



REPORT ON DEVELOPMENT EFFECTIVENESS

MAY 2023

PRIVATE SECTOR OPERATIONS IN 2022

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FOREWORD

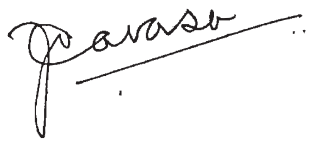


In 2022, the coronavirus disease (COVID-19) pandemic had eased across most of Asia and the Pacific, but at the same time many new difficulties arose, making it another challenging year for the Asian Development Bank's (ADB) Private Sector Operations Department (PSOD). In spite of these obstacles, PSOD was still able to deliver 37 projects for the year, above the 35 achieved in 2021, and just one shy of the all-time high of 38 recorded in both 2020 and 2019. There was a substantial rise in climate finance commitments, and a record percentage of projects directly supporting gender equity and mainstreaming. The year saw sharp commodity price rises and severe strains on food supplies in some developing member countries, to which PSOD responded by making important contributions, both through projects and programs in support of ADB's goal to expand assistance for food security.

Over the course of 2022, there were many landmark projects approved that demonstrated PSOD's ability to work closely and effectively with other financial institutions and to mobilize significant levels of private financing. These transactions—particularly in clean energy, transport, and the provision of finance to small businesses owned and led by women—will have a positive impact on our developing member countries and pave the way for future growth. Important transactions were likewise carried out in operational priority areas such as health and water, with projects supporting the provision of quality, affordable medical equipment and hygiene products in parts of Southeast Asia; and the development of wastewater treatment plants in India. These transactions illustrate PSOD's ability to be flexible and to diversify its operations beyond its traditional strong focus on infrastructure.

A number of agribusiness projects were also committed, with assistance to help strengthen food supplies in Mongolia, which have been badly undermined by the pandemic and the Russian invasion of Ukraine, and to support the livelihoods of thousands of smallholder farmers in South Asia and Southeast Asia. The sector also saw the first Private Sector Window facility transaction to help an animal feed producer expand operations in Cambodia, and the first-time use of a sustainability-linked financing agreement to boost climate-resilient fishing practices in India. The Trade and Supply Chain Finance Program, meanwhile, set up a Food Security Facility as part of its \$1.5 billion in food-security related transactions, while also opening an Emergency Trade Finance Facility to fund badly needed imports for Sri Lanka.

During the course of the year, I went on missions and met many clients, with a number expressing positive views about how PSOD teams were responsive and proactive in meeting their needs. This is a collective feather in PSOD's cap but we cannot rest on our laurels. We must continue to strengthen the value our operations add to helping ADB achieve its Strategy 2030 goals, particularly in the area of action on climate change and continue to make our internal processes more efficient and client-friendly.

**ASHOK LAVASA**

*Vice-President, Private Sector Operations and Public-Private Partnerships
Asian Development Bank*



PREFACE



In 2022, teams in the Private Sector Operations Department (PSOD) resumed travel and face-to-face meetings with clients as they worked to respond to both continuing and new challenges. The 37 committed projects, up 5.7% from the previous year, included the first private sector solar and wind power investments in Azerbaijan and Uzbekistan, the first private sector electric vehicle and water projects in South Asia, assistance to develop a first-of-its-kind fleet of public electric ferries in Thailand, and the first private sector investment in a forestry-based equity fund.

Meanwhile, PSOD's programs continued to deliver substantial volumes of assistance, attracting strong levels of cofinancing to fund trade, supply chains, and small businesses. The programs have been able to shift focus quickly to respond to external threats such as the COVID-19 pandemic and food insecurity.

Over two-thirds of private sector projects included climate finance commitments, which was a major success for PSOD in 2022. Further, PSOD continued its emphasis on ensuring that gender considerations are fully incorporated across its operations. That resulted in all of PSOD's clients committing to gender actions in their projects in 2022 and all new private equity clients agreeing to use a gender equality scorecard that uses gender lens criteria to guide their investments.

The overall quality of our portfolio remains strong, with a welcome continuation in the decline of projects at risk of failing to meet their development effectiveness targets. Our strong commitment to partnerships and collaboration was evident with the creation of the Climate Innovation and Development Fund, ADB's first private sector concessional fund supported by philanthropic organizations, and the signing of a framework agreement with five major global insurance companies under which they agreed to cover some of the risk of ADB loans to private sector financial institutions. We also continued to work closely and effectively with other ADB departments and resident missions, with 35% of projects incorporating One ADB collaborations.

This report is part of an ongoing series published by PSOD to inform stakeholders and partners about our operations and their contribution to ADB's Strategy 2030 development goals. It details best practices and experiences that we hope will be shared, as we continue to work closely with our partners in the pursuit of sustainable and inclusive development and growth. The 2022 report was prepared by a PSOD team led by Jamie Kho, Results Management Specialist, Private Sector Transaction Support Division. Team members included Ulritz Uzein Corcuera, Jillian Christelle Mae Aceveda, Mikaela Amihan Arrosa, Ma. Cherriemae Belo Bejo, and Bab Joy Marasigan. Michael Barker and Cherry Lynn Zafaralla drafted and edited the report, Joe Mark Ganaban performed typesetting, and Mike Cortes designed the cover and infographics. The Department of Communications planned and coordinated the dissemination of the report, while the Corporate Services Department printed the report.

Contributions and feedback were also received from Catherine Marsh, Deputy Director General; Craig Roberts, Senior Advisor; Mark Kunzer, Director, Private Sector Transaction Support Division; Shantanu Chakraborty, Director, Infrastructure Finance Division 1 (Central and West Asia and South Asia); Jackie Surtani, Director, Infrastructure Finance Division 2 (East Asia, Southeast Asia and the Pacific); Christine Engstrom, Director, Financial Institutions Division; Janette Hall, Director, Investment Funds and Special Initiatives Division; Marife Apilado, Director, Portfolio Management Division; Martin Lemoine, Unit Head, Agribusiness Investment Team; Aniruddha Patil, Unit Head, Social Sectors Team; Steven Beck, Advisor and Head of Trade and Supply Chain Finance; Anshukant Taneja, Program Lead, Microfinance Program; Joseph Bergin, Advisor and Head, Equity Investments Unit; and Bart Raemaekers, Advisor and Head, Guarantees and Syndications Unit.

Moving forward I expect to see many more changes and challenges confronting PSOD but I am confident we can manage them by ensuring the department remains strongly focused on meeting its three key goals of putting client needs at the center of all activities; scaling up assistance on climate action so that developing member countries can meet their Paris Climate Agreement commitments; and protecting ADB capital by remaining profitable, managing risk, and prioritizing cofinancing.



SUZANNE C. GABOURY

*Director General, Private Sector Operations Department
Asian Development Bank*

ABBREVIATIONS



ADB	Asian Development Bank
ADB V	ADB Ventures
BOQ	The Bank of Qingdao Company Limited
CARD	Center for Agricultural and Rural Development, Inc.
CIDF	Climate Innovation and Development Fund
COVID-19	coronavirus disease
CPB	Cambodia Post Bank Plc
DH-TMH	De Heus TMH Company Limited
DMC	developing member country
GRPO	Georgian Renewable Power Operations Joint Stock Company
GWh	gigawatt-hour
ICT	information and communication technology
MFI	microfinance institution
MFP	Microfinance Program
MSMEs	micro, small, and medium-sized enterprises
MW	megawatt
OAP V	OrbiMedAsia Partners V, L.P.
PAIFL	Ping An International Financial Leasing Company Limited
PSW	Private Sector Window
PSOD	Private Sector Operations Department
SMEs	small and medium-sized enterprises
TA	technical assistance
TPDDL	Tata Power Delhi Distribution Limited
TSCFP	Trade and Supply Chain Finance Program



EXECUTIVE SUMMARY



High inflation, tight monetary conditions, and reduced access to commercial finance created a difficult operating environment for the private sector in 2022. In response, the Asian Development Bank's (ADB) Private Sector Operations Department (PSOD) made commitments for 37 projects, totaling \$1.1 billion with 40% of the amount in the form of climate finance. These investments helped developing member countries directly address climate and food security concerns and supported small businesses, particularly those owned and led by women, to revive their operations in the wake of the pandemic. There were significant commitments for infrastructure, including clean energy, as well as groundbreaking transport projects to expand the use of electric powered vehicles. Important assistance was provided to strengthen health care and to provide access to affordable housing, while gender equality was again a central operational theme with all projects containing gender elements in their design.

The Trade and Supply Chain Finance Program (TSCFP) and Microfinance Program continued to play an essential role in filling gaps for trade and supply chain funding, and to help micro, small, and medium-sized enterprises (MSMEs) grow, with over 10,200 transactions valued at over \$8 billion. In Sri Lanka, the TSCFP helped secure imports of critically needed goods, such as medical supplies, through an Emergency Trade Finance Facility that saw ADB use more than \$100 million from sovereign loan projects. In addition, the TSCFP in 2022 launched initiatives to track and report carbon emissions throughout supply chains, and to widen the inclusion of people with disabilities in international trade.

Operational Priorities

The [Operational Plan for Private Sector Operations \(2019–2024\)](#) is aligned with [ADB's Strategy 2030](#), with a strong focus on accelerating progress on gender equality, scaling up investments to address climate change, and seeking out opportunities in frontier economies and challenging and new sectors.

In 2022, 81% of committed projects directly supported *gender equity as a theme* and *effective gender mainstreaming*, exceeding the previous record of 80% in 2021. These included an ADB investment in the first certified gender bond from the South Caucasus issued by a Georgia-based business to support women-owned MSMEs, and another in a Viet Nam bank that will allow it to expand its lending to women-owned small businesses.

Over two-thirds of projects had climate-related financing commitments, double that in 2021, representing a strong pivot to this priority area of ADB operations. Transactions included ADB's first private sector renewable energy investment in Azerbaijan, a first wind power project in Uzbekistan, and assistance to develop a first-of-its-kind in Southeast Asia fleet of electric ferries in Thailand.

With ADB announcing a plan to scale up investments to address pressing food security needs in the region, PSOD initiated five agribusiness projects. These included an investment to secure wheat supplies in Mongolia, assistance to improve the livelihoods of tens of thousands of smallholder farmers in South Asia and Southeast Asia, and commitments to facilitate climate-resilient and environmentally sustainable agricultural practices. There were a number of landmark project achievements in the agribusiness sector, including the first use of ADB's Private Sector Window facility, a first sustainability-linked financing agreement, and the first direct financing by PSOD for a forestry-based private equity fund.

Cofinancing

Despite the still-cautious investment environment, ADB was able to catalyze \$7.1 billion in nonsovereign cofinancing, with \$1.9 billion of it in long-term funds, resulting in a ratio of \$1.8 raised for every \$1 of private sector assistance from ADB's own resources. While below the \$2.2 raised in 2021, the 3-year cofinancing ratio average for 2020 to 2022 is at \$2.0, in line with ADB's corporate results framework target of \$2.0 by 2024.

Concessional funds play an important role as both a financial source for PSOD operations and to help leverage additional cofinancing from private investors. In 2022, a new ADB-managed fund was launched, the Climate Innovation and Development Fund, with contributions from the Goldman Sachs and Bloomberg Philanthropies. With initial commitments of \$25 million, it is ADB's first philanthropic fund with private institutions and will invest in private sector projects that promote sustainable low-carbon development in South and Southeast Asia.

As part of its ongoing commitment to strengthen partnerships, ADB signed a Master Framework Program agreement with five leading global insurers under which they will provide up to \$1 billion in insurance coverage for private sector financial institutions assisted by ADB. The insurers will cover the risk of nonpayment on a portion of ADB loans to the financial institutions, allowing ADB to preserve capital, diversify its portfolio, and improve the efficiency of its lending.

Special Initiatives

ADB Ventures, a financing partnership facility supporting early-stage companies, made commitments in two new companies in 2022, including a Philippines-based end-to-end technology platform providing digital solutions along the supply chain for microstores; and a satellite analytics company that provides risk assessment information that can benefit users, including financial institutions and smallholder farmers. ADB Ventures also made follow-up investments in five of its existing investee companies.

To support women's entrepreneurship, PSOD conducted a first online digital financial literacy training program for women-owned micro and small enterprises. The training included topics such as debt management and e-commerce and was attended by over 200 women entrepreneurs from throughout the Pacific.

Results Expected from Projects Committed in 2022

Projects committed in 2022 are expected to benefit 578,778 MSMEs, with 355,008 of them owned or led by women. Commitments pursuing renewable energy development and energy efficiency improvements in Azerbaijan, Georgia, India, Viet Nam, and Uzbekistan are projected to deliver 823 megawatts (MW) of new generation capacity and 2,561 gigawatt-hours (GWh) of electricity, while avoiding 1.5 million tons of carbon dioxide equivalent greenhouse gas emissions annually. Investments in the agribusiness sector are expected to benefit 109,168 farmers.

Telecommunications projects in Maldives and the Philippines will result in 200 new telecommunication towers being built while benefiting over 17,500 new broadband subscribers. In the transport sector, investments will support the production of 427 electric vehicles and reach over 8.2 million passengers. A health care project in Viet Nam will support the production of over 1.7 billion in hygiene products for women and infants. In the People's Republic of China, a project that will provide finance for ocean protection and development of a sustainable blue economy is expected to create a \$290 million blue finance portfolio.

Results Delivered by Projects in the Portfolio

Through its active portfolio of projects, PSOD has delivered benefits to 47.5 million MSMEs with 46.1 million of them owned or led by women. Operations have assisted nearly 10 million farmers and 4 million students; served over 1 million patients; and created employment for 592,047 workers, with 123,645 of them female. The portfolio has reduced 28.8 million tons of greenhouse gas emissions; delivered power of 44,062 GWh a year; and added 14,333 MW in new generation capacity.

Conclusion

While external factors were a drag on private sector activity in 2022, PSOD was able to significantly scale up operations addressing climate change, with a number of landmark energy and transport sector projects committed. The focus on gender equality was maintained with all projects containing gender elements in their design, and PSOD programs again made important contributions to the overall operational results of PSOD, particularly through transactions that addressed food security concerns in the region. The percentage of PSOD operations at risk of not meeting development effectiveness targets substantially declined, and while the value of the portfolio was down slightly it remains stable in terms of its risk profile.

The appetite for investor risk remained broadly subdued over the year but ADB was still able to attract nonsovereign cofinancing of \$7.1 billion, with a number of projects incorporating innovative financial structures that helped draw both concessional and commercial funding. The signing of agreements with global insurers and the creation of a first fund backed by philanthropic organizations represented a strong vote of confidence in PSOD, while fruitful One ADB collaborations across 13 projects with other ADB departments and resident missions were a further significant feature of operations in 2022.





● **Market, Thailand.** Despite still difficult external conditions, private sector operations made strong headway on priority areas including climate finance and gender equality in 2022 (photo by ADB).

INTRODUCTION

The start of 2022 saw an easing of the coronavirus disease (COVID-19) pandemic in most economies in Asia and the Pacific as the severity of the virus waned, and lockdowns and border restrictions were lifted. However, the Russian invasion of Ukraine in February quickly caused sharp increases in commodity prices, pressuring regional economies, particularly those heavily dependent on food and fuel imports. Tighter monetary policy to combat the surge in inflation saw currency depreciations across the region, raising debt servicing costs and prompting fresh caution from banks and investors.

Extreme weather events including a severe drought in the People's Republic of China and massive flooding in Pakistan resulted in widespread deaths, thousands displaced, and severe damage to agricultural production. Overall economic growth in Developing Asia slowed to around 4.2%, after a rebound to 7.2% in 2021, following a contraction of 0.1% in 2020.¹ The slower regional growth was primarily driven by the People's Republic of China's Zero-COVID Policy where targeted lockdowns, mass testing, and quarantine continued to remain in place, thereby limiting trade and tourism. While the number of extremely poor is estimated to have returned to its pre-pandemic level by the end of 2022, the food and fuel price rises caused renewed hardship to low-income households across the region, with a number of economies facing serious food insecurity.

Despite prevailing difficult external conditions, private sector operations of the Asian Development Bank (ADB) were able to exceed the number of committed projects made in 2021, significantly increasing the number of investments made to help developing member countries (DMCs) address climate change. Other major focus areas of assistance were for small business development, particularly for enterprises owned and led by women; and for agribusinesses to strengthen food security and farmer livelihoods. Meanwhile, 95% of operations helped accelerate progress in gender equality.

Moving into 2023 and beyond, the Private Sector Operations Department (PSOD) will remain strongly focused on supporting ADB's goal of providing as much as \$100 billion in climate finance from 2019 to 2030, including \$12 billion for private sector operations. To achieve this, PSOD will work to identify and assess new transaction opportunities and take steps to crowd in substantial amounts of cofinancing.

¹ ADB. 2023. *Asian Development Outlook*. Manila.

- **Solar energy, Mongolia.** Private sector operations in 2022 included landmark projects to support solar and wind power development in Asia (photo by ADB).



