



**Asia-Pacific
Economic Cooperation**

Advancing Free Trade
for Asia-Pacific Prosperity

APEC IN CHARTS 2024

POLICY SUPPORT UNIT

35
YEARS OF APEC

The Asia-Pacific Economic Cooperation (APEC) was established in 1989. The 21 member economies are Australia; Brunei Darussalam; Canada; Chile; China; Hong Kong, China; Indonesia; Japan; Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; the Philippines; Russia; Singapore; Chinese Taipei; Thailand; the United States; and Viet Nam.

The APEC Policy Support Unit (PSU) was set up in 2008 as the policy research and analysis arm for APEC. It supports APEC members and fora in improving the quality of their deliberations and decisions and promoting policies that support the achievement of APEC's goals by providing objective and high-quality research, analytical capacity, and policy support capability.

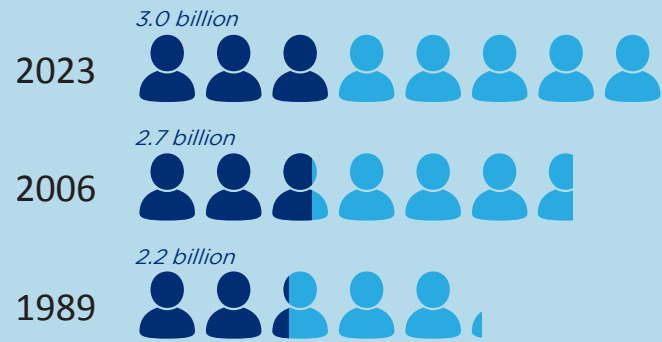
APEC in Charts was launched by the PSU in 2013 to provide a graphical overview of the APEC region's economic, trade, investment, and priorities-related performance. If you have any feedback, please write to us at email: psugroup@apcc.org.

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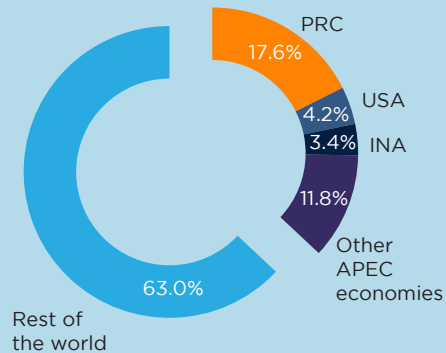
37% of the world's population live in the APEC region in 2023

POPULATION
each person represents 1 billion people



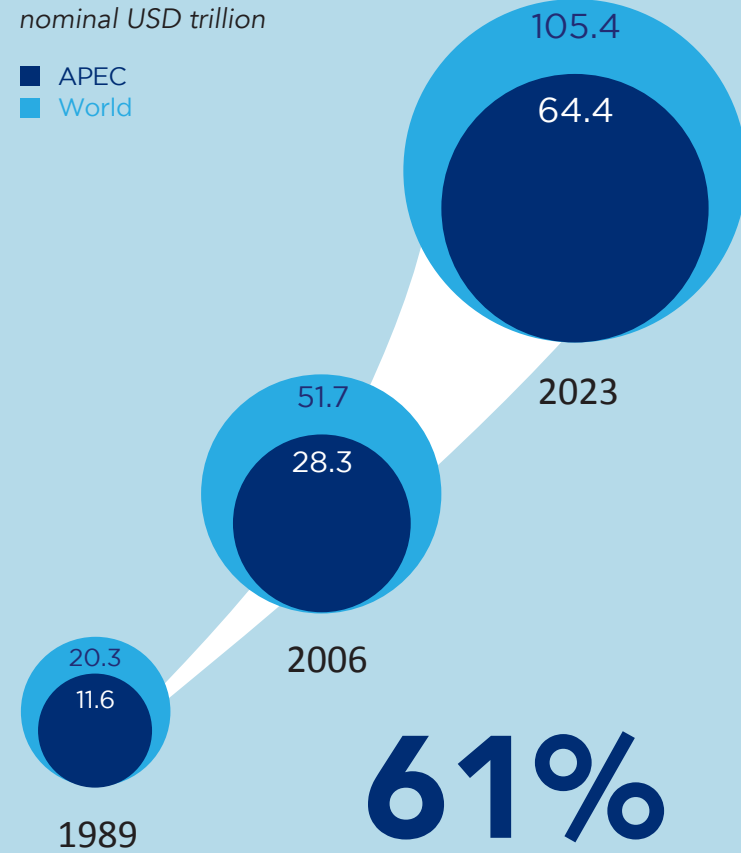
POPULATION SHARE IN 2023
percent of global population

3 APEC economies are among the world's top 5 most populous economies in the world



GROSS DOMESTIC PRODUCT
nominal USD trillion

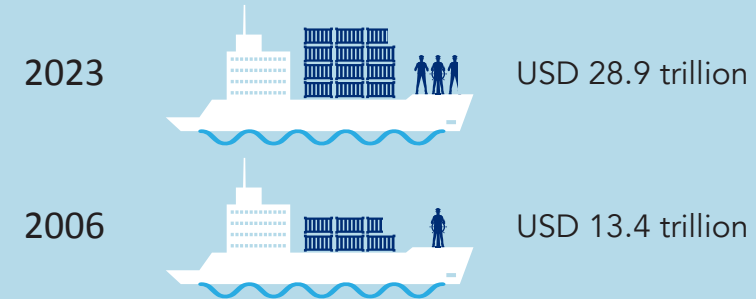
■ APEC
■ World



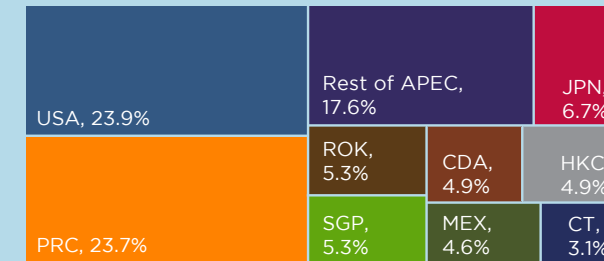
61% of global GDP was contributed by APEC economies in 2023

APEC economies accounted for **46%** of global trade in goods and commercial services in 2023

TRADE IN APEC
each container and person represent USD 2 trillion of goods and services, respectively



TRADE BY APEC ECONOMIES IN 2023
percent of total APEC trade



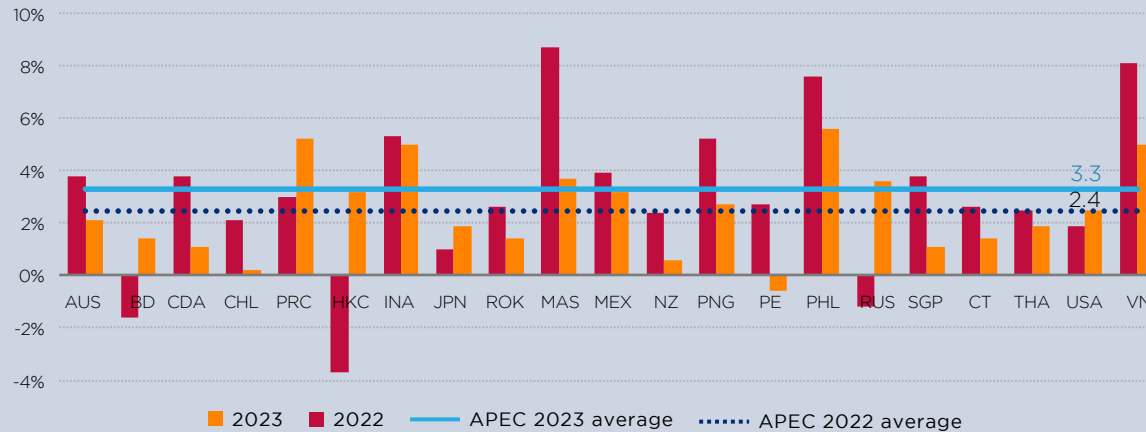
APEC IN THE GLOBAL ECONOMY 2023

The 21 APEC member economies continue to play a critical role in shaping the global economy, significantly contributing to the world's GDP and trade.

APEC Macroeconomic Indicators

ECONOMIC GROWTH IN THE REGION

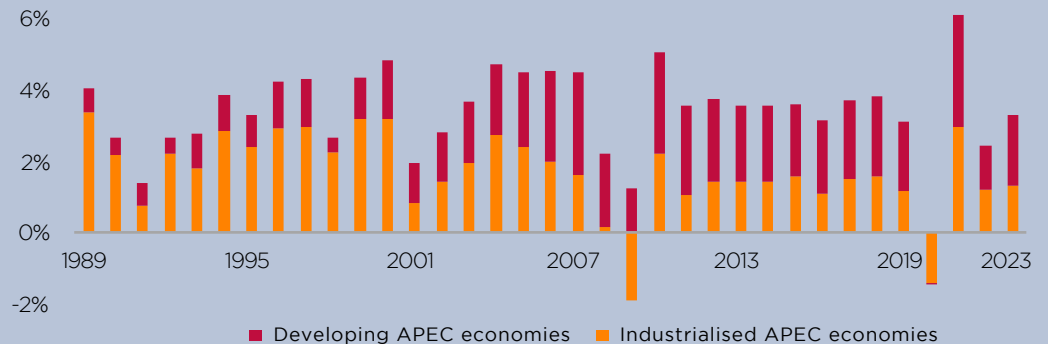
[1.1] REAL GDP GROWTH, 2022–2023
annual percent



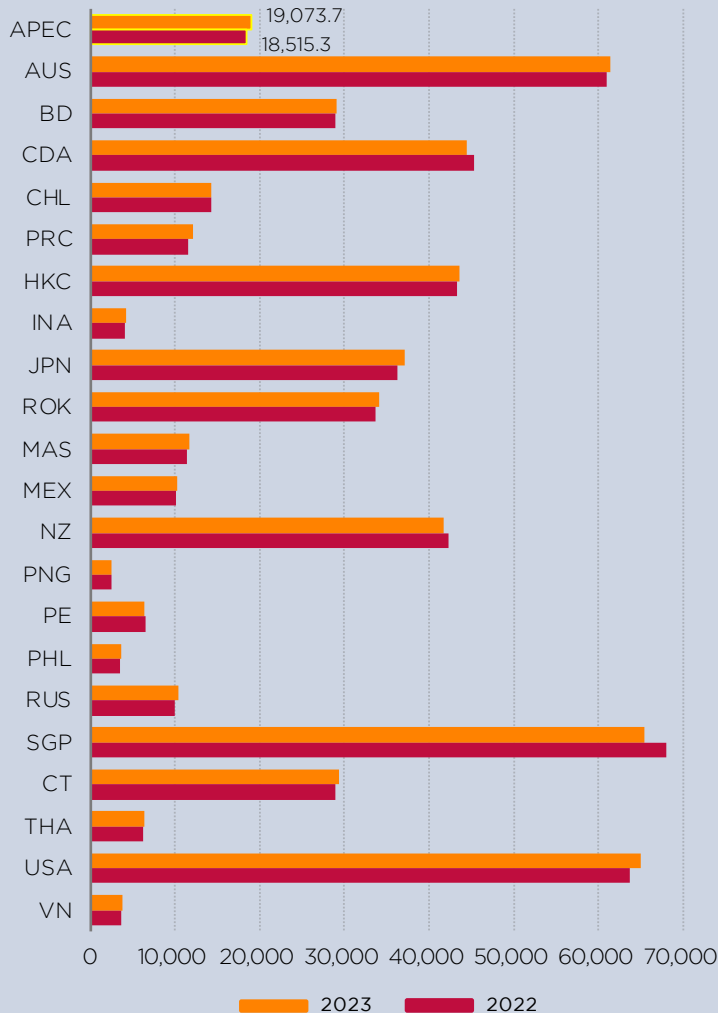
APEC's real GDP grew 0.9 percentage points faster in 2023 compared to 2022. Growth rates in Brunei Darussalam; China; Hong Kong, China; Japan; Russia; and the United States were higher than they were in 2022. In 2023, the Philippines recorded the strongest real GDP growth in the region at 5.6%.

[1.2] CONTRIBUTION TO REAL GDP GROWTH, 1989–2023
percentage points, annual basis

Over the past 35 years, developing APEC economies more than tripled their contribution to real GDP growth in the region. The share from these 14 developing economies had risen from 16.9% in 1989 to 61.9% in 2019 just before the COVID-19 pandemic. Their contributions were reduced to about 51.0% during the pandemic in 2021 and 2022 before recovering to 59.7% in 2023.



