EGILAT members may wish to explore ways to increase the dissemination and practical use of this important compendium so as to assist stakeholders in conducting legal trade in forest products. This could include a dialogue with featured resource providers and other partners to increase awareness of the compendium, updating and refining its contents and usability over time, and otherwise maximising its impact.

Connectivity and Infrastructure

Final Review of the APEC Supply-Chain Connectivity Framework Action Plan 2017-2020 (SCFAP II)

Link: [https://www.apec.org/publications/2021/11/final-review-of-the-apec-supply-chain-connectivity-framework-action-plan-2017-2020-\(scfap-ii\)](https://www.apec.org/publications/2021/11/final-review-of-the-apec-supply-chain-connectivity-framework-action-plan-2017-2020-(scfap-ii))

This report reviews the progress of SCFAP-II. SCFAP II addresses these five major chokepoints in supply chains: (1) lack of coordinated border management, and underdeveloped border clearance and procedures; (2) inadequate quality of, and lack of access to, transportation infrastructure and services; (3) unreliable logistics services and high logistical costs; (4) limited regulatory cooperation and best practices; and (5) underdeveloped policy and regulatory infrastructure for e-commerce.

Findings

As of 2019, APEC economies have generally performed well for chokepoints 1 and 2. Cost and time to import and export have fallen, connectivity has increased, and transparency has improved. Quality of transportation services and infrastructure under chokepoint 2 has also improved since 2016 both in terms of ensuring better shipping connectivity as well as a more stable environment for infrastructure investment.

Indicators used to measure chokepoint 3 were most affected by the lack of updates available. Of all the indicators used in chokepoint 3, only the DHL Connectedness Index was updated to reflect scores in 2019. Overall, performance for chokepoint 3 remains mixed; however, given the absence of updates for most indicators under this chokepoint, it is important to keep in mind that the overall assessment of logistics services is indicative. Based on the literature, the COVID-19 pandemic has worked against improvements in this area as warehouse capacity contracted and inventory costs shot up in 2020 and early 2021. Several APEC economies are leveraging on digital technologies to reduce costs and improve coordination and

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transparency in logistics services.

Alignment of processes and digitalisation of systems have facilitated sharing of information and cooperation. Conscious efforts have also been made to implement article 12 of the World Trade Organization (WTO) Trade Facilitation Agreement which encourages customs cooperation, particularly in facilitating the exchange of information between customs agencies. As a result, the performance of APEC economies on chokepoint 4 has been notably better since 2015.

Moreover, in line with the rise of e-commerce, there has been a greater focus on the digitalisation of operational processes and procedures to streamline workflow. Despite the greater focus, the performance of APEC economies on chokepoint 5 have been mixed. The performance of postal systems worsened as COVID-19 restrictions severed supply chains and placed undue pressure on postal services.

Recommendations

Moving forward, APEC economies may consider targeting their efforts on the following issues:

- As economies focus on building back better post-pandemic, improving resilience has popped up as a common theme across all sectors. Costly disruptions to supply chains have highlighted the need to build supply chains that are robust and can withstand shocks; agile in embracing recovery; flexible to leverage on alternatives; and able to build surplus capacity. Such resilient supply chains will ensure greater certainty and attract more investments, hence enhancing growth.
- Recovery needs to pay attention to rising trade costs. The ultimate goal is to achieve a strong supply chain and keep trade costs low at the same time. Congestion and delayed shipments are a reality and will continue to challenge business supply chains in the post-COVID-19 era. Adapting to disruptions and resiliency challenges requires upgrading of supply chains while keeping a keen eye on associated costs. Additionally, the continued and accelerated implementation of the provisions of the WTO Trade Facilitation Agreement will play a key role in keeping trade costs low, such as by strengthening border agency cooperation.
- To promote broader and stronger connectivity, interoperability issues need to be addressed more aggressively. Support for single-window interoperability and the expansion of Authorised Economic Operator (AEO) mutual recognition agreements, for instance, will increase supply chain visibility and efficiency, and reduce trade costs. However, to achieve this, cooperation

between customs authorities will need to be rooted in trust, protection of information and mutually beneficial objectives.

- It is imperative that APEC economies improve their investment in digital technologies and enhance public-private partnership (PPP) environments in order to close the digital divide and be more competitive. In response to the growing demand for quality infrastructure, APEC economies should prioritise PPP regulatory reforms and multimodal transportation services.
- E-commerce requires reliable logistics services to sustain its growth. The full realisation of the potential of e-commerce will be compromised by poor last-mile connectivity. Advanced supply chain visibility can help enable seamless and integrated logistics services and improved connectivity, but is hindered by lack of logistics skills and slow adoption of IT.
- Achieving an efficient and green supply chain may address the challenge of balancing growth and environmental sustainability. Sustainability and inclusiveness in supply chain trade are important components of recovery. A more diversified transportation network and wider adoption of multimodal transportation may increase supply chain efficiency and provide greener options for businesses. With global e-commerce on the rise, more small and medium-sized businesses may be able to participate in global trade through reduced trade costs and trade complexity, hence promoting inclusivity.
- Improvements to regulatory reforms affecting digital trade will also contribute to a stronger recovery. Logistics is not just about seamless flows of goods, but also about seamless flows of information. Adequate policies to protect data privacy, promote data sharing and streamline cross-border data flows should be introduced in order to further reduce trade costs.

Peer Review and Capacity Building on APEC Infrastructure Development and Investment: Papua New Guinea

<https://www.apec.org/Publications/2021/09/Peer-Review-and-Capacity-Building-on-APEC-Infrastructure-Development-and-Investment>

This report captures the results of a peer review that was conducted on the policies and practices in Papua New Guinea (PNG), including the relevant laws, regulations and guidelines relating to the planning, selection and implementation process of infrastructure projects. It suggests capacity building activities based on the needs identified from the peer review.

Findings

The PNG government works with a range of development partners (DPs) in the transport infrastructure sector, including the World Bank, ADB and the European Union as well as bilateral donors (Australia; China; Japan). India and the US are also entering the sector. The support provided by DPs is significant in terms of grants and concessional loans, especially for maintenance programmes which attract relatively little public investment.

Policy and regulatory framework review. In general, PNG is equipped with the high-level legal and policy frameworks that enable the development of quality infrastructure.

The PNG constitution sets out a tiered legal framework: constitutional, organic law, and acts of parliament. The constitution also provides for the protection of the law. Institutions exist to operationalise this framework: parliament considers and approves acts, and courts uphold the protection of the law. The laws are accessible on the Internet and through the parliament.

There is a well-defined government budget process. This culminates in the consideration by the parliament of an annual budget appropriation bill. Taxation laws are also in place.

PNG's transport sector policy is situated within a cascading series of publicly available strategy, planning and policy documents. Documents referenced in the National Transport Strategy of May 2013 include:

- PNG Vision 2050
- Development Strategic Plan 2010–2030
- Medium Term Development Plan 2010–2030
- Alotau Accord 2012
- Millennium Development Goals

The National Transport Strategy details an investment planning cycle for the development of a list of transport infrastructure projects. The process appears to largely follow quality principles but could be significantly strengthened with a more rigorous gateway approach. Adding rigour to the process, from project concept to implementation and evaluation, through a Gateway Review Framework is critical to the quality infrastructure process.

If done well, the Gateway Review Framework allows for the capture of all elements of whole-of-life infrastructure planning, including lifecycle costs, economic benefits, social and environmental impacts, lifecycle and asset management planning, and appropriate infrastructure maintenance models. A Gateway Review Framework approach will allow for lifecycle costs such as maintenance to be included in forward budget estimates.

Public-private partnerships. ADB will support PNG to operationalise its Public-Private Partnership (PPP) Act. The government has been slow to operationalise the Act; it was not gazetted until 2018. The point of responsibility for PPPs within the government has bounced between Treasury, Finance, and National Planning and Monitoring, landing most recently in National Planning and Monitoring.

With ADB's support, the government will need to consider if the Act can be improved, and the regulations that are needed to operationalise it. The government will also need to resource a unit in National Planning and Monitoring if it is going to drive the development of PPPs in PNG.

Roads. Like other economies, PNG has underinvested in transport infrastructure for many years. Underinvestment has forced planning priorities to be focused on maintenance of major transport assets rather than new investments. Even this limited focus has only been partially successful with some assets. For example, regional airstrips and roads have deteriorated over time, according to the World Bank's PNG Economic Update released in July 2020. During much of this period of underinvestment, the economy and population have grown significantly. The outcome is that many Papua New Guineans are poorly served by transport infrastructure. The same paper further notes that 17% of people have no access to roads and the economy remains without a single economy-wide road transport network.