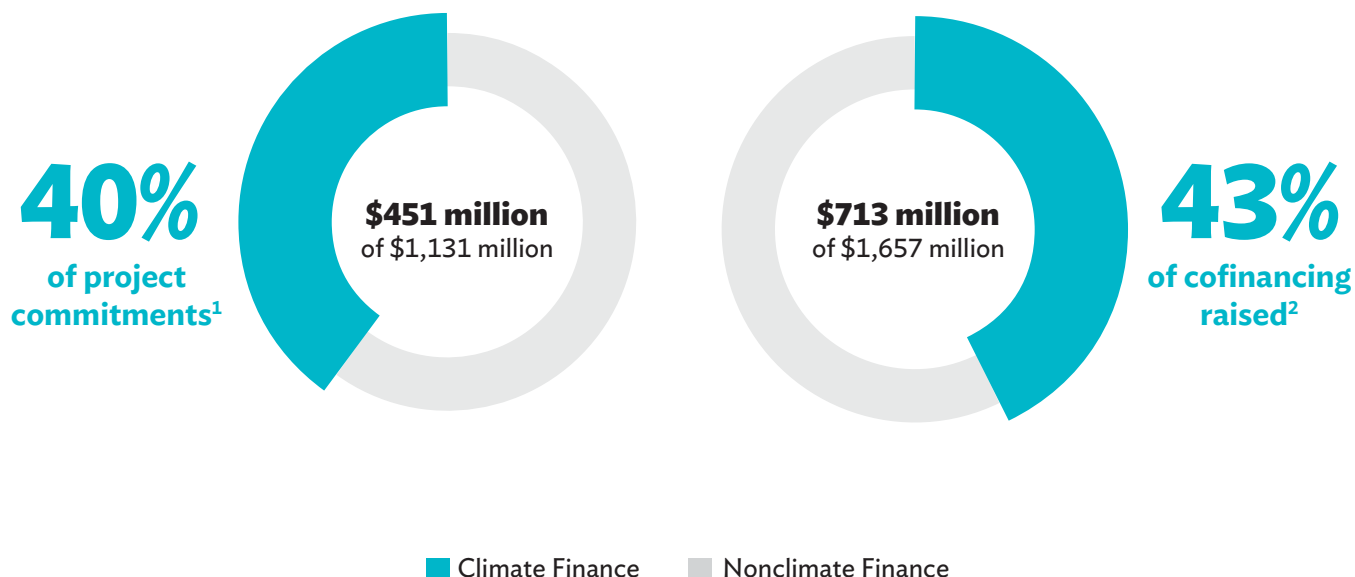


OPERATIONAL OVERVIEW

The private sector operations of ADB in 2022 included 37 projects, up 5.7% from the year earlier, with total commitments reaching \$1.1 billion. Operations were marked by a strong pivot to climate, with commitments for both mitigation and adaptation responses totaling \$451 million. Climate financing was extended to 68% of all projects from 34% in 2021.

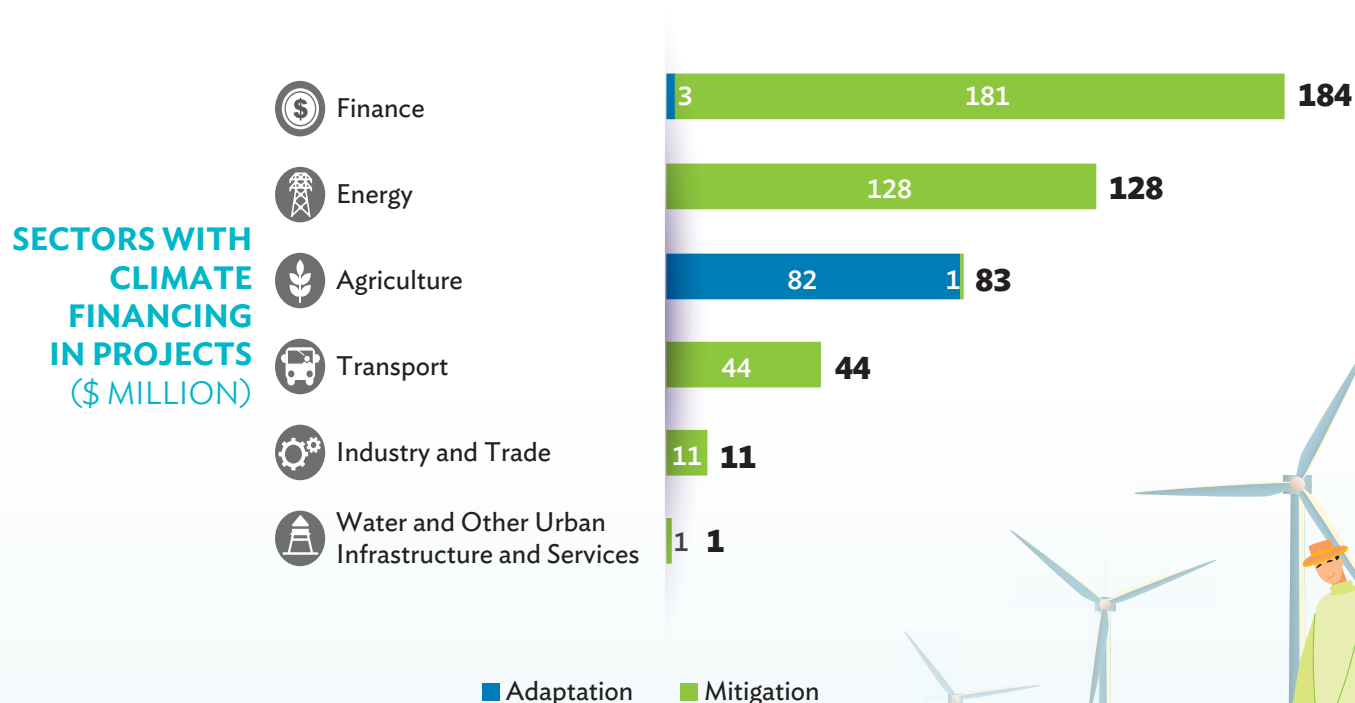
Gender equality was central to operations, with all projects having gender elements in their design. Eighty-one percent of projects directly supported gender equity and mainstreaming. Commitments to assist institutions providing financing for micro, small, and medium-sized enterprises (MSMEs) had a strong focus on women, with 61% of the 578,778 businesses being supported, owned, or led by women.

Private Sector Operations Department's Climate Finance in 2022



¹ Percentage is based on amount committed. In terms of number of projects, 25 out of 37 (68%) have climate financing.

² Percentage is based on amount of cofinancing raised. Out of 37 projects, 12 (32%) have climate cofinancing.



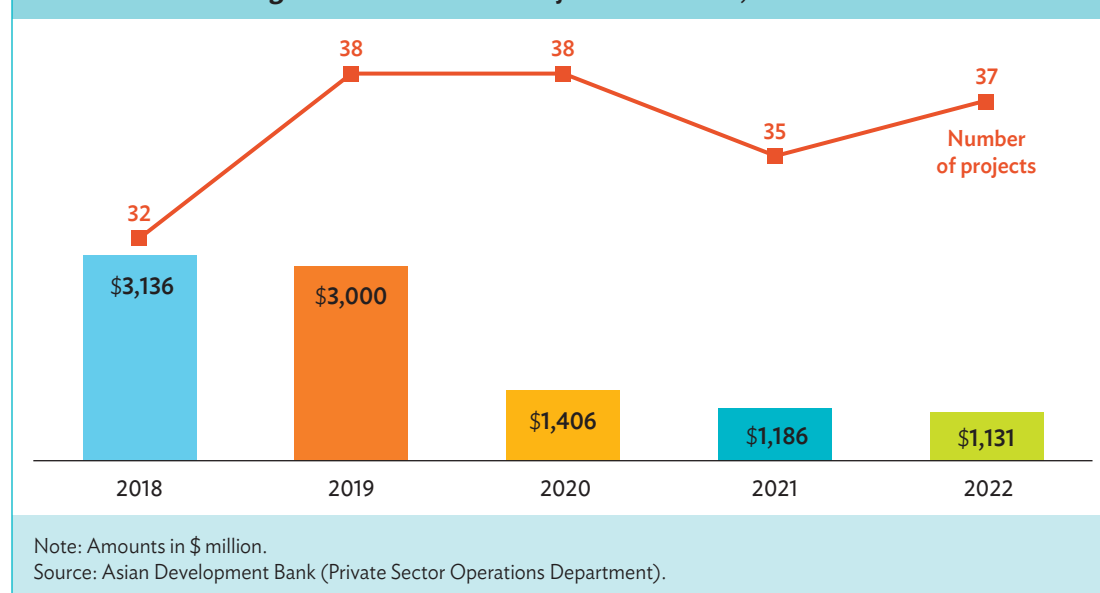
The percentage of operations diversifying into new sectors and markets fell from the year earlier, largely because of weaker business activity in frontier economies, which includes those classified as fragile or conflict-affected and small island developing states. As a percentage of total ADB operations, private sector operations rose to 28% from 27% in 2021, while the number of projects at risk of not meeting development results fell from 19.3% in the previous year to 14.9%, representing a marked improvement.

The Trade and Supply Chain Finance Program (TSCFP) supported over 10,000 transactions valued at more than \$7.7 billion, with important assistance committed for farmers and for strengthening food security. Over 6,300 of the transactions involved small and medium-sized enterprises (SMEs). The remit of the program was expanded to include climate change alleviation and trade digitalization. Meanwhile, the Microfinance Program provided \$341 million in loans to microfinance institutions, which extended the proceeds to more than 600,000 individual borrowers, 97% of whom were women.

The number of projects in 2022 rose to 37 from 35 the year earlier with the value of commitments sliding to \$1.1 billion from \$1.2 billion (Figure 1).

There were projects in 14 DMCs, as well as six regional projects. Among landmark projects in 2022 were the bank's first major private sector renewable energy investment in Azerbaijan for a solar power plant; a first wind power project in Uzbekistan; and assistance for an electric ferry fleet in Bangkok—the first such public transport system of its kind in Southeast Asia. Important assistance was given to agribusinesses in South Asia and Southeast Asia to strengthen food security and accelerate climate-resilient agricultural practices, while investments to boost access to microfinance for MSMEs saw a strong focus on businesses owned and led by women. In Maldives, a first private sector infrastructure financing transaction will support an expansion of affordable mobile telecommunications services across the archipelago.

Figure 1: Private Sector Projects Committed, 2018–2022



Private Sector Operations at a Glance

PRIVATE SECTOR OPERATIONS DEPARTMENT COMMITMENTS, 2022

37 projects, \$1.1 billion

Kazakhstan, \$15 million

- KMF Expanding Access to Credit for Micro, Small, and Medium-Sized Enterprise Borrowers Project

Uzbekistan, \$47 million

- Zarafshan Wind Power Project
- NephroPlus Dialysis Public-Private Partnership

Georgia, \$113 million

- Georgian Green Bond 2 Project
- Affordable Mortgage Finance
- Crystal Gender Bond Project

Azerbaijan, \$21 million

- Alat Solar Power Project

India, \$208 million

- ABIS Climate-Resilient Aquaculture Value Chain Project
- Smartchem Climate-Smart High-Efficiency Crop Nutrition Project
- Delhi Power Distribution Project
- Shriram Transport Finance Supporting Access to Finance for Small Commercial Vehicle Operators Project
- GreenCell Electric Bus Financing Project
- Wabag Clean Water Supply Project

Maldives, \$9 million

- Dhiraagu Telecommunication Connectivity Enhancement Project

Bangladesh, \$11 million

- Envoy Sustainable and Energy Efficient Textile Manufacturing Project

Thailand, \$5 million

- E Smart Bangkok Mass Rapid Transit Electric Ferries Project

Cambodia, \$30 million

- De Heus Sustainable and Inclusive Feed Supply Chain Project
- Cambodia Post Bank Expanding Micro, Small, and Medium-Sized Enterprise Lending Project

Regional, \$235 million

- Louis Dreyfus COVID-19 Climate-Resilient Smallholder Farmer Recovery Project
- Investment in KV Asia Capital Fund II L.P.
- Investment in Growtheum Capital Partners SEA Fund I, L.P.
- Investment in New Forests Tropical Asia Forest Fund 2 L.P.
- Investment in OrbiMed Asia Partners V, L.P.
- Quadria Capital Fund III L.P.

- Agriculture
- Clean Energy
- Energy (Other)
- Information and Communication Technology
- Finance
- Health
- Industry and Trade
- Transport
- Water and Other Urban Infrastructure and Services

Mongolia, \$18 million

- Tavan Bogd COVID-19 Food Security and Inclusive Job Creation Project

People's Republic of China, \$186 million

- Bank of Huzhou Decarbonizing Micro, Small, and Medium-Sized Enterprises Project
- Bank of Qingdao Blue Finance Project
- Ping An Leasing Micro, Small, and Medium-Sized Enterprises Energy Efficiency Improvement Project

Viet Nam, \$172 million

- AC Energy Wind Power Project
- Binh Duong Waste Management and Energy Efficiency Project
- Vietnam Prosperity Bank Expanding Access to Finance for Women-Owned Small and Medium-Sized Enterprises Project
- Hayat Women and Children Personal Hygiene Products Project
- VinFast Electric Mobility Green Loan Project

Philippines, \$49 million

- Wyntron Electric Vehicle Charger Production Expansion Project
- CARD Promoting Access to Finance for Low-Income Microborrowers Project
- Tiger Digital Infrastructure for Rural Connectivity Project

Indonesia, \$12 million

- JMI Medical Equipment and Supplies Project

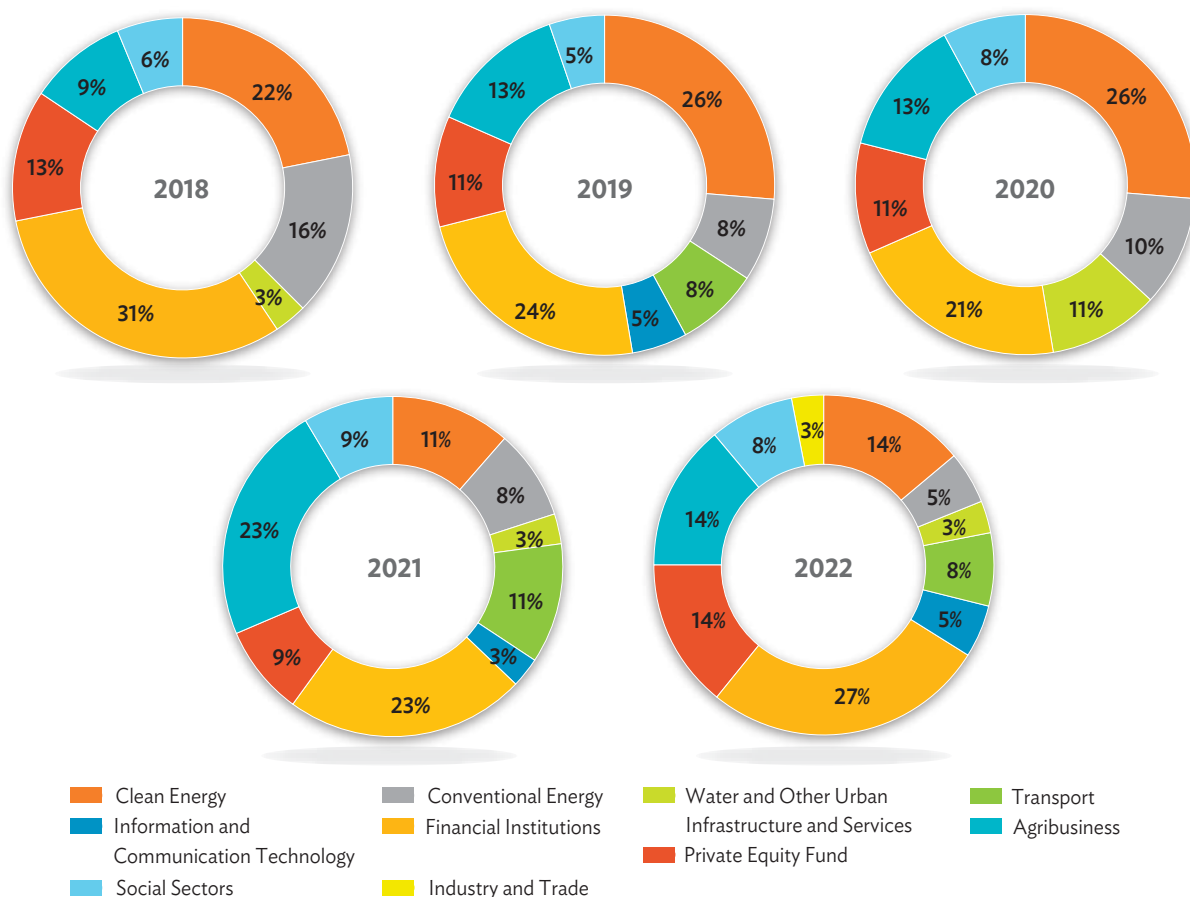
Notes: This map shows ADB regional members only. This map was produced by the cartography unit of the Asian Development Bank. The boundaries, colors, denominations, and any other information shown on this map do not imply, on the part of the Asian Development Bank, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries, colors, denominations, or information.
Source: Asian Development Bank (Private Sector Operations Department).

Commitments for financial institutions, reached 27% of the sectoral total in 2022, accounting for the largest share (Figure 2 and Figure 3). This was followed by shares of 14% each for agribusiness, clean energy, and private equity funds, along with 8% for social sector investments.

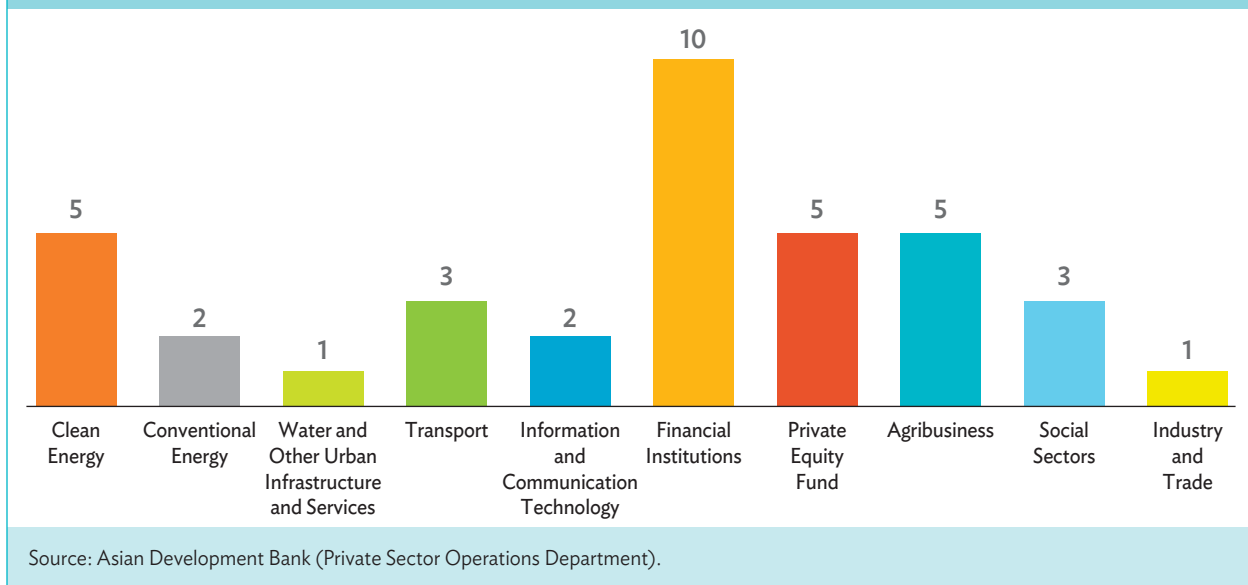
Projects in the finance sector had a strong focus on supporting women, with an ADB investment in a bond issue by the Georgia-based Joint Stock Company Microfinance Organization Crystal being used to provide loans to women-owned MSMEs. It is the first certified gender bond issuance in the South Caucasus and the first in the Georgian Stock Exchange. This project and several others in the finance sector also sought to help small businesses improve their energy efficiency and reduce their carbon footprint.

