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ASIAN ECONOMIC INTEGRATION REPORT 2023

TRADE, INVESTMENT, AND CLIMATE CHANGE
IN ASIA AND THE PACIFIC

HIGHLIGHTS



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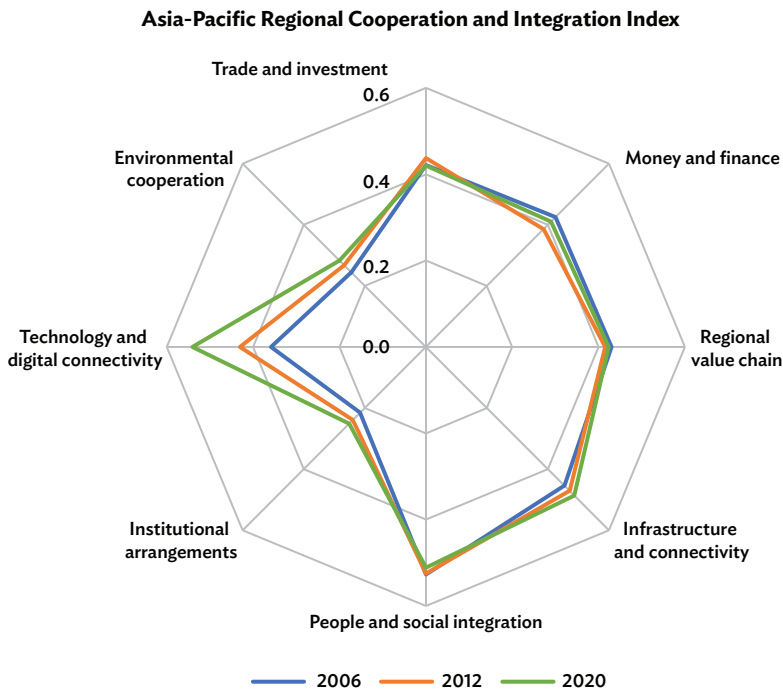
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HIGHLIGHTS



Regional integration in Asia and the Pacific is progressing steadily. Regional integration, as measured by the Asia-Pacific Regional Cooperation and Integration Index, has progressed steadily over the past 15 years and remained stable in 2020 despite the pandemic. The Asia-Pacific Regional Cooperation and Integration Index subindexes such as trade and investment, infrastructure, and digital connectivity have been notably buoyant. Southeast Asia fares better than other subregions in the dimensions of trade and investment, money and finance, infrastructure and connectivity, institutional arrangements, and people and social dynamics. Looking ahead, it is critical to deepen regional cooperation to address pressing climate challenges and advance trade and supply chain resilience, the digital economy, and sustainable tourism recovery. With Asia’s growing role in the fight against climate change, regional cooperation is vital for decarbonizing its production, and trade and investment.

Asia’s integration progresses steadily



Notes: Higher values denote greater regional integration.
Source: ADB, Asia-Pacific Regional Cooperation and Integration Index Database.

Trade and Global Value Chains

Asia's trade growth remains strong, but headwinds are increasing. After the strong rebound in 2021 pushed Asia's merchandise trade volume 11.3% higher than its pre-pandemic level, growth in trade has moderated in 2022. More recent high frequency data such as container freights and packing indexes as well as new export orders of global manufacturing purchasing managers point to a slowdown in the region's trade growth momentum. Tightening monetary policies to contain inflationary pressures in many advanced economies are affecting external demand and do not bode well for the region's exports. Overall, Asia's trade is more correlated with industrial production cycles inside and outside the region than with consumer confidence, reflecting the region's trade structure, which relies more heavily on intermediate goods exports (57% of Asia's total exports in 2021) and imports (70% of Asia's total imports in 2021) than on consumer goods.

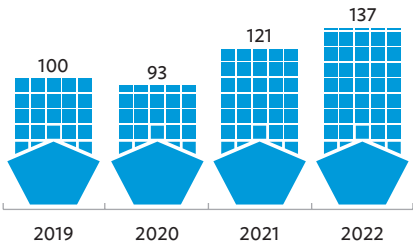
Regional trade integration continues to deepen, although regional value chain linkages remain focused on less sophisticated sectors. The region's intraregional trade share declined slightly to 58.2% in 2021 from 58.5% in 2020, which is higher than the average of 57.4% between 2015 and 2019. Whereas the European Union (EU) and North American intraregional trade shares have stagnated over the past 3 decades, Asia's has grown steadily, in part due to the weight of the People's Republic of China (PRC). While both Asia's global value chain and regional value chain (RVC) participation rates rose in 2021, its RVC relies more on simple networks—production involving border-crossing once—than complex ones. Likewise, its RVC displays stronger linkages in primary and low technology sectors than in high technology and business services, suggesting the possibility of cultivating closer value chain linkages in high value added, high technology sectors. Recent trade cooperation and liberalization momentum offered by the Regional Comprehensive Economic Partnership and other bilateral and regional trade agreements are expected to help deepen RVC linkages, laying the groundwork for regional production and trade to become more resilient to global shocks. The region's growing interest in establishing digital trade rules on the free flow of data across borders can also promote innovation, competitiveness, efficient value chains, and economic growth.

