



# INVESTING IN SUSTAINABLE INFRASTRUCTURE

## IMPROVING LIVES IN ASIA AND THE PACIFIC

Asian Development Bank

## Contents

Message from the Director	3
Introduction	4
Energy: Powering Poverty Reduction	6
Transport: Linking People, Improving Livelihoods	8
Water: Working Toward Water Security for All	10
Urban Infrastructure: Making Cities Livable and Sustainable	12
Information and Communication Technology: Paving the Way for Development Gains	13
Innovative Financing: Helping Sustainable Infrastructure Pay for Itself	14

## Abbreviations

- ADB Asian Development Bank
- CDIA Cities Development Initiative for Asia
- DMC developing member country
- ICT information and communication technology
- PRC People's Republic of China

Note: In this report, "\$" refers to US dollars.

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### Message from the Director



Infrastructure—the word is most often used to describe large structures made of concrete and steel, such as power plants, roads, water supply systems, and, increasingly, information and communications systems. These parts of the built environment underpin a country's economic potential—in today's world, no country can expect to succeed without a solid infrastructure base.

In Asia and the Pacific, the need for new infrastructure is growing rapidly. Investments in both urban and rural areas must reach an estimated \$4.7 trillion over the next 10 years to sustain growth in the region, with two-thirds of that amount required for new infrastructure.

It is also increasingly understood that negative environmental and social impacts of poorly conceived infrastructure investments will place additional burdens on current and future generations. There are mounting questions and concerns about the impacts of businessas-usual infrastructure development, such as resource degradation, pollution, waste and corruption in public spending and private contracts, and uneven distribution of benefits that tend to exclude poor people. Also, an often fierce debate continues to rage around the appropriate roles of the public and private sectors in the financing, ownership, and management of infrastructure.

As the countries of Asia and the Pacific are increasingly feeling the effects of climate change, these issues have become all the more important. Climate change impacts, such as increased intensity of storms and longer droughts, are threatening existing infrastructure and rolling back hard-won development gains. Concerted efforts are needed to protect communities, ecosystems, and industries from unavoidable impacts, as well as to help countries reduce their own contributions to climate change. Without such efforts, people—particularly poor people—in Asia and the Pacific will suffer.

In the following pages, you will learn about the current efforts of the Asian Development Bank to promote sustainable infrastructure in Asia and the Pacific. We stand ready to work with our partners to find appropriate solutions to their infrastructure investment needs, and to link them to the expertise and finance they need to address the many challenges ahead.

We believe that the countries of Asia and the Pacific must continue to grow, as this is key to creating a region free of poverty. However, we also believe there is a responsibility to grow sustainably. We urge our partners to contribute to the world's future health and well-being, while also finding a way to share the benefits of growth with those who have not yet been included in past development gains.

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Woochong Um Director Sustainable Infrastructure Division Regional and Sustainable Development Department Asian Development Bank

### Current Challenges in Asia and the Pacific

Developing countries in Asia and the Pacific are undergoing a remarkable economic transformation. Recent economic progress led by the People's Republic of China, India, and parts of Southeast Asia—has helped raise tens of millions of people out of poverty and has fueled vast improvements in public services such as education, health care, roads, water supply, and electricity.

However, despite bringing many benefits, growth in developing Asia has come at a price. Economic gains have been accompanied by a decline in natural capital and unprecedented levels of air and water pollution. Furthermore, as the impacts of climate change become greater, the region's remaining poor people become more vulnerable, as they will be most affected by natural disasters, rising sea levels, and droughts.



Meanwhile, hundreds of millions of people in Asia and the Pacific are still not enjoying the benefits of recent economic growth. Disparities in incomes and living standards in the region are growing wider, and the global financial crisis is likely to amplify these disparities. These problems—individually and combined—imperil economic growth and could erode recent development gains and diminish those yet to come. It is now increasingly apparent that the **pattern** of growth is just as important as the **pace** of growth—perhaps even more so. Concerns about the inclusiveness, environmental impact, and sustainability of growth into the future must be addressed. Otherwise, business-as-usual practices will place further stress on the environment, damage public health, and ultimately threaten recent economic gains and political and social stability.