The government of PNG has signalled the high priority it places on quality infrastructure through the release of its Connect PNG Policy 2020–2040. Implementation of the policy is an opportunity to put quality infrastructure approaches into practice.

The Road (Management and Fund) Act was passed on 14 January 2021, and aims to bring about substantial roads funding reforms. The Act aims to create a coordinated roads management system and establish the PNG Road Management Fund to ensure adequate funding for maintenance and rehabilitation, including of sub-domestic roads.

PNG's domestic development and transport sector strategies and plans outline ambitious goals for the sector to fill the missing links in the National Road Network while reducing the extensive backlog of preventative road maintenance.

Maritime. Maritime transport is crucial for connecting communities across PNG's archipelago and accessing the sea lanes to the north. Some communities travel large distances by water to markets and services risking their safety and security. Much of the rural maritime traffic is serviced by small jetties and wharves in various states of disrepair, and are managed by local and provincial governments that

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lack the technical capacity to meet maintenance, safety and security requirements. Port developments are also of significant geostrategic and security interest.

The Department of Transport provides the overall policy and regulatory framework for the maritime sector and works with the National Maritime Safety Authority and PNG Ports Corporation Limited to develop and maintain maritime transport infrastructure in PNG. The Department of Transport relies primarily on budget appropriations from the government of PNG for its maritime transport revenue.

PNG Ports Corporation continues to grow its revenue and is optimistic that there is significant potential to increase revenues from the 15 ports under its jurisdiction, if investment and the political will can be mobilised to upgrade port facilities. However, there appears to be little planning and public investment support from the responsible central, provincial and local governments for such initiatives.

Aviation. Given PNG's geography, and many inaccessible communities, air travel has been a core mode of transport since early colonial exploration of the highlands region, with PNG once having the most airstrips per capita in the world. PNG has 578 airports and airstrips, 27 of which have paved runways.

The National Airports Corporation is a statutory body under the Civil Aviation Act. The state-owned enterprise was formed in 2010, and operates under the Ministry of Civil Aviation and the Ministry for Finance and Rural Development. The National Airports Corporation manages PNG's 22 identified national airports, while provincial governments are responsible for its 20 secondary airports. The rest are managed by local communities, church missions and businesses.

The National Airports Corporation does not receive recurrent funding from the central government budget and funds its operational activities from fees and charges related to facilities and services provided to operators and businesses at the airports.

Under its 2030 Growth Strategy, the National Airports Corporation plans to deliver 15 smart airports that are compliant with the minimum standards and recommended practices for airport operations specified by the International Civil Aviation Organization (ICAO). This will require significant ongoing investments in airport infrastructure, including airport terminals, runway lengths and runway pavement strengths. There is also a significant need for ongoing upgrading and maintenance of PNG's rural airstrips, as 'without adequate and predictable funding for rural airstrip restoration and maintenance, the condition of PNG's rural airstrips will

progressively decline, with the risk of some closures in the medium term'.

Recommendations

Seven areas are recommended as priority areas for capacity building:

- **Strengthening adherence to the project cycle**, and in particular the front end of the process that allows the development of a suite of bankable projects, all assessed in a more rigorous process, to the same standard and with comparable economic rates of return over their life cycle, that allows them to be considered by the political decision-makers in the budget process.
- **Adding rigour to the project review process** from project concept to implementation and evaluation through the introduction of an Investment Management Standard and Gateway Review Framework process. Implementation is to be integrated with current government infrastructure project planning and the establishment of the new PNG PPP Centre.
- **Establishing a Government Gateway Review Framework foundation team** to undertake a review of several sample projects with support from the APEC economies, with a view to establishing a Gateway Review Framework function within the government consistent with international best practice.
- **Adding a process to the project cycle** to deal with unsolicited bids.
- **Further strengthening the incorporation of lifecycle costs** into projects.
- **Strengthening government procurement** so that it is completed in a timely manner, its process is demonstrably consistent, and it is accountable.
- **Strengthening the funding aspects of infrastructure**, including applying a structured framework for agreeing to a funding model, and systematising the PPP processes.

Building of capacity in these areas will lead to improvements in the quality of infrastructure development as the attractiveness of PNG as a destination for quality PPPs increases, but only if there is political will to do so. In effect, such capacity building moves the focus of political engagement in infrastructure development from involvement in process to making strategic decisions for the benefit of PNG based on good data.

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Future of Work

APEC Economic Policy Report 2021: Structural Reform and the Future of Work

Link: <https://www.apec.org/publications/2021/11/2021-apec-economic-policy-report>

A flagship product of the APEC Economic Committee, the 2021 APEC Economic Policy Report discusses the complex topic of structural reform and the future of work.

Findings

The future of work is not about technology but about people and the changing world around them. In the next decades, the future of work is expected to be affected by four megadrivers of change: technological change, climate change, globalisation and demographic change.

Megadrivers of change

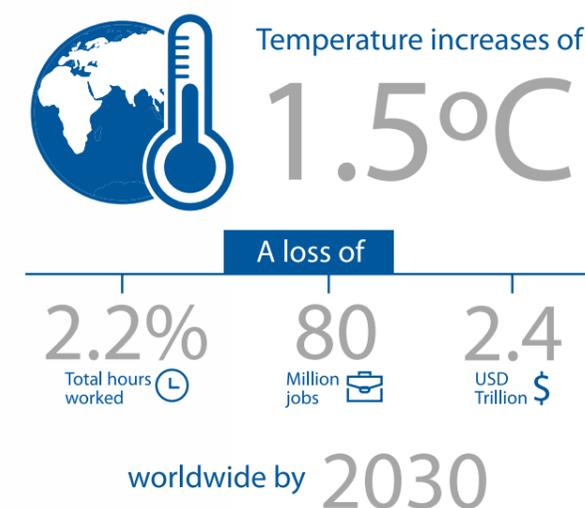
Technological change has created new jobs and increased productivity. It has also enabled greater flexibility in production and workstyles, for example, through the gig economy and remote working, and more opportunities for career advancement through e-learning. Facilitated by technology, the gig economy is growing by about 33% annually. However, as the world enters the Fourth Industrial Revolution (4IR) era, which is fundamentally anchored by the use of advanced digital technology, unequal access to technologies and the digital divide between low-income and high-income economies continue to threaten growth.

Within economies, rapid technological changes and automation have created job polarisation that widens wage inequality as manual and routine jobs face higher risks of displacement. Digital technology and the gig economy have also created new challenges to ensuring legal labour protections of the workforce. Moreover, women are over-represented in occupations at high risk of automation and are less equipped with skills associated with automation. Existing gender gaps put women at a disadvantage in benefiting from the new job opportunities.

Good governance, a conducive investment climate, and a sound macroeconomic policy framework will continue to be priorities in comprehensively addressing the growth divergence between high- and low-income economies.

Climate change and the rise in incidence of extreme weather events impacts jobs; they damage business assets, disrupt transport and

industrial infrastructure, and displace workers and settlements. The International Labour Organization (ILO) projects that a global temperature increase of 1.5 degrees Celsius will result in the loss of 2.2% of total hours worked, 80 million jobs and USD 2.4 trillion worldwide by 2030. The impact will be greatest in regions with high heat stress and for resource- or climate dependent sectors like agriculture and construction.



Transformation to a greener, circular economy to combat climate change is believed to have the potential to significantly contribute to the total number of jobs in the future. Net employment change is expected to be positive as consumption patterns adapt and green occupations grow. The ILO estimates that a shift to a greener economy with the right policies in place would create 24 million new jobs globally by 2030, with most of the job creation originating in the renewable energy sector. However, the impacts of the green economy and the circular economy come with a few caveats and limitations, especially with regard to skills mismatch and gaps.

Globalisation has been a driving force for growth in the APEC region by providing access to new markets, leading to an increase in output, and more and better job opportunities. However, while specialisation improves efficiency in the economy and raises overall welfare levels, non-competitive industries may not survive and some workers can become structurally unemployed. But the gains from trade and economic growth provide fiscal space to improve access to basic services, including for vulnerable and disadvantaged groups. The efficiency gains and positive effect of globalisation on overall welfare may be enhanced by providing for labour adjustment and investments in reskilling and training of human capital.

Average life expectancy has risen across the APEC region while birth rates have fallen. A key concern for policymakers is that an **ageing**

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population and rising dependency ratios will increasingly burden social protection and pension systems, threatening their financial viability. But it should also be recognised that the elderly members of the population are key contributors to the economy. The elderly have greater spending power, bring lifelong experiences to the workplace and are the source of significant demand in the care professions. However, their economic participation is hindered by lack of technological training, skills mismatches, lack of conducive working arrangements and workplace discrimination.