[1.3] REAL GDP PER CAPITA, 2022–2023
constant 2015 USD

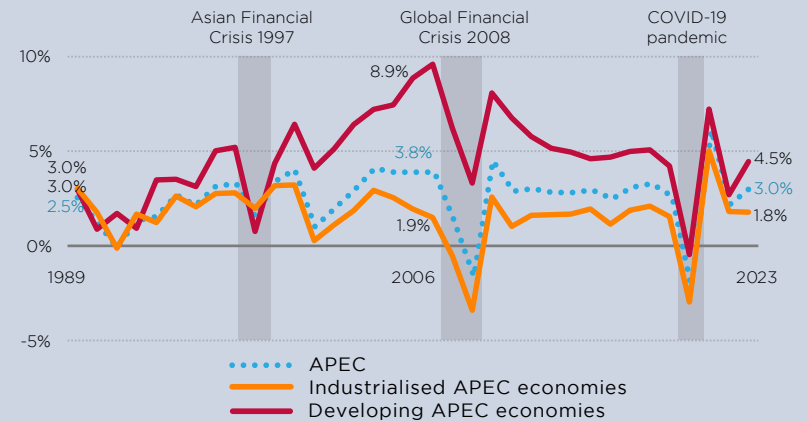


APEC Macroeconomic Indicators

STANDARD OF LIVING

Real GDP per capita in the APEC region continues to rise, hitting the USD 19,000 mark for the first time in 2023. Seventeen economies increased their real GDP per capita between 0.1% and 5.3% in 2023, while it decreased in four economies. Real GDP per capita in APEC varies widely, ranging from USD 2,483 to USD 65,422.

[1.4] REAL GDP PER CAPITA GROWTH, 1989–2023
annual percent



Real GDP per capita growth has recovered since the COVID-19 pandemic. However, in the past two years, per capita growth rates have moderated in both industrialised and developing APEC economies.

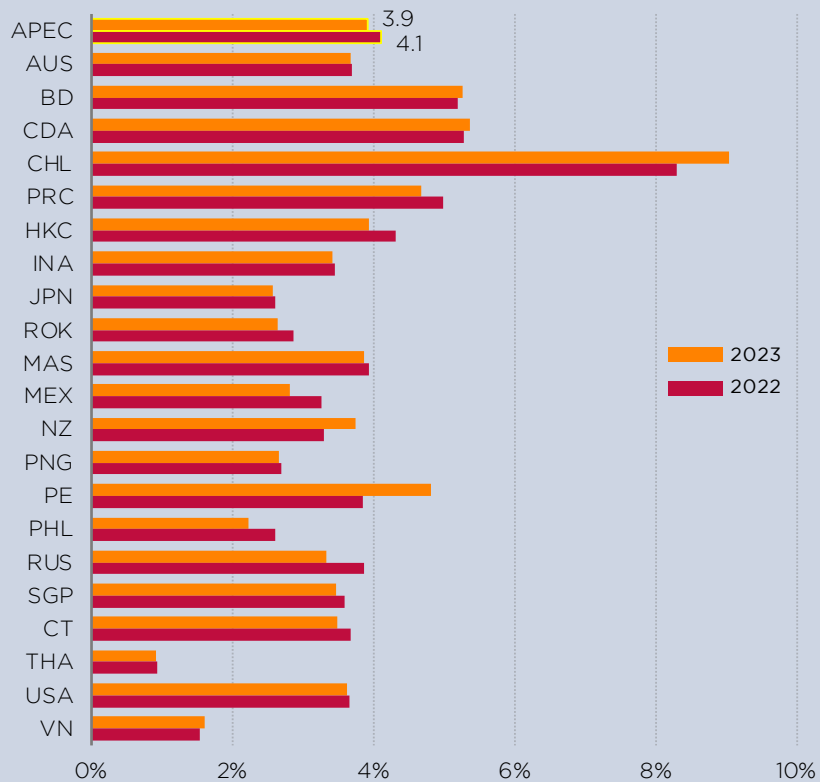
APEC Macroeconomic Indicators

LABOUR AND EMPLOYMENT IN THE REGION

Unemployment rates in the APEC region continue to drop. The rate averaged at 3.9% in 2023 as job creation remained strong in most economies. In 2023, unemployment rates decreased in 15 economies while they increased in the other six economies.

[1.5] UNEMPLOYMENT RATE, 2022–2023

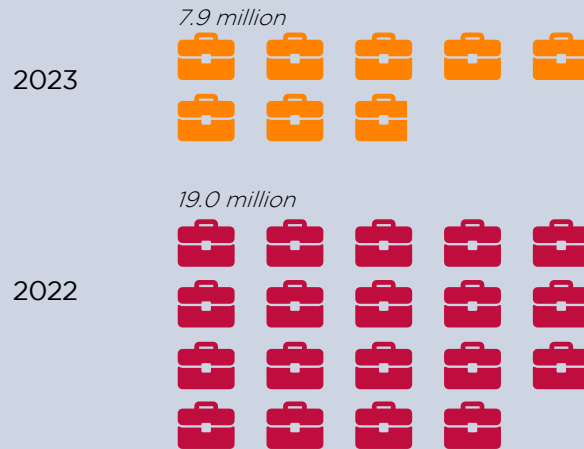
percent



[1.6] JOB CREATION, 2022–2023

each briefcase represents 1 million jobs

APEC economies continue to recover from the pandemic. In 2022, 19 million new jobs were created in the APEC region, and in 2023, a total of 7.9 million jobs were added, accounting for 10.6% of the jobs created worldwide.

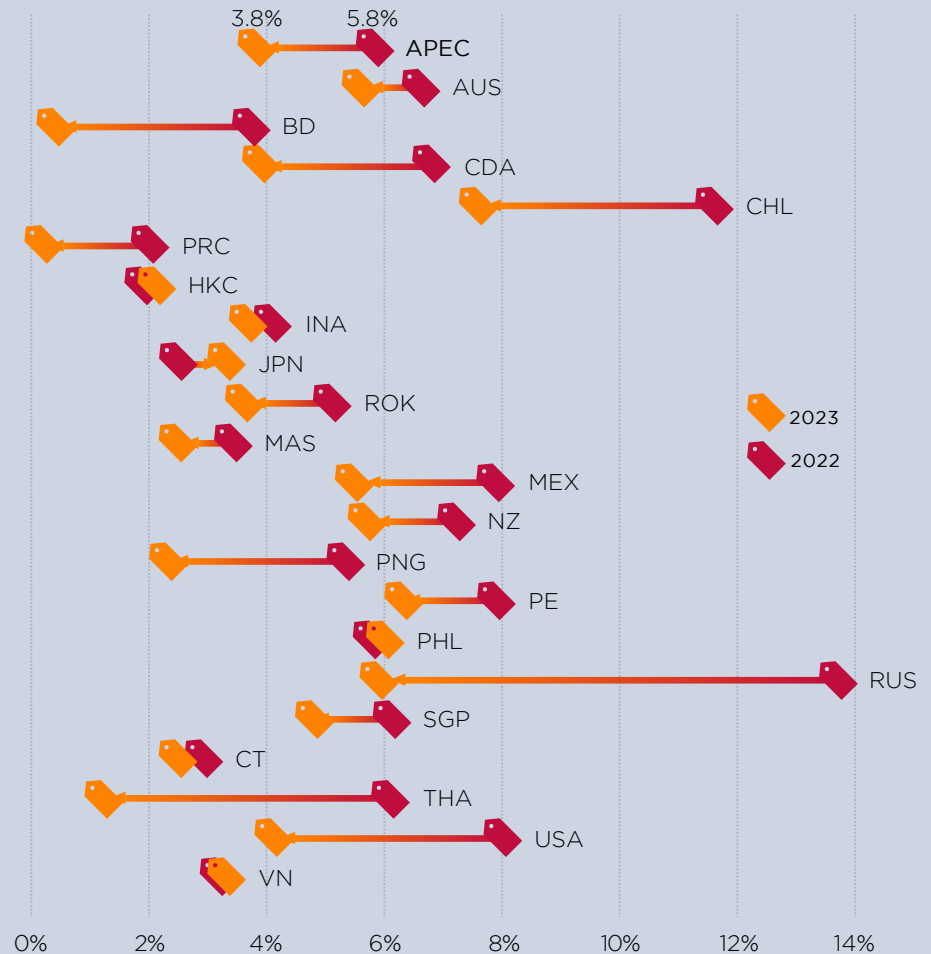


APEC Macroeconomic Indicators

DECREASING INFLATION

Inflationary pressures in APEC gradually dissipated in 2023 with the average inflation rate in the region declining to 3.8% from 5.8% in 2022. Lower inflation rates were recorded in 17 economies while rates increased marginally in four economies.

[1.7] CONSUMER PRICE INFLATION, 2022–2023
annual percent



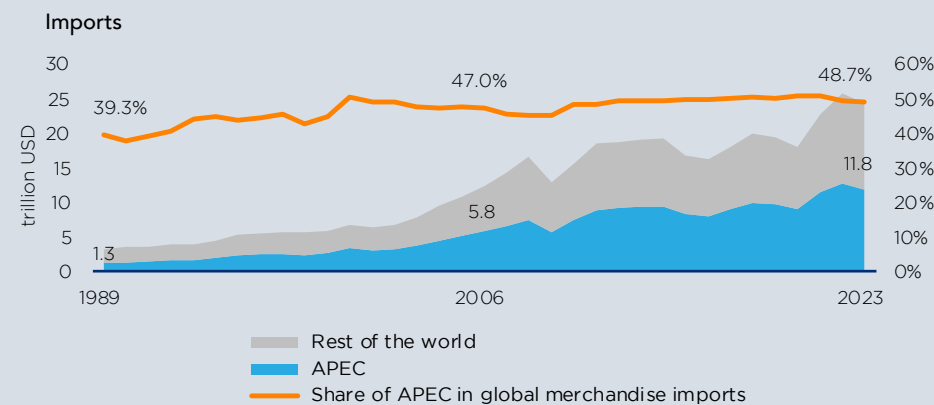
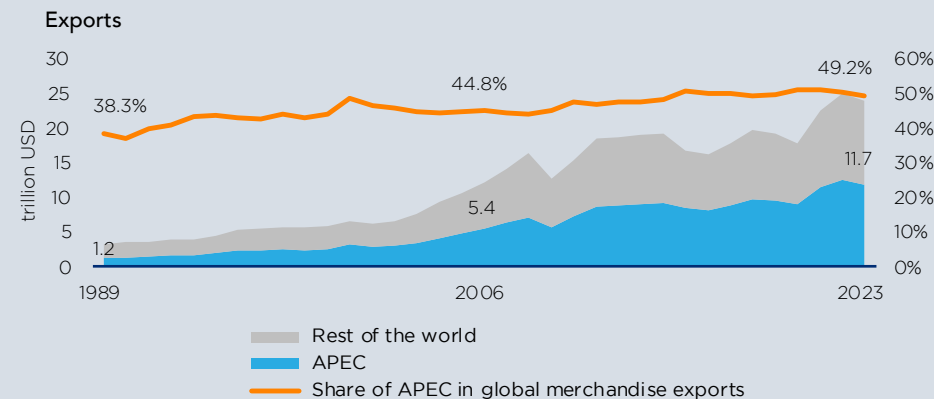
APEC Trade and Investment A GLOBAL TRADE POWERHOUSE

APEC continues to be the driver of global trade, contributing nearly half of global trade every year.

[2.1] MERCHANDISE TRADE, 1989–2023

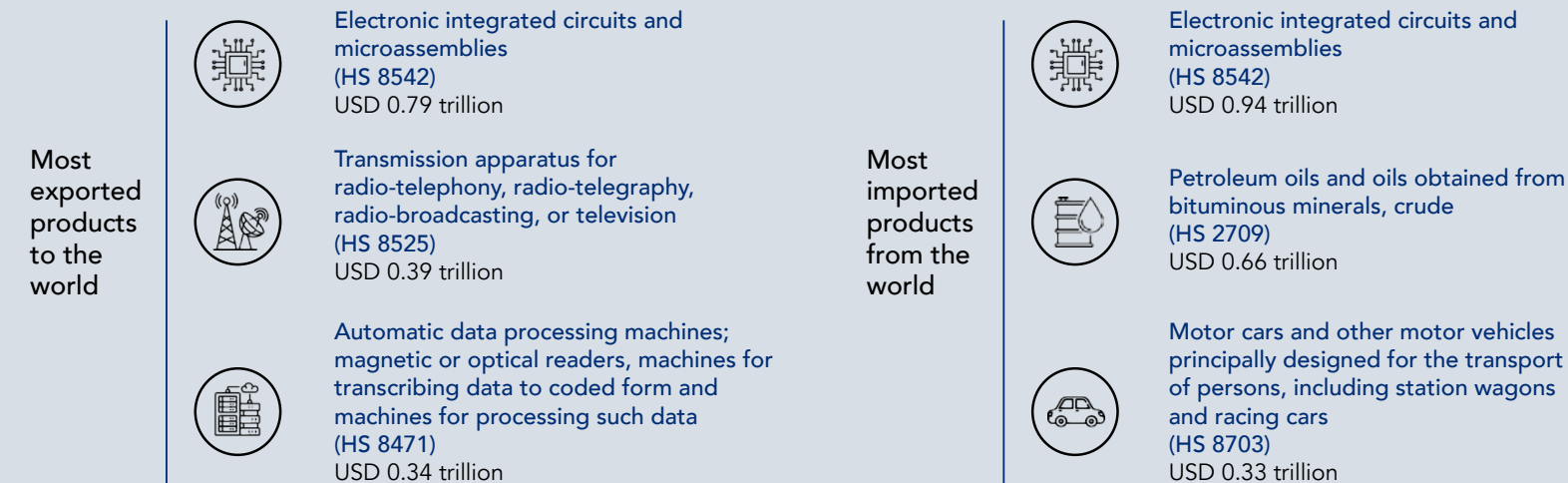
value in USD trillion, share in percent

APEC total merchandise exports were valued at USD 11.7 trillion in 2023, down by 6.0% from 2022. Total merchandise imports also fell by 6.7% in 2023 to USD 11.8 trillion. The region's shares in global merchandise exports and imports declined by 0.8 and 0.5 percentage points, respectively.