Investments in the agribusiness sector are helping smallholder farmers recover from the COVID-19 pandemic, strengthening food security, and introducing more environmentally sustainable and climate-resilient farming practices.

Figure 2: Distribution of Private Sector Projects Committed, 2018–2022



Source: Asian Development Bank (Private Sector Operations Department).

Figure 3: Private Sector Projects Committed, 2022

Clean energy commitments include investments in solar and wind power development in Azerbaijan, Uzbekistan, and Viet Nam, as well as a project that is helping Viet Nam turn its fast-growing solid waste mounds into energy.

The first project of PSOD in the industry and trade sector since 2012 is helping Bangladesh's leading denim manufacturer introduce energy-efficient equipment that will cut power use, expand production, and generate new jobs.

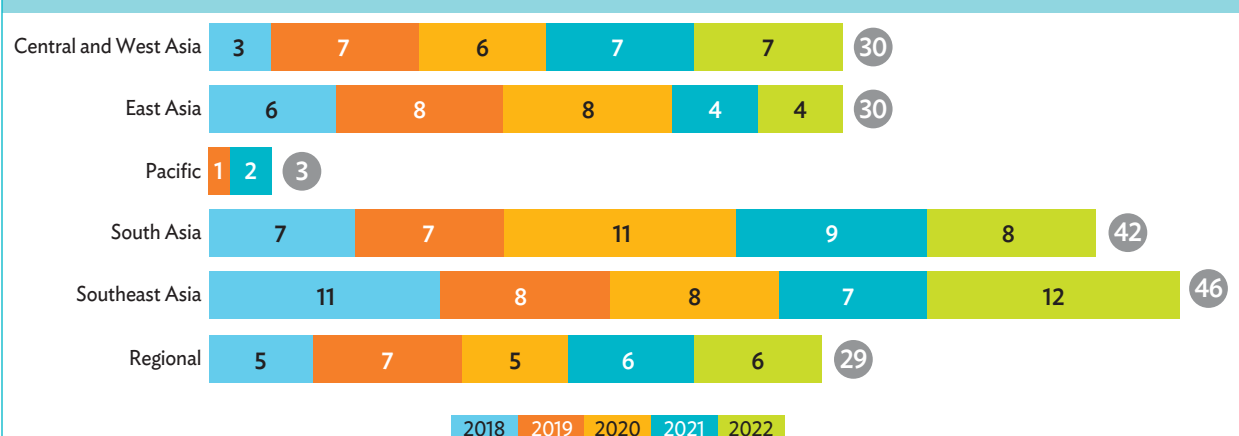
Meanwhile, ADB investments in equity funds are providing important growth capital to companies in East Asia, South Asia, and Southeast Asia that are operating in multiple sectors, with a strong focus on health care. As they expand, these companies are expected to provide new jobs and facilities, contributing to growth, improved services, and increased access to opportunities for women.

In the social sector, PSOD commitments are facilitating improved access to affordable medical equipment and hygiene products, and expanding the availability of dialysis equipment and facilities for chronic kidney disease sufferers in Uzbekistan.

Southeast Asia emerged as the region with the highest number of committed projects in 2022, at 12 investments (Figure 4), including one agribusiness project supporting farmer livelihoods and climate-resilient agricultural practices in Cambodia; three energy projects in Viet Nam and the Philippines supporting waste-to-energy generation, wind power development, and production of electric vehicle chargers; three finance projects in Cambodia, the Philippines, and Viet Nam providing funds for the development of MSMEs, including one expressly targeting women-owned businesses; one health care project each in Indonesia and Viet Nam targeting improved access to affordable medical equipment and women and children's hygiene products; one information and communication technology (ICT) project in the Philippines supporting expanded mobile and internet services in the central (Visayas) and southern (Mindanao) regions; and two transport projects that are supporting Southeast Asia's first commercial electric ferry fleet in Thailand and Viet Nam's first public transport electric bus fleet.

The region with the second-highest number of committed projects in 2022 was South Asia with eight projects. In India, two agribusiness projects are supporting climate-resilient aquaculture and enhanced-efficiency fertilizers; one energy project is helping improve power distribution in the National Capital Region, Delhi; one finance project is supporting small businesses in the transport and logistics sector; one transport project is aiding the establishment of electric battery powered buses; and one water and other urban infrastructure and services project is helping to finance the development of new wastewater treatment plants. An industry and trade investment in Bangladesh is financing energy-efficient yarn spinning equipment to expand production and generate new jobs, while an ICT project in Maldives will improve the quality and affordability of internet services and increase the number of broadband subscribers.

Figure 4: Private Sector Projects Committed by Region, 2018–2022



Source: Asian Development Bank (Private Sector Operations Department).

In Central and West Asia, there were seven projects, including investments in clean energy in Azerbaijan, Georgia, and Uzbekistan, along with assistance to expand borrowing for MSMEs and to access affordable mortgage finance in Georgia. There were six investments with a regional focus, five of which were in private equity funds to provide growth capital to businesses; as well as one project to provide assistance to a major global agricultural supply chain merchant for the purchase of inventories from over 50,000 smallholder farmers in India, Indonesia, Pakistan, Thailand, and Viet Nam. In East Asia, two finance sector investments in the People's Republic of China are helping MSMEs to reduce carbon emissions and become more energy-efficient, while a third is promoting clean oceans and sustainable blue economies. In Mongolia, an investment in one of the country's largest diversified conglomerates is helping to preserve farmer livelihoods, create jobs, and protect food security, which have been undermined by the Russian invasion of Ukraine and border restrictions with the People's Republic of China.

ADB sets results targets for projects to help measure the impact and development effectiveness of its operations. In the finance sector in 2022, investments are expected to benefit 578,778 MSMEs, with 355,008 of them owned or led by women.

Commitments supporting renewable energy development and energy efficiency improvements in Azerbaijan, Georgia, India, Viet Nam, and Uzbekistan are projected to deliver 823 megawatts (MW) of new generation capacity and 2,561 gigawatt-hours (GWh) of electricity, while cutting 1.5 million tons of carbon dioxide equivalent greenhouse gas emissions annually.

An investment in the People's Republic of China to support the provision of finance for ocean protection and development of a sustainable blue economy is expected to result in the creation of a \$290 million blue finance portfolio.

In the agribusiness sector, investments supporting rural livelihoods and climate-resilient practices will benefit over 109,000 farmers, while a health care investment project in Viet Nam will support sales of over 1.7 billion in hygiene products for women and children. Telecommunications projects in Maldives and the Philippines will result in 200 new telecommunication towers being built and the provision of broadband internet services to over 17,500 subscribers, while in the transport sector, investments will support the production of 427 electric vehicles.



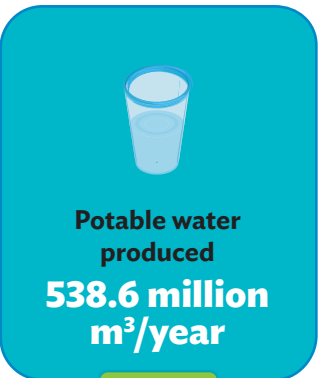
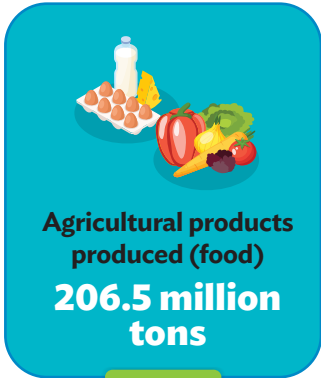
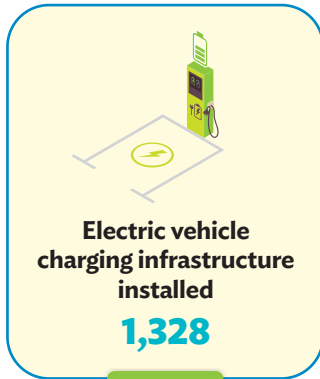
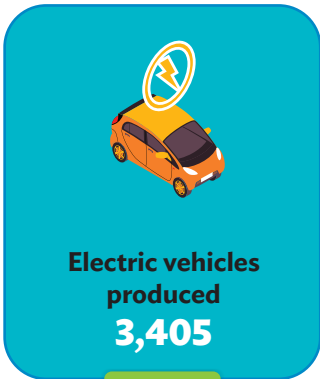
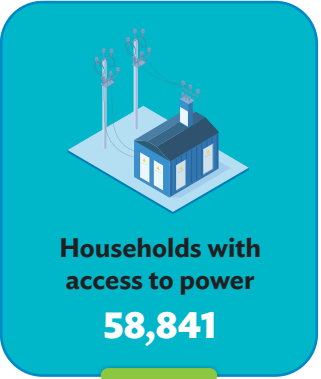
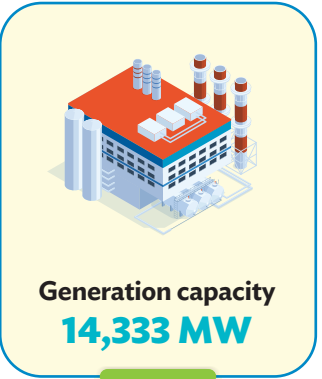
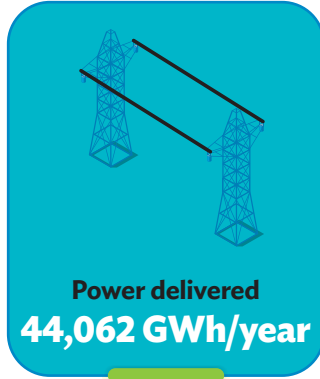
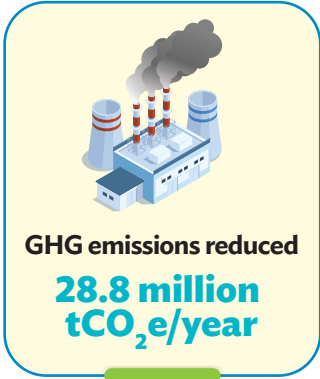
Results Expected from Projects Committed in 2022



GHG = greenhouse gas; GWh = gigawatt-hour; MSMEs = micro, small, and medium-sized enterprises; MW = megawatt; tCO₂e = tons of carbon dioxide equivalent.
Source: Asian Development Bank (Private Sector Operations Department).

Results Delivered by Private Sector Operations

Department's Active Portfolio as of 2022

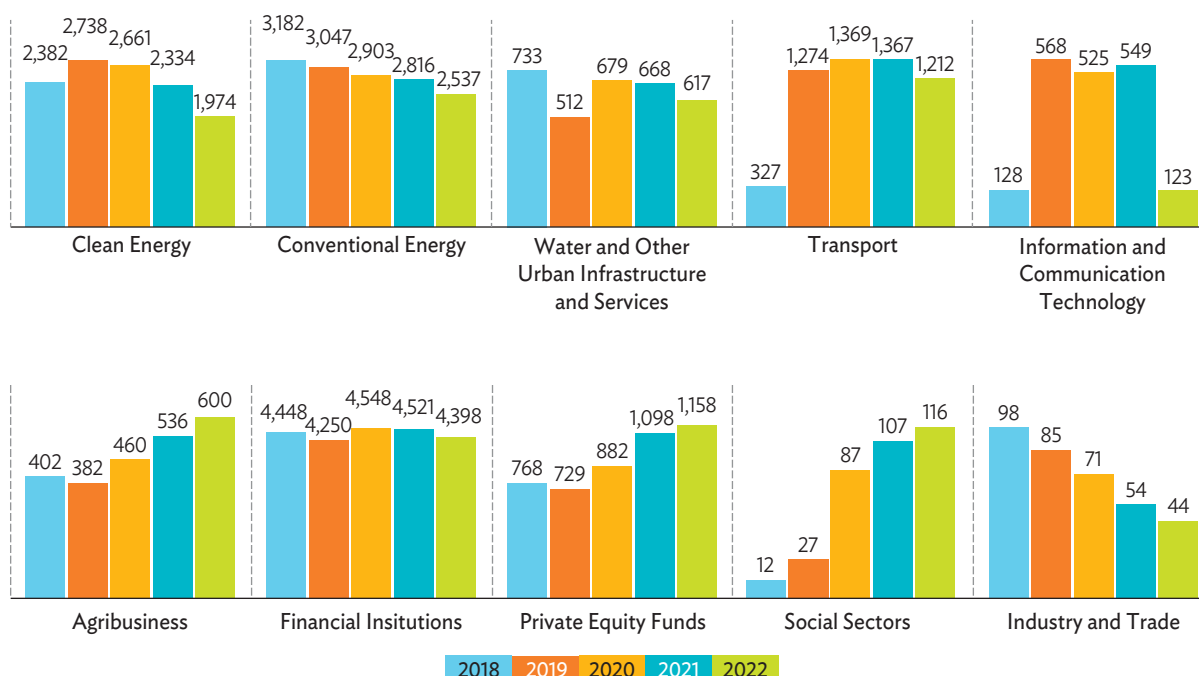


GHG = greenhouse gas; GWh = gigawatt-hour; m³ = cubic meter; MSMEs = micro, small, and medium-sized enterprises; MW = megawatt; tCO₂e = tons of carbon dioxide equivalent.
Source: Asian Development Bank (Private Sector Operations Department).



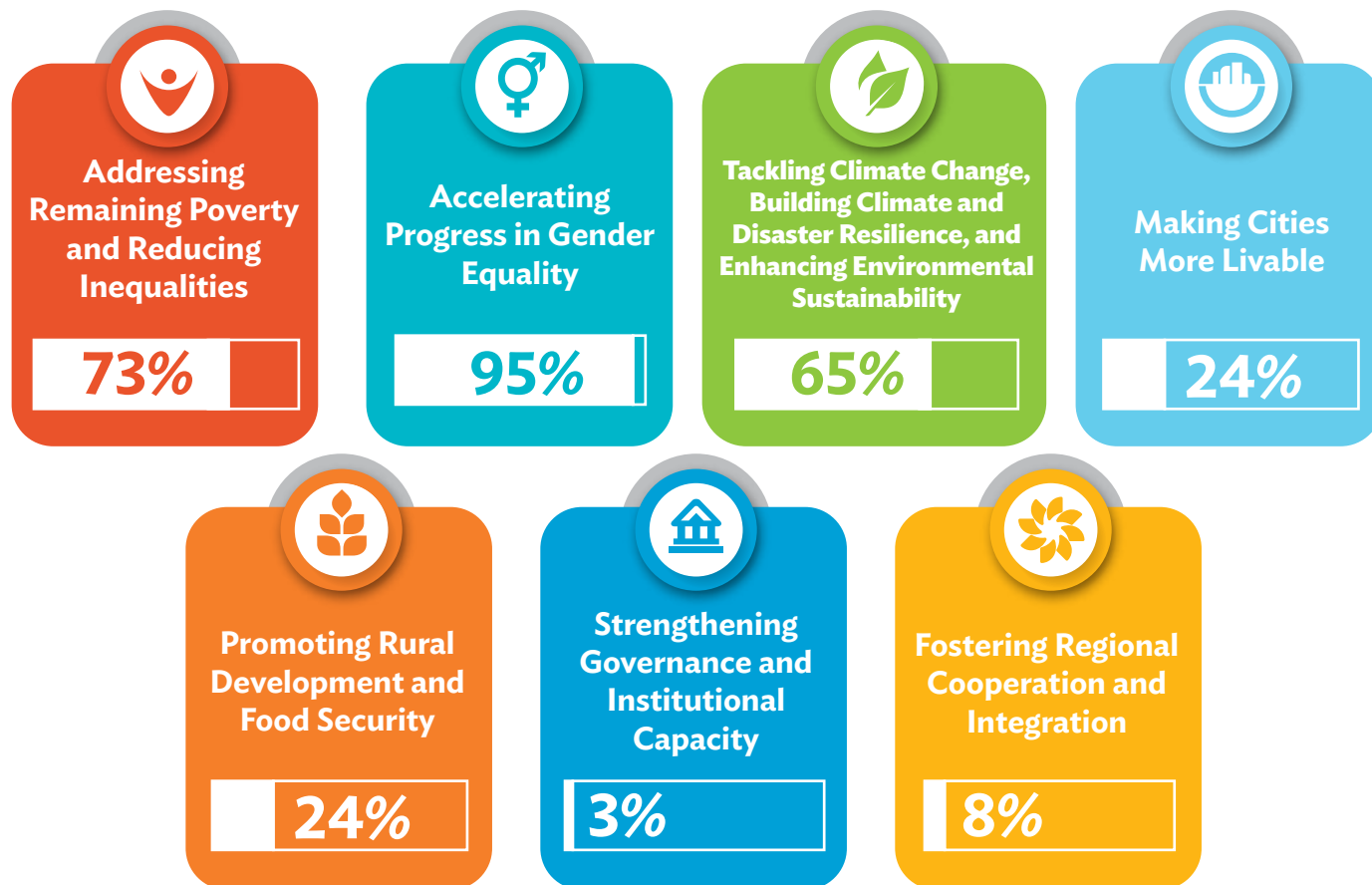
The PSOD active portfolio at the end of 2022 was almost \$13 billion, down from the 2021 level of \$14 billion (Figure 5). Assistance to banks, nonbank financial institutions, and microfinance institutions for onlending to businesses has benefited 47.5 million MSMEs, of which 46.1 million are owned or led by women. Agribusiness, education, and health projects have supported nearly 10 million farmers and more than 4 million students and served over 1 million patients, while PSOD operations have created new employment for 592,047 workers, of whom 123,645 are female. In the energy sector, projects have helped expand the availability of power across Asia and the Pacific by adding new generation capacity of 14,333 MW and delivering supplies of 44,062 GWh of electricity a year. Operations supporting decarbonization have reduced 28.8 million tons of greenhouse gas emissions. Projects in water, sanitation, and housing have resulted in the production of 538.6 million cubic meters of potable water a year, the treatment of 936.7 million cubic meters of wastewater a year, and the construction of 434,428 houses.