Regional cooperation is crucial to prevent harms from export bans and trade restrictions on food and energy prices. Commodity price surges, prompted by the Russian invasion of Ukraine, have moderated lately. Export bans on food commodities such as wheat, corn, and palm oil have exacerbated food price inflation, and dozens of such restrictions are still in place. Weakening local currency values through 2022 also added to the pains of growing import bills for the major food and energy importers of

the region. Food and energy price increases have varying impacts on Asian economies, depending on their status as a net importer or exporter, as well as the scale of their import bills and export revenues relative to economic size. Unlike crude oil and natural gas, major food importers are among the poorest economies in the region. To mitigate food security risks posed by supply shocks and logistical hurdles, policy makers should strengthen international cooperation to eliminate trade restrictions and streamline commodity supply chains, promote trade facilitation, and cultivate alternative transportation routes.

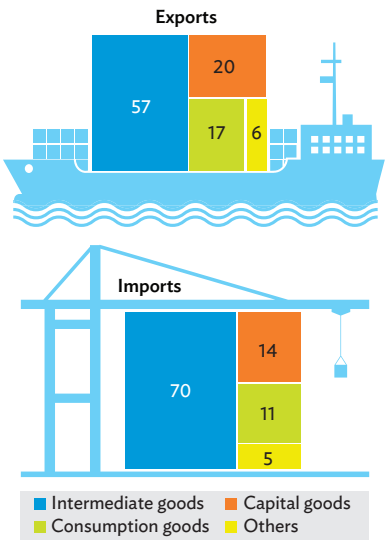
Asia and the Pacific’s trade and value chain remains robust

Asia and the Pacific trade volume index, Jan–Sep
(100 = Jan–Sep 2019)



A strong rebound in 2021 pushed the region’s merchandise trade volume higher than its pre-pandemic level, and it kept growing in 2022 albeit at a moderate pace.

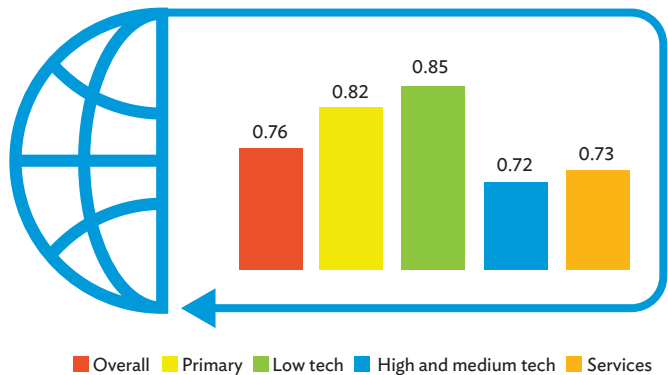
Composition of Asia and the Pacific trade in 2021 (%)



Asia’s heavier reliance on intermediate goods trade than consumer goods suggests its trade performance will be significantly affected by global and regional production cycles.

Sources: ADB calculations using data from CEIC Data Company; CPB Netherlands Bureau for Economic Policy Analysis. World Trade Monitor; and United Nations Commodity Trade Database.

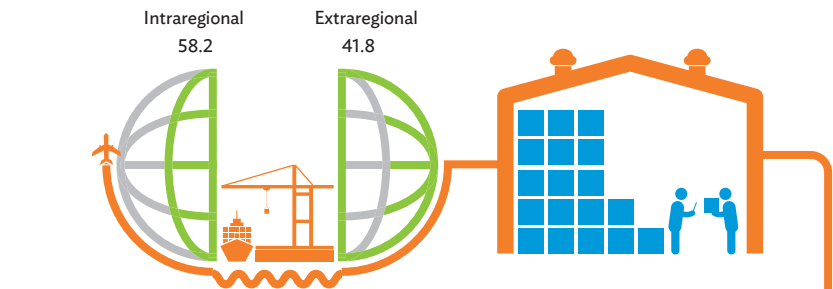
Asia and the Pacific regional value chain–global value chain intensity per sector, 2021



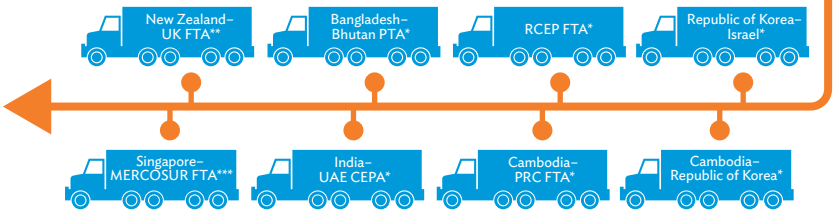
The region’s international trade share remains high at 58.2% in 2021, with strong regional value chain especially in its primary and low-tech sectors. Recent trade cooperation offered by new bilateral and regional trade agreements is expected to help deepen regional value chain linkages further.

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Asia and the Pacific trade share (%)



New Regional Trade Agreements, 2022



* In force, **Signed, ***Concluded

CEPA = Comprehensive Economic Partnership Agreement, FTA = free trade agreement, MERCOSUR = Mercado Comum do Sul (Common Market of the South), PRC = People’s Republic of China, PTA = preferential trade agreement, RCEP = Regional Comprehensive Economic Partnership, UAE = United Arab Emirates, UK = United Kingdom.

Source: ADB calculations using data from ADB. Multi-regional Input–Output Tables; ADB. Asia Regional Integration Center Free Trade Agreement Database; International Monetary Fund. Direction of Trade Statistics; and methodology by A. Borin and M. Mancini. 2019. Measuring What Matters in Global Value Chains and Value-Added Trade. Policy Research Working Paper. No. 8804. Washington, DC: World Bank.