[2.2] MOST TRADED PRODUCTS BETWEEN APEC AND THE WORLD, 2019–2023

USD trillion, average value over the period



[2.3] APEC MAIN MERCHANDISE TRADE PARTNERS, 2019–2021

USD trillion, average value over the period

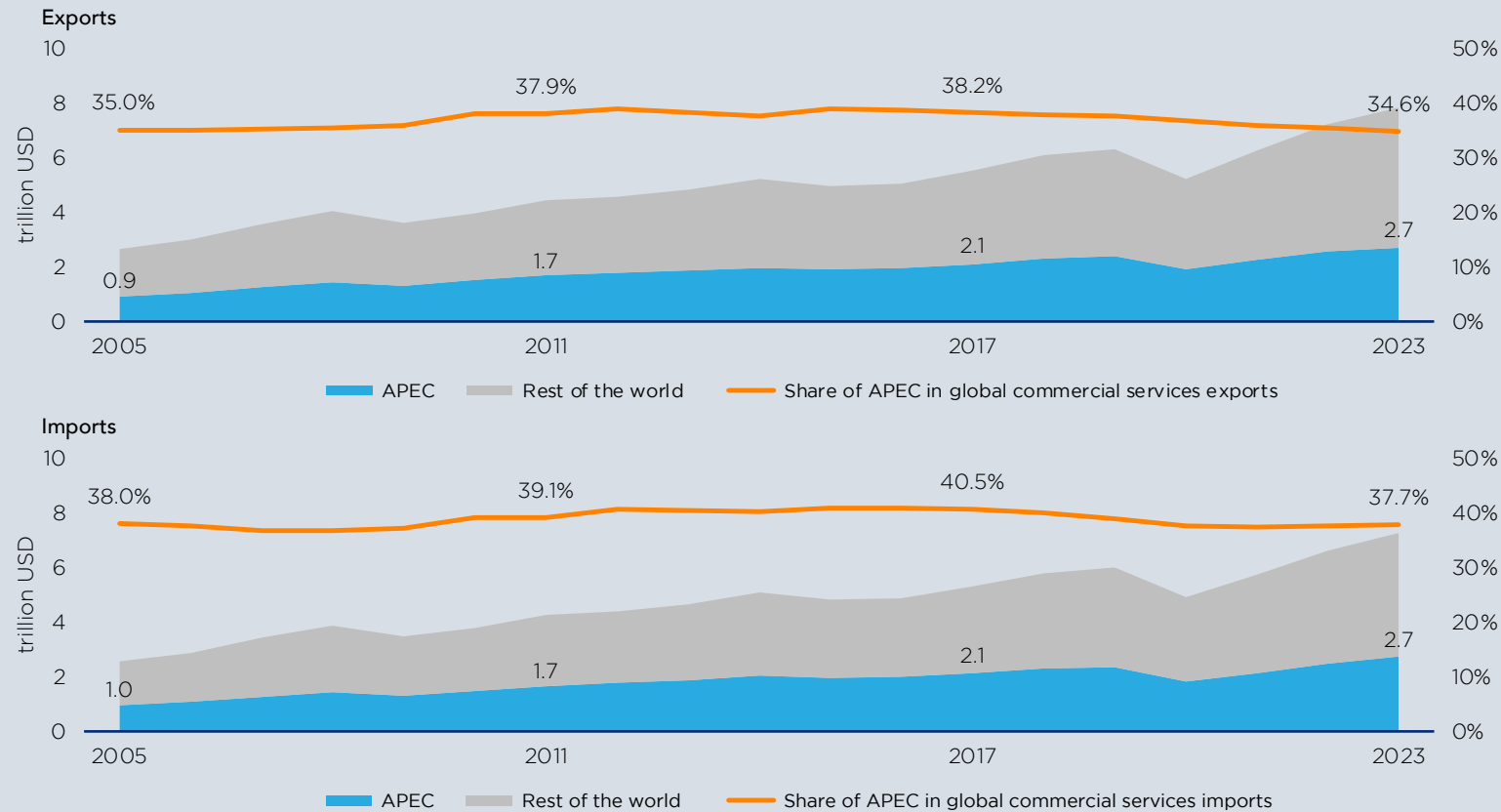
Between 2019 and 2021, China; Japan; and the United States were the top export and import partners of APEC economies. Canada; Hong Kong, China; Korea; and Chinese Taipei were also among the top trading partners of APEC economies.



[2.4] COMMERCIAL SERVICES TRADE, 2005–2023

value in USD trillion, share in percent

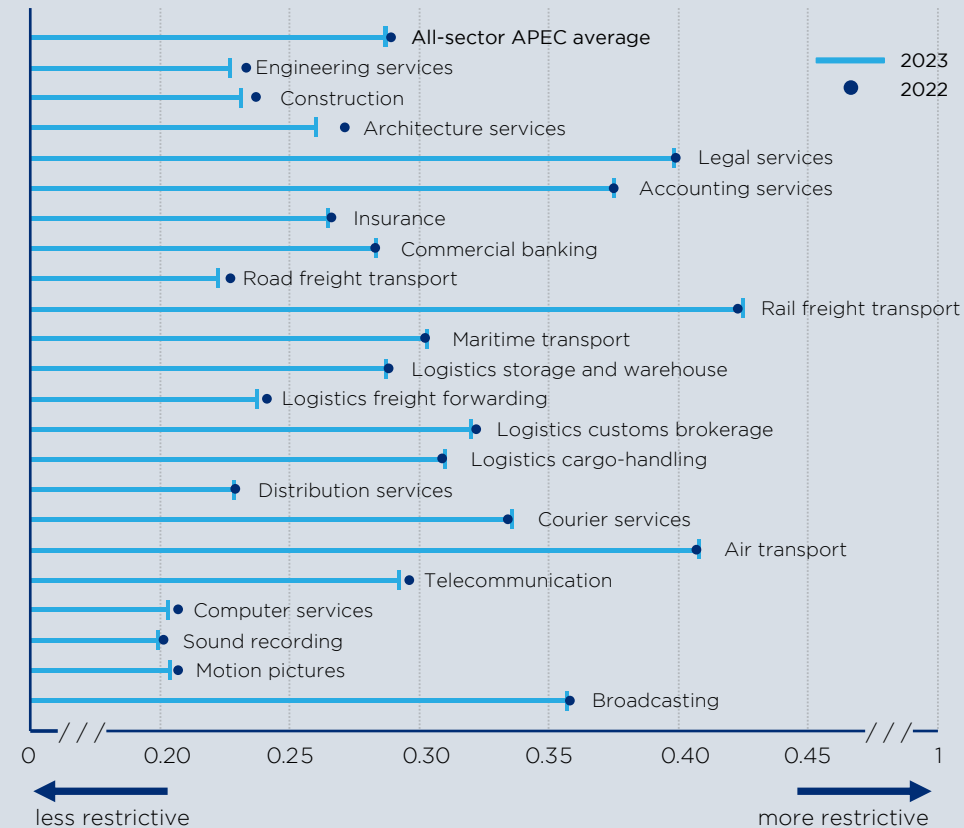
Commercial services exports in APEC grew by 6.0% from USD 2.6 trillion in 2022 to USD 2.7 trillion in 2023. The region's imports of commercial services grew even faster at 9.7% to reach a value of USD 2.7 trillion in 2023. However, commercial services in the rest of the world are growing faster than those of the APEC region as APEC's share has been declining in the global export and import of commercial services.



[2.5] APEC AVERAGE SERVICES TRADE RESTRICTIVENESS INDEX BY SECTOR, 2022–2023

score

Services trade in the APEC region became slightly less restrictive as the average APEC Index score decreased from 0.289 in 2022 to 0.287 in 2023. Among the 22 services sectors surveyed, 16 became less restrictive, while the other six became more restrictive. Rail freight transport; air transport; and legal services remain the top three most restrictive sectors.



APEC Trade and Investment TRADE IN SERVICES

Trade in commercial services continues to expand in the APEC region. Its total value grew from USD 1.9 trillion in 2005 to an all-time high of USD 5.4 trillion in 2023. While services trade is becoming more open, some sectors remain relatively restrictive.

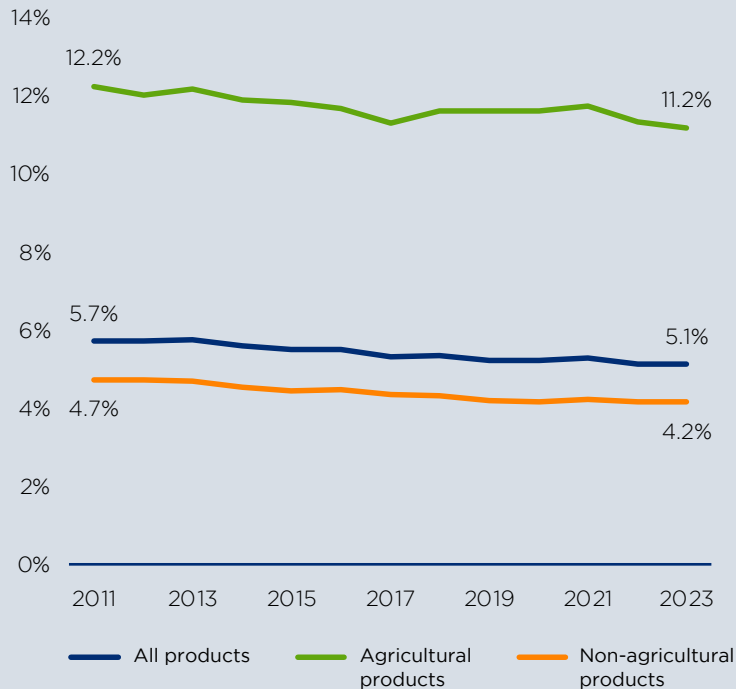
APEC Trade and Investment

TRADE-RELATED MEASURES

APEC economies continue to reduce import tariffs as the average most favoured nation (MFN) tariff rate of all products in the region declined from 5.2% in 2019 to 5.1% in 2023. At the same time, the number of non-tariff measures has risen steadily as members implement more trade restrictions and remedies, which together accounted for 71.4% of goods trade measures in force in 2023.