It is imperative that development is strategic from the outset. Cutting-edge, cost-effective, and cleaner technologies must be promoted over conventional designs, and investments must be inclusive so that poor people are able to participate in, benefit from, and contribute to the growth process. In this effort, countries in Asia and the Pacific must establish institutions and policies that maximize opportunities for growth and poverty reduction.

### **ADB's Long-Term Strategy**

The Asian Development Bank's (ADB's) long-term strategic framework for 2008-2020, places sustainable development, infrastructure, and the environment at the forefront of its poverty reduction efforts.<sup>1</sup> This framework–Stategy 2020–was developed to guide ADB's efforts to pursue emerging opportunities and to exercise our comparative strengths in the face of new challenges in the region. It directs ADB to focus support on three distinct but complementary development agendas: regional integration, inclusive economic growth, and environmentally sustainable growth.

<sup>&</sup>lt;sup>1</sup> ADB. 2008. Strategy 2020: The Long-Term Strategy of the Asian Development Bank, 2008–2020. Manila.



The **inclusive economic growth** agenda calls on ADB to invest in infrastructure to achieve high sustainable economic progress, connect poor people to markets, and increase the access of these poor people to basic productive assets. Under the framework, ADB will also support investments in essential public services, such as water and sanitation, which particularly benefit the poor and women. This reflects ADB's concern with social development, extending across all of our operations and sectors.

ADB also understands that the ability to achieve and sustain poverty reduction depends not only on economic growth but also on a well-managed natural environment. Thus, as part of the **environmentally sustainable growth** agenda, ADB will support the use of environmentally friendly technologies, the adoption of environmental safeguard measures, and the establishment of institutional capacities to strengthen the enforcement of these measures.

At the convergence of these two development agendas lies the concept of sustainable infrastructure. Its basic principles include:

- promoting low-carbon development and minimizing impacts on local environments (e.g., renewable energy);
- advancing solutions that help communities deal with the unavoidable impacts of climate change (e.g., climateresilient infrastructure);
- improving the access of poor people to education, health, and basic social

protections, as well as to markets and productive assets;

- emphasizing gender equality and the empowerment of women;
- improving the transparency and efficiency of public resource management (e.g., controlling wasteful public spending and corruption); and
- attracting direct private sector investments that support inclusive growth and improve the environment.

ADB is promoting sustainable infrastructure through a number of loans, investments, and technical assistance projects through our public and private sector operations departments, and through regional programs under our Sustainable Infrastructure Division. In urban development, we help countries reduce air and water pollution, develop cleaner modes of transport, and improve systems for solid waste management. In rural areas, we invest in irrigation and integrated water resources management and improve energy access.

In all of our efforts, ADB promotes good governance and increases development capacities, including improving the costeffective delivery of public goods and services and broadening inclusiveness. The economic success of many developing countries will depend on this kind of institutional progress, along with a policy and regulatory environment that fosters the development of trade, investment, and technology.



The consumption of energy in Asia and the Pacific is rapidly increasing, along with spectacular economic growth. In developing Asia, primary energy demand is projected to nearly double between 2006 and 2030, thereby accounting for the majority of incremental worldwide energy demand. To meet this insatiable demand, over \$7 trillion is needed for energy infrastructure between 2007 and 2030.

If business-as-usual energy use continues, developing Asia could account for 17 billion tons of energy-related carbon dioxide emissions per year in 2030, or 43% of global emissions from energy use. Fortunately, with energy market volatility and uncertainties over the recent global economic problems, developing countries have begun focusing on energy security, reducing oil consumption, and developing indigenous energy sources.

However, amid the sharp drop in oil and gas prices, the present global financial crisis has raised concerns about the ongoing viability of alternative fuels. While world leaders are trying to implement ways to jump-start economic recovery, the climate change crisis and issues of energy security continue to loom. At the same time, a substantial proportion of Asia and the Pacific is distinguished by some of the lowest levels of per capita energy use in the world. Countries in developing Asia, with their multitudes of "energy poor," must find ways to comprehensively address these issues if they are to join the ranks of more developed and prosperous countries.



To address these problems, the Asian Development Bank (ADB) is working to ensure that our developing member countries can reduce their greenhouse gas emissions and have greater energy security without sacrificing economic growth and living standards. We believe that aggressively adopting new technologies and sound policies will enable developing Asia to avoid investments in unsustainable energy services and technologies. To help accomplish this, ADB is directing an estimated \$6.7 billion towards a range of innovative programs between now and 2011.