Figure 5: Private Sector Operations Department's Portfolio, 2018–2022
(\$ million)



Source: Asian Development Bank (Private Sector Operations Department).

Private Sector Operations in 2022



28% of ADB operations in the private sector

\$1.8 in long-term cofinancing for every \$1 of own committed nonsovereign financing

49% of committed private sector operations in new sectors or frontier markets

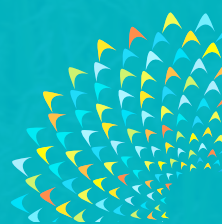
● **Rice farming, Viet Nam.** ADB made critical investments in 2022 to help agribusinesses in strengthening food security and boosting jobs and rural livelihoods (photo by ADB).



OPERATIONAL PRIORITIES THROUGH PRIVATE SECTOR OPERATIONS

Alignment with and Contribution to Strategy 2030

The ADB's Strategy 2030 has seven operational priority areas: addressing remaining poverty and reducing inequalities; accelerating progress in gender equality; tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability; making cities more livable; promoting rural development and food security; strengthening governance and institutional capacity; and fostering regional cooperation and integration. To fully align its work with those priorities, PSOD adopted an operational plan for 2019–2024. This blueprint lays out key areas for PSOD operations to focus on, such as frontier and underserved markets, including countries in fragile and conflict-affected situations and small island developing states. It also seeks to target work in challenging and newer sectors, including agribusiness, education, environmental infrastructure, health, ICT, and transport. In 2022, operations placed a strong focus on climate action and gender equity, along with support for small businesses and assistance to address food insecurity in parts of the region.



Addressing Remaining Poverty and Reducing Inequalities



While the number of extremely poor people in developing Asia is estimated to have returned to its pre-pandemic level by the end of 2022, a surge in food and fuel prices, propelled by the Russian invasion of Ukraine, exerted great pressure on low-income communities, the elderly, people with disabilities, children, and other vulnerable groups. The lingering impacts of the COVID-19 pandemic and a number of extreme climate events also hurt poor families and small businesses.

In response, nearly three-quarters of all PSOD projects included elements designed to reduce remaining poverty and inequality. These included financing for struggling small businesses; investments to strengthen food security and rural livelihoods; and assistance to provide affordable transport, telecommunications services, and health care products and equipment.

A sharp slowdown in economic activity during the pandemic, on top of already limited access to finance, has badly affected MSMEs in Cambodia. There is a strong need for funding assistance to restore and grow businesses, which are critical to Cambodia's economic growth and poverty reduction. To support these businesses, a \$10 million loan from ADB to [Cambodia Post Bank Plc \(CPB\)](#) aims to increase by more than 41% the number of CPB's MSME borrowers, from 32,508 in 2019 to 46,000 in 2024.



● **Bank employees, Cambodia.** An ADB loan for Cambodia Post Bank Plc will help micro, small, and medium-sized enterprises get back on their feet in the wake of the COVID-19 pandemic (photo by ADB).

The 5-year tenor loan will provide CPB with the long-term resources it needs to expand its MSME portfolio, allowing it to support businesses with larger numbers of employees and assets that are part of a segment that has missed out on funding in the past. Women own the majority of MSMEs in Cambodia, and at least half of the loan proceeds will be used to finance women-led MSMEs. The project will also help CPB achieve its goal of becoming the leading digital bank in Cambodia over the medium term.

In Georgia, low- and middle-income earners will be able to access long-term mortgage finance to build affordable, quality homes, following an ADB loan to the country's biggest bank, [TBC Bank JSC \(TBC\)](#). The \$99.7 million loan, denominated in Georgian lari, responds to the shortage of long-term local currency financing in the housing finance market. It will enable TBC to increase its number of mortgage borrowers by over 42% from its 2018 level, including a more than 43% increase in female borrowers.

Along with purchasing homes, the loan funds will also be made available for home renovation financing. The project will help improve the overall quality of housing, as much of the existing stock was built before 1990 using standards of the former Soviet Union. The project supports Georgia's broader goals of widening access to finance needed for more inclusive economic growth and for strengthening social security.

In the Philippines, the largest microfinance group received a loan from ADB that will increase the funding capacity of the [Center for Agricultural and Rural Development, Inc. \(CARD\)](#) and will allow it to provide working capital to low-income microborrowers, many of whom are women in rural communities. The \$4 million loan in Philippine peso equivalent to CARD will provide it with a longer-term, stable source of funding that will enable it to expand access to finance in more remote regions with higher incidence of poverty.

CARD will help more than 33,000 microborrowers to graduate from being classified as extreme poor. The effort to enroll and help transition extreme poor borrowers is considered a measure that supports increased inclusiveness. A gender action plan was designed to ensure that women can fully benefit from the new CARD financing. At least 230,000 new women borrowers will be provided access to finance.



Accelerating Progress in Gender Equality



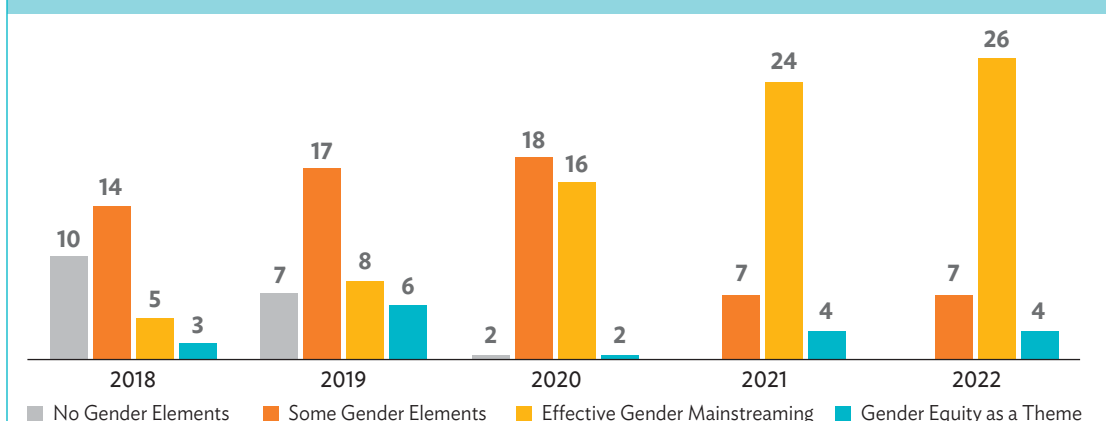
The impacts of the COVID-19 pandemic and the food and fuel shocks of 2022 have been felt disproportionately by women in many ways, including through loss of employment, food insecurity, a rise in unpaid work, and domestic violence. In addition, women entrepreneurs, who have traditionally found it difficult to get equal access to finance for their businesses, found it even more difficult to do so during the pandemic.

Responding to these imbalances and needs was at the heart of PSOD operations with all 37 committed projects containing gender elements (Figure 6) in their design, and 81% promoting *gender equity as a theme* and *effective gender mainstreaming*. Projects supporting small businesses had a strong focus on those owned and led by women and included an investment in the first certified gender bond from the South Caucasus, along with a major financing package put together by ADB to support Vietnam Prosperity Joint Stock Commercial Bank (Box 1).

ADB has committed 18.8 million Georgian lari (approximately \$7 million) as an anchor investor in the debt issuance of Georgia's [Joint Stock Company Microfinance Organization Crystal \(Crystal\)](#). All of the proceeds of the 2-year local currency bond will be used to finance loans to MSMEs owned by women, including climate-change loans to purchase small energy-efficient and renewable energy equipment. The offering is the first certified gender bond issuance in the South Caucasus and in the Georgian Stock Exchange to be subscribed to by ADB, which has been actively supporting microfinance development in Georgia and the region since 2015.

Gender bonds are instruments that provide funds to address gender inequality and to empower women. Crystal's debt offering complies with standards set under the International Capital Market Association's Social Bond Principles. In the Georgian economy, MSMEs account for 88% of private firms and generate over half of all jobs. However, limited access to financial resources remains a continuing obstacle to their expansion and the country's development. Collateral requirements for business loans are steep and affect women disproportionately as they are less likely to own property. Microfinance institutions play an important role in extending funding to

Figure 6: Private Sector Projects Committed by Gender Classification, 2018–2022



Source: Asian Development Bank (Private Sector Operations Department).

Box 1**Vietnam Prosperity Bank Gets Financing to Expand Loans, Services to Women Borrowers**

Tire center, Viet Nam. Helping women business operators access finance was a major focus of private sector operations in 2022 (photo by ADB).

In Viet Nam, the Asian Development Bank (ADB) helped put together a financing package that will allow [Vietnam Prosperity Joint Stock Commercial Bank \(VPB\)](#) to expand funding for women-owned small and medium-sized enterprises and provide social loans. The package includes an ADB loan of \$100 million and a \$300 million syndicated parallel loan with contributions of \$100 million from the Sumitomo Mitsui Banking Corporation (SMBC), \$100 million from the Australia and New Zealand Banking Group, and \$100 million from Maybank Securities Pte. Limited. The financing also includes a \$100 million facility, cofinanced by Japan International Cooperation Agency and SMBC, signed in 2021. The funding package will help VPB design new products and expand lending to women borrowers, with the goal of increasing the number of women-owned small and medium-sized enterprise borrowers by 66% in 2026 from 2021 levels.

The parallel loans will provide financing for small businesses, as well as for retail mortgages and home improvements, deemed as social loans. A \$750,000 performance-based grant from the Women Entrepreneurs Finance Initiative (We-Fi), and administered by ADB, will incentivize VPB to expand services to female borrowers and undertake a first-of-its-kind randomized control trial study in Viet Nam on bank lending practices to women entrepreneurs. We-Fi supports women entrepreneurs by helping to scale up their access to financial products and services, and by helping them to link to domestic and global markets.

Since 2015, ADB has had a relationship with VPB, one of Viet Nam's leading joint stock banks, through the ADB Trade and Supply Chain Finance Program. VPB's social financing operations are aligned with internationally recognized Social Bond and Social Loans Principles. ADB's presence in the project helped catalyze assistance from both commercial and development finance sources, with ADB and SMBC jointly mobilizing the parallel loans.

Source: Asian Development Bank (Private Sector Operations Department).

low-income borrowers, particularly in remote areas where Crystal has a leading role in lending to women, with a 13% market share. It has a wide range of credit offerings, including climate-related financing, which it launched in 2017, with climate-related loans already disbursed to 17,000 clients as of 2022.

Tackling Climate Change, Building Climate and Disaster Resilience, and Enhancing Environmental Sustainability

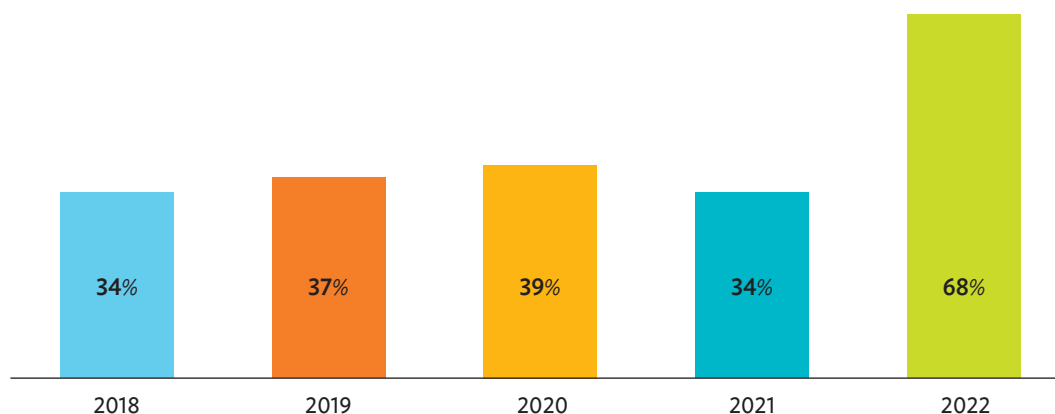


Devastating floods and droughts in parts of Asia and the Pacific in 2022 again highlighted the growing menace that climate change poses to the region. In response to these threats, ADB has increased its ambition for climate financing to up to \$100 billion between 2019 and 2030. The PSOD plays an important role in supporting the bank's climate aspirations in multiple ways, including through projects that expand the use of renewable energy, improve energy efficiency and incorporate new green energy technologies, such as battery storage. PSOD's presence and ability to structure often complex financing arrangements needed for some clean energy projects has also been instrumental in attracting commercial cofinanciers that might otherwise have been unwilling to do so because of perceived risks.

The rising commitment of PSOD to climate-related investments was seen in 2022, with 68% of projects including finance for climate action (Figure 7), double the percentage in 2021. A first nonsovereign investment was committed for renewable power development in Azerbaijan (Box 2), along with a first lari-denominated investment in a green bond issuance to support renewable energy assets in Georgia; and a loan to finance the introduction of energy-efficient equipment at Bangladesh's leading denim manufacturer, Envoy Textiles Limited.

Assistance was also extended to develop a sustainable blue economy and help MSMEs reduce their carbon footprint in the People's Republic of China, as well as to support the development of a wind farm in Viet Nam, in which ADB acted as lead arranger for multiple financiers.

Figure 7: Share of Committed Private Sector Projects with Climate Financing, 2018–2022



Source: Asian Development Bank (Private Sector Operations Department).

Box 2**First Private Sector Renewable Power Investment in Azerbaijan**

A major private sector renewable energy project in Azerbaijan, Alat Solar, is a significant step forward in the country's goal of decarbonizing its energy mix. The [Masdar Azerbaijan Energy Limited Liability Company](#) is developing a 230-megawatt grid-connected solar power plant near Alat, a settlement close to the capital Baku, with support from a \$21.4 million loan from the Asian Development Bank (ADB). The plant will play an important role in helping Azerbaijan meet its target of renewable power sources contributing 30% of total generating capacity by 2030, while avoiding up to 255,400 tons of carbon dioxide emissions annually.

The project company is a wholly owned subsidiary of Abu Dhabi Future Energy Company Private JSC–Masdar, which is a global leader in renewable energy, developing utility-scale clean energy projects, along with smaller off-grid energy applications for remote communities. Masdar is taking a central role in helping Azerbaijan transform its energy sector, which is heavily reliant on fossil fuels. Masdar and ADB have previously partnered on renewable power projects in Uzbekistan.

The project represents ADB's first nonsovereign investment in renewable power in Azerbaijan and is cofinanced with support from the European Bank for Reconstruction and Development, Japan International Cooperation Agency, and Abu Dhabi Fund for Development. As the first major private sector renewables investment in Azerbaijan, it is expected to have a strong demonstration effect on the commercial viability of renewable energy development in the country, while catalyzing further private sector support.



● **Electricity transmission lines, Azerbaijan.** The ADB-assisted Alat Solar Power Project will help Azerbaijan expand the use of renewable energy for power generation (photo by ADB).

Source: Asian Development Bank (Private Sector Operations Department).

[The Bank of Qingdao Company Limited \(BOQ\)](#) has become the first commercial city bank in the People's Republic of China to issue a blue bond. An ADB investment of \$35 million, along with assistance from other international financial institutions in the bond, is providing BOQ with funds to support ocean protection and the development of sustainable blue economies.

Having been involved in green financing since 2013, BOQ is aiming to become the leading blue finance bank in the People's Republic of China. It has potential investments in areas such as sustainable shipping and port logistics, fisheries and seafood processing, chemical waste and plastics management and treatment, development of ocean and water-friendly products, water supply and treatment, sustainable tourism services, and offshore wind energy facilities.

The support from ADB and other partners in the blue bond provides a source of stable, long-term finance for BOQ to pursue blue investments in a market where it is difficult to source such funds. ADB's presence and that of its international partners helps to build credibility around the blue bond concept, paving the way for future institutional investors in this segment of the debt market.

A private sector wind farm project in Viet Nam will help meet fast-growing demand for electricity while bolstering the government's drive to expand the use of clean energy. Supported by a \$107 million financing package, including a \$25 million loan from ADB, [BIM Wind Power Joint Stock Company \(BIM Wind\)](#) will construct and operate an 88 MW wind farm in Ninh Thuan Province, Viet Nam. As lead arranger and book runner for the project, ADB has catalyzed funding from commercial banks and development institutions, with Japan International Cooperation Agency providing \$25 million; Hong Kong Mortgage Corporation Limited, \$13 million; Sumitomo Mitsui Banking Corporation, \$17 million; ING Bank, \$18 million; and Cathay United Bank, \$9 million.

● **Clam harvesting, People's Republic of China.** An ADB investment in a blue bond issuance of the Bank of Qingdao will provide funds for ocean protection and the development of sustainable blue economies (photo by ADB).



The facility will generate more than 240 GWh of clean electricity per year on average, and help Viet Nam reach clean energy and climate action targets by offsetting about 215,000 tons of carbon dioxide annually. BIM Wind is a special purpose vehicle owned by subsidiaries of ACEN Corporation, which is controlled by Philippine conglomerate Ayala Corporation and BIM Group Company Limited, one of the largest private conglomerates in Viet Nam. ACEN Corporation and BIM Group have been developing renewable energy projects since 2019.