COVID-19 impact

The COVID-19 pandemic has had a significant impact on enterprises and workers. The type of work available and how it is conducted has drastically changed and, in doing so, accelerated 'future of work' trends. While some businesses have thrived in these new settings, others have had to cease operations. The subsequent labour market adjustments have resulted in reduced working hours or job losses. Many workers have dropped out of the labour market altogether.

Workers in the informal economy are particularly vulnerable to the impact of COVID-19 through lack of job security, irregular and insufficient incomes, as well as poor access to healthcare and social protection. Thirty-four percent of the total employed APEC population in 2019 were estimated to be in either own-account work or contributing family work – a proxy for the informal economy. A larger reduction in employment of -3.1% was seen among them compared to wage and salaried employees. Meanwhile, high-skilled workers were the least affected as they were able to work from home and were more likely to have healthcare benefits and social protection. Employment in medium-skilled occupations dropped the most as it includes jobs that were severely impacted by restrictions such as sales and service workers and plant operators.

Women workers were more disadvantaged by COVID-19 than men. In APEC, women accounted for 44% of the total employed population in 2019 but they accounted for 54% of the total change in employment in 2020. They were also more likely to take on the burden of increased unpaid or underpaid care work. Meanwhile, youth were heavily impacted by increased joblessness, reduced entry-level positions, and disruptions to education provision. Other vulnerable segments of society – migrant workers, the elderly, the disabled, ethnic minorities and indigenous peoples – also experienced higher unemployment rates, lower wages and reduced resilience during the pandemic.

APEC economies implemented a range of extraordinary policy measures to help mitigate the impacts of COVID-19 – job retention and wage subsidy programmes, COVID-19 leave support schemes (including medical and family caregiving leave), social security

programmes, investment in skills and training, and job redesign and growth initiatives. However, challenges remain as economies strive to balance immediate recovery needs with concerns surrounding fiscal budgets and long-term debt sustainability. Disparities in vaccination rates threaten an unequal recovery for the region. Moreover, there may be negative long-term impacts on labour markets that hinder a quick rebound.

Recommendations

There is a need to address the real social and economic impacts that come with change.

- The disruptive nature of the pandemic and the impact of megadrivers on the labour market require effective social protection systems that reduce income uncertainty and mitigate the downside to workers. Economies can improve their protection systems by expanding the scope and coverage of unemployment benefit programmes, such as cash transfers and unemployment insurance, to cover the most vulnerable workers and by designing more targeted active labour market policies that can improve the employability of the unemployed.
- Policies that promote skills building in the face of rapidly changing labour market conditions are important to mitigate the skills gap and strengthen the resilience of the workforce. Governments can support the development of skills by developing better skills forecasting systems, expanding reskilling and upskilling programmes, promoting lifelong learning and increasing targeted investments in education to better align school curricula and labour market skills needs.
- The future of work also requires that policymakers be able to react quickly to changing market conditions by designing responsive and efficient labour market regulations. Governments need to improve the scope and coverage of employment protection legislation to include those in non-standard employment, ensure more inclusive collective bargaining systems, facilitate remote working arrangements and address discrimination.
- APEC is well-placed to address many of the behind-the-border and cross-border issues that have arisen due to the megadrivers affecting the future of work by promoting greater international labour mobility by reducing regulatory barriers; and by improving the international portability of social security benefits, updating tax rules to help prevent cross-border corporate tax avoidance, improving mechanisms to resolve cross-border commercial and labour disputes and having an inclusive approach to representation in policy discussions.

The Future of Work is not about technology, but about people

What can policymakers do?



Ensure economic security
Develop effective social protection systems and expand them to cover all workers.



Develop skills and improve productivity
Develop skills and improve productivity. Human workers need access to lifelong learning.



Update labor laws and institutions
Those made in the previous century are unable to recognize new terms and relationships of work in this century.



Cooperate across borders
Labor laws as well as social protection systems still assume workers and employers operate behind the same borders.



Operationalize APEC initiatives on future of work
APEC is in a unique position to operationalize its initiatives addressing future of work challenges. It needs to be the forum where innovations are developed, policies are discussed, and consensus for implementation is achieved.

Filling APEC's Data Gaps to Address Future of Work Challenges

Link: <https://www.apec.org/publications/2021/12/big-data-for-the-labor-market-sources-uses-and-opportunities>

This paper studies the existing labour market data sources and compares them with big data available through digital platforms. It looks into the integration of new data into labour market information systems, and assesses opportunities for bringing this data into public policymaking.

Findings

As digitalisation occurs across all corners of the economy, big data will continue to expand and increase in value. While traditional labour market data is collected by most APEC economies and continues to be an important source of information, these data leave gaps that are important to consider. Most traditional sources of data are collected through long, costly and time-intensive surveys that paint a broad picture of the labour market but allow limited strategic policymaking. Aggregate statistics mask nuances within certain sectors, occupations or regions that could make a difference in approaches to reskilling or upskilling, social protection policies, and education and training provision.

The timeliness and breadth of big data offer much-needed detail and an opportunity for policymakers to react in real time. Big data also provides an additional layer of granularity, helping stakeholders to pinpoint areas of growth and decline, and craft appropriate policy responses. The ways in which people interact in labour markets are also changing: increasing trends in remote work, online communication technologies and general switching of tasks from in-person to online means that it is harder to track the nature of work through traditional survey methods. Data from online collaboration tools and other tracking systems can help provide more context for how workers operate and the skills required to do so successfully.

Innovation and Digitalisation

Comparison of traditional labour market data and big data

Type of data	Years of data	Ease of time series analyses	Data representativeness	Compatibility across economies	Real-time data access	Regular taxonomy (classification) updates	Data granularity
Traditional labour market data	~50	High	Apply statistical sampling methods and weights	✓	✗	✗	Low
Big data	~10	Medium	Captures digitised labour market; can benchmark against public data to gain insight	✓	✓	✓	High

The shift to an increasingly digital world means that more and more data are being collected and utilised by private corporations in a way that was not possible in previous eras. Data are used to target advertising and marketing campaigns, hire and recruit talent, and make strategic decisions. Without incorporating elements of big data analysis and collection into public sector processes, APEC governments run the risk of falling behind. The efficacy of wide ranges of government programmes, including training, social service provision, and other public goods could be substantially increased with the use of new sources of big data.

The COVID-19 pandemic brought challenges that were immediate and immense. The lack of real-time, granular data across labour markets, health outcomes and other important economic indicators constrained economies' ability to develop and adapt policy in a timely and targeted manner. APEC economies can start to use big data now to prepare for the next economic shock and more readily respond to any future volatility. While not a silver bullet, big labour market data provides

valuable complementarities to traditional labour market data and can be a cost-effective way of supporting economic growth, workers, students and employers.

There are various examples of policymakers using big labour market data to increase granularity, timeliness and relevance of labour market information. Primary applications of big data that may be of particular use to policymakers include addressing time lags in traditional data, responding quickly to economic shocks such as the COVID-19 pandemic, reskilling and upskilling workers, and matching job seekers to critical occupations.

Recommendations

For governments and policymakers looking to use big data to expand their understanding of the labour market, there are a few main challenges to consider and associated recommendations:

Challenges	Recommendations
<p>High up-front costs to collect online labour market data, including:</p> <ul style="list-style-type: none"> Development of technical capabilities to automatically scrape data and identify online text as job postings, résumés, etc. Storage space for storing large raw text data Finding the best sources of job postings or other online labour market data, including job boards and individual employer website 	<ul style="list-style-type: none"> Work with a third-party intermediary familiar with data collection in other geographies to build aggregation system for job postings Use local knowledge of labour market to identify high-density sources of labour market data, such as the economy's primary job board
<p>Cleaning, deduplicating and preparing raw text data for analysis requires advanced modelling expertise including:</p> <ul style="list-style-type: none"> Technical capability to see a job posting or social profile/résumé on multiple websites and deduplicate across sources Ability to read raw text in the source language and categorise the data into labelled fields, such as employer, occupation, location and skills 	<ul style="list-style-type: none"> Apply a parser from a third-party intermediary built on at least one local language as a pilot case Limit sources to one large job board or one set of employers to ensure the ability to parse postings can be readily standardised Work with local language experts or translators to translate some components of a parser into a local language
<p>Merging data with current government sources and taxonomies and analysing big labour market data</p> <ul style="list-style-type: none"> Big labour market data may not be representative of the population and may be limited to more urban, digital or high-skill jobs. This may be a particular challenge for developing economies Maintaining a database of big labour market data requires near-constant updating, and ever-growing storage capacity 	<ul style="list-style-type: none"> Utilise crosswalks and parsers that parse to both local taxonomies and international standard taxonomies, which third-party intermediaries often have Match the distribution of big labour market data to public datasets to understand gaps and differences Plan for expanding storage costs as improvements in technology mean that an additional number of job postings/résumés are collected monthly or annually
<p>Visualising data and creating models and tools on top of big labour market data to answer research and policy questions</p> <ul style="list-style-type: none"> Dashboards and interfaces make real-time data accessible to a wider range of agencies rather than just technical experts, but need to be built and maintained Big data analysis requires a different understanding of data limitations, such as changes in data collection over time affecting the time series analysis 	<ul style="list-style-type: none"> Build a tool in partnership with a data visualisation organisation to easily view different cuts of data, such as top-growing skills or top industries