Cross-Border Investment

Global foreign direct investment (FDI) flows to Asia and the Pacific continue to recover to pre-pandemic levels. Based on balance of payments data, inward FDI expanded by 64.3% in 2021 worldwide—nearly 7% higher than in 2019. FDI to Asia and the Pacific recovered in 2021, up 19.1% from 2020, accounting for 40% of global inward FDI in 2021, and down from 55% in 2020. The PRC remains the top destination for global FDI in Asia, followed by Hong Kong, China and Singapore. Firm-level data similarly highlight Asia's resilience in attracting FDI. Greenfield investment to the region grew a modest 0.8% in 2021 after declining 40.9% in 2020, while the value of mergers and acquisitions recovered by 10.1% after a 10.0% loss. Recent years have seen greenfield investments increase in other business activities besides manufacturing. From 2003 to 2021, the share of greenfield investment in Asia increased in activities such as electricity (from 4% to 13%), and information and communication technology and internet infrastructure (from 1% to 4%), while contracting in extraction activities (from 11% to 2%). Meanwhile, outward investment from Asia recovered by 15.2% in 2021, based on balance of payments data. Japan and the PRC remain the largest sources of FDI from Asia. Having been robust in 2021, FDI flows may subside in 2022, given the uncertain global environment. FDI to Asia is likely to remain resilient as the region attracts FDI from a more diversified pool of investors. Investment chapters in new megaregional agreements, such as the Regional Comprehensive Economic Partnership, may complement efforts to promote investment.

Tax incentives for foreign investment ought to be reexamined amid changes in international tax rules. Corporate income tax (CIT) incentives are a significant component of investment packages, in the form of instruments such as tax rate reductions, tax holidays, investment tax allowances, and tax credits. In Asia, CIT incentives represented 50% of all tax-related investment measures from 2011 to 2021. While well-targeted, nonredundant tax incentives can foster new industries and support firms during downturns, they can also be costly and reduce the tax base. While CIT accounts for 21% of tax revenues in developing Asia, the estimated foregone revenue related to CIT measures in economies where information is available is about 2.2% of tax revenues—and can be as high as 5.8%. New global tax rules will limit tax competition and offset the use of tax incentives for foreign investment in the future. Economies in the region need to reassess their incentive structures accordingly and exercise caution when considering new ones. Greater premium can be placed on regulatory incentives that favor certain projects or sector characteristics. Cross-border cooperation will be critical for the region's effective adoption of global tax rules while balancing the use of tax incentives, and for designing appropriate incentives to encourage investment in key areas including green industries.

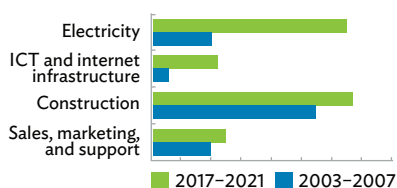
Foreign direct investment to and from Asia and the Pacific gained momentum in 2021



▲19% inflows
▲15% outflows
based on balance of
payments data for Asia



Greenfield FDI grew
1% while M&As grew 10% in 2021,
after a stark decline in 2020



Greenfield FDI by business activity in Asia remains in manufacturing, but recent years saw increased investment in electricity; ICT and internet infrastructure; construction; and sales, marketing, and support

Cross-border cooperation will be critical to effectively adopt global tax rules while balancing the use of corporate income tax-related incentives



From 2011 to 2021, 50% of tax-related investment incentives in Asia were on corporate income tax



21% of tax revenues in developing Asia are from corporate income taxes



Changes in global tax rules call for a review of the region's investment tax incentives; greater premium can be placed on regulatory and sectoral incentives

FDI = foreign direct investment, ICT = information and communication technology, M&A = merger and acquisition.

Sources: ADB calculations using data from ADB. 2022. *Asian Development Outlook 2022: Mobilizing Taxes for Development*. Manila; ASEAN Secretariat. ASEANstats Data Portal; Bureau van Dijk. Zephyr M&A Database; CEIC Data Company; Eurostat. Balance of Payments; Financial Times. fDi Markets; International Monetary Fund. World Economic Outlook April 2022 database; United Nations Conference on Trade and Development (UNCTAD). 2022. *Corporate Income Taxes and Investment Incentives*. Geneva; and UNCTAD. 2022. *World Investment Report 2022 Statistical Annex Tables*. Geneva.

Financial Cooperation

Growing uncertainties in global economic growth prospects and worsening financial conditions could put pressure on capital inflows and local currencies.

Nonresident portfolio inflows of debts and equities rebounded strongly after plunging in March 2020 during the onset of the pandemic, and remained robust throughout 2021. Since the United States (US) Federal Reserve System's first interest rate hike in March 2022, however, net nonresident portfolio inflows turned negative although the scale of the net outflows are still relatively mild. Regional currencies have also seen a decline in their value relative to the US dollar. Stock market performances have been lackluster in 2022, reflecting tightening liquidity and financial conditions and a slowing economy. Debt-to-gross domestic product ratios across sovereign, corporate, and household sectors increased post-pandemic in many regional economies. Given the heightened financial uncertainties, policy makers need to remain vigilant in monitoring financial market conditions and guarding against a buildup of systemic risks and potential spillover effects. If financial uncertainty and evaporation of dollar liquidity trigger sharp exchange rate volatility, it could have negative impacts on balance sheets and debt management. Therefore, regional financial safety nets, such as the ASEAN+3's Chiang Mai Initiative Multilateralisation, need to be strengthened to provide a backstop in case of liquidity and balance of payment crunches. The ASEAN+3 Multi-Currency Bond Issuance Framework, a policy program under the Asian Bond Markets Initiative, could promote common bond issuance in the region based on a regionally standardized framework.