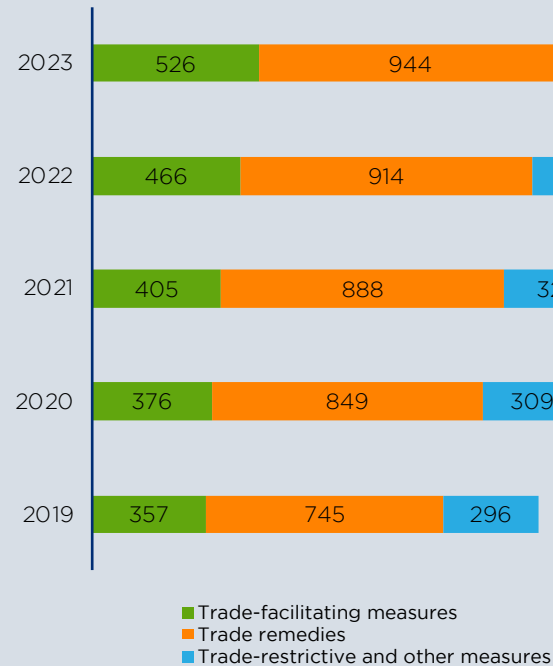
[2.6] AVERAGE MFN APPLIED TARIFF RATES IN APEC, 2011–2023

percent



[2.7] GOODS TRADE MEASURES IN FORCE IN APEC BY TYPE, 2019–2023

number of measures, cumulative



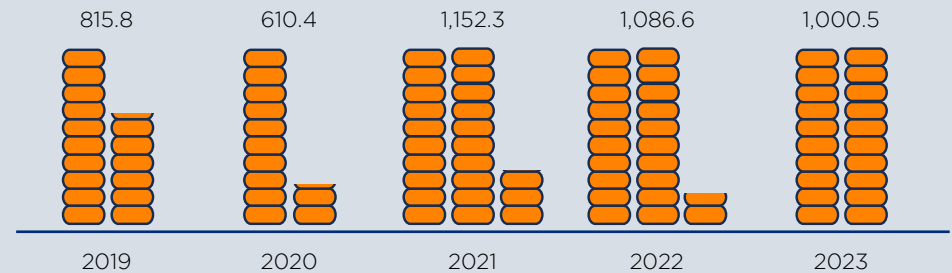
APEC Trade and Investment

FOREIGN DIRECT INVESTMENTS

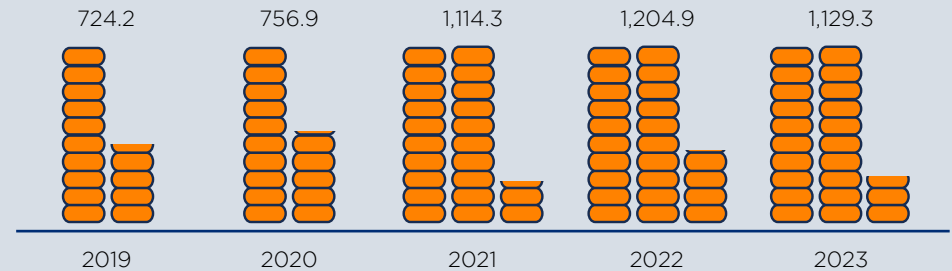
Foreign direct investment (FDI) flows to APEC continue to decrease after peaking in 2021. In 2023, FDI inflows fell by 7.9% to USD 1.0 trillion while outflows similarly shrunk by 6.3% to USD 1.1 trillion.

[2.8] FOREIGN DIRECT INVESTMENT FLOWS IN APEC, 2019–2023
each bullion represents USD 50 billion

Inflows



Outflows

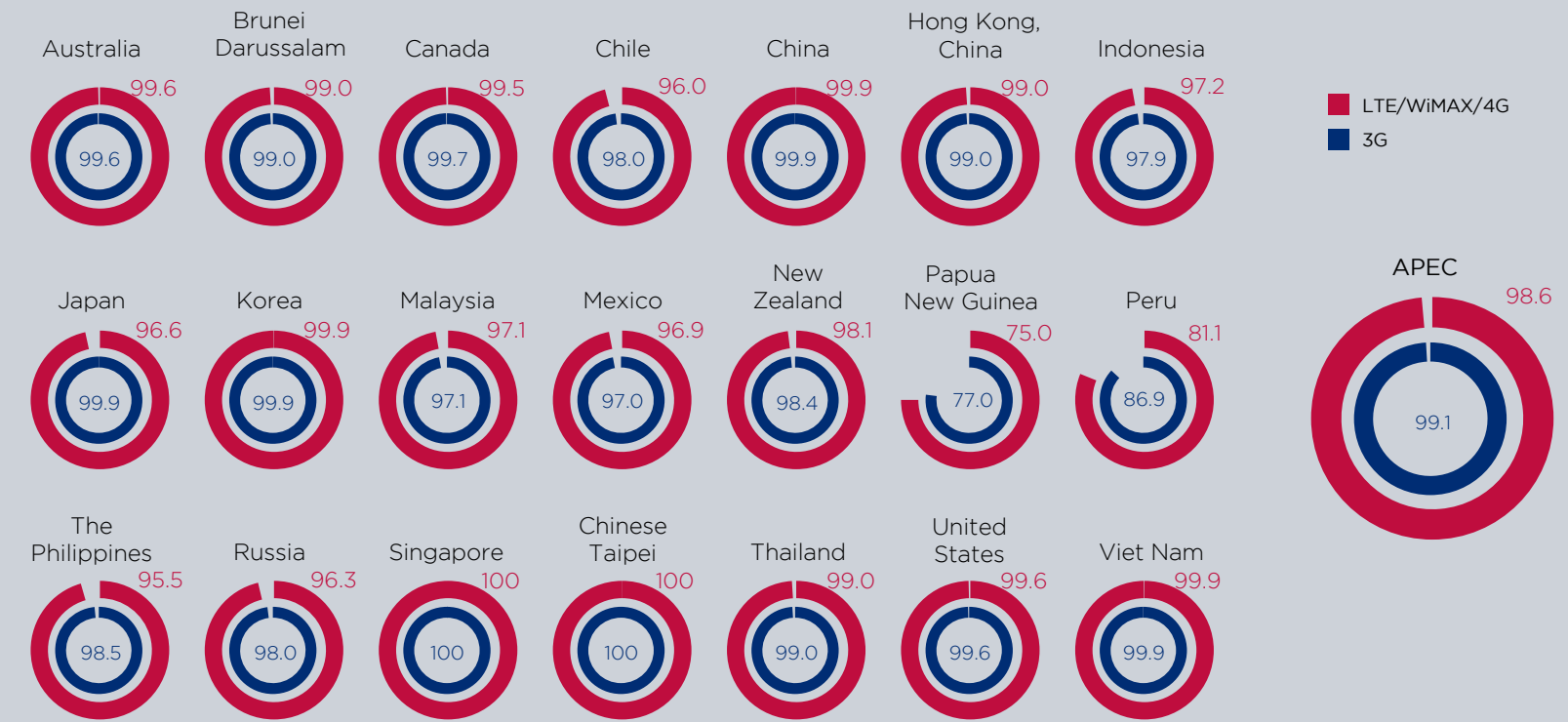


APEC Innovation and Digitalisation

A MORE DIGITALISED APEC REGION

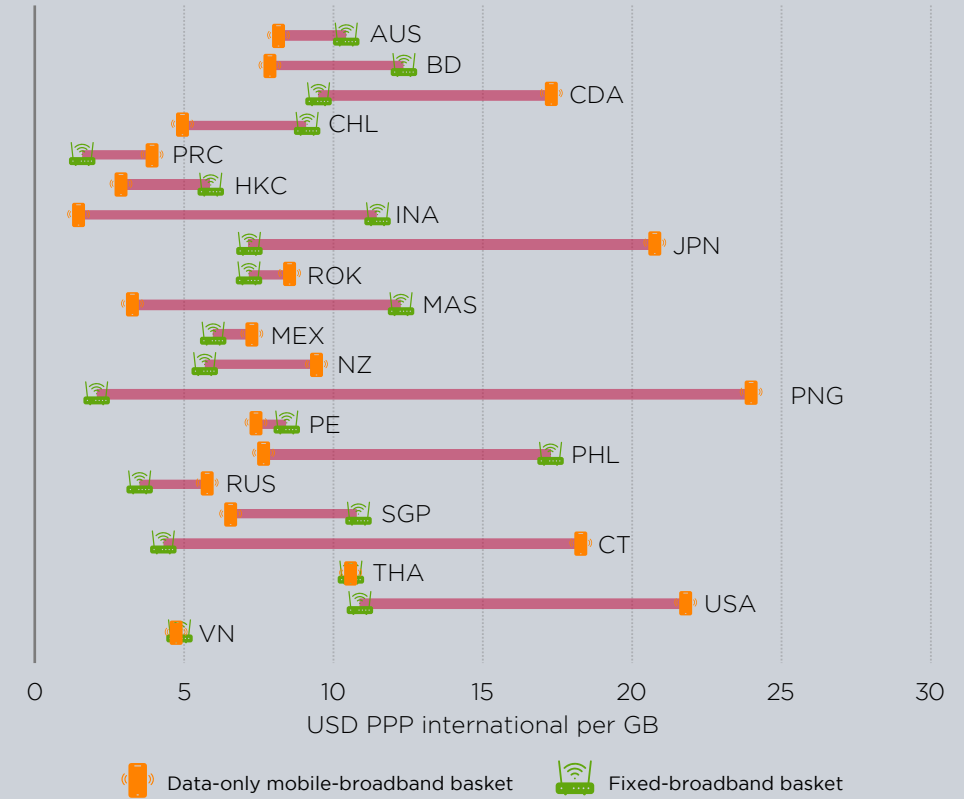
The transition toward 4G mobile network is almost complete in most APEC economies. By 2023, 98.6% of the region's population have potential access to 4G or LTE/WiMAX technology. However, disparities remain across the APEC region in terms of coverage.

[3.1] POPULATION COVERAGE OF MOBILE NETWORK TECHNOLOGY IN APEC, 2023
percent of population



[3.2] COST OF BROADBAND IN APEC, 2023
USD PPP international per gigabyte (GB)

Beyond coverage, the affordability of broadband services is also important for digital inclusion. Measured per GB, prices of mobile broadband services in the APEC region range from PPP\$ 1.4 to PPP\$ 24.1 whereas fixed broadband services are from PPP\$ 1.6 to PPP\$ 17.2. Moreover, in four APEC economies, prices of mobile broadband services are at least 50% more affordable than their fixed broadband counterparts.



[3.3] AVERAGE MOBILE-BROADBAND INTERNET TRAFFIC IN APEC, 2019-2023
gigabytes (GB) per subscription

As access to mobile broadband becomes more widespread and affordable, users in the APEC region also consume more mobile data as they use the internet. Between 2019 and 2023, average internet traffic in APEC grew by 82.1% to reach 156.0 GB per subscription in 2023.



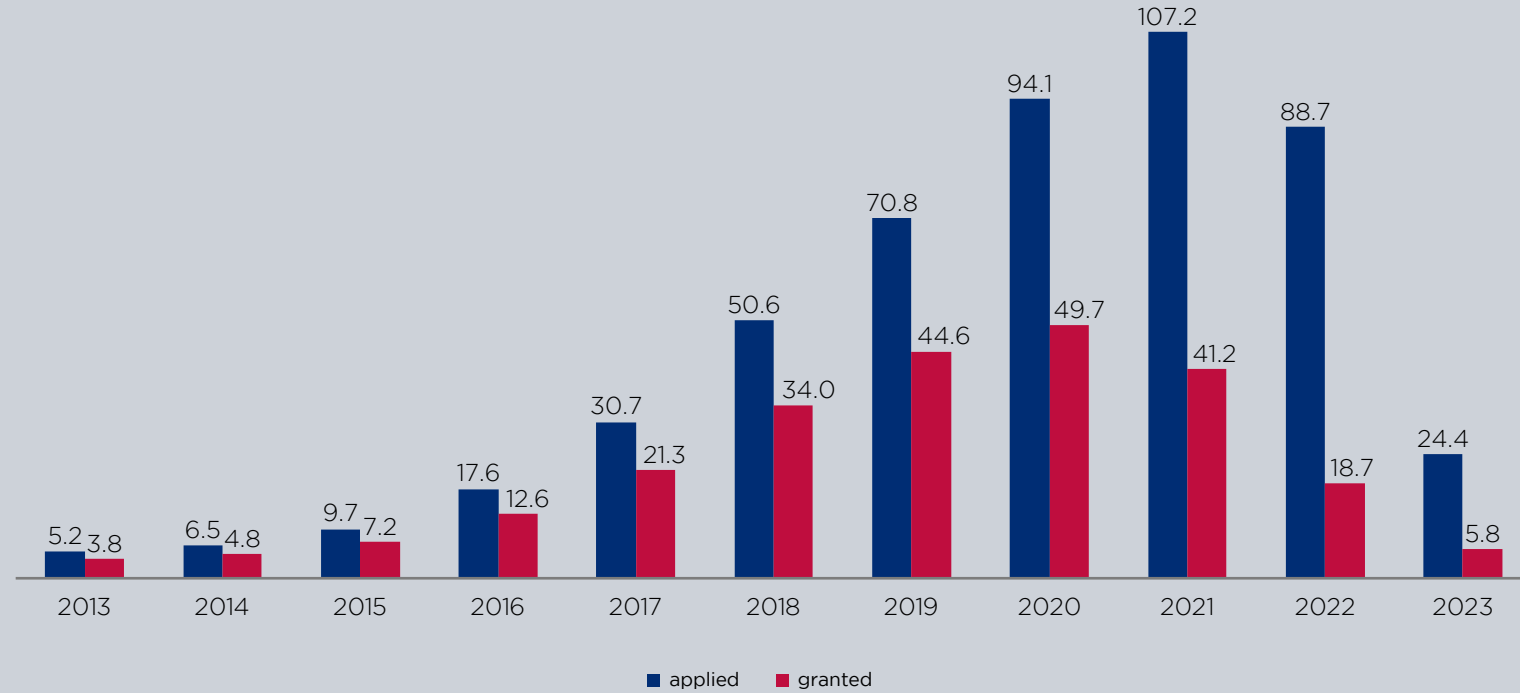
APEC Innovation and Digitalisation

THE RISE OF ARTIFICIAL INTELLIGENCE

APEC has emerged as the leader in artificial intelligence (AI) innovation. Between 2013 and 2023, a total of 505,326 unique AI patent applications were filed in the region, 243,653 of which were granted. This represents about 97.5% and 97.4% of global patent applications and grants, respectively. In 2023, however, the number of filings and approvals dropped significantly compared to the preceding five years.