In general, regardless of the type of labour market data being utilised, the following are recommended as immediate next steps for policymakers:

- **Understand and assess the full scale of costs.** In any of the partnership modalities (with academia or non-governmental organisations, for example), there are up-front costs as well as dynamic costs. It is important to consider the costs of initial creation and set-up, people and analytical resources, and maintenance of taxonomical and data updates.
- **Begin with a small-scale pilot project.** This pilot project should aim to solve a very specific problem, like determining top skills required for each occupation in the economy. Initially, the government may face some hesitation from stakeholders used to working exclusively with traditional data. It is important that the first project starts small to gain trust in the data.
- **Once trust is gained, start a larger project.** After the initial data scoping to ensure big labour market data can be helpful and used to solve a problem, the government can consider larger scale projects. Further projects can include work like the examples described earlier, including identifying labour shortages, emerging skills or growing occupations.

Structural Reform

Proposed Indicators for Monitoring APEC Collective Progress on Enhanced APEC Agenda for Structural Reform (EAASR)

Link: <https://www.apec.org/publications/2022/01/proposed-indicators-for-monitoring-apec-collective-progress-on-aaasr>

This report contains the PSU's proposed list of 28 indicators to monitor and report on the APEC collective progress under EAASR, which is the latest iteration of APEC's structural reform agenda for the period of 2021-2025.

Findings & Recommendations

The endorsement of EAASR by Structural Reform Ministers in June 2021 reflects APEC's longstanding commitment to structural reforms in the region. The four pillars of work under EAASR are: (1) creating an enabling environment for open, transparent, and competitive markets; (2) boosting business recovery and resilience against future shocks; (3) ensuring that all groups in society have equal access to opportunities for more inclusive, sustainable growth, and greater well-being; and (4) harnessing innovation, new technology, and skills development to boost productivity and digitalisation.

EAASR's pillars 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 amidst the evolving economic landscape. EAASR also recognized the important role of structural reforms in promoting inclusive and sustainable growth and urged economies to consider the approaches identified in the 2018 Economic Committee paper titled "Structural Reforms for Inclusive Growth: Three Approaches."

In line with the spirit and intent of EAASR, the PSU has employed a two-pronged approach to identifying and improving the quantitative indicators for monitoring and reviewing EAASR's progress. The first would be to review the existing indicators used for monitoring RAASR and to keep them for monitoring EAASR if these are still relevant. The second would be to review a broader list of indicators, in particular those that have not been included for monitoring RAASR and to add them if relevant.

The PSU has also adhered to several criteria when proposing these indicators, namely: (1) balancing the total number of proposed indicators and the objective of providing as much information as possible; (2) balancing the relevance of proposed indicators and their coverage in terms of the number of economies as well as the years where data is available; (3) including different types of indicators (i.e., policy-based, perception-based, and outcome) as these serve different purposes and can complement one another; and (4) placing priority on identifying indicators for evaluating inclusiveness of structural reform policies.

The PSU is proposing a total of 28 indicators to monitor and report on APEC collective progress under EAASR. Sixteen indicators have previously been used to monitor RAASR and are still relevant for monitoring EAASR, while the remaining 12 indicators are newly-added and cover broad areas, such as digitalisation, income inequality, and social protection.

All but five of the indicators can be associated with more than one pillar, which is to be expected as the pillars are arguably linked to one another. A total of 18 indicators can be associated with Pillar #1. Meanwhile, 21 indicators can be associated with Pillar #2, whereas 23 indicators can be associated with Pillar #3. Finally, 20 indicators can be associated with Pillar #4.

Considering that each EAASR pillar can be operationalised through various themes, the 28 indicators can also be grouped into potential themes under respective pillar, which can be helpful to understand how each of the indicators are related within a given pillar, and to monitor APEC collective progress with respect to a specific theme.

While it should be acknowledged that these EAASR indicators are not exhaustive and, hence, will not be able to cover every aspect of structural reform efforts, the PSU hopes that the updated list will be more relevant and fit for the purpose of monitoring APEC's collective progress under EAASR.

Strong, Balanced, Secure, Sustainable and Inclusive Growth

Women's Empowerment

The APEC Women and the Economy Dashboard 2021

Link: <https://www.apec.org/Publications/2021/09/The-APEC-Women-and-the-Economy-Dashboard-2021>

The APEC Women and the Economy Dashboard provides a snapshot of the status of women in the region by monitoring trends in a set of indicators over the years, to measure progress, highlight data gaps and bring to the fore policy and socio-cultural issues that impact on women's participation in the economy. The Dashboard indicators were based on the five priority pillars identified by the APEC Policy Partnership on Women and the Economy (PPWE): (1) access to capital and assets; (2) access to markets; (3) skills, capacity-building and health; (4) leadership, voice and agency; and (5) innovation and technology. This report contains 22 dashboards – one for each APEC member economy and one for the APEC region.

Findings

The 2021 Dashboard shows continued progress in key areas affecting women's access to opportunities and markets during the covered period of 2008–2020. Parallel to this progress are persistent barriers arising from weak policies and socio-cultural gender biases, which served to hold back women from participating fully and equally in economic activity.

Contrasting policy intentions have weakened efforts to advance women's empowerment in the APEC region as a whole. This lack of reinforcing policies is evident across the spectrum of women's access to credit, employment, education, technology and institutions as summarised below:

- Women's rights to property and equal inheritance continue to be upheld in majority of APEC economies, providing women with assets that could be used to start a business or collateral for bank loans; however, access to credit remains hampered by creditors' discrimination based on gender in more than half of APEC economies.

Women and men are enjoying equal rights

- To own property
- To inherit property



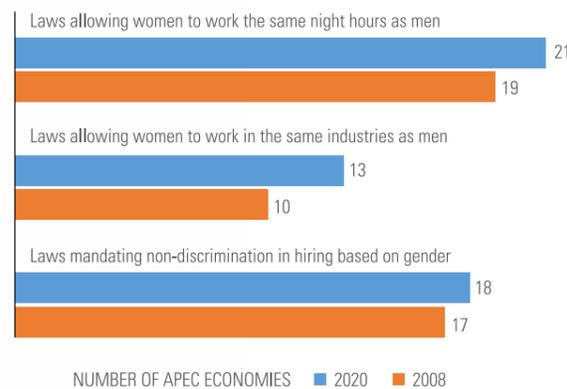
This may provide empowering income security that could impact socio-economic conditions well into the future.



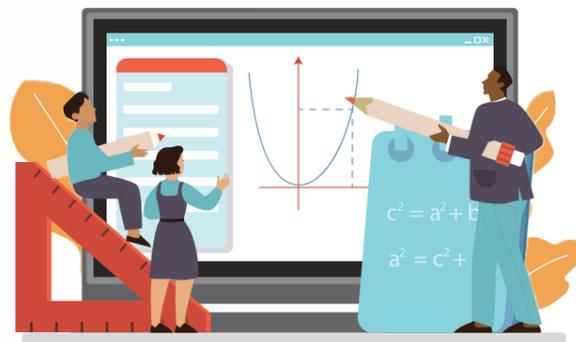
Access to credit is constrained by creditors' discrimination based on gender and marital status.

The number of APEC economies with laws prohibiting such discrimination has remained persistently low.

- Female participation in the labour market is supported by enabling laws that prohibit the dismissal of pregnant women and sexual harassment in the workplace, as well as grant paid maternity and parental leaves; but the number of economies with laws mandating equal pay for men and women doing work of equal value has stayed low for more than a decade, while women are not allowed to work in the same industries as men in some APEC economies.