Along with the loan financing, ADB will administer a \$5 million grant from the Goldman Sachs and Bloomberg Philanthropies-backed Climate Innovation and Development Fund (CIDF) to be used for mitigating environmental and social risks from the project.

[Ping An International Financial Leasing Company Limited \(PAIFL\)](#), a leading leasing business in the People's Republic of China, is receiving a \$103 million loan from ADB that will support financing to assist MSMEs reduce their carbon emissions and improve their use of energy.

The People's Republic of China is the world's largest energy consumer, and the government has adopted policies and programs to make energy use more efficient as part of its drive to be carbon-neutral before 2060. Larger businesses have undertaken substantial improvements, but MSMEs typically lack the resources to make changes and are much less energy-efficient. The People's Republic of China's financial leasing sector, while smaller than its banking sector, plays an important role in the overall financial system, thereby presenting significant opportunities to support the introduction of more energy-efficient equipment and processes among MSMEs—of which PAIFL has a large customer base.

The ADB loan will enable PAIFL to scale up the leasing of energy-efficient equipment to cut the energy intensity of MSME operations and reduce their carbon footprint. As part of the project, ADB is also providing TA to help PAIFL develop tools for calculating carbon dioxide emission reductions from the use of energy-efficient equipment.

[Envoy Textiles Limited \(Envoy\)](#) is the leading denim fabric manufacturer in Bangladesh with an annual production capacity of 52 million yards, or about 10% of the country's total. Envoy holds the world's first platinum Leadership in Energy and Environmental Design certification for its denim fabric-making facility. To help expand its yarn production capacity and generate new employment, ADB is providing Envoy with a loan equivalent to \$11.2 million (€10.8 million) to install new energy-efficient spinning equipment and other machinery at its manufacturing plant in Jamirdia, north of Dhaka. This new yarn spinning unit will produce up to 3,600 tons of yarn a year, mainly for the manufacture of denim, and create 250 new jobs.



● **Garment training center, Bangladesh.** An ADB investment in denim maker Envoy Textiles Ltd. will help the company boost production; create new jobs; and install new, energy-efficient production equipment (photo by ADB).

The ready-made garments industry is central to the Bangladesh economy, accounting for over 80% of total export earnings. The introduction of modern, automated, energy-efficient spinning equipment will allow Envoy to partially avoid yarn imports, while helping to cut electricity consumption and greenhouse gas emissions.

The investment marks ADB's reentry into textile industry financing in Bangladesh and provides much-needed long-term euro funds that are otherwise not readily available to private sector companies in the country. It is expected to help catalyze further financing support for the textiles sector. The project is PSOD's first in the industry and trade sector since 2012.

The issuance of a green bond—the first locally listed green bond and the largest corporate debt security on the Georgian Stock Exchange—will give a major lift to Georgia's clean energy sector by ensuring that key renewable power facilities have the funds they need to operate. ADB invested \$4 million in the bonds issued by the [Georgian Renewable Power Operations Joint Stock Company \(GRPO\)](#) and also administered cofinancing provided by the Leading Asia's Private Infrastructure Fund.

ADB's participation in the GRPO offering helped draw financing support from other investors, with a further \$63.8 million in parallel cofinancing being provided by the European Bank for Reconstruction and Development, the International Finance Corporation, and the Dutch Entrepreneurial Development Bank, FMO.

The fundraising helped cover the capitalization of GRPO as a leading independent renewable energy operator in Georgia. The company has five renewable power projects, including four hydropower facilities and Georgia's sole wind power plant, generating combined electricity output of over 71 MW and making important contributions to the state-owned electricity network and the country's energy security. The investment was allocated to allow GRPO to refinance the debt of three of its renewable energy assets: the Qartli Wind Power Plant, Akhmeta Hydropower Plant, and Debeda Hydropower Plant.

Green bonds are increasingly used to finance projects with environmental or climate-related benefits, and along with its investments, ADB supports issuers in the process of obtaining formal green validations for their bonds. GRPO is owned by Georgia Capital PLC, one of Georgia's most prominent business groups, with which ADB has a long-standing relationship, including previous investments in other group companies. In 2020, ADB invested in Georgia's first green bond issuance by Georgia Global Utilities, the country's largest privately owned utility company to upgrade water infrastructure.

Making Cities More Livable



The COVID-19 pandemic caused major disruption to urban life, which on top of already existing issues such as pollution, overcrowding, and unequal access to housing and services, highlights the need for substantial improvements in both infrastructure and services in urban areas. Private sector operations aim to make cities more livable, green, and resilient through investments in areas such as sustainable transport, clean energy, water and other urban infrastructure and services, and expanded access to mortgage finance for underserved groups.

In 2022, private sector operations included support for a Philippine company that produces electric vehicle (EV) chargers, assistance to build wastewater treatment plants in India, and a first-of-its-kind investment in electric ferries in Thailand (Box 3).

[VA Tech Wabag Limited \(Wabag\)](#), a leading player in India's water sector, is set to develop new wastewater treatment plants with ADB debt assistance of \$24 million. The project is the first by PSOD in the water sector in South Asia and will provide long-term working capital to allow Wabag, which offers a full range of water technologies and services in its operations, to construct, operate, and maintain the plants.

Private water companies struggle to tap long-term funds for their operations, due to perceptions of high risk and limited opportunities for profit, and ADB's support for Wabag is expected to provide an example for future investments in the sector by international and domestic financiers. ADB is also providing TA of up to \$35,000 to boost Wabag's capacity for assessing and mitigating environmental and social risks for future projects.

The project will contribute to improved sanitation and water security in India, where less than 30% of wastewater is treated before being released back into rivers, and the reuse of water, nutrients, and biogas from the wastewater treatment plants will aid in the development of the circular economy.

A \$20 million ADB loan to [Wyntron Inc. \(Wyntron\)](#), an electronics products provider that manufactures chargers, is giving a boost to the nascent EV industry in the Philippines. The proceeds from ADB's 6-year tenor loan will allow Wyntron, which has worked on developing EV chargers with Siemens Industry since 2018, to expand its purchasing and production facilities, as well as refurbish a factory and acquire additional machines and equipment to meet rising international demand.

The market for EV chargers is expected to increase from \$33 billion in 2021 to around \$210 billion by 2028, the bulk of which will be met by the private sector. By providing chargers for export, Wyntron is contributing to the global drive to decarbonize the transport sector. The project will also help increase the Philippines' production capacity for EV chargers and support the development of the local EV industry.

Box 3**ADB-Led Funding for Rollout of Public Electric Ferries in Thailand**

Energy Absolute Public Company Limited (Energy Absolute), one of the largest renewable energy companies in Thailand, is receiving support from the Asian Development Bank (ADB) for the launch of an electric ferry (e-ferry) fleet in Bangkok. The project is the first commercial-scale use of electric ferries for mass rapid transit in Southeast Asia. ADB is providing a \$4.7 million equivalent Thai baht loan to the company as part of a wider financing package in which ADB's lead financing role has helped address key risks and catalyzed cofinancing support. This includes a \$3.6 million concessional loan from the Clean Technology Fund and parallel cofinancing of \$9.6 million from the Japan International Cooperation Agency and Export-Import Bank of Thailand.

The funds will be used by a subsidiary of Energy Absolute to develop and operate 27 electric-powered ferries along the Chao Phraya River, a key transport waterway in the capital. The introduction of the e-ferries will provide a clean transport option, reducing greenhouse gas emissions by an estimated 18,900 tons of carbon dioxide equivalent a year. This is substantial as Bangkok suffers from chronic air pollution and its traffic congestion is ranked among the worst in the world.

As part of the project's gender action plan, the operator will improve the safety of female passengers on ferries through a number of safety design features, including designated seating for pregnant women and measures to address sexual harassment. It will also enhance gender inclusivity by ensuring that 30% of crew members are female.

Energy Absolute, established in 2006, is a clean energy leader in Southeast Asia, which ADB had previously supported in its maiden green bond issuance in 2019 and its first certified green loan financing in 2020. The current project is expected to have a strong demonstration effect for the launch of similar future e-ferry services.



● **E-ferries, Bangkok.** The launch of a fleet of public electric ferries in Thailand will be the first commercial-scale use of electric ferries in Southeast Asia (photo by ADB).

Source: Asian Development Bank (Private Sector Operations Department).

Promoting Rural Development and Food Security



Food sustainability is an important priority for ADB, which has announced plans to provide at least \$14 billion over 2022–2025 to respond to the serious global food crisis that emerged in 2022 and to support long-term food security by making production systems better able to withstand the impacts of climate change and biodiversity loss. Direct support for farmers and agribusinesses is key to stronger food systems. ADB has earmarked \$3.5 billion for this sector, with an additional \$5 billion in cofinance to be provided by the private sector.

In 2022, nearly a quarter of private sector projects promoted rural development and food security, with \$184 million committed in direct agribusiness financing. There was a strong focus on addressing the connection between climate change and food security through investments that support climate-resilient fish-farming and the adoption of specialty fertilizers in India.

ADB has entered into its first private sector sustainability-linked financing agreement with [ABIS Exports India Private Limited \(ABIS\)](#), one of India's leading integrated animal protein companies. The \$16 million (in Indian rupee equivalent) debenture investment by ADB, along with a TA grant of \$500,000, will enhance food security in India by supporting the construction of a micro fish feed plant and by training up to 6,000 farmers in climate-resilient fish farming practices and financial literacy.

In line with its sustainability focus, ADB is offering ABIS margin discounts on its debt investment, in return for the company meeting performance targets in areas including carbon dioxide emissions reductions and water conservation. The investment is tagged as a blue debt facility under the ADB Action Plan for Healthy Oceans and Sustainable Blue Economies, which includes financing that contributes to food security.

[Smartchem Technologies Limited \(STL\)](#), a subsidiary of Deepak Fertilisers and Petrochemicals Corporation Limited, one of India's leading fertilizer and chemical businesses, is tapping ADB's assistance to develop specialty fertilizers that can reduce water pollution, improve soil health, and increase agricultural productivity across crops. ADB will provide a \$30 million loan to support the expansion of STL's enhanced efficiency fertilizer business.

The development of enhanced efficiency fertilizers tailored to specific crops with features including controlled release and water solubility has the potential to cut fertilizer-related water pollution by 60%, while maintaining productivity and food security. With runoff from existing fertilizers being a major contributor to pollution of India's inland waterways, along with indiscriminate use of urea leading to a significant deterioration in soil health, harvests are undermined. The project therefore also includes a TA grant of \$500,000 to help 4,000 smallholder farmers learn more climate-resilient soil management practices and receive financial literacy training.



● **Climate-resilient farming, India:** ADB assistance for Smartchem Technologies Limited is helping to develop specialty fertilizers and support climate-resilient farming practices (photo by Smartchem Technologies Ltd).

Strengthening Governance and Institutional Capacity



The need for strong governance and institutions underpins effective and sustainable development, and PSOD supports this Strategy 2030 priority in many ways. This includes working with clients to help them adopt good governance practices and environmental and social safeguards, and providing training on issues such as anti-money laundering.

In 2022, ADB made its largest-ever investment in a wind power plant in Uzbekistan (Box 4), where PSOD played an important role in catalyzing commercial cofinancing for the project and in setting standards for safeguards and women's empowerment.

Fostering Regional Cooperation and Integration



The need for closer regional cooperation to help countries absorb shocks and collectively address common cross-border issues such as climate change has been brought to the fore by the COVID-19 pandemic and recent extreme weather events. Stronger regional integration is also crucial for providing opportunities for smaller, fragile, and often isolated developing member countries.

Through its Trade and Supply Chain Finance Program and projects, PSOD supports this Strategy 2030 priority that seeks to grow both regional and global trade.

In 2022, PSOD committed \$129 million for projects supporting regional cooperation and integration, including investments in five private equity funds that provide growth capital to companies across the region and a loan for an agribusiness project to support farmers in South Asia and Southeast Asia.

To help smallholder farmers recover from the pandemic and increase their resilience to the impacts of climate change, Louis Dreyfus Company B.V. (LDC) is extending working capital to finance coffee, cotton, and rice inventories of over 50,000 smallholder farmers in India, Indonesia, Pakistan, Thailand, and Viet Nam. This is being supported by a \$100 million ADB loan and accompanying TA that will help around 4,000 farmers, specifically women farmers, to adopt sustainable, climate-resilient agricultural practices. These practices include drip irrigation in cotton fields and use of biochar kilns, which will be pilot tested in India. The ADB loan helped catalyze cofinancing in the form of risk transfers.

Box 4

First Wind Power Plant for Uzbekistan



● **Harnessing the power of the wind.** Uzbekistan is looking to scale up its use of renewable energy sources and with ADB assistance will build its first wind power plant (photo by ADB).

Uzbekistan is set to construct its first wind power plant with a financing structure, safeguards, and gender action plan that will provide a blueprint for potential future replication. [Shamol Zarafshan Energy Foreign Enterprise Limited Liability Company \(SZE\)](#) has obtained a \$42 million Asian Development Bank (ADB) loan as part of a wider financing package to build and operate a 500-megawatt power plant that incorporates best practice safeguard standards and a strong gender plan. The facility, located to the east of Zarafshan City in the Navoi region, will be made up of over 100 state-of-the-art wind turbine generators and will generate 1,599 gigawatt-hours of clean power annually, avoiding more than 890,000 tons of carbon emissions. SZE is a subsidiary of Abu Dhabi Future Energy Company Private Joint Stock Company – Masdar.

The development of the plant supports Uzbekistan’s national goal of scaling up the use of renewable energy assets to reduce reliance on aging and inefficient fossil fuel-powered generation assets. The project will meet rising demand for electricity in Uzbekistan—one of the fastest growing economies in Central Asia—particularly in underserved urban and rural areas.

The project is cofinanced with the European Bank for Reconstruction and Development, First Abu Dhabi Bank, the International Finance Corporation, the Japan International Cooperation Agency, and Natixis. As part of the financing package, ADB helped catalyze a \$10 million B-loan from the Dutch Entrepreneurial Development Bank, FMO. ADB also signed a sovereign-backed partial credit guarantee of \$19.5 million to mitigate the credit risk associated with the offtaker, Joint Stock Company National Electric Grid of Uzbekistan.

The plant is the largest wind power facility ADB has ever funded, and the project is expected to have a significant demonstration effect, highlighting the commercial viability of wind power development in Uzbekistan.

Along with helping to structure and raise finance for the project, ADB will support SZE to adopt international best practice for environmental and social safeguards and put in place a meaningful gender action plan that will promote opportunities and empowerment for women.

Source: Asian Development Bank (Private Sector Operations Department).

Strategic Focus and Priority Areas



Agribusiness

Agribusinesses play a major role in most ADB DMCs, underpinning food security and generating jobs and livelihoods.

Private sector operations help agribusinesses in many ways, including making investments that allow them to boost production, develop value chains, and pursue farming practices that incorporate climate resilience and environmental sustainability.

In 2022, ADB continued its assistance to large agribusiness houses with \$184 million committed for five sector projects, which helped strengthen food security, boost farmer livelihoods, and introduce more energy-efficient and climate-resilient agricultural practices. One of the most significant investments was a loan to one of Mongolia's largest conglomerates (Box 5) to ensure stable supplies of wheat, the country's key food staple.

ADB has committed its first loan for a private sector agribusiness project in Cambodia, with [De Heus TMH Company Limited \(DH-TMH\)](#), a major animal feed producer, receiving \$15 million to expand its operations in Kampong Speu Province and purchase additional processing machinery. This assistance will allow DH-TMH to source more raw materials from farmers to produce

animal feed and expand storage facilities to protect raw materials from climate extremes. This project is expected to improve farmers' livelihoods and national food security.

The ADB assistance will allow DH-TMH to increase feed production by over 96% by 2025 from 2021 levels, expand storage capacity by over 36%, and increase the share of raw materials sourced locally by over 66%.

A separate TA grant will provide training in climate-resilient farm practices to 2,000 maize and 2,000 poultry farmers, with provisions for substantial participation of women farmers. Also, as part of its assistance package, ADB is providing partial risk guarantee cover of up to \$5.2 million on the loan to DH-TMH through the Asian Development Fund Private Sector Window. This facility fosters private sector development in frontier markets by helping to reduce risks attached to financing.



● **Poultry farmer, Cambodia.** An ADB investment in De Heus TMH Company Limited, a major **Cambodian** animal feed producer, will allow sourcing of more raw materials from farmers, helping their livelihoods (photo by ADB).

Box 5

Mongolia's Tavan Bogd Gets Assistance to Strengthen Food Security

Tavan Bogd Group, one of Mongolia's largest diversified conglomerates, with its three operating subsidiaries as borrowers, has received an \$18 million loan from the Asian Development Bank (ADB) to support stable wheat flour procurement and creation of new jobs. Ulaanbaatar Flour (UBF) is Mongolia's leading wheat flour producer with a 35% market share and is the largest buyer of domestic wheat, the country's main food staple. Tavan Bogd Foods (TBF) and Tavan Bogd Foods Pizza (TBF Pizza) are leading players in the quick service restaurant industry through KFC and Pizza Hut stores located within and outside the capital city of Ulaanbaatar.

Out of the total loan of \$18 million, \$8 million will be used by UBF to procure 60,000 tons of wheat directly from farmers. The remaining \$10 million will be used to support the construction of eight additional quick-service restaurants and two warehouses, split between KFC and Pizza Hut. The project will preserve the livelihoods of 6,000 wheat farmers and 1,503 employees, as well as generate 358 new jobs, with employment opportunities extending to people with disabilities and women.

The project is playing an important role in helping Mongolia meet its wheat supply needs, while the restaurant and warehouse expansion will support domestic economic activity. Collectively, these measures will boost food security, which has been undermined by the coronavirus disease (COVID-19) pandemic and the Russian invasion of Ukraine. These events have disrupted agricultural supply chains and caused price volatility.