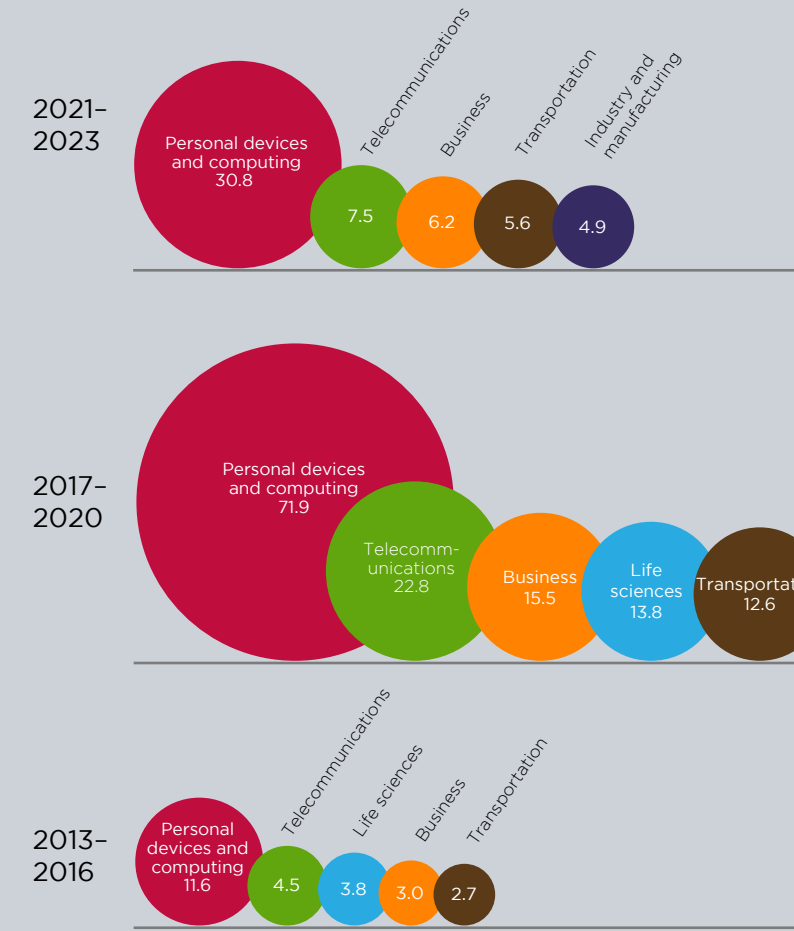
[3.4] ARTIFICIAL INTELLIGENCE (AI) PATENTS IN APEC, 2013–2023

thousand of unique patent filings



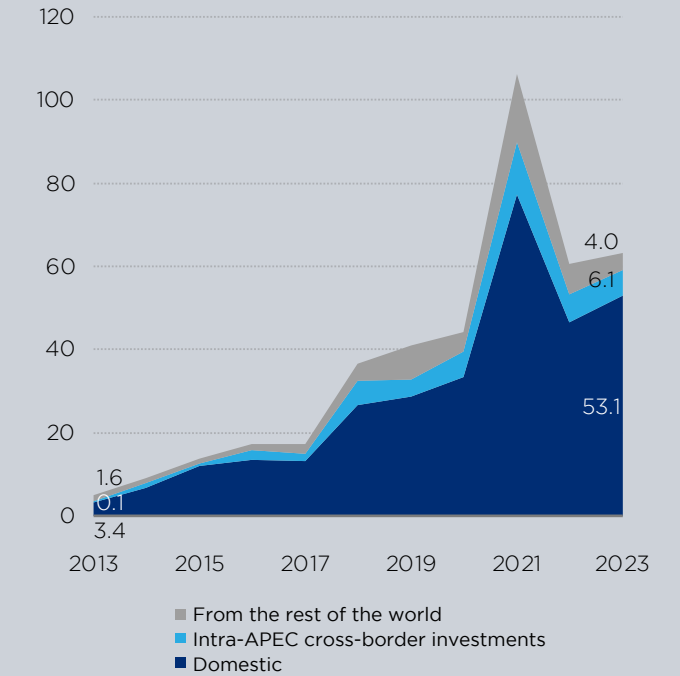
[3.5] TOP 5 AI INDUSTRIES WITH THE MOST GRANTED PATENTS IN APEC, 2013–2023

thousand of unique patents



[3.6] DISCLOSED EQUITY INVESTMENT INTO PRIVATE AI-RELATED COMPANIES IN APEC BY ORIGIN, 2013–2023

USD billion



A total of USD 414.6 billion disclosed equity investments into privately held AI-related companies have been made in APEC over the past 11 years. In 2023 alone, a total of USD 63.2 billion in such investments were recorded. Most of these investments had a domestic origin.

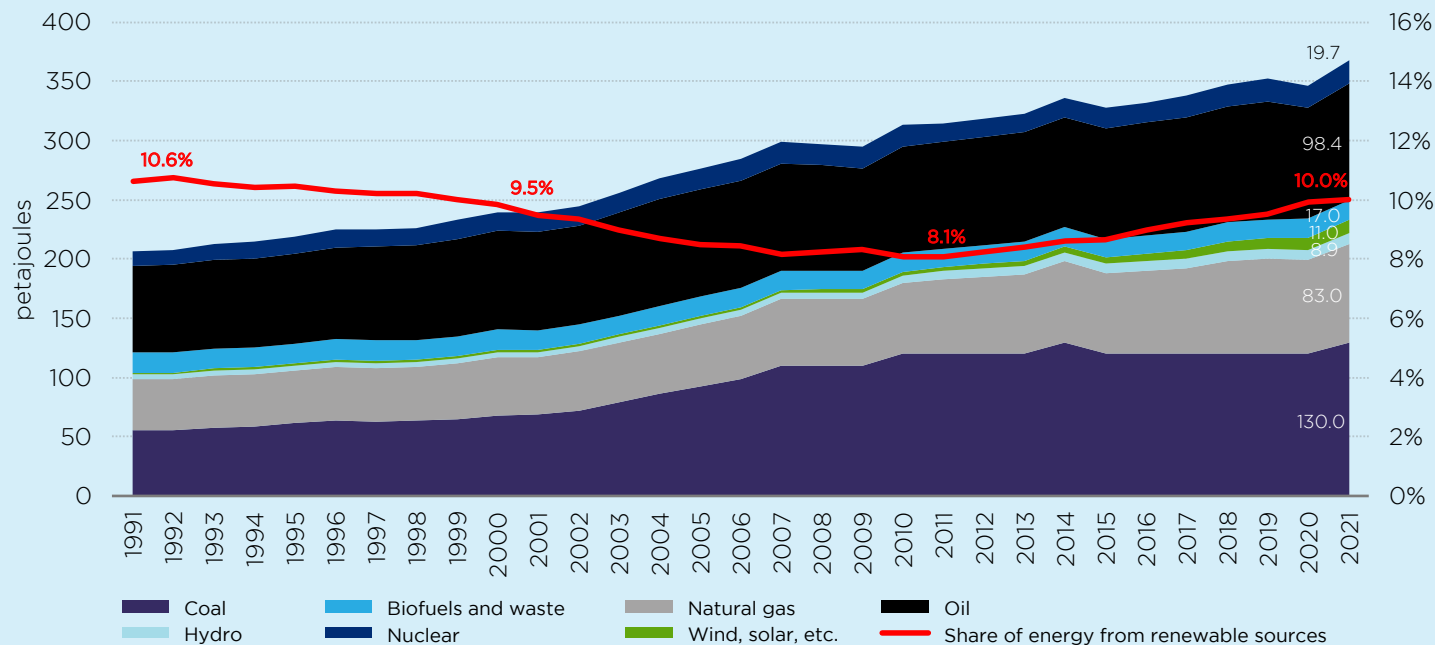
APEC Strong, Balanced, Secure, Sustainable and Inclusive Growth

DIVERSIFYING THE ENERGY MIX

Coal, oil, and natural gas are the dominant energy sources in the APEC region, accounting for 35.3%, 26.8% and 22.6% of energy supply in 2021, respectively. The dominance of fossil fuels in the region's energy mix has not changed significantly over much of the past three decades. However, in recent years, there has been an observable shift to renewable sources, with their share in the energy mix rising from 8.1% to 10.0% between 2011 and 2021.

[4.1] ENERGY SUPPLY IN APEC BY SOURCE AND SHARE OF RENEWABLE SOURCES IN ENERGY SUPPLY, 1991–2021

petajoules and percent

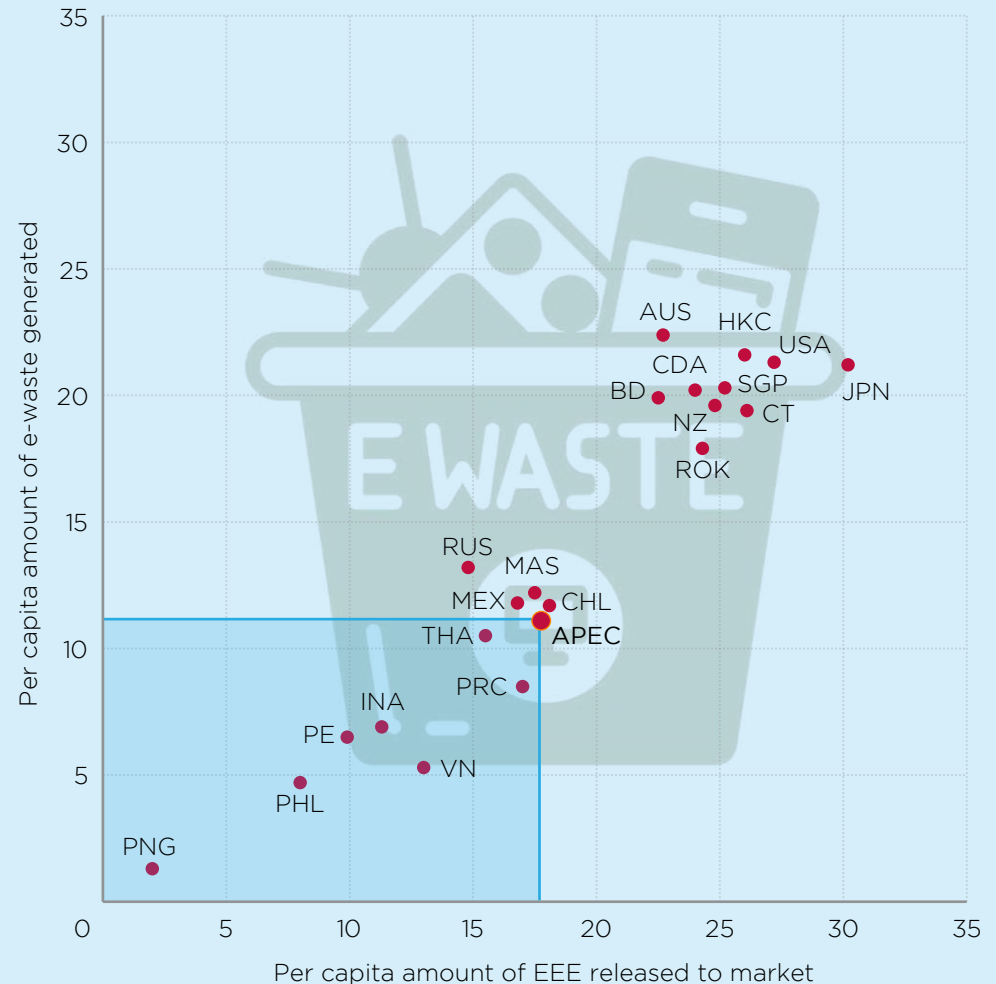


APEC Strong, Balanced, Secure, Sustainable and Inclusive Growth

E-WASTE IN APEC

As digital transformations take place, more electrical and electronic equipment (EEE) is released to the market. In 2022, a total of 52,845 kilotons of EEEs were released in APEC through production and trade, equivalent to about 17.8 kg per capita. This creates a growing problem of e-waste generation as obsolete EEEs are being discarded and replaced with newer ones. In 2022 alone, APEC economies generated a combined 33,010 kilotons of e-waste, equivalent to about 11.1 kg of e-waste produced by an individual.