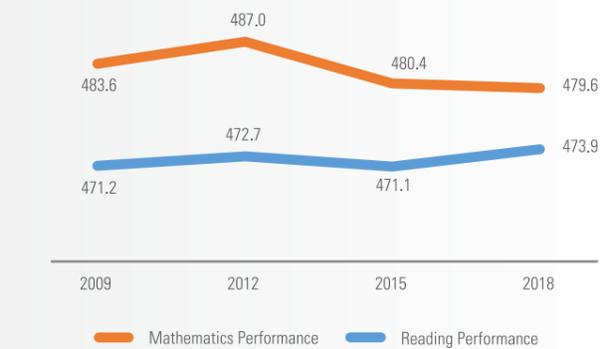


- The region achieves near parity between women and men in terms of literacy and educational attainment, although the continued low participation of women in the fields of Science, Technology, Engineering and Mathematics (STEM) is concerning, particularly in this era of accelerated technological changes.



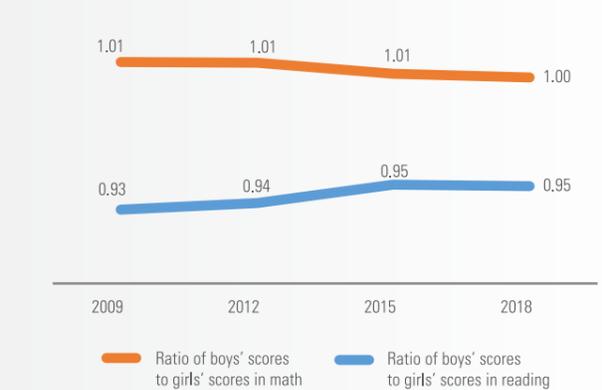
Girls have improved academic performance
Girls are at par with boys in math and better at reading.

PISA results, female (mean performance)



Source: OECD-Programme for International Student Assessment

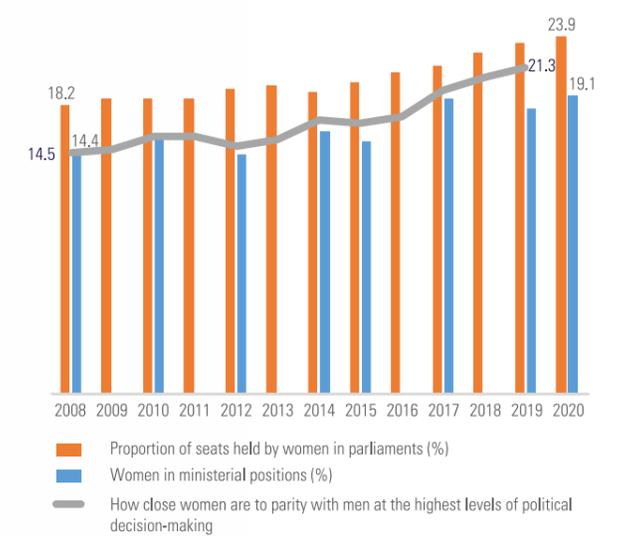
PISA ratio



Source: OECD-Programme for International Student Assessment

- In terms of access to technology, the percentage of the population who are mobile phone users and covered by a mobile network signal continues to improve, but available data show that the percentage of women in the region with access to the internet is still low in some APEC economies.
- Integral to women's empowerment is their representation in leadership roles, both in the public and private sectors. In APEC, women's representation at the highest level of political decision-making, reflected in the proportion of women in ministerial positions and parliaments, has seen small improvements in the past decade. This is crucial because the participation of women in policy-making bodies could facilitate the formulation of inclusive policies that improve women's economic and social participation. On the other hand, there is insufficient data on firms with female top managers in APEC, which is just as important to be able to generate clear trends in the region and provide policymakers with valuable information to identify areas or sectors where supportive policies could assist to widen women's representation in senior management roles.

Women's political empowerment



Sources: Inter-Parliamentary Union: Women in Politics for women in parliaments and ministerial positions; and the World Economic Forum-Global Gender Gap Report for the gender parity at the highest levels of political decision-making

Recommendations

Policy issues and data gaps. Policy gaps in a number of areas have not been addressed by APEC economies over the years. The most noticeable example is the absence of laws ensuring equal pay between women and men for work of equal value in more than half of APEC economies. Policies also need to be mutually reinforcing to be more effective. However, while access to property and inheritance continue to be protected in APEC, access to credit remains constrained by creditors' discrimination on the basis of gender and marital status. These inconsistent policies weaken efforts toward ensuring a wider access to capital and assets for women.

Moreover, while significant strides have been made to advance women's economic empowerment, women's political empowerment continues to lag behind. Low representation of women at the highest political decision-making bodies could slow down efforts in ensuring gender equality in policy initiatives that promote women's economic participation and social inclusion.

Meanwhile, data gaps – particularly on sex-disaggregated data – have created limitations on the analysis, preventing a more comprehensive and accurate depiction of the status of women's empowerment in the region, and making it more difficult to design policies that could improve women's participation in the economy and society.

Similarly, the lack of data on women's participation in STEM and research fields is particularly concerning, given the increasing value of STEM-related skills and innovative approaches – amid greater technological

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adoption – that are accelerating a shift to digital economies.

Addressing the unequal impact of COVID-19 on women. The impact of COVID-19 has been unequal, with women sustaining severe losses from the economic fallout and digital disruptions brought about by the pandemic.

The sectors hit hardest by the lockdown measures implemented to curb the spread of the virus, particularly travel and tourism, food and beverage as well as retail sales are more likely to employ women. McKinsey (2020) estimates that women account for 54% of COVID-19-induced job losses globally, with women's jobs being almost twice as vulnerable to the pandemic compared to men's jobs.



Travel & tourism, food & beverage and retail, hit hardest by social distancing policies, employ women.

Moreover, the shift to telecommuting and online learning means that women face increasing challenges in balancing gainful employment with unpaid care work. Working from home could increase the burden of unpaid work, making it difficult for women to maintain their productivity so that some would opt to leave the labour force instead. The digital skills requirement of teleworking and online schooling for children along with issues on the reliability and speed of internet connections could add to the difficulties that women have to contend with during the pandemic.

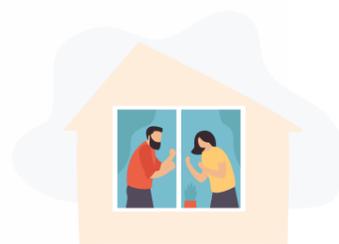


Telecommuting and online learning mean that women face increasing challenges in balancing employment with unpaid care work.

The impact on women's livelihoods extend to women-led small firms, with 64% reporting that the pandemic is having a severe impact on their business operations relative to 52% of men-led companies.

Another negative effect of the pandemic is the rising cases of domestic violence. In some parts of Asia, calls to women's desks and helplines have increased by around 30% during the lockdown period. The UN

estimates that stay-at-home measures could lead to a 20% surge in domestic violence as victims are trapped with their abusers.



Rising cases of domestic violence due to lockdown conditions.

The repercussions of the pandemic are expected to reverberate into the medium to long term if policy responses are late and inadequate. For example, the accelerated shift to automation could likely lead to more women being unemployed, with data from some APEC economies suggesting that women are more likely than men to be employed in an occupation that is at high risk of automation.

Retaining women in the workforce necessitates pro-active and flexible labour market policies that allocate resources for retraining or reskilling and upskilling women. As women retrain, governments could also look into expanding the availability and reducing the cost of childcare services or providing temporary unemployment cash transfers to allow them to complete the skills training.

For MSMEs, governments can facilitate access to capital to help them shift to digital business platforms. In parallel, digital infrastructures also need to be improved, particularly its reliability, speed and security, while ensuring that costs of internet subscription and digital equipment remain affordable in order to encourage greater digital adoption. These policy responses could widen the employment opportunities available for women, allowing them to access new digital-related jobs, and at the same time facilitate business growth for MSMEs.

The pandemic has exacerbated the economic, digital, and gender inequalities that women face. Indigenous groups, women with low levels of literacy and other skills, as well as women in remote areas with no access to the internet could face multiple layers of challenges. It is high time that governments, the private sector and the greater community come together to implement measures that expand women's access to opportunities that make their lives better.

There is always room for improvement: enforcing laws and addressing socio-cultural biases. The Dashboard is a useful resource to monitor the existence of enabling policies that support women's participation in the economy and understand the problems that have prevented efforts toward equal access, equal rights and equal opportunities.

APEC economies should take a step further, by enforcing properly measures that aim to advance women's empowerment across key

areas as well as exerting efforts to change mindsets and counter gender stereotyping that usually starts at home, emanating from age-old society norms and expectations. APEC economies could look into integrating gender equality in all levels of education. In addition, information campaigns targeted at certain groups or sectors could also be conducted to help eliminate gender stereotyping.