ADB has built a good working relationship with the Tavan Bogd Group through its \$15 million working capital loan to UBF and TBF during the pandemic in 2020 to support their liquidity requirements. The new project, through a gender action plan, will enhance gender equality and disability inclusion, which includes women internships at UBF and disability inclusion staff training for TBF and TBF Pizza employees.

● **Inspection at a flour factory, Ulaanbaatar.** An employee inspects wheat at Ulaanbaatar Flour, a subsidiary of Mongolian conglomerate Tavan Bogd, which is getting ADB assistance to purchase wheat and build restaurants that will support food security and create jobs (photo by Ulaanbaatar Flour).





Finance

Smaller businesses play an outsized role in the economies of many ADB DMCs, but lack of access to finance hampers their development. In addition, many adults in the region remain excluded from formal financial services. The COVID-19 pandemic and interest rate hikes driven by sharp spikes in inflation in 2022 have made accessing funding for both small enterprises and microborrowers even more difficult and costly. Against this backdrop, PSOD finance sector operations in 2022 focused heavily on providing funds to needy MSMEs, particularly those owned and operated by women. This includes investments to help smaller enterprises in the People's Republic of China lower their carbon footprint, financing for enterprises in Kazakhstan affected by COVID-19, and assistance for small businesses in the transport and logistics sector in India.

In the People's Republic of China, [Bank of Huzhou Co., Ltd.](#), a fast-growing green financier, has secured ADB assistance that will allow it to scale up funding to help MSMEs decarbonize their operations. Using the proceeds from ADB's \$47.4 million loan, Bank of Huzhou will provide long-tenor green financing to help MSMEs, including those owned and run by women, take steps to make their businesses more energy-efficient and less carbon-intensive.

More than half of all household and industrial carbon dioxide emissions is estimated to be generated by MSMEs. The provision of long-term finance, specifically for energy efficiency improvements, will help these businesses adjust existing practices, and support the People's Republic of China's goal of becoming carbon-neutral by 2060.

Kazakhstan's largest microfinance institution, [KMF Limited Liability Company \(KMF\)](#), is getting ADB assistance to scale up lending for MSMEs, particularly in rural areas where operations have been badly affected by COVID-19. A \$15 million ADB loan will allow KMF to deploy additional funds across a wide range of sectors, including for businesses owned and led by women who face significant impediments in sourcing finance for their operations. Nearly 97% of all businesses in Kazakhstan are MSMEs, contributing more than 27% to gross domestic product.

Some 35% of the total microfinance institutions in Kazakhstan are managed by KMF, which has a strong focus on the underserved lower-income and lower-middle-income segments. Over two-thirds of its customers are from rural areas and more than half are women-owned and women-led MSMEs. The project aims to increase the total number of MSME borrowers and the number of women-owned and women-led MSMEs by more than 46% by 2025 compared to 2020 levels.

In India, [Shriram Transport Finance Company \(STFC\)](#) will use a \$100 million loan from ADB to finance MSMEs engaged in transport and logistics. The logistics, distribution, warehousing, and transport business is an important segment of MSMEs in India whose operations were badly affected by the pandemic. The ADB assistance will give STFC—the flagship company of the Shriram Group, which has a leading position in the commercial vehicle segment in India—the long-term assistance it needs to finance commercial vehicles owned and operated by MSMEs in the transport and logistics sectors. The vehicles purchased will need to meet high emission standards, with at least 20% of the proceeds to be deployed in lagging states, and at least 10% to benefit women borrowers or co-borrowers. Funds will also be deployed to finance electric vehicles.

The project will aid in the restoration of supply chains disrupted by COVID-19, while the ADB requirement for purchasing vehicles with high emission standards will contribute to greener transport in India.

Health

Good quality health care is essential for full economic participation, which in turn underpins productivity and supports reduced levels of poverty.

The COVID-19 pandemic brought into sharp focus gaps in the availability of quality, affordable health care services and products across the region, highlighting the need for stepped-up assistance. Private sector operations in 2022 enabled better access to affordable medical equipment in Indonesia (Box 6) and hygiene products in Viet Nam, and improved dialysis services in Uzbekistan.

Through a public-private partnership project between the Government of Uzbekistan and [Nephrocare Health Services Central Asia LLC \(NephroPlus\)](#), ADB is providing assistance to NephroPlus to improve health care for at least 1,100 chronic kidney disease patients across Uzbekistan. NephroPlus is receiving a loan of up to \$5.03 million from ADB and up to \$3.4 million in concessional assistance from the Leading Asia's Private Sector Infrastructure Fund to establish four dialysis centers in Tashkent City, the Republic of Karakalpakstan, and Khorezm Region.

Box 6**ADB Helps Deliver Affordable Medical Equipment in Indonesia**

The largest manufacturer and distributor of medical equipment and supplies in Indonesia, [PT Jayamas Medica Industri \(JMI\)](#), is receiving an equity investment from the Asian Development Bank (ADB) of \$12.3 million in Indonesian rupiah equivalent for the company's initial public offering (IPO). The IPO proceeds will be used by JMI to increase its manufacturing and distribution capacity by adding two manufacturing facilities, a national distribution center, 15 warehouses, and 25 new retail stores. Collectively, this added capacity will significantly increase the availability of locally made and affordable medical equipment and supplies.

Health care outcomes in Indonesia have been hindered by the high cost of medical services and equipment, with an overreliance on imported medical products. During the coronavirus disease (COVID-19) pandemic, the country suffered from shortages and significant price increases in face masks, medical gloves, thermometers, and disinfectants due to a global scarcity in supplies. Expanding the availability of locally made, affordable medical products will strengthen the resilience of its health care system and help make the Government of Indonesia's universal health insurance program, Jaminan Kesehatan Nasional, more financially sustainable.

ADB's participation in the IPO has attracted other investors and raised \$41 million in parallel cofinancing from a range of investors. ADB is also assisting JMI to establish a comprehensive environmental and social management system and to put in place measures to achieve high corporate governance standards.

The products of JMI tend to be more affordable than comparable items available in the market. JMI has the most comprehensive portfolio of medical supplies in Indonesia, with a distribution network that spans all 34 provinces, physical stores, and a presence on e-commerce platforms.



● **Medical laboratory, Indonesia.** Assistance to boost local production of medical equipment and supplies will strengthen resilience of the country's health care system (photo by ADB).

Source: Asian Development Bank (Private Sector Operations Department).

The funds will be used for the purchase of new equipment, civil works, and as working capital. The Tashkent center will have at least 160 dialysis machines, making it one of the largest stand-alone dialysis facilities in the world. Along with constructing, equipping, and training staff for the dialysis centers, NephroPlus will introduce peritoneal dialysis for the first time in Uzbekistan. The government has agreed to cover the full cost of hemodialysis and peritoneal dialysis fees for at least 1,100 patients a year in the four centers.

This is ADB's first financing of private health care in Uzbekistan and the project is expected to pave the way for future health care public-private partnerships in the country. In addition, ADB is working with NephroPlus to carry out a gender action plan that seeks to increase women's participation in technical and skilled work in the company's dialysis treatment centers.

Infrastructure

While Asia and the Pacific has made great strides in delivering improved infrastructure in recent decades, significant gaps remain. Developing Asia alone is estimated to need to spend up to \$1.7 trillion a year on infrastructure through to 2030 to maintain growth and meet development needs.² The worsening climate crisis also poses rising challenges to the sustainability of infrastructure.

To help DMCs reduce the carbon intensity of their economies, PSOD is focusing investments on areas including clean energy and energy efficiency, environmental infrastructure, ICT, and transport. In 2022, there were five clean energy projects, including a waste-to-energy project in Viet Nam (Box 7) as well as two conventional energy investments, which included assistance to improve power distribution in India. Telecommunications projects in Maldives and the Philippines, meanwhile, will give a major boost to connectivity and access to internet services in remote communities.

India's [Tata Power Delhi Distribution Limited \(TPDDL\)](#), a major distributor of electricity in Delhi, is getting an ADB debt injection of \$18.1 million in rupee equivalent to improve its distribution network, allowing it to reduce losses and meet future load growth. ADB will also administer a \$2 million CDF grant that will be used to partly finance a 10 megawatt-hour pilot battery energy storage system at TPDDL's substation. The system will allow electricity to be stored and delivered on demand, reducing grid instability and providing greater flexibility for integrating power from solar and wind facilities into the grid.

Power distribution in India is plagued by dilapidated networks, high electricity losses, and financial weakness. In 2022, the Government of Delhi split the generation, transmission, and distribution components of the power supply and created three distribution circles, with TPDDL winning the bidding for the north and northwest. Like other distributors, TPDDL needs to substantially upgrade infrastructure to increase customer coverage and reduce losses.

² ADB. 2017. *Meeting Asia's Infrastructure Needs*. Manila.

Box 7

Viet Nam Waste-to-Energy Project Promotes Cleaner Environment

● **Composting plant, Viet Nam.** An ADB-assisted waste-to-energy project will produce renewable power and organic fertilizer for farms (photo by BIWASE).



To help tackle Viet Nam's growing solid waste problem, a loan of \$7 million from the Asian Development Bank (ADB), along with \$6 million from the Leading Asia Private Infrastructure Fund and parallel cofinancing of \$7 million from the Japan International Cooperation Agency have been committed to the [Binh Duong Water Environment Joint Stock Company \(BIWASE\)](#).

Rapid urbanization and economic growth have resulted in a sharp rise in solid waste volumes in Viet Nam, with the province of Binh Duong alone generating over 2,600 tons a day. BIWASE will construct and operate a composting plant with a capacity of 840 tons per day and a waste-to-energy facility that can process 200 tons of industrial and municipal waste a day, generating 5 megawatts of electricity for its own use. The plant will cut the volume of waste going to landfills, as well as provide a renewable source of power. The composting facility will also produce organic fertilizer for agricultural use.

ADB has worked with BIWASE on a water project in 2020, which was ADB's first private sector water transaction in the Greater Mekong Subregion. BIWASE is a leading water and waste management company and has a dominant presence in Binh Duong Province.

The financing package for the project, including the provision of a blended concessional loan from the Leading Asia Private Infrastructure Fund, which helps mitigate risk and improve financial viability, allows BIWASE to move away from sovereign assistance to stand-alone private sector funding. The project was structured through close collaboration between the Private Sector Operations Department and Southeast Asia Department, marking the first joint nonsovereign transaction in waste management in the Greater Mekong Subregion between the two departments. This partnership is expected to have strong replication potential.

Source: Asian Development Bank (Private Sector Operations Department).

The ADB loan will allow TPDDL to put in place a new 66/11-kilovolt grid and make additions or improvements to existing equipment and infrastructure, as well as cover the cost of installing the battery energy storage system into its network. The battery energy storage system is the first to be fully integrated into a distribution network in South Asia, and the lessons from TPDDL's experience are expected to be replicated, with the systems eventually mainstreamed in distribution companies across India.

The electricity distributor is a joint venture of Tata Power Company Limited and government-owned Delhi Power Company Limited with 1.9 million customer connections over 500 square kilometers.

In Maldives, an ADB loan of \$9 million, together with parallel cofinancing of \$15.9 million from the International Finance Corporation, will improve the affordability and quality of broadband internet services. The funds will be used by [Dhivehi Raajjeyge Gulhun Public Limited Company \(Dhiraagu\)](#) to invest in the SEA-ME-WE 6 (SMW6) submarine cable system and for other capital expenditures. The cable will connect to other international submarine links.

Quality telecommunications services are crucial for the development of small island developing states. An archipelago of over 1,100 islands, Maldives has a population of just over 550,000 living in a total area of 90,000 square kilometers. The government uses the internet to deliver education, health, judicial, and other services. Despite the high internet and mobile phone penetration rate, many small island communities still lack access to fixed broadband connections because of high costs, even as insufficient access to international infrastructure hinders the quality of internet services.

The SMW6 is part of an international undersea cable system traversing 15,000 kilometers, connecting Europe and Asia via the Middle East, with seven branch landing stations, including Maldives. Once the cable project is completed, Dhiraagu, the leading digital services provider in Maldives, expects to be able to sharply increase its bandwidth and volume of data transmissions, and to raise the number of its fixed broadband subscribers by nearly 45%.



● **Domestic transport terminal, Maldives.** A new information and communication technology project will continue ADB's efforts to enhance connectivity in this archipelago of widely scattered islands (photo by ADB).

The ADB loan, with a tenor of up to 8 years, is the first private sector infrastructure financing transaction in Maldives.

[Tiger Infrastructure Philippines, Inc.](#) is building 380 telecommunications towers in the central and southern regions of the Philippines, which will improve digital connectivity in often remote and widely scattered communities in the Visayas and Mindanao islands. To assist in the construction and operation of the towers, ADB is providing a loan of \$25 million in peso equivalent and will administer another loan of \$15 million from the Leading Asia's Private Infrastructure Fund.

Improving digital connectivity is key to supporting both social services and business activities and plays an important role in the achievement of the Sustainable Development Goals. Although the Philippines has one of the highest mobile phone penetration rates in Southeast Asia, structural challenges in the telecommunications industry and the archipelagic nature of the country have resulted in very low tower coverage. The Government of the Philippines estimates that an additional 60,000 towers are needed by 2031 in unserved and underserved areas. The lack of investment in towers is particularly marked in the Visayas and Mindanao. The towers will be available for use by multiple mobile network operators, providing a full range of mobile and data services to consumers.

Private Equity Funds

Private equity funds provide important capital injections into companies that can help create jobs, economic growth, and sustainable development. Through its support, ADB can broaden the reach and impact of its operations and help promote greater gender diversity and the adoption of international-standard environmental and social safeguards in companies in which it invests.

Both the COVID-19 pandemic and the Russian invasion of Ukraine have strained the availability and cost of finance, particularly for small and medium-sized enterprises (SMEs). In 2022, PSOD supported five funds that invest in companies operating in a wide range of sectors, including health care and sustainable forestry management (Box 8).

[Quadria Capital Fund III L.P. \(Quadria Fund III\)](#), a private equity fund specializing in health care, is managed by Quadria Capital, one of Asia's largest health care-focused investment firms with assets under management of around \$1.7 billion. An ADB equity injection of \$25 million in Quadria Fund III will help catalyze capital into the fund and provide financing for growth purposes to health care companies in India and Southeast Asia.

South Asia and Southeast Asia require significant private sector investment for improvements in health infrastructure, products, and services. In these regions, health care spending ranges from only 1% to 4% of gross domestic product. The number of hospital beds per 1,000 people is 10 times less than levels recommended by the World Health Organization, and out-of-pocket spending makes up over half of all current health care spending, with these costs pushing many people into poverty.

Box 8**First Private Sector Investment to Improve Forest Management in Asia**

The Asian Development Bank (ADB) has made its first investment in a private equity fund that directly supports forestry companies with a \$5 million capital injection into [New Forest's Tropical Asia Forest Fund 2 \(TAFF2\) L.P.](#) This is also ADB's first forestry project in over a decade. In addition to its own equity investment, ADB will also administer \$10 million from the Australian Climate Finance Partnership Trust Fund, a concessional blended financing facility managed by ADB and funded by the Government of Australia to catalyze financing for private sector climate adaptation and mitigation projects in the Pacific and Southeast Asia.

The fund will use these investments to provide capital to sustainably managed commercial forestry companies across Southeast Asia—and potentially in Solomon Islands as well.

Healthy forest ecosystems play an important role in climate mitigation through carbon sequestration, and in preserving biodiversity. Historically, financing for sustainable forestry in emerging economies has been limited given a range of risks, so the investments will help fill a gap. TAFF2 has a target size of \$300 million, which will help forest plantation companies acquire new assets, including established and brownfield plantations, greenfield developments, and processing facilities. The investments in TAFF2 will also help reduce logging of natural tropical forests and improve the livelihoods of forestry workers and communities.

New Forests Asia (Singapore) Pte Ltd., one of the leading forestry fund managers in Asia and the Pacific, will manage TAFF2. ADB will work with the fund manager to bring its environmental and social management system for investments in line with ADB safeguard standards. ADB will likewise provide guidance on advancing gender equality, including upskilling of female plantation workers. The fund manager has committed to attaining best practice sustainable forestry certification from the Forest Stewardship Council for all its investments.



● **Mekong Timber Plantation's nursery, Lao People's Democratic Republic.** An equity investment to promote sustainable forest management in Southeast Asia is ADB's first in a private sector forestry fund (photo by New Forests).

Source: Asian Development Bank (Private Sector Operations Department).



To address these challenges, ADB's equity investment in Quadria III will target investments in companies operating in India, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam. The fund aims to deploy up to \$1.2 billion in capital across 8–10 market-leading and growing private companies with average deal sizes ranging from \$70 million to \$200 million. Targeted health care segments include hospitals, pharmaceuticals, medical devices, health technology, and consumer health care and distribution. ADB has helped Quadria Capital develop a gender plan that will enable the fund to identify appropriate investments and adopt practices that benefit women and children. In addition, with ADB's guidance, the fund will encourage its investee companies to conduct energy efficiency assessments and establish energy savings and emission reduction targets to reduce their carbon footprint.

ADB has committed a \$60 million equity investment in [OrbiMedAsia Partners V, L.P. \(OAP V\)](#) to promote improved health care in the People's Republic of China and India. OAP V is expected to make investments in 20–25 health care companies across the biopharmaceuticals, medical technology, health care services, diagnostics, and medical distribution subsectors in the two countries. Investments will range from \$10 million to \$50 million per company.

Health care is one of the fastest growing sectors in the People's Republic of China and India with sector expenditure per capita in both countries increasing by more than 5% annually over 2009–2019. The need for greater health care capacity has been brought into focus by the COVID-19 pandemic, while businesses also need additional investments to be able to offer more innovative services and to adopt new digital technologies.

OAP V is managed by OrbiMed Advisors LLC, a leading global health care investment firm that provides capital across the health care industry from start-ups to large multinational corporations, with the goal of building world-class health care companies. The capital commitment from ADB is its fourth investment in an OrbiMed-managed health care fund following previous commitments to OrbiMed Asia Partners II, L.P. in 2014; OrbiMed Asia Partners III, L.P. in 2017; and OrbiMed Asia Partners IV, L.P. in 2020.