[4.2] ELECTRICAL AND ELECTRONIC EQUIPMENT (EEE) RELEASED TO MARKET AND E-WASTE GENERATED IN APEC, 2022
kilogram (kg) per capita

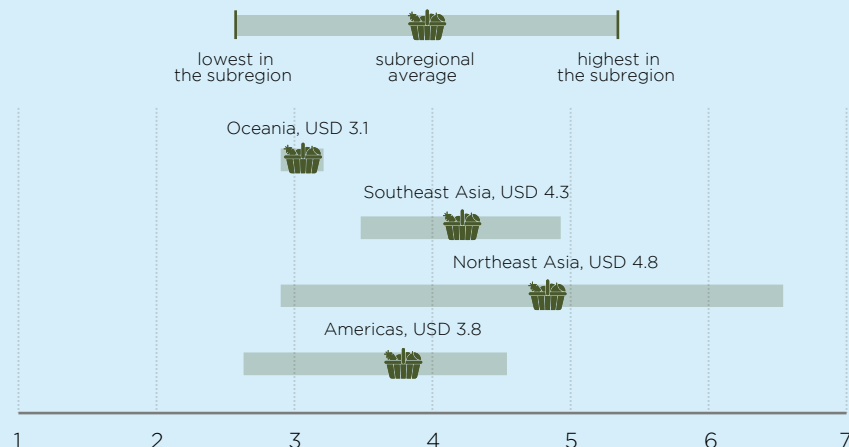


APEC Strong, Balanced, Secure, Sustainable and Inclusive Growth

FOOD SECURITY AND NUTRITION

[4.3] AVERAGE COST OF A HEALTHY DIET IN APEC BY SUBREGION, 2022

USD PPP international per person per day

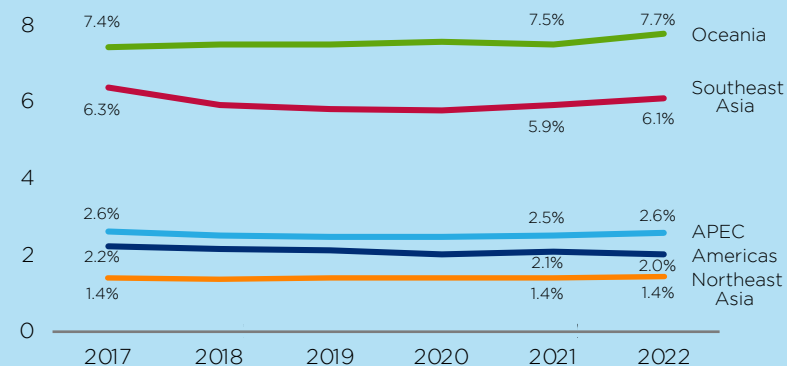


A healthy diet requires a mix of food items that satisfy a minimum dietary energy intake of 2,330 kilocalories per day. In 2022, such food consumption would require a person to spend between USD 2.6 and USD 6.5 a day in APEC economies (in PPP terms). Within APEC, the cost of a healthy diet on average was more expensive in Northeast Asia while it was relatively cheaper in Oceania.

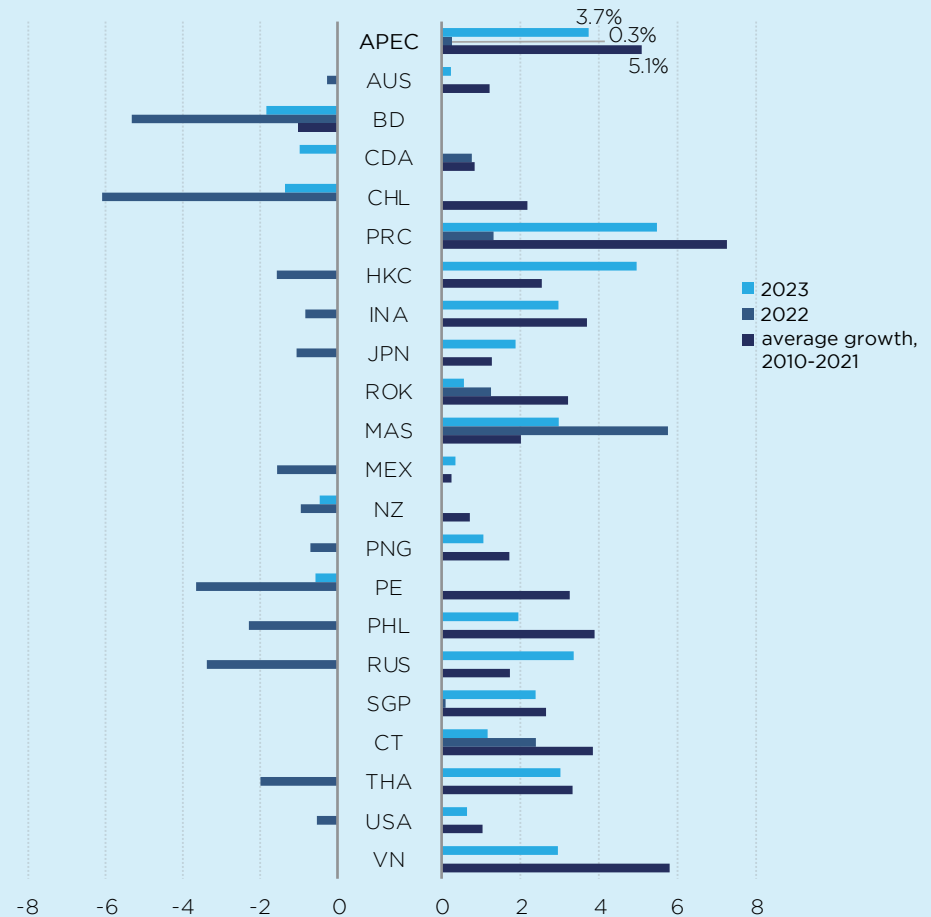
[4.4] PREVALENCE OF UNDERNOURISHMENT IN APEC BY SUBREGION, 2017–2022

percent of population

The prevalence of undernourishment in APEC did not change much between 2017 and 2022. About 2.6% of the APEC population was undernourished in 2022, slightly higher compared to 2.5% in 2021. Prevalence of undernourishment was higher in Oceania while it was relatively lower in Northeast Asia.



[4.5] GROWTH IN OUTPUT PER HOUR WORKED IN APEC,
2010–2023
annual percent



APEC Strong, Balanced, Secure, Sustainable and Inclusive Growth

LABOUR PRODUCTIVITY

In 2023, APEC’s labour productivity – measured as output per hour worked – recovered in comparison to 2022 and grew at 3.7%. China; Hong Kong, China; Malaysia; Russia; and Thailand reported the highest growth rates in the APEC region. Ten economies reported positive labour productivity growth in 2023 after experiencing negative growth in 2022.

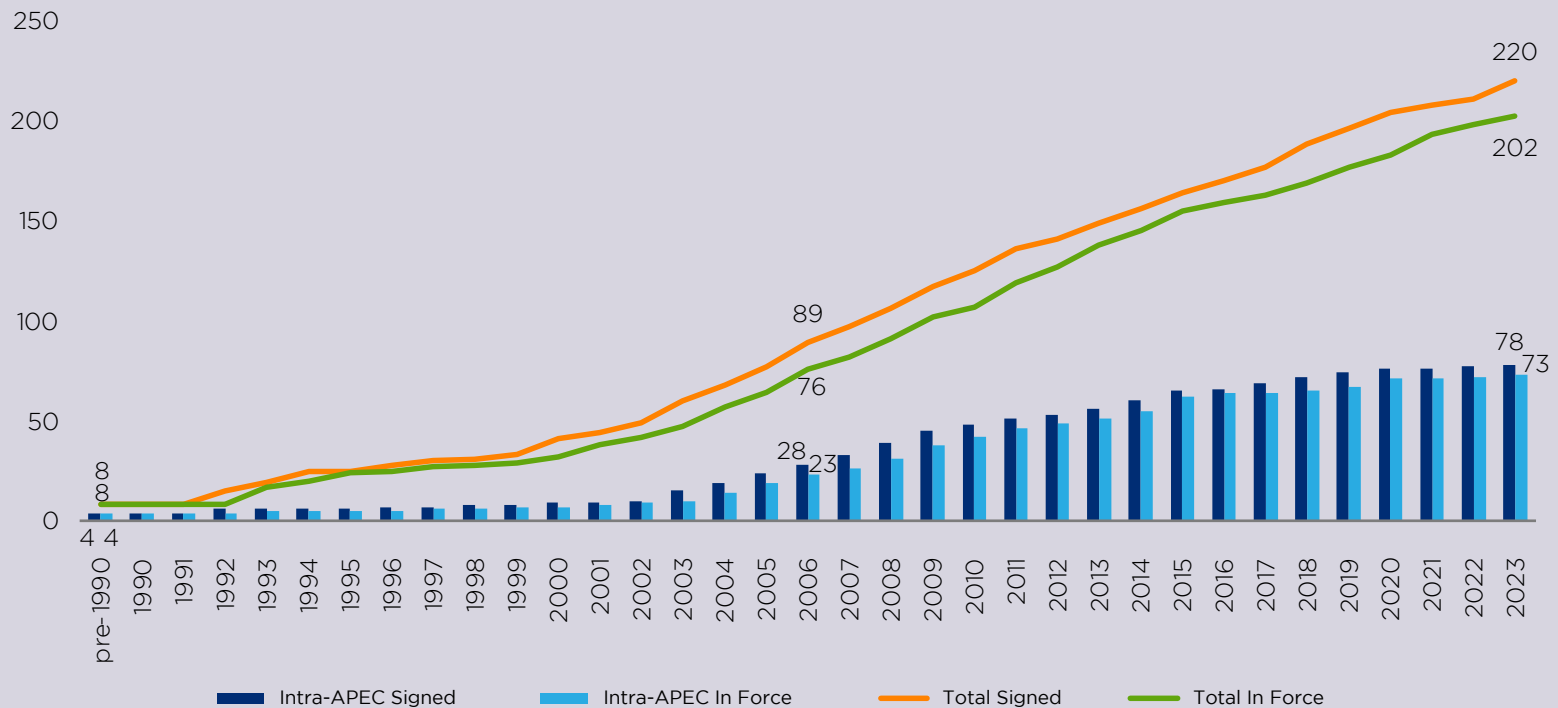
APEC 2024 Priorities

REGIONAL ECONOMIC INTEGRATION

APEC economies have cumulatively signed a total of 220 free trade agreements (FTAs) as of 2023. In total, 202 of these agreements have been put in force. Intra-APEC FTAs (i.e., those with at least two APEC economies) represent 36.1% of the FTAs in force.

[5.1] FREE TRADE AGREEMENTS IN APEC, PRE-1990–2023

number of agreements, cumulative



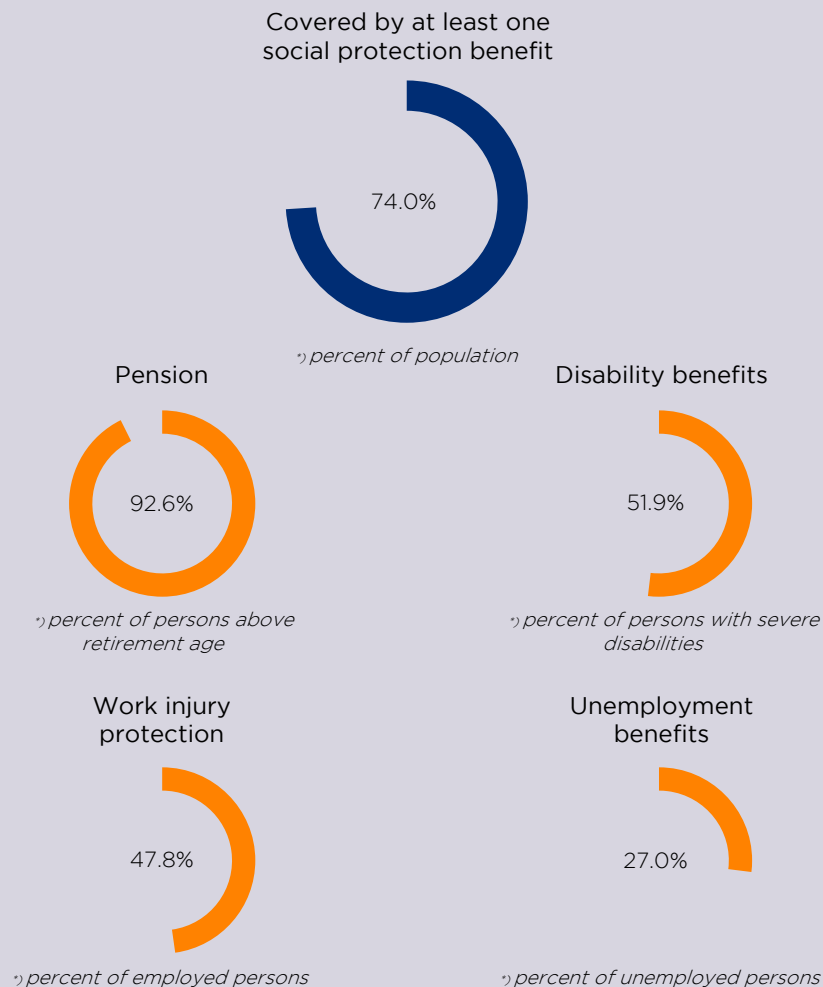
APEC 2024 Priorities

SOCIAL PROTECTION

Investing in social protection is important in making growth more inclusive as this helps people manage economic risks and smooth consumption. In 2023, an estimated 74.0% of APEC's population were covered by at least one social protection benefit. Pension benefits show much higher coverage compared to other protection schemes.