There are different ways that economies could raise awareness to address gender biases and move toward an equal society, but the message is the same: addressing discriminatory policies and attitudes require collective awareness and action. And the time to start is now.

The Role of Women's Empowerment in Anti-Corruption

Link: <https://www.apec.org/publications/2022/01/proposed-indicators-for-monitoring-apec-collective-progress-on-eaasr>

This Policy Brief provides a literature review of the nexus between women's empowerment and corruption. It adopts a gendered lens to analyse corruption, outlining how women experience corruption differently from men due to existing forms of disempowerment. It discusses how the advancement of women's empowerment can help in addressing corruption, before concluding with a summary of current APEC initiatives and future areas of work.

Findings

The gendered impact of corruption. Early studies on the gendered impact of corruption explored which sex is more exposed to corruption, with contrasting results. These contrasting studies show that the relationship between gender and corruption is complex. The impact of gender on corruption is not universal as it intersects with a range of factors such as culture, ethnicity, class, age, roles, among others.

While the impact of gender on corruption is confounded by other factors, the United Nations (2020) has suggested that as a whole, women are more disproportionately affected by corruption than men due to the following main reasons: (1) women have less socioeconomic power than men; and (2) women access certain public services where corruption is more likely to be prevalent.

Women's empowerment as part of an anti-corruption strategy. Socioeconomic and cultural disempowerment exposes women to corruption. Conversely, women's empowerment could help mitigate women's experience with corruption.

Many early studies argued that women's empowerment reduces corruption. Several studies found that markers of women's

empowerment, such as the presence of female leaders in businesses, greater female labour participation, and higher female literacy rates are linked to lower prevalence of corruption. However, some studies argued reverse causality, as less corruption itself could lead to greater women's empowerment, by impacting women's representation in government. As such, gender alone does not explain this relationship between women's empowerment and corruption levels. In fact, several studies have shown that women are not necessarily less corrupt than men. Rather, gender may interact with other factors such as power structures and networks to mitigate corruption.

Corruption at its core is mediated through social networks, which can be seen as the network of relations between actors (i.e., individuals, groups, or organisations). These networks serve as conduits for information, trust, power, and other resources. Corruption networks come into play when actors arbitrarily choose to grant favours to those within their network and exclude outsiders. Additionally, the network of inclusion and exclusion is more sophisticated when mutually beneficial incentives exist, as this could encourage corrupt actors to collude with other agents to amplify the corruption network. These agents could coordinate with others to maximise payoffs or conceal records of those involved in corrupt practices.

Social networks reinforce existing power differentials such as gender inequality. Due to societal structures and traditional gender norms, more men are in positions of power; as such, power is typically concentrated among male agents. While women themselves can engage in corruption, it is found that women are perceived as less trustworthy partners in corrupt transactions.

The limits of women's empowerment in anti-corruption efforts. Women's empowerment alone will not eliminate corruption. As noted earlier, women are not necessarily less corrupt than men. Women may not be involved in corrupt transactions because they do not have access to the same opportunities to be corrupt as men. Though women's empowerment reduces power inequalities, it could also increase the opportunity for women to engage in corrupt transactions. Women in governments with high female representation could themselves be implicated in grand corruption networks.

Nevertheless, government policies promoting women's empowerment can help strengthen efforts to fight corruption. Firstly, because women's access to basic services suffer from corruption, women in power may be incentivised to pursue initiatives that improve the delivery of basic services for women, which could reduce corruption affecting women. Secondly, women in power could also help address gendered forms of corruption such as sextortion, which may be left out in ongoing anti-corruption initiatives. These two outcomes empower women by improving access to basic services and introducing gender-

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sensitive methods of addressing corruption. As more women become empowered, they are less likely to be exploited and are more able to demand accountability from those in power.

Recommendations

APEC economies should continue working together on anti-corruption efforts especially in relation to women. The APEC Anti-Corruption and Transparency Experts Working Group (ACTWG) is spearheading work on a gendered approach to the fight against corruption. It has conducted a stocktaking survey to explore the current state of gender-sensitive anti-corruption initiatives in the region, and is in the process of consolidating the challenges faced by APEC economies and the best practices that they have implemented.

APEC economies could take a number of steps to complement ongoing initiatives to advance women's participation in anti-corruption initiatives. They can work on incorporating gender mainstreaming principles in anti-corruption initiatives. Corruption impacts men and women differently; hence, anti-corruption initiatives should assess the gender-specific implications of any proposed action. Moreover, gender mainstreaming work should acknowledge that gender also intersects with other factors such as ethnicity, age and class. As such, APEC's gender mainstreaming initiatives could benefit from discussions involving a wide range of participants and stakeholders.

APEC economies can introduce gender-sensitive mechanisms, strategies, policies, legislation, or regulations to address corruption. One clear area where the lack of gender-sensitive legislation can be seen is in cases where corruption involves sex. Current regulations may not be adequate to address incidents of these sex-mediated corruption. APEC economies could look into recommendations to review legislation to cover gendered forms of corruption and share their experiences on this matter at ACTWG.

It is also important that APEC economies explore how to collect sex-disaggregated data to inform anti-corruption efforts. While anecdotal evidence suggest that women tend to suffer more from corruption, this is difficult to empirically quantify due to insufficient data. As the impact of corruption appears to be differentiated by sex, collecting sex-disaggregated data could shed light into how corruption is shaped and help inform policymakers to employ well-targeted interventions against corruption.

Finally, APEC should continue its prioritisation of women's empowerment in ACTWG and across sub-fora. Women's empowerment has several spillovers that could help in the overall fight against corruption. As outsiders in most corruption networks, women's presence in positions of power could minimise the ability of corrupt agents to succeed. Women politicians also tend to prioritise initiatives that widen economic

opportunities and ensure service delivery for the improvement of women's social and economic mobility. Further empowering women, through increased economic and political participation, could pave the way for improved access to information and resources, which could enable them to join ongoing work in demanding greater accountability from public officials.

Cross-Border Mobility

Passports, Tickets and Face Masks: COVID-19 and Cross-Border Mobility in the APEC Region

Link: <https://www.apec.org/Publications/2021/08/Passports-Tickets-and-Face-Masks>

The COVID-19 pandemic led to border closures and restrictions as economies sought to contain the virus. Previous attempts at safe reopening have been tentative and uncertain due to the changing COVID-19 situation around the region. This study presents some recommendations to enable safe reopening of borders and outlines a role for APEC.

Findings

In early 2020, APEC economies implemented restrictions at the border such as blanket entry bans, banning arrivals from selected locations, and pre-arrival permits, as well as public health measures like COVID-19 testing and quarantine requirements. These measures were implemented in order to prevent imported cases of COVID-19 from affecting local populations.

In May 2020, Korea initiated the "Proposal to Review Measures Facilitating Essential Movement of People across Borders" to share information on cross-border policies, identify common elements and lessons, and discuss future steps as necessary. A survey on "Voluntary Exchange of Information on Measures Being Explored/Implemented by APEC Economies to Facilitate Essential Movement of People across Borders" was conducted in September 2020. As of February 2021, 18 APEC economies had responded to the survey. The policy measures based on the survey that are listed in this report may have been modified, repealed, or extended by the time of this study's publication.

The survey shows many similarities in the types of measures implemented at borders, but also highlights many variations and differences in the details of how these measures are implemented. There was no policy coordination on testing and quarantine requirements, criteria and protocols for border closures, nor criteria and protocols for the reopening of borders among APEC economies in the early stages of the pandemic.

Cross-border movement of people is essential for trade and economic activity. Apart from the obvious linkages in terms of tourism and transportation, cross-border movements of people also contribute to economic growth by enabling logistics and supply chains, investments, employment, education, and capacity building. There are strong and synergistic linkages between cross-border movement and bilateral trade and economic growth. Conservatively, every 10% increase in non-resident arrivals is associated with a 0.34% increase in trade and 0.31% increase in GDP.

On the other hand, the effectiveness of border restrictions in preventing imported cases from seeding waves of the pandemic is mixed. The effectiveness of these border policies hinges on timing — i.e., before the virus has reached domestic populations — and the effectiveness of behind-the-border pandemic response.

The border restrictions had immediate and substantial impacts on cross-border movements and economic activity, as well as society and various vulnerable groups. Estimated direct trade losses due to the fall in cross-border movement range from USD 488 billion to USD 786 billion. GDP losses for the region from lost cross-border movement and unrealised economic activity is estimated at USD 1.2 trillion.

Previous attempts at safe reopening have been tentative and uncertain due to the changing COVID-19 situation around the region. Several attempts at bilateral travel bubbles have been postponed, cancelled, or reversed due to changing risk profiles in other economies.