ADB has committed a \$30 million equity investment in [Growtheum Capital Partners SEA Fund I L.P.](#) to expand investments in middle-market Southeast Asian companies operating in the consumer, digital services, education, financial services, and health care sectors. The fund is managed by Growtheum, a regional private equity fund manager based in Singapore. The fund is Growtheum's first and aims to make 8 to 12 equity investments of between \$50 million and \$125 million each, as well as larger investments augmented by cofinancing capital.

Investments in middle-market companies help create new jobs, increase incomes, and generate larger tax revenues. However, institutional investors have typically shunned these companies due to perceived economic and political risks. In recent years, political and economic stability has improved in countries in Southeast Asia, which has enabled the introduction of stable fiscal and monetary policies, thereby improving the region's risk perception. Given this backdrop, platforms like Growtheum offer investors a conduit to support the region's economic growth and social development in markets where private equity capital is still lacking relative to demand.

ADB has worked with the fund on designing a gender plan to target investments and adopt practices that aim to improve access to resources and provide more opportunities for women. In addition, with ADB guidance, the fund will encourage its investee companies to conduct energy efficiency assessments and establish energy savings and emission reduction targets to reduce their carbon footprint.

[KV Asia Capital Fund II L.P. \(KV Asia II\)](#), a private equity fund focused on Southeast Asia, will provide much-needed growth capital to middle-market companies operating in health care, financial services, education, manufacturing, business services, and the consumer goods and services sectors. ADB's \$15 million equity investment in KV Asia II will help fill a gap in the financing needs of the fund's targeted investee companies, which often lack the scale to easily access equity capital. KV Asia II's investments will allow target companies to acquire new customers, expand into underdeveloped markets, and provide high-quality services at affordable prices.

KV Asia II is managed by KV Asia, which has previously raised around \$450 million in equity capital for two funds investing in growth companies in Southeast Asia. ADB's investment will help the fund enhance its management of environmental and social issues as well as implement energy efficiency measures to reduce its carbon footprint.

KV Asia II is also the first KV Asia-managed fund to incorporate a gender lens investing approach across its operations, which will help improve access to resources and opportunities for women and promote their inclusion and empowerment in businesses.

Catalyzing Cofinancing

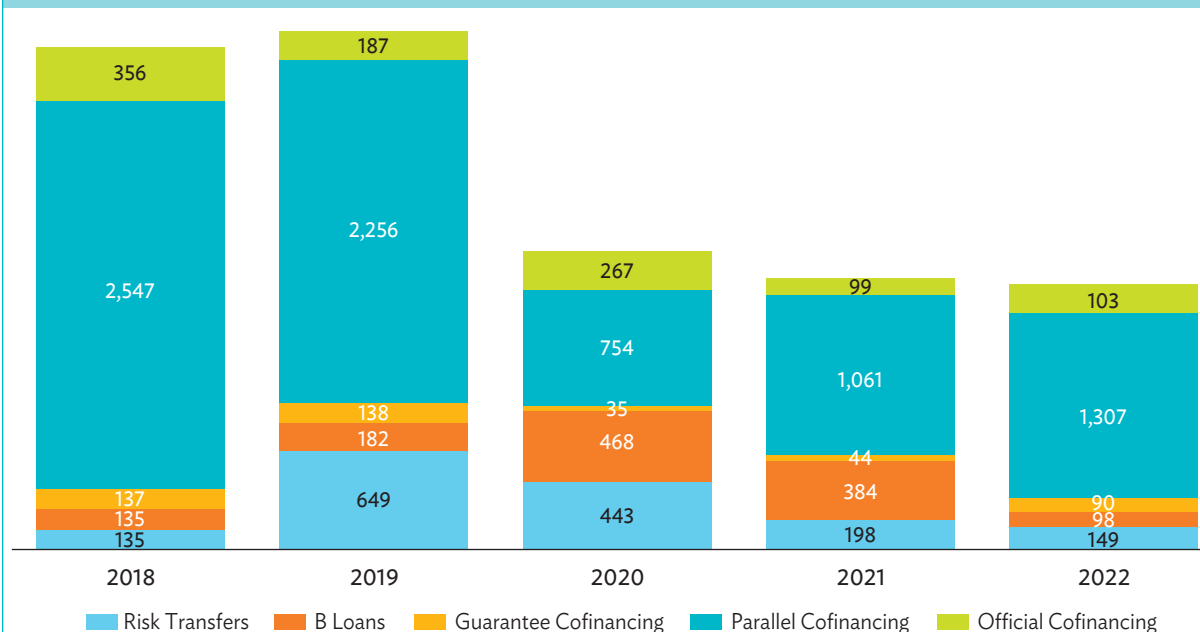


Cofinancing is a critical element of ADB operations, with both commercial and concessional cofinanciers filling funding gaps, sharing risks, and providing knowledge and expertise that contribute to the impact and effectiveness of projects, programs, and technical assistance.

The lingering effects of the COVID-19 pandemic and a surge in inflation following the Russian invasion of Ukraine saw costs for businesses rise and access to commercial finance dwindle in 2022. Against this backdrop, long-term cofinancing provided in the form of risk transfers, B loans, guarantees, and parallel and official cofinancing reached \$1.7 billion (Figure 8), with a ratio of \$1.8 for every \$1 ADB committed for private sector assistance. While below the \$2.2 raised in 2021, the 3-year cofinancing ratio average for 2020 to 2022 is at \$2.0, in line with ADB's corporate results framework target of \$2.0 by 2024. The ADB Strategy 2030 target is to attract \$2.5 in long-term cofinancing for every \$1 of ADB financing for private sector operations. Separately, long-term cofinancing for trade activities reached \$127.7 million. Total private sector cofinancing for the year reached \$7.1 billion, below the \$8 billion recorded in 2021 but above the average annual amount of \$6.8 billion between 2019 and 2021.

Despite reduced risk appetite among investors, reflecting fears of nonrepayment by borrowers in emerging markets, perception of ADB as a reliable “honest broker” and PSOD's reputation for arranging high-quality transactions with well-constructed insurance underwriting arrangements,

Figure 8: Private Sector Operations Department's Long-Term Cofinancing, 2018–2022
(\$ million)



Source: Asian Development Bank (Private Sector Operations Department).

saw a number of major credit insurers commit to support private sector operations in 2022. A Master Framework Program agreement signed between ADB, Allianz Trade, AXA-XL, Chubb, Liberty Mutual, and Tokio Marine will see these five leading global insurers provide up to \$1 billion in coverage for ADB's lending to private financial institutions. The five companies will cover the risk of nonpayment on a portion of ADB's loans to the institutions, taking on risks they might not otherwise commit for individual transactions. This will allow ADB to transfer credit risks from its own portfolio to the balance sheets of the insurance firms, freeing up ADB capital and allowing the bank to expand its lending capacity and diversify its portfolio.

Among projects that have received substantial cofinancing over the year were renewable energy projects in Azerbaijan and Uzbekistan; an investment in Vietnam Prosperity Joint Stock Commercial Bank to support women-owned SMEs, which drew in \$400 million in parallel financing from three commercial banks and the Japan International Cooperation Agency; and the VinFast Electric Mobility Green Loan Project (Box 9) in Viet Nam.

Third-Party Funds and Blended Finance

Third-party funds administered by ADB, such as the Leading Asia's Private Infrastructure Fund, serve as a valuable financing source, as well as helping leverage additional financing from institutional investors. Much of their focus is on projects that address climate change and support infrastructure development.

In February 2022, the ADB-managed CIDEF was launched with \$25 million in grant commitments from the Goldman Sachs and Bloomberg Philanthropies. The CIDEF, which is ADB's first philanthropic fund with private institutions, was created to support sustainable low-carbon development in DMCs in South Asia and Southeast Asia through investments in innovative private sector projects addressing climate mitigation and adaptation. These include areas such as renewable power development; energy efficiency, storage, and management; carbon capture and storage; sustainable transport; climate-resilient agriculture, forestry, land and water use; waste management; and green manufacturing and construction. By providing concessional finance to reduce risks, CIDEF is aiming to leverage up to \$500 million in project finance from the private sector. Initial investments include two projects in India and three in Viet Nam.

Blended financing products involve a mix of concessional donor funds, along with ADB resources and commercial market-based finance. These products help mitigate specific investment risks and have supported projects that otherwise cannot proceed solely with commercial funding. A project to develop electric battery-powered buses in India (Box 10) demonstrates the effectiveness of using blended products to address market risks associated with investing in green public transport.

Box 9

ADB Leads Financing for Viet Nam's First Electric Public Bus Transport Fleet



● **VinFast facility, Viet Nam.** An ADB-led financing package will support development of a first-of-its-kind electric public transport bus fleet for Viet Nam (photo by VinFast Trading and Production JSC).

Viet Nam's first electric public transport bus fleet and first national electric vehicle (EV) charging network are getting critical finance from a \$135 million funding package mobilized by the Asian Development Bank (ADB) for [VinFast Trading and Production Joint Stock Company \(VinFast\)](#). VinFast, Viet Nam's first domestic car company and EV manufacturer, will use the proceeds to manufacture fully electric buses and to establish the EV charging network. To pursue its EV expansion strategy, VinFast is upgrading its state-of-the-art manufacturing facility near the city of Hai Phong.

Viet Nam's transport sector accounts for around 18% of the country's annual greenhouse gas emissions. The project will align with the government's goals of achieving net zero greenhouse gas emissions and growing the EV and high-technology manufacturing industries. The project loan funding has been certified green by the Climate Bonds Initiative, a system for labeling financing instruments that contribute to addressing climate change.

ADB played a lead role in arranging finance for the project. Aside from its loan of \$20 million, ADB has mobilized concessional assistance of up to \$28 million from trust funds managed by ADB and parallel loans of \$87 million from Export Finance Australia, Finnish Fund for Industrial Cooperation, Development Bank of Austria, and ResponsAbility.

ADB helped offset some of the project's risks by tapping ADB-managed trust funds consisting of \$20 million provided by the Australian Climate Finance Partnership, financed by the Government of Australia (DFAT); a loan of up to \$5 million from the Clean Technology Fund; and a grant of up to \$3 million from the Climate Innovation and Development Fund, which is funded by Goldman Sachs and Bloomberg Philanthropies.

The project also includes an associated technical assistance grant of \$950,000 focused on raising consumer awareness about e-mobility's economic, environmental, and social impacts and benefits, and promoting female participation in science, technology, engineering, and mathematics.

Source: Asian Development Bank (Private Sector Operations Department).

Box 10**Blended Financing Drives E-Bus Project in India**

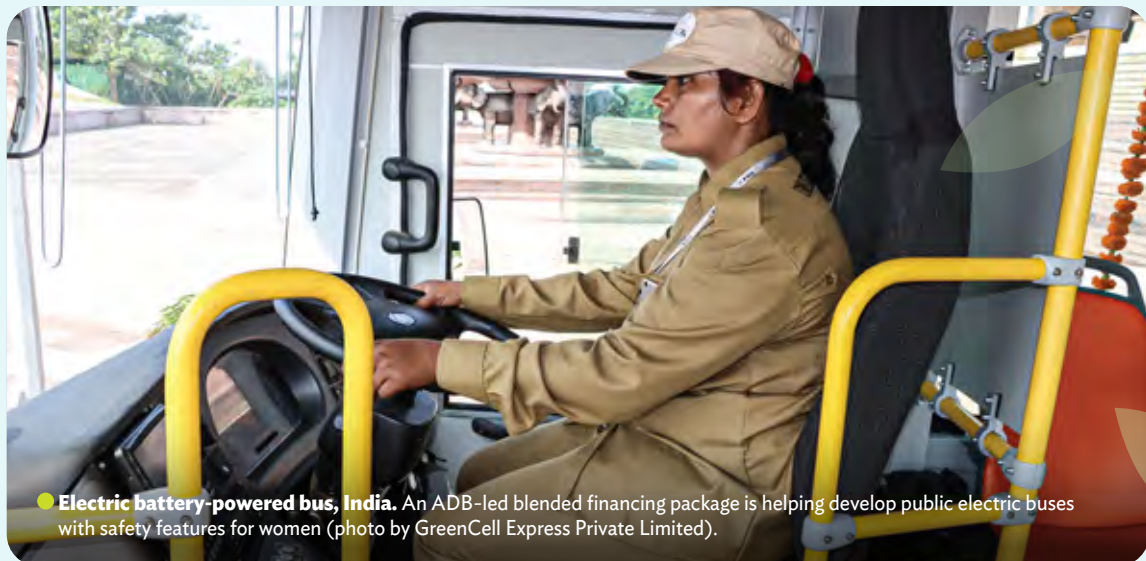
A blended financing package with Asian Development Bank (ADB) assistance will enable India's [GreenCell Express Private Ltd.](#) to develop 255 electric battery-powered buses (e-buses), supporting the Government of India's drive to expand the use of green transport and its goal of having e-buses comprise 40% of all electric vehicles by 2030. The project will contribute to safer and more comfortable travel, as the e-buses will include cameras and panic buttons for immediate contact with control centers.

The package, put together by ADB, includes an ADB loan of \$19.4 million in Indian rupee equivalent, along with a parallel loan of \$19.4 million from the Asian Infrastructure Investment Bank. ADB will also administer loan and grant finance of \$14 million from the Clean Technology Fund and a \$5.2 million grant from the Climate Innovation and Development Fund, supported by the Goldman Sachs and Bloomberg Philanthropies. With the full market risk for the project being covered, this financing package is a first, highlighting how it is possible to finance the development of e-buses using an innovative blended financing arrangement.

The Climate Innovation and Development Fund grant will partially finance the decarbonization of 100 buses by deploying a solar power-plus-battery energy storage system, replacing the mainly fossil fuel powered electricity grid for recharging. This will result in a reduction of about 6,355 tons of carbon dioxide a year.

Along with the safety features installed to enhance passengers' security in their use of transport services, training will be held on safety protocols for women passengers. A gender action plan is designed to raise diversity and inclusion in the company, aiming to get more women in technical and leadership roles. The project qualifies for the 2X Gender Financing Challenge, a gender financing scheme that supports women.

GreenCell Express Private Ltd. is a wholly owned subsidiary of GreenCell Mobility Limited, controlled by the Green Growth Equity Fund managed by EverSource Capital, whose mandate is to mobilize capital into green infrastructure in India.



● **Electric battery-powered bus, India.** An ADB-led blended financing package is helping develop public electric buses with safety features for women (photo by GreenCell Express Private Limited).

Source: Asian Development Bank (Private Sector Operations Department).

Private Sector Operations Department Programs

Trade and Supply Chain Finance

International trade has lifted millions of people out of poverty and is important to achieving the Sustainable Development Goals. Without sufficient financing, trade will not deliver its potential maximum development impact. ADB estimates that as of August 2022, there is a trade financing gap of \$2 trillion, which may be growing further.

The ADB Trade and Supply Chain Finance Program (TSCFP) has two main tracks of activity. On one hand, it provides guarantees and loans, mobilizing significant amounts of private sector financing to help close these financing gaps. On the other hand, the TSCFP delivers knowledge products, services, and solutions to make global trade green, resilient, inclusive, transparent, and socially responsible.

Demand for guarantees and loans saw the TSCFP support trade and supply chain transactions worth \$7.7 billion in 2022, with over 10,000 transactions carried out. TSCFP delivered assistance to clients within a 1–2-day turnaround and reached more than 6,300 small and medium-sized enterprises. Nearly 30% of the transactions facilitated trade between developing member countries.

In 2022, the program established a Food Security Facility as part of \$1.5 billion provided for transactions related to food security, which included ADB commitments of \$530 million. A Green Equipment Facility was launched to help companies acquire energy-efficient equipment to cut the carbon intensity of their supply chains and TSCFP also opened an innovative Emergency Trade Finance Facility, which used funds from ADB's sovereign sector projects in Sri Lanka to import badly needed commodities.

Along with its core business of providing guarantees and loans to bridge financing shortfalls, TSCFP undertakes initiatives to address issues such as climate change, money laundering, social inclusion, and the digitalization of trade. In 2022, TSCFP launched an initiative to track and report carbon throughout supply chains. TSCFP is expanding its work to include more women in trade and finance, and in 2022 launched an initiative to include more people with disabilities in international trade.

Microfinance

The Microfinance Program (MFP) is an ADB credit enhancement facility that promotes private sector financing to farmers and MSMEs that find it difficult to access funds from formal financial sources. The MFP carries out this function by working with commercial banks to extend local currency funding to microfinance institutions (MFIs) and nonbank financial institutions for lending to microborrowers. Since its inception in 2010, the MFP has provided credit that has benefited more than 9 million microborrowers, with women making up more than 95% of the clients served.

In 2022, the MFP extended \$341 million in loans to MFIs, which lent these funds to more than 600,000 individual borrowers, 97% of whom were women. This assistance included cofinancing of \$170 million. The MFP worked with nine partner financial institutions to support 25 MFIs across five DMCs, including Bangladesh, Cambodia, India, Indonesia, and Pakistan.

The MFP also includes TA to complement its main financing activities. Many of the TA projects are helping raise the capacity of smaller MFIs to better assist clients who need to strengthen their resilience to climate change and disasters, through instruments such as home improvement loans and microinsurance. This will be an important focus of the MFP going forward as many microfinance borrowers' homes and incomes are extremely vulnerable to the adverse effects of climate extremes and disasters.



● **Microentrepreneurs, India.** Since the Microfinance Program began in 2010, it has assisted over 9 million microborrowers, with women making up over 95% of them (photo by ADB).

Special Initiatives



Business Development: ADB Ventures

In 2022, global venture capital deal volumes fell significantly but ADB Ventures (ADBV) was still able to commit investment capital for two new companies, along with follow-up investments for five existing portfolio companies. ADBV was established in 2020 to provide capital to early-stage companies operating in Asia that are helping to address development issues such as climate change and gender equality. It has now invested in nine companies following the launch of its initial \$60 million equity fund.