The **Energy Efficiency Initiative**, launched in 2005, has been the flagship program of ADB's climate change mitigation efforts. The goal of the program is to increase ADB's clean energy investments to \$1 billion per year by 2010. In 2008, ADB easily surpassed this target by approving nearly \$1.7 billion in clean energy investments. ADB has now set a new target of \$2 billion of investments per year starting in 2013.

ADB has two sources of funds to assist greater investments in clean energy. The Clean Energy Financing Partnership Facility, a multidonor trust fund set up in 2007, has a targeted size of \$250 million. As of May 2009, ADB has received commitments of \$90 million to finance more efficient and less polluting energy technologies through this facility. The Climate Change Fund, launched in 2008, will provide \$30 million to projects that promote clean energy and energy efficiency, as well as those that reduce emissions from deforestation and land degradation. Through the Climate Change Fund, the Energy Efficiency Initiative is also being expanded to involve more developing member countries, such as Afghanistan, Bangladesh, Cambodia, the Lao People's Democratic Republic, Mongolia, and Uzbekistan.

Under its **Energy for All** initiative, ADB is developing strategic approaches and partnerships to expand access by the poor to modern and clean forms of energy. It supports a number of activities, such as promoting modern cooking stoves that can use a range of fuels (including biomass), promoting community-managed decentralized energy systems, and promoting local financing for technologies appropriate to individual households. The initiative has a target of providing access to safe, clean, affordable modern energy to an additional 100 million people in Asia and the Pacific by 2015.

In the People's Republic of China (PRC), ADB is bringing about sustainable power sector reforms through a range of innovative public–private partnerships. Under the Partial Credit Guarantee for PRC Energy Efficiency Multi-Project Financing, ADB is partnering with Johnson Controls, a private energy management company, and Standard Chartered Bank (China) Limited to increase the availability of private funds for energy efficient projects—new energy efficient "green" buildings and building retrofits. The total investments supported by guaranteed loans is expected to exceed CNY1 billion (\$150 million) by 2012. The program will save at least 245 gigawatt-hours of electricity per year and reduce carbon emissions by at least 225,000 tons per year by 2012.

With assistance from ADB, the Government of Viet Nam is increasing its ongoing **biogas program** to reach another 40,000 households, including many poor households. To reach those households that cannot cover the construction costs, ADB will provide credit to local financial institutions to finance biogas digesters and then strengthen the capacity of these institutions to continue their lending, which is essential for a sustainable market. Having identified a successful model, ADB also hopes to replicate this approach throughout the Greater Mekong Subregion.



Efficient and effective transport systems for goods and people are the backbone of sustainable economies. However, many countries in Asia and the Pacific are following the trend of inefficient transportation characteristics of developed countries by becoming increasingly dependent on resource-intensive private transportation in place of public transport. As a result, these systems are responsible for a range of negative impacts.

Transportation contributes about 25% of energy-related greenhouse gas emissions in the region and this figure is likely to rise. Under a business-as-usual scenario, the total number of personal vehicles in the People's Republic of China (PRC) and India combined could rise from around 19 million in 2005 to 273 million by 2035. Largely because of increased energy use for transportation and also because there are few competitive alternatives to petroleum, developing Asia, including the PRC and India, is expected to account for 45% of the total world increase in oil use through to 2025.<sup>2</sup>



Rapid urbanization, urban sprawl, and growing vehicle ownership have also led to worsening congestion, which contributes to environmental degradation and declining quality of city life. Many cities in the region face problems with urban ambient air quality, which has high impacts on human health.

Furthermore, the rapid increase in vehicles has strongly influenced urban form. Motorization has come at the expense of users of nonmotorized transport, such as bicycle users and pedestrians. This, in turn, has contributed to the loss of public space and has limited the mobility of those who cannot afford motorized transport.

Weighed down by inefficient allocation of road space, inadequate traffic management, institutional weaknesses, and insufficient financial resources, many cities have not been able to find sustainable solutions. Minimal efforts have been made to integrate transport with land use planning in most cities.