Recommendations from various international organisations on safely resuming travel suggest the need for economies to lift travel restrictions with a risk-based approach, cooperate with other economies, provide traveller confidence, and consider standardisation and digitisation of global health credentials. Tools to realise these strategies are already on the table. Examples include online one-stop platforms that allow sharing of travel restriction information as well as various digital health certificate apps such as IATA's Travel Pass.

Recommendations

There are three key recommendations to enable safe reopening of borders:

- Contain COVID-19 everywhere. Experience over the past year has shown that the virus remains a threat everywhere so long as it continues to ravage anywhere. The SARS-CoV-2 virus is highly capable of mutation, which can potentially slow or reverse gains from vaccination and other pandemic control measures. The only way to reopen borders safely and avoid the stop-start uncertainty of previous attempts is to quickly put an end to the pandemic

for all people and all economies. Policy cooperation in areas of trade in medical products, ramping up production of vaccines and therapeutics, and ensuring equitable access to them will be crucial in this regard.

- Reduce uncertainty at the borders. The lack of at-the-border policy coordination has led to significant uncertainty for travellers and even the logistics personnel who make trade possible. Stop-start attempts at travel bubbles and uncoordinated green lanes add to, rather than reduce, this uncertainty. Policy coordination in mutual recognition, harmonising standards, sharing data, as well as establishing clear criteria for closing or reopening borders will eliminate confusion and reduce uncertainty at the border.
- A role for APEC. APEC is in a unique position to contribute to the first two. Behind-the-border issues require policy cooperation, while at-the-border issues require policy coordination. APEC has various sub-fora on trade, standards, intellectual property, digital economy, health, life sciences, business mobility, human resources, tourism, transportation, and others. APEC also has close working relationships with other international organisations at the forefront of addressing the COVID-19 pandemic and safely reopening borders. All these can be brought to bear on this issue.

Beyond COVID-19, APEC can be the forum where information sharing, objective risk analysis, and regional cooperation happen to prepare for future "black sky events" affecting the region. APEC already has the multisectoral structures that will enable cooperation wherever the black sky events may originate. APEC's culture of informality, non-binding agreements, and drive towards consensus can enable it to be more nimble and responsive to new regional threats as they emerge, something that more formal and binding institutions may find difficult to do. This is an opportunity for APEC to emerge from the COVID-19 pandemic as a more highly relevant, innovative and forward-looking international organisation.

APEC Regional Trends Analysis

The APEC Regional Trends Analysis (ARTA) is a flagship report published in May and November every year. Each report carries a theme chapter which discusses pertinent issues in the APEC region and a cyclical chapter which provides an analytical overview of the region's macroeconomic developments and the trade and investment trends and measures recently implemented by APEC economies. Updates offering a concise analysis on the latest economic situation are published in between the biannual reports.

February 2021 Update - Uneven Recovery, Unequal Impact

Link: <https://www.apec.org/publications/2021/02/apec-regional-trends-analysis-february-2021-update>

Findings & Recommendations

- The APEC region is estimated to have contracted by 2.0% in 2020 or an output loss of USD 1.5 trillion, better than the 2.5% decline projected in November 2020.
- Near-term outlook points to improved growth prospects, with APEC projected to grow by 5.7% in 2021 and 4.1% in 2022, but extreme uncertainty remains.
- The region faces uneven growth across APEC economies, with the speed of recovery largely hinged on effective virus containment through vaccination access and uptake. Unequal impact of COVID-19, particularly on the poor, women and the youth needs to be addressed for growth to be inclusive.
- Economic recovery requires: (1) universal access to healthcare and widespread immunisation; (2) maintenance of fiscal and monetary stimulus measures; and (3) stepped-up regional cooperation efforts.

May 2021 - Bolstering Supply Chains, Rebuilding Global Trade; Making Recovery Inclusive

Link: <https://www.apec.org/Publications/2021/05/APEC-Regional-Trends-Analysis---May-2021>

Findings & Recommendations

Bolstering supply chains, rebuilding global trade

- COVID-19 has severely impacted global supply chains. Measures implemented to contain and control the pandemic have resulted

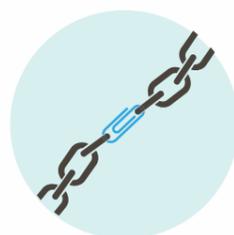
in closures of non-essential businesses, leading to significant and costly disruptions to global supply chains and lower production from manufacturing hubs.

- Supply chain disruptions have also impeded COVID-19 response and mitigation measures. Disruptions to the pharmaceutical industry supply chain meant that medicines and medical equipment could not reach where they were needed the most. And higher demand, factory shutdowns, and just-in-time inventory systems led to global shortages of personal protective equipment (PPE) such as surgical masks and biohazard suits. Trade-restrictive measures further worsened access to essentials like medicines and food.
- Calls for greater resilience have grown louder after the supply chain disruptions.

In search of resilience

The pandemic has made businesses and governments more aware of the importance of resilience. But what does it really mean?

Key characteristics of a resilient supply chain:



- Robustness: strong enough to withstand shocks and changes
- Agility: able to quickly recover from shocks
- Flexibility: able to leverage on options and alternatives during normal times and during recovery
- Redundancy: able to build adequate surplus capacity

- However, improving resilience is neither simple nor cost-free. The current structure of global value chains (GVCs) is the result of fundamental factors – such as resource endowments and costs, market size, geography and institutional quality – which together determine the most efficient business connections with the greatest productivity gains. Altering network relations within GVCs to accommodate greater agility and resilience could work against the economic efficiency and cost considerations that drove their formation in the first place.
- Since 2008, participation in GVCs has stagnated while trading partners in certain sectors have become more geographically concentrated. This trend illustrates a salient feature of today's GVCs: the pursuit of efficiency has resulted in concentration around a few hubs. However, such concentration risks reducing resiliency in case of unexpected disruptions at manufacturing hubs.
- To improve resiliency, economies can promote adoption of digital technologies to enhance supply chain visibility, and strengthen trade facilitation efforts to manage flows of traded goods. Governments could also focus on maintaining the competitiveness and efficiency

of domestic enterprises by building on the skills and know-how that firms have acquired from their supply chains under the GVC network.

- Regional cooperation is key to building trust in trading commitments and relations. APEC economies need to maintain their commitment to open trade policies and avoid discriminatory and trade-restrictive measures. Governments should see participation in GVCs as part of the solution when it comes to handling supply shortages and advancing global recovery. Within the APEC context, it is important to avoid policy interventions that disrupt the configuration of GVCs formed based on economic fundamentals.

Making recovery inclusive

- APEC GDP declined by 1.9% in 2020, better than the 2.7% contraction projected in the May 2020 edition of the ARTA. The softer contraction was due to the economic turnaround during the second half of 2020 as economies gradually reopened amid continued fiscal and monetary support.
- However, GDP growth across APEC has been uneven, with a few economies returning to positive territory by the end of 2020, others contracting less than expected, but some plunging deeper into recession.
- The near-term economic outlook points to higher APEC GDP growth of 6.3% in 2021 as pent-up demand is unleashed following a year of subdued spending while the rollout of multiple vaccines has buoyed optimism. Growth is expected to be sustained in 2022 and 2023 but at a moderated pace of 4.4% and 3.4%, respectively.
- APEC economies are projected to recover at different speeds and strengths depending on vaccine availability and access in each economy, which in turn affect the pace and coverage of vaccinations. The majority could reach widespread immunisation by mid-2022 onwards, while some could do so earlier, by the end of 2021. Confirmed vaccine purchases also vary across APEC, resulting in wide disparity in coverage, from as low as 40% of the population to as high as almost 800% of the population.
- Significant uncertainty surrounds the short-term economic outlook, linked largely to the unpredictable path of the pandemic. Virus mutations could prolong the pandemic and delay the planned full reopening of businesses and borders. Cautious spending due to job insecurity, business closures and expectations of higher inflation could hold back economic activity. The start-stop economic reopening amid the elevated risk of resurgence in infections could also result in lower growth than projected.