Investee companies include a business that uses drone-based aerial surveying to eliminate wastage in the trillion-dollar construction industry and help reduce its carbon footprint; and another that develops gas-insulated switchgear technologies to cut the use of SF₆, one of the world's strongest greenhouse gases. Capital has been provided to the world's first mass production platform for successfully commercializing high-quality, virus-free seed potatoes that will raise productivity and reduce the carbon footprint of the potato industry; and for a satellite analytics company that provides financial institutions with better risk assessment information and facilitates climate adaptation and resilience actions, especially for smallholder farmers.

In India, ADBV has extended capital to a designer and manufacturer of light EVs supporting last-mile commercial logistics, and another business providing energy-efficient services for hospitals and commercial buildings. In the Philippines, an investment is helping a company that is digitizing the point-of-sales and inventory status of more than 1 million microstores, resulting in efficient supply logistics, fuel savings, and reduced carbon emissions for the entire supply chain. Two other companies aiming to deliver microcredit to small businesses and extend financial literacy education to low and middle-income workers have also received ADBV capital injections.

During 2022, ADBV continued to support promising, early-stage companies through its SEED program. This program provides ADBV future investment rights in target companies to enable greater impact. ADBV has made over 35 SEED investments in companies, including those interested in or looking to expand operations in lower-income countries.

In addition to investment activity, ADBV continued to consolidate partnerships globally and regionally to support portfolio companies and deal flows. It participated in several high-profile events, including the Asia Cleantech Forum, Singapore Fintech Festival, She Loves Tech, AVPN Global Conference, the Social Investment Forum, and the Asian Venture Capital Journal Private Equity & Venture Forum. In addition, ADBV organized a roadshow in the Republic of Korea and soft launched the Asia Climate Tech Investor Network, a partnership between selected leading climate-focused venture capital funds aimed at fostering more collaboration and sharing of deal-flow. ADBV also has plans to expand its operations through future funds and consolidate fundraising efforts for future investments.



● **Poultry farming, Cambodia.** An ADB livestock project in Cambodia will aid food security and help train farmers in climate-resilient production practices (photo by ADB).

Private Sector Window

The ADB Private Sector Window (PSW) facility provides assistance to ADB Group A (concessional assistance only) countries for projects that seek to catalyze additional capital from the private sector. Set up in September 2020 by Asian Development Fund donors, the ultimate goal is to enhance the development of the private sector in frontier economies by helping reduce risks attached to investments. The PSW provides resources to reduce common financing constraints that hinder many private sector transactions. It provides concessional finance in three ways: local currency assistance, blended finance, and loan guarantees. The facility benefits from ADB's established governance procedures that are consistent with those of development finance institutions on the use of blended concessional finance.

The COVID-19 pandemic had hit Group A countries hard, leading to a significant decrease in investment appetite and increased risk ratings. After its 2020 PSW outreach initiative to create awareness and build a pipeline of potential transactions, ADB signed its first PSW transaction in July 2022 as economies reopened and investment appetite came back. A \$15 million loan was extended to Cambodian animal feed producer De Heus TMH Company Limited to produce high-quality, affordable, and sustainable animal feed and to strengthen the climate resilience of its operations. The PSW provided partial risk guarantee cover of up to \$5.2 million for this loan. By providing the guarantee, the PSW improved the credit profile of the transaction. The project is ADB's first grant-funded guarantee under the PSW and PSOD's first dedicated project in Cambodia's agribusiness sector.

In January and February 2023, ADB approved two more PSW transactions, the first of which is an innovative blended financing package to mitigate risks for a wind power project in the Lao People's Democratic Republic. The second is a viability gap funding transaction to support a blue economy project in Maldives. ADB's Blended Finance Committee has also endorsed three other projects in three DMCs for potential PSW funding. The projects will support MSMEs and provide housing finance, with a strong focus on women.

ADB anticipates that projects eligible for PSW assistance will continue to be rare, given the still challenging investment environment for private sector counterparties in Group A countries. Nevertheless, the PSW team will continue to seek and identify further potential transactions.

Gender Focus

The 2X Challenge and Gender Lens Investing Criteria

Promoting gender equality and women's empowerment is critical to achieving the Sustainable Development Goals, and PSOD supports this ADB priority through a wide range of investments and activities.

In January 2022, ADB joined a partnership of development finance institutions and private sector investors in the 2X Challenge, a gender financing scheme that aims to mobilize \$15 billion between 2021 and 2022 for investments supporting women. This is the second target under the 2X Challenge, which had mobilized \$11.4 billion in its initial capital raising between 2018 and 2020.

Determining if an investment in a private sector company is genuinely promoting women's empowerment and equal opportunities is a critical part of ADB project design. The 2X Challenge collective established a set of gender lens investing criteria to guide assessment at entry and to measure investments that can be counted as gender financing.

Gender lens investing criteria are fast becoming the global industry standard for reporting on gender investments in development finance, and ADB has integrated these criteria in its screening of all new private sector transactions. The goal is to clearly identify client companies that are committed to advancing opportunities for women.

In 2022, close to 60% of ADB's committed investments in private sector companies met the 2X challenge criteria for gender financing. One example is the investment in India's GreenCell Express Private Limited for the development of its intercity fleet of electric battery-powered buses (e-buses), which will serve more than 5 million people a year (Box 10). By incorporating safety features in its e-buses and bus depots, such as cameras and panic buttons, the company has shown its commitment to women's safety.

Another ADB private sector project in 2022 that met the 2X Challenge was an investment in Hayat Kimya Vietnam Company Limited to fund the expanded production of baby diapers, wipes, and women's hygiene pads for the Malaysia, Thailand, and Viet Nam markets (Box 11). By investing in a company that is majority-owned by women, the project not only supports women's entrepreneurship, but also addresses an issue that disproportionately impacts women's health by financing the production and distribution of products that are mostly used by women for baby care and their own hygiene.

Tip Sheets for Mainstreaming Gender Goals

Asia and the Pacific has seen substantial advances in gender equality, but gender gaps persist, notably in the workplace such as in hiring, compensation, entrepreneurship, and leadership. These mean lost opportunities for growth. Studies show that increased participation of women in the labor force and in decision-making improves their well-being while raising overall productivity, profitability, and capacities for developing innovative products and services. A McKinsey Global Institute report estimates that achieving gender balance in the region could add \$4.5 trillion to its annual gross domestic product.

In 2022, ADB published four gender tip sheets that make the business case for integrating gender goals into private sector projects in sectors that include finance, renewable energy, and agribusiness. The tip sheets seek to promote a better understanding of how gender mainstreaming enhances the capacity of the private sector to develop products and services that respond to the female market, from female service providers to female distributors, women-owned MSMEs, and female customers. They also aim to help companies develop relevant gender measures and corporate initiatives and adapt practices to gender-inclusive business models.

The tip sheet “Applying the Asian Development Bank’s Approach to Gender Mainstreaming in Private Sector Operations” presents ADB’s overall approach to gender mainstreaming in private sector projects and how it can help companies boost profits and attract and retain talent. The “Accelerating Gender Equality in the Finance Sector” tip sheet identifies entry points for private sector finance companies to increase women’s access to financial services.

The “Accelerating Gender Equality in the Renewable Energy Sector” tip sheet offers gender entry points for women’s inclusion and involvement in power systems, while the “Accelerating Gender Equality in the Agribusiness Sector” tip sheet identifies gender entry points for enhancing gender equality along agriculture value chains.

Box 11

Providing Affordable Hygiene Products in Southeast Asia

● **Gender financing through sanitary products for women and children, Viet Nam.** ADB is helping boost production of hygiene products for women and infants in Southeast Asia (photo by Hayat Kimya).



Over half of the female population in Viet Nam lack access to affordable sanitary products for themselves and their babies. This has negative health effects and impacts women's ability to fully partake of education and employment opportunities. To improve the availability and affordability of hygiene products for women and infants in Viet Nam and other parts of Southeast Asia, the Asian Development Bank (ADB) is extending a euro loan of \$19.7 million equivalent to [Hayat Kimya Vietnam Company Limited \(Hayat Kimya\)](#) to finance the construction of a manufacturing facility for producing women's hygiene pads, baby diapers, and wet wipes.

The products will be sold in Viet Nam, Thailand, and Malaysia, giving consumers more choices and access to affordable sanitary goods. Additional parallel cofinancing of \$15.1 million is being provided by German Development Finance Institution.

Hayat Kimya is a wholly owned subsidiary of Hayat Kimya Sanayi, the world's fifth-largest branded baby diaper manufacturer headquartered in Türkiye.

In supporting Hayat Kimya's efforts to promote gender equality across its operations, ADB's investment will include a gender action plan aimed at pursuing gender inclusivity in the company's branding and marketing operations, raising the awareness of underserved women on the importance of hygiene products, and developing a gender-responsive work environment and providing internships and career development programs for female professionals. The project qualifies for the 2X Challenge, which encourages development finance and international financing institutions, along with the private sector, to scale up investments in women.

Source: Asian Development Bank (Private Sector Operations Department).



Digital Literacy Training for Women Entrepreneurs

In 2022, PSOD supported an online digital literacy training program for women-owned MSMEs. This first-of-its-kind program covered topics including debt management and e-commerce, with over 200 women entrepreneurs from the Pacific participating. ADB also organized a number of webinars with major financial institutions that sought to promote the business case for financing women.



- **Women business entrepreneurs, Indonesia.** In line with efforts to strengthen the development effectiveness of private sector operations, support for women-led businesses was a major theme in 2022 (photo by ADB).



STRENGTHENING DEVELOPMENT EFFECTIVENESS



Ex-Ante Development Impact Framework Initiative

To strengthen the alignment of private sector operations with ADB's corporate priorities and enhance project selectivity and design, PSOD developed the Ex-Ante Development Impact Framework. This new tool assesses projects at their entry point using five dimensions and is part of an end-to-end PSOD system that includes results monitoring of projects in implementation and ex-post evaluation of projects at early operating maturity. It was piloted in January 2021 and PSOD finalized the governance process in 2022. Steps are now being taken to pave the way for the framework to be used in all private sector transactions, with a guidance note and other materials being prepared to support the rollout. Training on the use of the framework by PSOD teams and other ADB staff is being carried out in 2023.

Meanwhile, the Portfolio Approach tool that is being developed to support the Ex-Ante Development Impact Framework assessment process is expected to be piloted and tested in 2023. This follows refinements made to it in 2022 to generate more detailed analytics and insights. The tool will help PSOD get a full picture of how proposed investments will align with strategic goals and strengthen the development impact of private sector operations.



● **International bazaar, People's Republic of China.** The finalization of the governance process of the Ex-Ante Development Impact Framework in 2022 clears the way for the tool to be used for all private sector transactions, including for projects like this one in the People's Republic of China which is supporting micro, small, and medium-sized enterprises (photo by ADB).

Monitoring of Development Results

The development effectiveness performance of PSOD projects continues to improve year by year. As of 31 December 2022, only 14.9% of PSOD's active projects were assessed as *at-risk* compared to 19.3% in 2021 and 32.1% in 2020. PSOD started tracking this performance indicator in 2020. The 2022 result meant PSOD comfortably met its target for the year of keeping the percentage of *at-risk* projects below 20%.

Many deal teams, including origination teams, have raised their awareness on development effectiveness in projects, by being increasingly proactive with indicator settings, ensuring timely reporting of project activities, and taking prompt remedial action if needed.

Meanwhile, revisions to project design and monitoring frameworks increased, which is likely due partly to COVID-19, as many adjustments to targets are seen to be justified to counter both direct and indirect consequences of the pandemic. At the end of 2022, a total of 17 projects had undergone design and monitoring framework revisions, with approved change-in-scope memos, while a further nine are under preparation.

● **Technician at work, Kazakhstan.** The percentage of private sector projects at risk of not achieving development results has continued to decline (photo by ADB).



Results of Post-Completion Evaluations

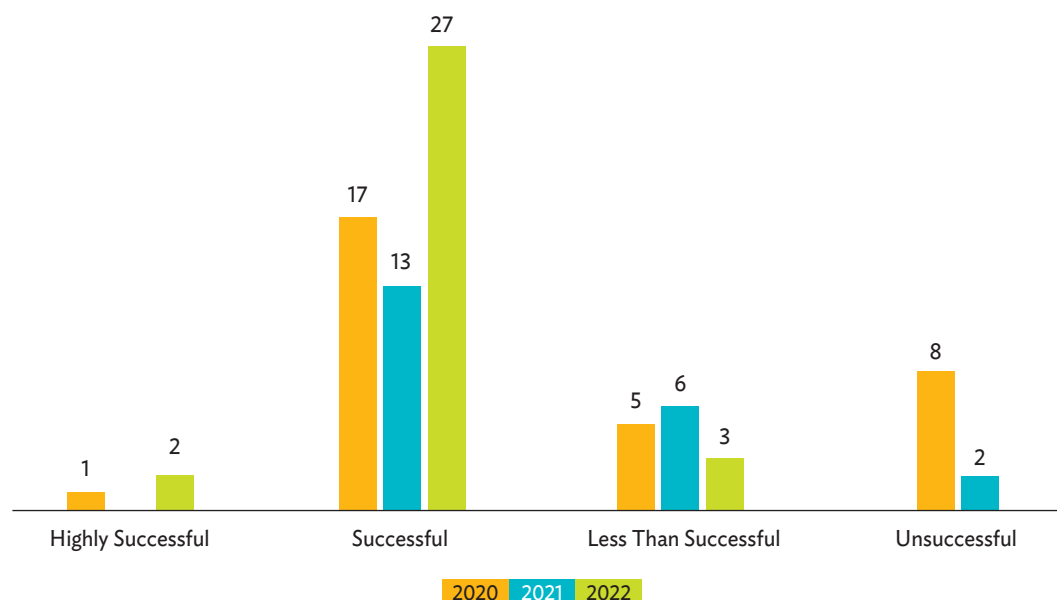
Upon project completion, PSOD prepares extended annual review reports that evaluate the success of transactions against four criteria: development results achieved, investment profitability, work quality, and additionality. The report findings are validated by ADB's Independent Evaluation Department.

The extended annual review reports prepared in 2022 covered 32 completed transactions approved during 2008–2021. This is well above the 21 transactions recorded in 2021 and exceeds the previous all-time high of 31 in 2020. Of the 32 projects, 2 were rated *highly successful*, 27 were *successful*, and 3 *less than successful* (Figure 9). These ratings must still undergo independent evaluation.

Lessons learned from projects rated *highly successful* and *successful* demonstrate the importance of providing working capital that includes a plan for improved environment, health, and social safeguards and is linked to development impact targets; disbursement flexibility; suitable sponsors, managers, and investment teams; improved safeguards and gender mainstreaming designs; benefits of public–private partnerships; and use of the One ADB approach.

Key lessons learned from reviewed projects with *less than satisfactory* results include the importance of leveraging ADB financing to promote transparency and good governance; the need for integrity checks in the assessment of fund managers; and the need for due diligence on governance, legacy risks, and operations outside the ADB-financed project.

Figure 9: Ratings of Completed Transactions, 2020–2022


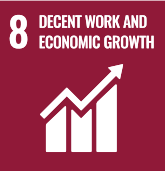





Source: Asian Development Bank (Private Sector Operations Department).



Measuring ADB Private Sector Operations Contributions to the Sustainable Development Goals

	Indicators	2022	2021	2020
1 NO POVERTY 	MSME beneficiaries	37.4 million	40.2 million	56.8 million
2 ZERO HUNGER 	Farmers reached	62,852	3.5 million	11.3 million
	Agricultural products produced (food)	206.5 million tons	176.9 million tons	128.6 million tons
3 GOOD HEALTH AND WELL-BEING 	Patients served	300,322	1.2 million	910,208
4 QUALITY EDUCATION 	Students reached	26,694	4.0 million	9.2 million
5 GENDER EQUALITY 	Workers employed (female)	30,169	57,798	78,191
	MSME beneficiaries (female)	33.8 million	40.0 million	35.4 million
	Women trained	244,078	412,666	516,832
6 CLEAN WATER AND SANITATION 	Potable water produced	538.6 million m ³	482.1 million m ³	388.3 million m ³
	Wastewater treated	656,370 m ³	936.5 m ³	937.2 million m ³

	Indicators	2022	2021	2020
7 AFFORDABLE AND CLEAN ENERGY 	Generation capacity	7,898 MW	10,327 MW	7,640 MW
	Power delivered	25,503 GWh	43,789 GWh	32,235 GWh
	Households with access to power	58,841	46,426	38,543
8 DECENT WORK AND ECONOMIC GROWTH 	Workers employed	312,361	328,138	347,058
	People trained	284,937	748,124	861,624
11 SUSTAINABLE CITIES AND COMMUNITIES 	Houses built	432,288	319,252	281,101
13 CLIMATE ACTION 	GHG emissions reduced	14.8 million tCO ₂ e	24.6 million tCO ₂ e	21.7 million tCO ₂ e
17 PARTNERSHIPS FOR THE GOALS 	Government revenues	\$1,521 million	\$1,731 million	\$816 million
	Export sales	\$1.3 million	\$92.6 million	\$7.1 million

ADB = Asian Development Bank; GWh = gigawatt-hour; m³ = cubic meter; MSMEs = micro, small, and medium-sized enterprises; MW = megawatt; tCO₂e = tons of carbon dioxide equivalent.
 Note: Results are based on reports received as of 31 March 2023.
 Source: Asian Development Bank (Private Sector Operations Department).



Awards Received by ADB, Its Investees, and Transactions



Private Sector Operations in 2022

Report on Development Effectiveness

The Asian Development Bank (ADB) Private Sector Operations—Report on Development Effectiveness series reviews the development impacts of the Private Sector Operations Department (PSOD) and its contribution to ADB's Strategy 2030 and the Sustainable Development Goals. This 13th edition of the series highlights the diverse contributions that PSOD projects and programs are making in areas including climate change, gender equality, food security, and the development of small businesses. It details PSOD achievements in catalyzing cofinancing, putting in place innovative financing structures for projects, and strengthening partnerships and collaborations to maximize the effectiveness of its operations and contributions to sustainable development.

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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