Asia's financial integration has progressed steadily. Intraregional inward portfolio debt ratio increased to 29% in 2021, from 28% in 2017, while the inward equity ratio rose to 21% from 18%, and cross-border bank loan and deposit inflow ratio grew to 38% from 37%. Stronger regional financial integration could help recycle a greater portion of regional savings into regional investments. Growing financial interconnectedness, however, has also highlighted the risks of cross-border spillover and contagion effects, which might be triggered by regional shocks and financial distress. Economies in the region could strengthen an array of safety nets, such as their international foreign exchange reserves, bilateral swap arrangements, and regional financial arrangements such as the Chiang Mai Initiative Multilateralisation. Policy measures to help cushion impacts from global and regional shocks could include temporary capital flow management and foreign exchange measures, and macroprudential arrangements.

Worsening financial conditions could put pressure on capital inflows and local currencies

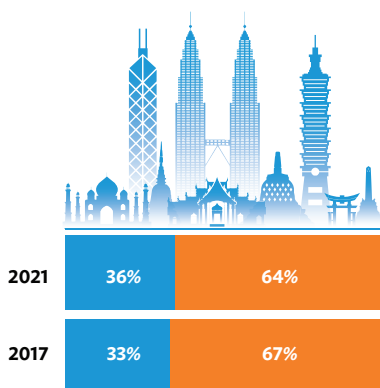


High inflation has led to increased policy rates and rising capital market volatilities



Regional currencies are depreciating while stock market prices and nonresident portfolio inflows have declined

Asia's financial integration is progressing steadily



The intraregional shares of Asia and the Pacific's total liabilities increased from 33% in 2017 to 36% in 2021

Sources: ADB calculations using data from Bank for International Settlements. Locational Banking Statistics. Bloomberg; CEIC Data Company; International Monetary Fund (IMF). Coordinated Direct Investment Survey; and IMF. Coordinated Portfolio Investment Survey.

Movement of People

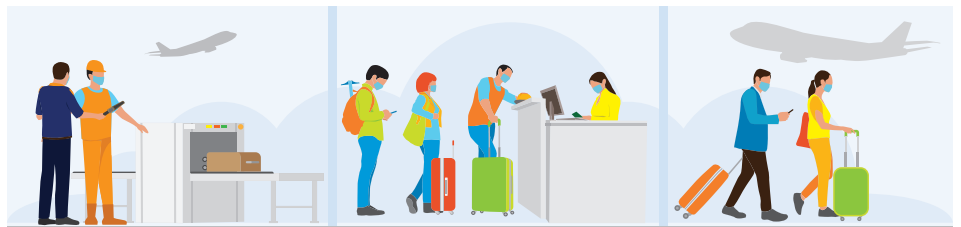
As more borders reopened and travel requirements eased, outbound migration from Asia and the Pacific continues to increase. Asian migrants resumed emigration to major host economies where labor demand is improving, such as in the Middle East, North America, some European economies, and Oceania. In 2022, the aftermath of the Russian invasion of Ukraine aggravated the condition of Central Asian migrants, while the subregion experienced a sudden large jump in inflow of skilled Russian workers and businesses seeking safety. While work visa issuance in major developed host economies has yet to recover, labor shortages and demand for more high-skilled workers could open more opportunities for Asian migrants. Regional cooperation initiatives need to aim at improving international migration governance frameworks to uphold the tenets of the Global Compact for Migration, including migrant rights, cooperation and partnerships, and socioeconomic well-being. These could drive and sustain global recovery and revitalize the development impact of international migration.

Remittance inflows display resilience alongside rising relative economic contribution. Inflows to the region recovered with a 3.4% growth in 2021, reaching \$325.5 billion, after a 1.9% dip in 2020. Since 2019, remittance inflows also overtook tourism receipts as the second-largest type of financial inflow following net FDI inflows. Except for East Asia and Oceania, remittance inflows to Asian subregions improved in 2021, bolstered by recovery in major host economies in North America, the Middle East, and Europe. In 2022, the Russian invasion of Ukraine led to large money transfers from the Russian Federation to Central Asia, accompanied by Russian workers and companies. The average cost of sending \$200 to Asia was 5% in the second quarter of 2022—still higher than the Sustainable Development Goal target of 3% by 2030. Advancing knowledge transfer on digital financial platforms, promoting greater transparency, and improving the remittance infrastructure could help lower remittance costs. An enabling legal and regulatory environment could also contribute to cross-border interoperability and further promote formal remittance channels.