- The pandemic has exposed underlying economic, social and digital divisions and fragilities, making the journey toward an inclusive economic recovery that facilitates the full and equal participation of all segments of society more important.
- While the strategies adopted by individual economies may vary depending on their level of economic, financial and technological development, there are four key imperatives to ensure that no one is left behind:

Recovery for all: A checklist



CONTAIN COVID-19

- Curb the spread of the virus and its variants
- Continue targeted fiscal and monetary support
- Increase public spending on health



TURN CRISIS INTO OPPORTUNITY

- Allocate resources to improve social outcomes
- Invest in human capital development
- Adapt to the digital economy



PROTECT THE ENVIRONMENT

- Cut unsustainable practices such as deforestation
- Rein in coal and other costly fuels
- Promote green investments and technology



LEVERAGE REGIONAL COOPERATION

- Ensure the swift and equitable supply of vaccines
- Share COVID-19 related expertise
- Commit to economic recovery that is durable, sustainable and inclusive

APEC Regional Trends Analysis

August 2021 Update - Vaccine Access Drives Recovery

Link: <https://www.apec.org/Publications/2021/08/APEC-Regional-Trends-Analysis-August-2021-Update>

Findings & Recommendations

- APEC GDP growth rebounded strongly to 6.1% in Q1 2021 from a contraction of 2.0% in Q1 2020, reflecting increases in government spending and fixed investments as well as base effects, while trade performance and personal consumption expenditure also improved.
- Brighter growth prospects are seen in the near term, with APEC expected to expand by 6.4% in 2021 and 4.9% in 2022, higher than the forecast in the May 2021 edition of the ARTA.
- However, the resurgence in infections due to the spread of the more contagious Delta variant is threatening the economic recovery, with some economies re-imposing movement restrictions. Persistent uncertainty due to COVID-19 and its variants amid unequal access to vaccines combined with varying magnitudes of fiscal and monetary support is expected to translate into diverging economic growth across APEC.
- Multilateral cooperation is needed to strengthen economic recovery. There has never been a more important time than now for multilateral cooperation to play a role in facilitating the free flow of vaccine components, as well as related supplies and equipment along the supply chain to ramp up vaccine production and deployment. This would have a significant ripple effect on vaccine affordability, availability and access, especially for low- and middle-income economies.
- The goal is to ensure equitable vaccine access to protect as many people as possible, as soon as possible. When people feel safe, they are more confident to go out, work, and spend accumulated savings while firms could resume investment activity, supporting a gradual but uninterrupted economic reopening toward a firmer recovery.

November 2021 - APEC's Climate Change Challenge; Toward a Resilient Recovery: Policies Matter

Link: <https://www.apec.org/publications/2021/11/apec-regional-trends-analysis-november-2021-apec-s-climate-change-challenge-toward-a-resilient-recovery-policies-matter>

Findings & Recommendations

APEC's climate change challenge

- Climate change is an existential threat not only for the APEC region, but for humanity as a whole. The discussion is no longer about how to prevent climate change; the question now is how to keep it within levels that will allow our species to survive on this planet in the long term.
- Climate change comes at a high cost. The losses from the increased frequency and severity of extreme weather are estimated at 7.3% of GDP, and the costs are higher for developing economies. Climate change also disproportionately impacts vulnerable populations, including the poor, women and girls, migrants, Indigenous Peoples, and people in rural and remote areas.
- Climate change does not have an upside. There are no net winners, only a lose-lose scenario. Without policy action to address climate change, the APEC region could see losses amount to 18% of GDP by mid-century.
- APEC economies lose from climate change, but they contribute to it too.

An APEC-contributed problem



Between 1990 and 2018, the region's greenhouse gas (GHG) emissions increased from 16.5 to 27.8 billion tons of CO2 equivalent.

- APEC makes up 38% of the world's population and 55% of GDP, but contributes 60% of global GHG emissions and 65% of carbon emissions
- 7 of the world's top 10 CO2 emitting economies are in APEC
- APEC's share of global GHG emissions is increasing

- APEC Leaders first mentioned climate change in their 1997 Declaration. Since then, the region has racked up achievements in reforestation, renewable energy, and trade in environmental goods. Moreover, 19 APEC economies have declared commitments to achieve net-zero carbon emissions by 2050 or 2060.
- But this is not nearly enough. If the APEC region is to contribute toward the Paris Agreement of keeping global warming to within 2°C above pre-industrial levels, it would need to collectively reduce net GHG emissions by 3.8% per year – an average of 893MtCO2 equivalent – between 2022 and 2030, and from 2031 further reduce net GHG emissions by 471 MtCO2 equivalent until net zero is achieved by 2070.
- While climate change science can tell us how economies will be damaged by climate change and how much reduction in net emissions is needed to keep global warming to 1.5°C or 2°C, it cannot advise on the political and economic decisions that are needed to make this happen. That goes beyond the realm of scientists, to that of policymakers, who can change the incentive structures and the rules of the economy.

APEC needs to do more

To limit the rise of global temperature to no more than 2.0°C, APEC must reduce GHG emissions by about 900 million tons of CO2 equivalent per year until 2030, then achieve net-zero by 2070. This is roughly like eliminating the carbon emissions of 117 million cars every year for the next 50 years.

APEC needs to do a lot more to address climate change. The post-pandemic recovery can be an opportunity to rebuild better and greener.



Action beyond commitments

- Climate change requires a holistic approach
- Green policies need to address negative side effects



Concrete measures and policy analysis

- Standardize measurements and monitor against climate change targets
- Evaluate impacts of green policies



Strengthen global and regional cooperation

- Make APEC relevant in addressing the climate change crisis

Toward a resilient recovery: Policies matter

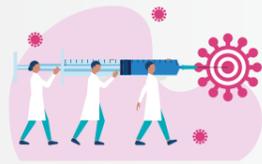
- APEC GDP rebounded to an 8.0% growth in the first half of 2021, following a 3.7% contraction in the first half of 2020. While coming from a low base, stronger consumption and investment along with sustained government spending fuelled economic activity for the period January–June 2021.
- However, growth among member economies continues to diverge. Some economies were able to rebound relatively fast; for others, their economic recovery remains fragile, hinged largely on vaccine access and rollout.
- In line with strengthening economic activity, APEC saw a broad-based surge in trade, with both the volume and value of merchandise trade recording double-digit growth.
- In the near term, APEC GDP is expected to expand by 6.0% in 2021 after declining by 1.8% in 2020. Growth is projected to settle at 4.9% in 2022 with the anticipated winding down of fiscal and monetary support measures, moderating to 3.2% in the medium term.
- Substantial uncertainty surrounds the growth projections, with the Delta variant and virus mutations posing as the biggest threat to economic recovery. The Delta variant has already slowed down economic momentum, with a downgrade in the growth forecast for APEC in 2021, from 6.4% in the August 2021 update of the ARTA to the current projection of 6.0%.
- Vaccines remain the most effective antidote to the spread of COVID-19 and the emergence of new variants that could prove more dangerous. Economies need to speed up vaccination rollouts and ensure that access to vaccines, therapeutics and related medical supplies are equitable so that no one is left behind in the journey toward recovery.
- Other factors that could weigh on growth include stubborn inflation and a steady climb in global commodity prices. These could trigger an increase in monetary policy rates, squeezing liquidity and credit. The scaling back or withdrawal of massive fiscal support is inevitable, particularly in light of rising government debt from mitigating the fallout from the pandemic. The tightening of monetary, financial and fiscal conditions could dampen consumption and investment activity, putting the economic recovery on fragile ground.
- The pandemic has exacerbated existing economic and social divisions, while also giving rise to a vaccine divide. The unequal

APEC Regional Trends Analysis

access to vaccines needs to be addressed to avoid a two-track recovery, with some able to revive economic activity at a faster and more durable pace while other economies continue to grapple with resurgent infections amid tighter fiscal conditions.

- APEC, along with the global economy, is in uncharted territory, where recovery is underway even amid an ongoing pandemic. There are many hard-earned lessons from the pandemic, central of which is that economic, trade and health policies are intertwined – and that good policies matter.

- These policies are crucial to the delivery of three key priorities:



Vaccinate as many people as soon as possible



Facilitate the production and flow of vaccines and other medical products to speed up vaccination programme



Mitigate economic, social and vaccine disparities. Address unequal access to vaccines to recover stronger together

- APEC's membership is committed to a broad range of initiatives that reinforce each other:



Facilitating trade in the movement of essential goods and services, COVID-19 vaccines, food products and people across borders



Sharing knowledge and expertise on measures tackling COVID-19



Building resilience and inclusion among APEC communities



Utilizing digital technology to support COVID-19 response and recovery efforts

StatsAPEC is APEC's statistics portal with data dating back to APEC's inception in 1989. It consists of the Key Indicators Database and Bilateral Linkages Database. The Key Indicators Database includes over 120 GDP, trade, financial and socio-economic indicators, allowing for an analysis of trends across a number of topics. The Bilateral Linkages Database facilitates detailed analysis of bilateral trade flows between APEC economies and within APEC. APEC aggregates are available for most indicators in StatsAPEC, making it easy to examine the region as a whole.

StatsAPEC is available at statistics.apec.org.



**Asia-Pacific
Economic Cooperation**

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