[5.2] COVERAGE OF SOCIAL PROTECTION SYSTEMS IN APEC, 2023

percent



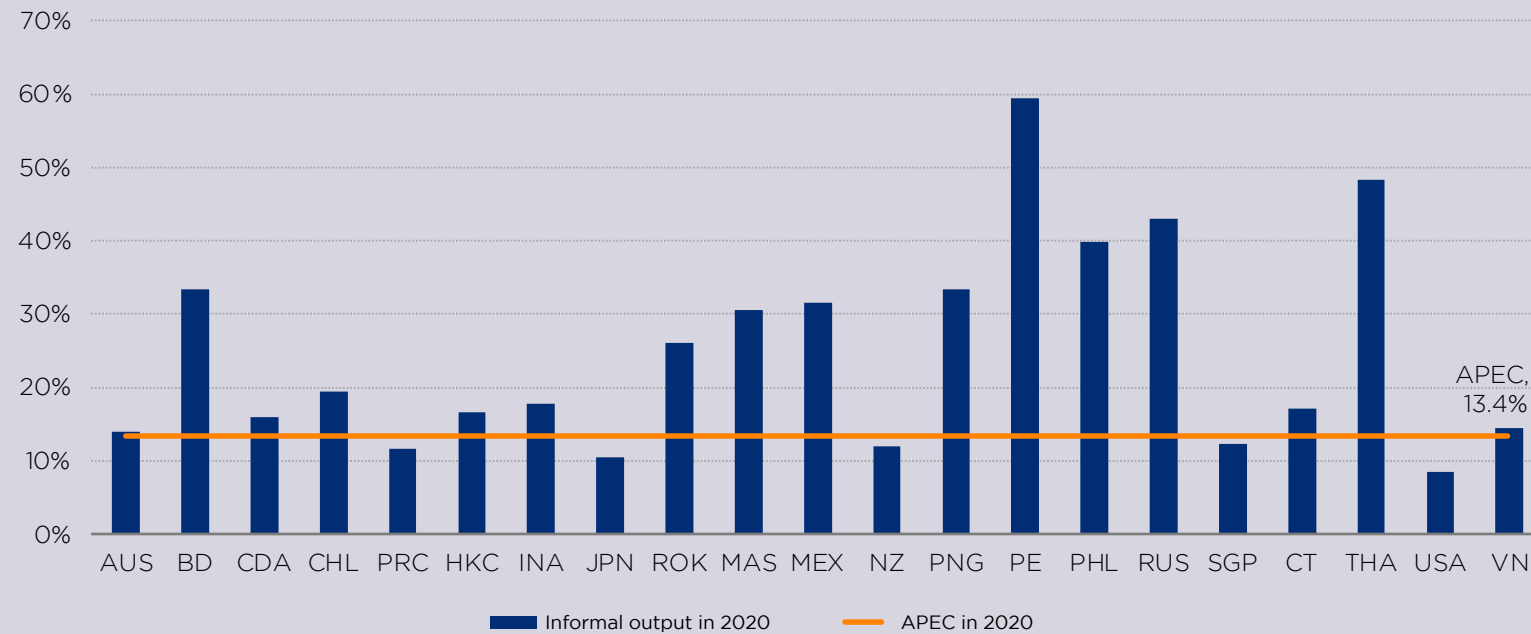
APEC 2024 Priorities

TRANSITIONING FROM THE INFORMAL TO THE FORMAL ECONOMY

The informal economy refers to economic activities that are not covered or insufficiently covered by formal arrangements. Most recent estimates for 2020 suggest that the size of informal sector in APEC was equivalent to about 13.4% of the region's GDP that year. Informality levels differ across APEC economies, ranging from 8.6% to 59.4% of their GDP in 2020.

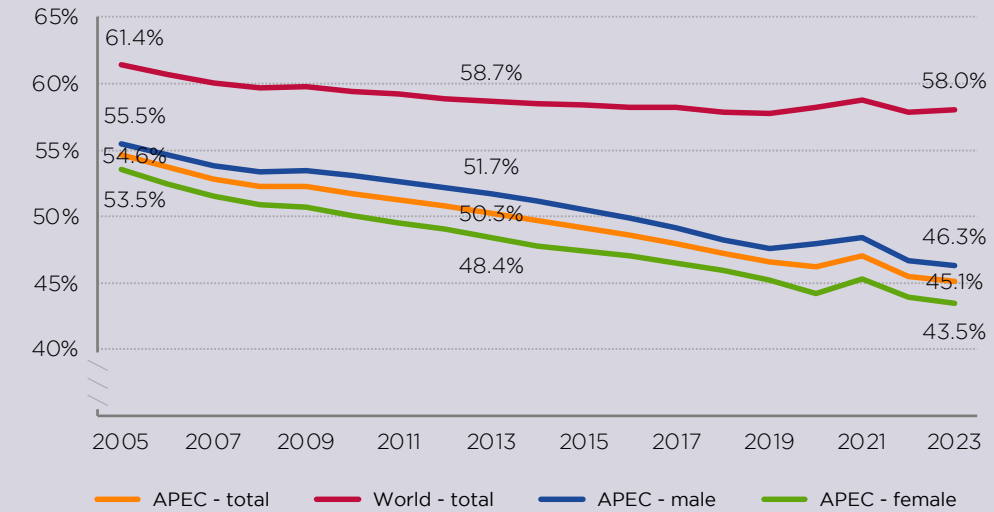
[5.3] ESTIMATES OF INFORMAL OUTPUT IN APEC, 2020

percent of GDP



[5.4] INFORMAL EMPLOYMENT RATE IN APEC, 2005–2023

percent of employed population

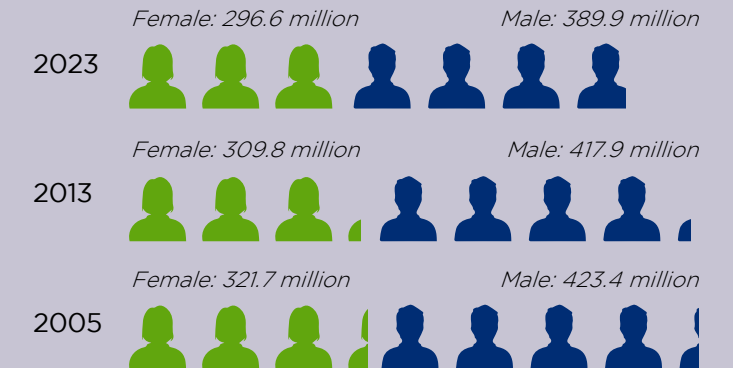


The informal sector remains one of the largest sources of livelihood in APEC with 45.1% of the employed population working under informal arrangements in 2023. Informality is more prevalent among men in the APEC region. Although the figures remain high, APEC has observed a steady decline in informal employment, with the rate dropping from 54.6% in 2005 to 45.1% in 2023.

[5.5] NUMBER OF INFORMAL WORKERS IN APEC, 2005–2023

each person represents 100 million people

A total of 686.5 million people were working under informal arrangements in the APEC region in 2023, a reduction of 7.9% between 2005 and 2023.



APEC 2024 Priorities

SUSTAINABLE FINANCE

The market for green bonds – a type of fixed instrument where the money raised is used solely for sustainable projects – is rapidly growing. Issuance of green bonds in APEC has increased from a mere USD 0.03 billion in 2012 to USD 206.1 billion in 2022. The public sector in the region has also recently started to tap into this market. The rapid growth in APEC’s green bonds market is reflected in its rising share in the global market, increasing from 1.3% in 2012 to two-fifths of global green bonds issuances in 2022.

[5.6] GREEN BOND ISSUANCES IN THE APEC REGION, 2012–2022

value in USD billion, share in percent



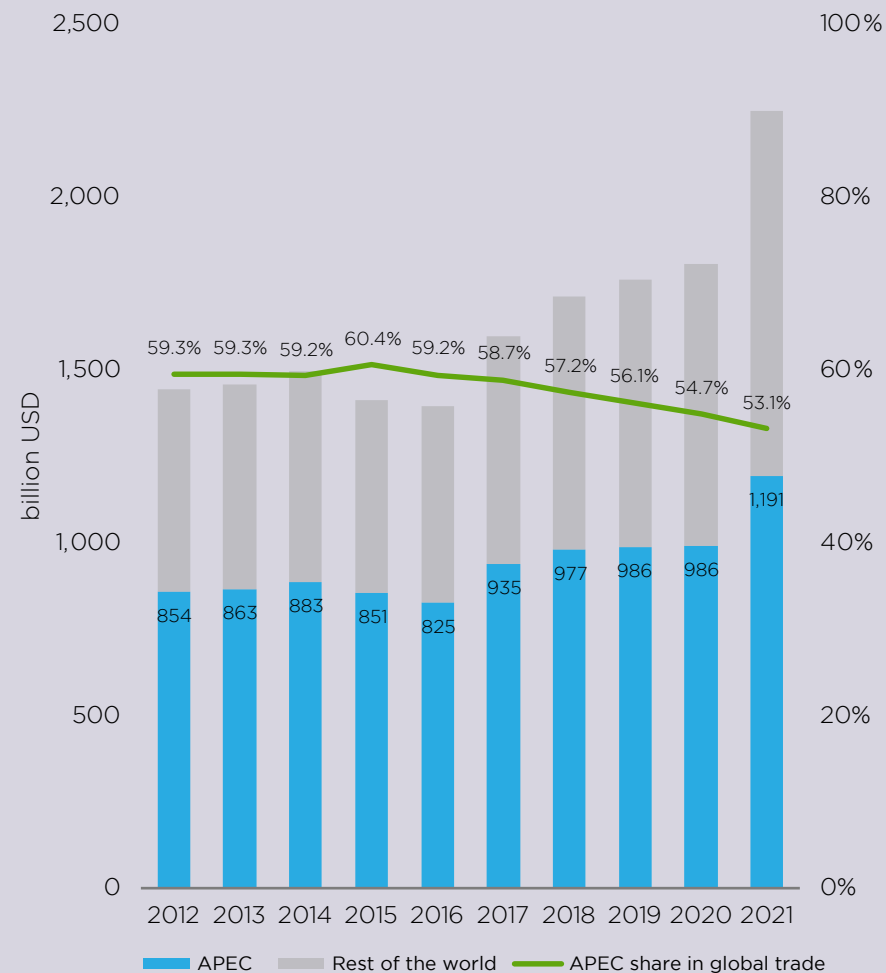
APEC 2024 Priorities

LOW-CARBON TECHNOLOGY TRADE

As APEC economies gear up efforts to decarbonise, trade in low-carbon technology products has picked up. In 2021, the combined exports and imports of such products in APEC reached the USD 1.0 trillion mark for the first time. However, trade in low-carbon technology appears to have slowed relative to the rest of the world in recent years, as APEC's share has steadily declined since 2016.

[5.7] TRADE IN LOW-CARBON TECHNOLOGY PRODUCTS IN APEC, 2012–2021

value in USD billion, share in percent



Data Notes

Industrialised and Developing APEC Economies

Industrialised APEC Economies: Australia; Canada; Japan; Korea; New Zealand; Chinese Taipei; and the United States.

Developing APEC Economies: Brunei Darussalam; Chile; China; Hong Kong, China; Indonesia; Malaysia; Mexico; Papua New Guinea; Peru; the Philippines; Russia; Singapore; Thailand; and Viet Nam.

APEC Economies by Geographic Subregion

Americas: Canada; Chile; Mexico; Peru; and the United States.

Northeast Asia: China; Hong Kong, China; Japan; Korea; Russia; and Chinese Taipei.

Southeast Asia: Brunei Darussalam; Indonesia; Malaysia; the Philippines; Singapore; Thailand; and Viet Nam.

Oceania: Australia; New Zealand; and Papua New Guinea.