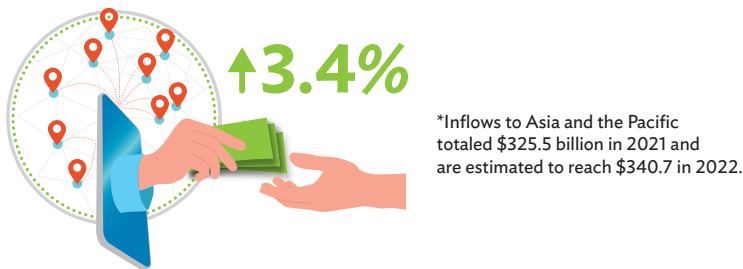
Tourism recovery has picked up speed, but the level of international tourist arrivals remains much below the 2019 level. International tourist arrivals in Asia and the Pacific rose 399% year-on-year for the first 8 months of 2022, but only to about 10.3% of the pre-pandemic 2019 numbers. Among the subregions, Southeast Asia reached 20% of the pre-pandemic level, while Central Asia and South Asia touched 50%. The variation is largely driven by differences in the pace of border reopening, public health protocols, and people's confidence in overseas travel. The PRC's zero-COVID policy held back the tourism recovery in East Asia. The Russian invasion of Ukraine also continued to pose a downside risk to Asian tourism—a potential loss

of about one-third of the Russian Federation’s outbound tourists, especially to the PRC, Thailand, and some Central Asian economies. Higher fuel prices translating to higher airfares and travel expenses, alongside weak global growth prospects, are dampening the recovery momentum. Experts foresee the global tourism sector rebounding to 2019 level by 2024. For post-pandemic recovery, economies in the region need to look at several policy options to build sustainability and resilience while addressing pre-pandemic challenges that include narrow source markets, mass tourism, lack of infrastructure, and high informality. While some policy options can be developed at the national level, greater regional cooperation is needed to deal with the prolonged challenges.

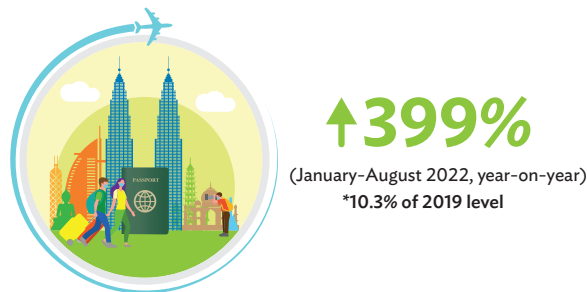
More open borders and eased travel requirements facilitate the outbound migration from Asia and the Pacific



Remittance inflows remained resilient in 2021 and higher growth is estimated in 2022



International tourist arrivals begin to pick up pace despite trailing behind prepandemic level

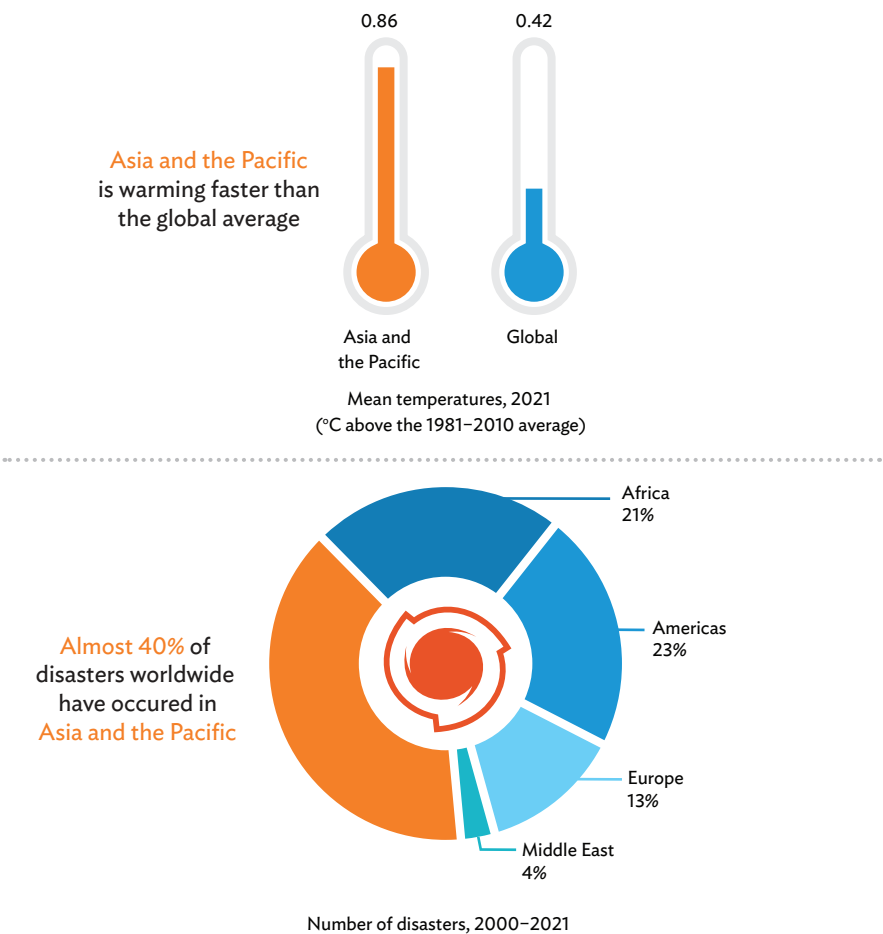


Sources: United Nations Department of Economic and Social Affairs, Population Division. International Migrant Stock 2020; Global Knowledge Partnership on Migration and Development; and United Nations World Tourism Organization. Tourism Recovery Tracker.