Abbreviations for APEC Member Economies

Australia (AUS); Brunei Darussalam (BD); Canada (CDA); Chile (CHL); China (PRC); Hong Kong, China (HKC); Indonesia (INA); Japan (JPN); Korea (ROK); Malaysia (MAS); Mexico (MEX); New Zealand (NZ); Papua New Guinea (PNG); Peru (PE); the Philippines (PHL); Russia (RUS); Singapore (SGP); Chinese Taipei (CT); Thailand (THA); the United States (USA); and Viet Nam (VN).

APEC in the Global Economy 2023

Source: World Bank, World Development Indicators; Directorate-General of Budget, Accounting and Statistics (Chinese Taipei); and World Trade Organization (WTO), Time Series on International Trade.

APEC Macroeconomic Indicators

1.1 Real GDP Growth (annual percent), 2022–2023

Note: The APEC average is a real GDP-weighted average.

Source: International Monetary Fund (IMF), World Economic Outlook April 2024; World Bank, World Development Indicators; and Directorate-General of Budget, Accounting and Statistics (Chinese Taipei).

1.2 Contribution to Real GDP Growth (percentage points, annual basis), 1989–2023

Note: Group averages are real GDP-weighted averages.

Source: World Bank, World Development Indicators; and Directorate-General of Budget, Accounting and Statistics (Chinese Taipei).

1.3 Real GDP per Capita (constant 2015 USD), 2022–2023

Note: The APEC average is a population-weighted average.

Source: World Bank, World Development Indicators; and Directorate-General of Budget, Accounting and Statistics (Chinese Taipei).

1.4 Real GDP per Capita Growth (annual percent), 1989–2023

Note: APEC and group averages are population-weighted averages.

Source: World Bank, World Development Indicators; and Directorate-General of Budget, Accounting and Statistics (Chinese Taipei).

1.5 Unemployment Rate (percent), 2022–2023

Note: The unemployment rate is the proportion of unemployed persons as a percentage of total labour force. The APEC average is a labour force-weighted average.

Source: World Bank, World Development Indicators; International Labour Organization (ILO), ILOSTAT database; and Directorate-General of Budget, Accounting and Statistics (Chinese Taipei).

1.6 Job Creation (million jobs), 2022–2023

Note: Job creation is the difference between the total number of employed people in a given year and the previous year.

Source: ILO, ILOSTAT database; and Directorate-General of Budget, Accounting and Statistics (Chinese Taipei).

1.7 Consumer Price Inflation (annual percent), 2022–2023

Note: The APEC average is a simple average.

Source: IMF, World Economic Outlook April 2024.

APEC Trade and Investment

2.1 Merchandise Trade (value in USD trillion, share in percent), 1989–2023

Note: Shares of APEC in global merchandise exports and imports are in percentages of the world's exports and imports, respectively.

Source: World Trade Organization (WTO), Time Series on International Trade.

2.2 Most Traded Products between APEC and the World (USD trillion), 2019–2023

Note: Figures shown are the average annual values of exports and imports of the particular good between 2019 and 2023, inclusive of both years.

Source: World Bank, World Integrated Trade Solution; and UN, UN Comtrade database.

2.3 APEC Main Merchandise Trade Partners (USD trillion), 2019–2021

Note: Figures shown are the average annual values of exports and imports of all APEC economies with particular partner economies between 2019 and 2021, inclusive of both years.

Source: World Bank, World Integrated Trade Solution; and UN, UN Comtrade database.

2.4 Commercial Services Trade (value in USD trillion, share in percent), 2005–2023

Note: Shares of APEC in global services exports and imports are in percentages of the world's exports and imports, respectively.

Source: WTO, Time Series on International Trade.

2.5 APEC Average Services Trade Restrictiveness Index by Sector (score), 2022–2023

Note: Sector indices are averages across economies. The all-sector APEC average is an average of the economy averages. Data for Brunei Darussalam; China; and Hong Kong, China are unavailable. Data for Papua New Guinea; Singapore; and Chinese Taipei are only available for 9, 21, and 4 services sectors, respectively.

Source: Organisation for Economic Co-operation and Development (OECD); and APEC, 2024 Update to Monitoring Pandemic Recovery under the APEC Services Competitiveness Roadmap (ASCR).

2.6 Average MFN Applied Tariff Rates in APEC (percent), 2011–2023

Note: Figures shown are simple averages.

Source: WTO, World Tariff Profiles.

2.7 Goods Trade Measures in Force in APEC by Type (number of measures, cumulative), 2019–2023

Source: WTO, Trade Monitoring Database.

2.8 Foreign Direct Investment Flows in APEC (USD billion), 2019–2023

Source: UN Trade and Development (UNCTAD), World Investment Report 2024.

APEC Innovation and Digitalisation

3.1 Population Coverage of Mobile Network Technology in APEC (percent of population), 2023

Note: According to the International Telecommunication Union (ITU), this indicator measures the percentage of inhabitants that are within range of at least the specified technology of the mobile cellular signal (3G or 4G/LTE/WiMAX) regardless of whether they actually subscribe to the service or use it. The APEC average is a population-weighted average.

Source: ITU; and Global System for Mobile Communications Association's Connected Society Programme, The State of Mobile Internet Connectivity 2023.

3.2 Cost of Broadband in APEC (USD PPP international per gigabyte (GB)), 2023

Note: According to the ITU, this indicator refers to the cost of the entry-level basket of the respective broadband type. A fixed-broadband basket is composed of the cheapest plan providing at least 5 GB of monthly high-speed data (256Kbit/s or higher) from the operator with the largest market share in each economy. A data-only mobile broadband basket is composed of the cheapest mobile broadband plan providing at least 2 GB of monthly data using at least 3G technology. Data for Chinese Taipei are only available at nominal USD and are converted using implicit exchange rate of USD to PPP international USD.

Source: ITU; and Directorate-General of Budget, Accounting and Statistics (Chinese Taipei).

3.3 Average Mobile-Broadband Internet Traffic in APEC (gigabytes (GB) per subscription), 2019-2023

Note: According to the ITU, this indicator refers to broadband traffic volumes originating within the economy from 3G networks or other more advanced mobile networks, including 3G upgrades, evolutions or equivalent standards in terms of data transmission speed. Figures presented are APEC averages and are weighted by the number of active mobile-broadband subscriptions. Data for Russia are unavailable for 2023

Source: ITU.

3.4 Artificial Intelligence (AI) Patents in APEC (thousand of unique patent filings), 2013-2023

Note: According to the Emerging Technology Observatory, a patent family is defined as a group of patent documents related to the same invention. Each patent family is counted as a single 'patent'; hence, the term 'unique patent' is used here. Inventors often file patents for the same invention in multiple jurisdictions. When an inventor seeks a patent for an invention in more than one jurisdiction, all documents from each jurisdiction are counted as part of the same patent. Such a patent is attributed to the first jurisdiction where the inventor filed (i.e., the priority economy). Patent applications data are unavailable for Papua New Guinea; and Viet Nam. Data on patent grants are unavailable for Brunei Darussalam; Thailand; and Viet Nam.

Source: Emerging Technology Observatory, CAT Artificial Intelligence dashboard.

3.5 Top 5 AI Industries with the Most Granted Patents in APEC (thousand of unique patents), 2013-2023

Note: See data notes on indicator 3.4 for explanations on the unit of measurement used. Data are unavailable for Brunei Darussalam; Thailand; and Viet Nam.

Source: Emerging Technology Observatory, CAT Artificial Intelligence dashboard.

3.6 Disclosed Equity Investment into Private AI-Related Companies in APEC by Origin (USD billion), 2013-2023

Note: According to the Emerging Technology Observatory, equity investment covers venture capital transactions, private equity transactions and mergers and acquisitions, but excludes non-equity investment such as debt finance, grants and crowdfunding. This indicator only covers AI-related privately held companies and excludes any company traded on a public stock exchange. An AI-related company is defined as those that satisfy at least one of two criterion: (1) the company description in their source database matches a regular expression-based query for AI keywords; and (2) their source database assigns the company an industry tag in the 'artificial intelligence' industry group. Data for Brunei Darussalam; Hong Kong, China; and Papua New Guinea are unavailable.

Source: Emerging Technology Observatory, CAT Artificial Intelligence dashboard.

APEC Strong, Balanced, Secure, Sustainable and Inclusive Growth

4.1 Energy Supply in APEC by Source and Share of Renewable Sources in Energy Supply (petajoules and percent), 1991-2021

Note: The share of renewable sources in energy supply is computed by dividing the total energy supply coming from renewable energy sources to total energy supply (TES). Renewable energy supply includes energy supply coming from: wind, solar, etc.; biofuels and waste; and hydro. According to the International Energy Agency (IEA), TES data publicly available on its website excludes electricity and heat trade, while coal also includes peat and oil shale where relevant. Data for Papua New Guinea are unavailable.

Source: IEA.

4.2 Electrical and Electronic Equipment (EEE) Released to Market and E-Waste Generated in APEC (kilogram (kg) per capita), 2022

Note: According to the Global E-Waste Monitor 2024 report, electrical and electronic equipment (EEE) refers to all products with circuitry or electrical components and a power or battery supply. Batteries and other electricity storage devices, however, are not EEE. In addition, an EEE which is designed for and installed in an automotive apparatus is not categorised as EEE due to its lack of functionality as a standalone device. Items for military use and space debris containing EEE are also not considered EEE. The indicator 'EEE released to the market' represents

the size of the domestic EEE goods market, or consumption by households and other economic units, including from production and trade activities. The indicator 'e-waste generated' is defined as the amount of discarded electrical and electronic products (e-waste) resulting from consumption within an economy during a given reporting year, prior to any collection, reuse, treatment or export. The APEC aggregate is calculated by weighting the amount of EEE and e-waste by population.

Source: UN Institute for Training and Research and ITU, Global E-Waste Monitor 2024; and World Bank, World Development Indicators.

4.3 Average Cost of a Healthy Diet in APEC by Subregion (USD PPP international per person per day), 2022

Note: According to the Food and Agriculture Organization (FAO), the cost of a healthy diet is the cost of purchasing the least expensive locally available foods to meet requirements for energy and food-based dietary guidelines, for a representative person within energy balance of 2,330 kcal/day. Subregion averages are simple averages. Data for Papua New Guinea are unavailable. Data for Chinese Taipei are interpolated using the annual average growth rate of the costs between 2017 and 2021.

Source: FAO, FAOSTAT database.

4.4 Prevalence of Undernourishment in APEC by Subregion (percent of population), 2017–2022

Note: APEC and subregion averages are population-weighted averages. Data for Brunei Darussalam; and Singapore are unavailable.

Source: FAO, FAOSTAT database; and World Bank, World Development Indicators.

4.5 Growth in Output per Hour Worked in APEC (annual percent), 2010–2023

Note: APEC averages are total hours worked-weighted averages.

Source: ILO, ILOSTAT database.

APEC 2024 Priorities

5.1 Free Trade Agreements in APEC (number of agreements, cumulative), pre-1990–2023

Source: Economy sources; WTO; and Asian Development Bank.

5.2 Coverage of Social Protection Systems in APEC (percent), 2023

Note: APEC aggregates shown are modelled estimates as presented by the ILO on ILOSTAT.

Source: ILO, ILOSTAT database.

5.3 Estimates of Informal Output in APEC (percent of GDP), 2020

Note: The APEC average is a GDP-weighted average.

Source: World Bank, Informal Economy Dashboard; and APEC, Addressing Informality: Transitioning to the Formal Economy (Policy Brief No. 57).

5.4 Informal Employment Rate in APEC (percent of employed population), 2005–2023

Note: APEC aggregates shown are modelled estimates as presented by the ILO on ILOSTAT.

Source: ILO, ILOSTAT database.

5.5 Number of Informal Workers in APEC (million), 2005–2023

Note: APEC aggregates shown are modelled estimates as presented by the ILO on ILOSTAT.

Source: ILO, ILOSTAT database.

5.6 Green Bond Issuances in the APEC Region (value in USD billion, share in percent), 2012–2022

Note: 'Other types of green bonds' is the difference between total green bond issuances and total sovereign green bond issuances. Data for Brunei Darussalam; and Papua New Guinea are unavailable.

Source: IMF, Climate Change Dashboard.

5.7 Trade in Low-carbon Technology Products in APEC (value in USD billion, share in percent), 2012–2021

Note: The 'rest of the world' figure is the difference between global and APEC total trade in low-carbon technology products. The APEC share in global trade is computed by dividing the APEC total trade in low-carbon technology products with the corresponding global figure.

Source: IMF, Climate Change Dashboard.

StatsAPEC is a statistics portal with data dating back to APEC's inception in 1989. 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. StatsAPEC makes it easy to examine the region as a whole as APEC aggregates are available for most indicators.



Visit <https://statistics.apec.org/>
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