Theme Chapter: Trade, Investment, and Climate Change in Asia and the Pacific

Asia is one of the most vulnerable regions to climate change risks yet emits the largest volume of carbon dioxide. Annual temperatures have risen faster in the last 30 years than in any other region, and are now 0.86°C above the 1981–2010 average. Asia is also increasingly facing more extreme precipitation incidences such as storms, floods, and landslides, having borne the brunt of almost 40% of disasters worldwide in the past 2 decades. Ironically, it is responsible for about a half of global annual carbon dioxide (CO₂) emissions.

Asia and the Pacific is on the frontline of climate change



Note: Americas includes Latin America and North America.

Source: Centre for Research on the Epidemiology of Disasters - CRED, EM-DAT The International Disaster Database; and World Meteorological Organization. 2021. *State of the Climate in Asia 2021*. Geneva.

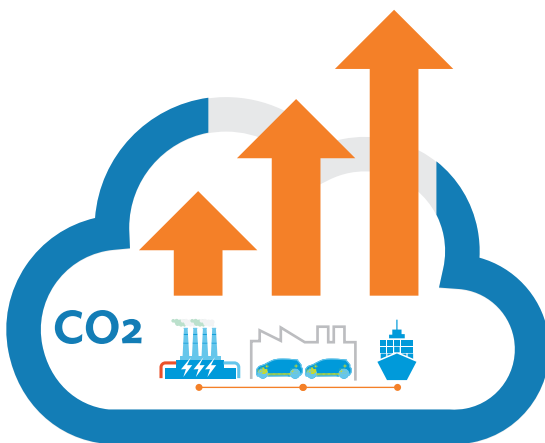
CO₂ emissions embodied in Asia's production increased sharply, surpassing its demand. Emissions embodied in production in the region have almost tripled since 1995, largely reflecting the unparalleled pace of economic growth and manufacturing to satisfy demand, both within the region and in export markets. Massive global demand for manufacturing goods, including carbon intensive ones, may not have been met without Asia's rapid expansion of production capacity, which also increased CO₂ emissions as a byproduct. Rapid growth has involved heavy resources consumption in the production of goods, with manufacturing's share now exceeding 20% of gross domestic product, which is higher than the 11% share in the US and 15% share in the EU. Asia's fast incorporation into the global value chain through industrialization, while helping promote economic growth and prosperity, has also contributed to this byproduct. Asia's CO₂ emissions embodied in production have grown much faster than the consumption side, with the region exporting CO₂ emissions to the rest of the world.

Many Asian economies are net exporters in their CO₂ emission balances with developed economies in Europe and North America. In 2019, Asia's production-based CO₂ emissions were 17.2 giga tonnes. After exporting 4.5 giga tonnes and importing 3.5 giga tonnes, the region consumed 16.2 giga tonnes of CO₂ emissions. This left a 1.0 giga tonne positive CO₂ emissions balance for the region. Total CO₂ emissions from gross exports have risen almost threefold over 20 years although the trajectory has moderated recently. The region's CO₂ emissions from gross exports had overtaken Europe's in 2003, led by East Asia. On the other hand, Asia's total CO₂ emissions embodied in gross imports have risen more slowly than for exports over those years.

Better emissions-reducing technology, stricter environmental regulation, and growing environmental consciousness have moderated the emissions intensity in Asia's production and exports over the past 2 decades. However, Asia still records the highest CO₂ emission intensities in both production and exports. This is partly due to the region's industrial structure, with high shares of traded products coming from carbon intensive industries. The share of carbon intensive exports in Asia was 62.3% in 2018, while it was 40.2% for the EU plus the United Kingdom, and 37.3% for North America. The share of industrial inputs in Asia's total imports, at about 60%, was also higher than for other regions, reflecting a significant import share of intermediate goods for production in Asia rather than final consumption goods. The region's relatively high dependence on manufacturing compared with primary and services sectors also contributes to high CO₂ emissions. The effect of this factor is likely to diminish as more Asian economies develop and transition to more services-driven and digital economies.

There is room to improve Asia's low carbon competitiveness in high carbon intensive industries. With economic size and industrial structure held constant as factors, many Asian economies demonstrate higher CO₂ emission intensity (emissions per output or export value) than the US and EU economies in such sectors as utility and basic metals. However, significant heterogeneity is apparent across economies. For example, some Asian economies would show lower emission intensity than developed economies even in some carbon intensive sectors. This is because economies can use different energy sources and production technologies.

Asia is a net exporter of carbon emissions



The region's rapid economic growth and industrialization has increased emissions...



...despite the emission-reducing effects of technological advancements

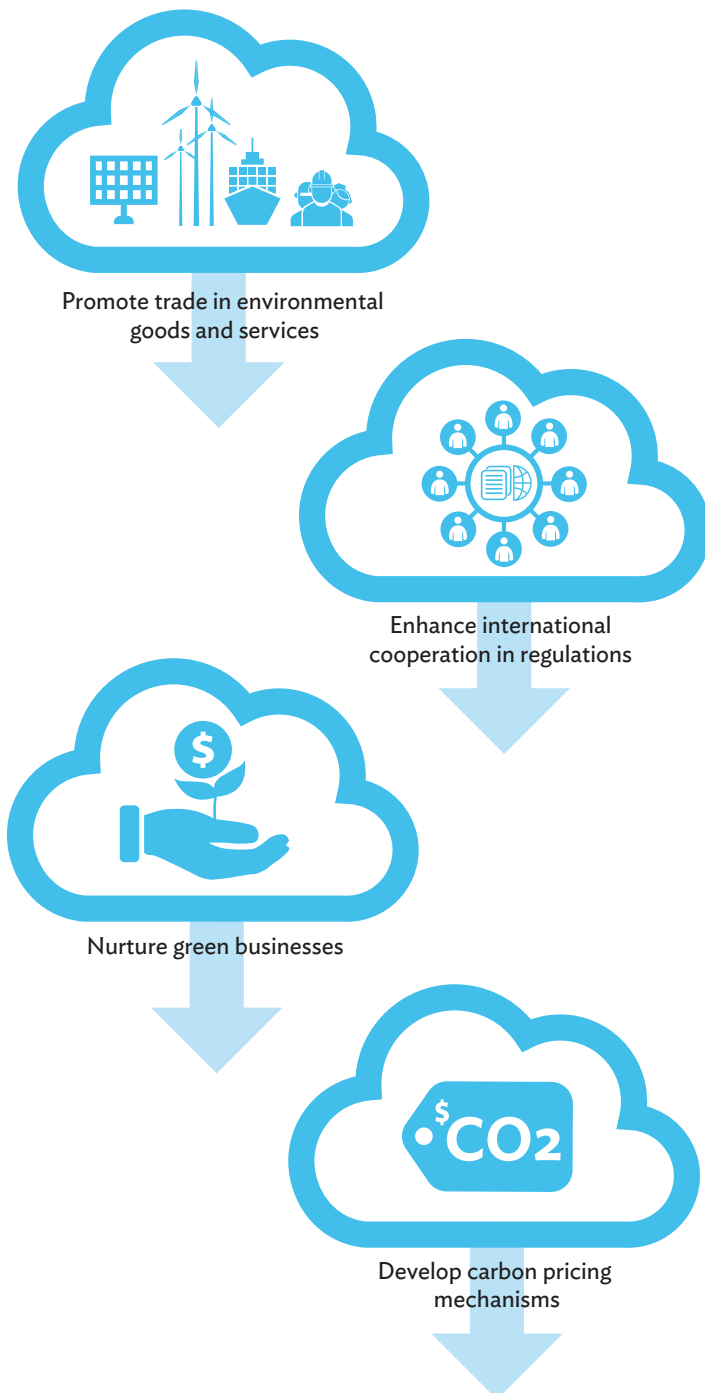
Asia has attracted the largest share of global FDI in carbon intensive industries, but its share in global non-carbon intensive FDI is increasing. Trends in Asia's greenfield investment reflect its role as a global manufacturing hub. On average, Asia hosted 33.1% of global carbon intensive FDI flows from 2008 to 2016, above industrialized regions such as North America (29.7%) and Europe (22.5%). East Asia and Southeast Asia host nearly three-quarters of the region's carbon intensive FDI, mainly in manufacturing, retail trade, mining, gas and oil extraction, and utilities. At the same time, the region lags only Europe as a destination for FDI in non-carbon intensive industries, accounting for 20% of global greenfield investment in these sectors. By source, intraregional FDI flows—investments from other Asian peers—also reflect an important shift. They make up about 45% of the carbon intensive investments in the region, followed by investments from North America (28.5%) and Europe (24%). Yet, participation from Asian investors in non-carbon intensive industries is growing rapidly, having tripled from 9.8% to 31.5% from 2008 to 2016, suggesting an encouraging shift in regional investment toward cleaner industries.

FDI into environmental goods and services is also growing in Asia. The region's estimated share of greenfield FDI in environmental goods and services grew from 3.4% in 2005 to 11.4% in 2021, with a major share concentrated on renewable energies. Indeed, an average 41.6% of foreign investment in environmental goods and services was destined for solar electric power projects and 20.5% for wind electric power. This could facilitate the transfer of green technology from foreign investment and firms, which is crucial for the adoption of emissions abatement technologies.

Trade and investment policies should be part of the climate action

Trade and investment in environmental goods and services can help mitigate climate change. Clean and renewable energy goods—such as solar panels and wind turbines—and resource-efficiency goods are critical to reduce greenhouse gas emissions. They encourage low-carbon production techniques and reallocate resources toward activities with low-emission intensities. Asia's trade in environmental goods is remarkable in this regard as it accounts for more than 40% of the global volume, both as exporter of renewables and importer of environmental management appliances, among other products. On the other hand, the region's environmental services trade lags far behind other regions, accounting for less than 2% of the global total, suggesting there is great room to develop and cultivate its industrial potential.

How can trade and investment become part of climate solutions?



Source: ADB staff.

With better and more affordable access to green technologies, Asian businesses have a massive opportunity to improve resource efficiency while reducing their environmental footprint. However, challenges remain in leveraging this promise. A narrow scope and lack of consensus on the definition of environmental goods, along with tariff and nontariff measures on environmental products in some Asian economies, limit the benefits. Promoting trade in environmental goods will require preferential treatment for a broader range of goods, including rapidly changing technologies in areas such as energy and resource efficiency. Further, a regional initiative to define and liberalize environmental services is imperative.

Interoperability of certification schemes and mutual recognition could be pathways to lower regulatory burdens and facilitate green trade. Interoperability should be an essential component of nationally developed certification schemes. An important step toward this is the alignment of embedded emissions—emissions over the supply chain or parts thereof—accounting methodologies. Recent experience suggests that interoperability can best be supported through a modular approach to boundary definition for embedded emissions accounting. This will ensure that embedded emissions are calculated for distinct modules along the supply chain. Likewise, mutual recognition agreements (MRAs) for conformity assessment can also facilitate access to markets. MRAs can simplify the verification process by a specific conformity assessment body. Adoption of MRAs will help reduce redundant efforts and technical duplication, while ensuring much-needed convergence to encourage green trade.

Trade agreements can be useful for fostering climate policies, yet further progress needs to be made. Environmental provisions in preferential trade agreements across the world have increased dramatically from 2 provisions per agreement on average in 1990 to 87 provisions in 2018. They have been important in removing barriers to climate-friendly goods, services, and technologies. Trade agreements also outline other areas for climate mitigation such as the use of alternative energy and net-zero goals. In addition, trade facilitation measures, in particular those promoting digitalization, can help reduce carbon emissions by increasing transparency, simplifying customs procedures, improving border agency coordination, and shortening delays at borders. Raising the coverage and depth of environment and climate change provisions or incorporating a separate chapter on climate change mitigation efforts into regional trade agreements can help ensure their effectiveness in achieving climate goals.

International investment agreements (IIAs) could also be better utilized to promote climate action. With climate-related litigation on the rise, there is further scope to align IIAs with net-zero commitments. As it stands, the existing IIA network falls far short of effectively supporting climate goals. Less than 10% of bilateral investment treaties in Asia contain environmental and climate-related references. Most of them aim to reserve policy space for environmental regulation, prevent lowering environmental standards to attract investment, and encourage environmental cooperation. Empirical assessments show that the inclusion of environmental and climate-related references in bilateral investment treaties has a moderate but positive impact on non-carbon intensive FDI inflows. As investment frameworks become more ambitious in their climate policy, economies could pursue introducing a model agreement or “opt in” mechanism—a multilateral agreement where economies can flexibly join to modify old agreements—which includes substantive standards on environmental protection and access to investor–state dispute mechanisms in climate-related cases. Further, Asian agreements could expand coverage to areas beyond environmental regulation to support climate mitigation, including market access for climate investment, green investment incentives, and investment facilitation in green industries.

New modalities of international cooperation are emerging to implement climate action in trade and investment. Novel and practical international green economy collaborations are looming. These can help Asian economies accelerate actions on the identification, certification, and freer trade of green products, and facilitate innovation and green technology transfers. Memorandums of understanding and joint statements of intent could build the entry level framework. While being low-cost in terms of required resources with low risk involved (as they are generally not legally binding), they could be a step toward more ambitious collaboration (including legally binding agreements). Further, green economy agreement (known as GEA) offers an innovative, promising avenue for cross-border collaboration to tackle climate change by combining green industrial policy objectives with the depth, commitment, and legal standing of a formal agreement. Through GEA, economies could pursue deep regulatory collaboration and facilitate trading in environmental goods and services across borders, among other achievements.

Carbon pricing is crucial for curbing emissions efficiently. Momentum is growing for the use of market-based mechanisms, either through a carbon tax or carbon pricing system. However, Asian economies have yet to seize the momentum fully. New measures such as border carbon adjustments also loom large—particularly in the EU. While the details of its implementation are yet to be finalized, the Carbon Border Adjustment Mechanism will likely have a negative impact on the welfare of developing

economies. Potential controversies remain, surrounding possible conflict with the principle of voluntary mitigation efforts, inadequacy in capturing the global social costs of carbon emissions, and questions on World Trade Organization compliance. Economies with a high exposure of trade in emission-intensive industries could be affected more than others. Asian economies need to be monitoring developments closely and to take steps to mitigate risks under the changing trade environment.

A global approach could offer the best solution for the reduction of emissions and carbon leakages across borders.

An international framework on cross-border carbon measures or a global carbon pricing mechanism can help resolve deficiencies in unilateral approaches. While a fully functional international emissions trading system as outlined in Article 6.4 of the Paris Agreement may not be feasible in the short term, bottom-up approaches can build the foundations for a global carbon market. As an intermediate process, direct and indirect linking of existing emissions trading schemes can be more effective than fragmented approaches in reducing mitigation costs, limiting carbon leakage, and fostering convergence in carbon prices. Regional carbon market alliances can also further facilitate trade of carbon assets, increase transparency, and harmonize standards. Regional economies will need support to take full advantage of these opportunities. Technical assistance and capacity building could provide knowledge on different carbon market models and help employ the most efficient technical options for implementation.

Asian Economic Integration Report 2023

Trade, Investment, and Climate Change in Asia and the Pacific—Highlights

This publication highlights key findings of the *Asian Economic Integration Report 2023* and provides insights on how trade and investment policies can be part of climate actions. It presents an overview of changes in trade and global value chains, cross-border investment, financial cooperation, and movement of people amid the current global economic headwinds. The highlights also include updates on the Asia-Pacific Regional Cooperation and Integration Index. The Asian Economic Integration Report involves the annual review of regional cooperation and integration covering the 49 regional members of the Asian Development Bank.

About the Asian Development Bank

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 68 members—49 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.



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