To address these problems, there is a need for a more holistic and systematic approach to transport that puts a greater focus on environmental, social, and economic sustainability. Such an approach must give more attention to emerging issues, including commitments to achieving the Millennium Development Goals, rising concerns about climate change and increasing traffic congestion, and recognition of access as a

<sup>2</sup> ADB and the Department for International Development of the United Kingdom, in collaboration with the Clean Air Initiative for Asian Cities. 2006. *Energy Efficiency and Climate Change Considerations for On-road Transport in Asia*. Manila.

key to both economic opportunity and good governance.

The Asian Development Bank (ADB) has fully supported the role of transport as an important component of poverty reduction and economic development. This priority is reflected in the scale of ADB operations for transport development, which account for about 24% of total ADB lending. The commitment to future lending in the transport sector is also significant, with an average of \$5.8 billion per year identified during 2009– 2011. Along with this commitment, ADB is charting a new path to make transport systems safer and more accessible, affordable, and environmentally friendly.

To refocus its support, ADB established the **Sustainable Transport Initiative** in 2007. The initiative aims to improve on business-as-usual projections for the transport sector by developing strategic frameworks that promote effective environmental management, poverty reduction, and inclusive social development. To accomplish this, the initiative is helping countries and cities develop and implement updated policies and improve institutional capacity.

The Sustainable Transport Initiative produced a strategic development framework for regional sustainable transport. The work defined a new paradigm for urban transport development and "rules of engagement" for



sustainable transport solutions and services, including clear criteria for types of support and interventions.

Ongoing efforts are improving existing public transport systems or designing new systems in Bangkok, Ha Noi, Ho Chi Minh City, and Manila. ADB is also working on pilot urban transport projects aimed at developing sustainable and integrated transport solutions in Ahmedabad, Harbin, and Kathmandu.

In September 2008, ADB, in collaboration with the Global Transport Knowledge Partnership and the South East Asia Community Access Program, held a forum in the transport sector for the first time. With more than 250 participants from over 30 countries in attendance, it provided an excellent opportunity for sharing knowledge, information, and experience on holistic approaches to, and solutions for, sustainable transport development. More than 600 million people in Asia and the Pacific lack access to safe drinking water, and nearly 2 billion people lack access to adequate sanitation facilities. Increasing water scarcity and pollution are compounded by economic growth, population pressures, and increased urbanization.

For many countries in Asia and the Pacific, especially those in arid and semi-arid regions, water security has become a pressing concern. While the demand for fresh water is growing, water supply in some countries is dwindling. In many places, the best and cheapest sources of water are already being overextracted. In addition, water quality in many places is deteriorating due to industrial discharge, municipal sewage, and overload of fertilizers and agrochemicals.

The Asia Water Watch 2015 report, published by the Asian Development Bank (ADB) and partners in December 2005, estimated that annual investments of at least \$8 billion would be needed over the next decade to meet the Millennium Development Goal targets for safe drinking water and sanitation alone.<sup>3</sup> Additional investments are also needed for irrigation services, river basin management, flood management and mitigation, and wastewater management. At the same time, many countries need an appropriate legislative framework and the technical, financial, and administrative capacity to enforce regulations. In pursuing improved water governance, decision makers must also distinguish between water as a resource that must be managed and water as a service for delivery.



In 2006, ADB responded to increasing demand for investments in the water sector through its landmark **Water Financing Program**. Through the program, ADB committed to doubling its water investments—to more than \$10 billion by 2010—to improve the lives of 340 million people, introduce integrated water resources management in 25 river basins, and improve water governance through reforms and capacity development.

The Water Financing Program directs its investments into three core areas:

- Rural water, to improve health and livelihoods in rural communities.
- Urban water, for economic growth in cities, particularly for water supply, sanitation, and wastewater management.
- Basin water, to promote integrated water resources management and healthy rivers.

Three years on, over 130 million people are expected to benefit from projects approved by the Water Financing Program. Around 95 million people will have access to safe

<sup>3</sup> ADB et al. 2005. Asia Water Watch 2015. Manila. Available: www.adb.org/water/actions/REG/target-ten.asp



drinking water and improved water supply, 35 million people will benefit from reduced risks to floods, and 8 million people will have better irrigation services to improve their livelihoods.

#### Also in 2006, the **Water Financing Partnership Facility** was established to provide additional finance and knowledge from development partners for implementing the Water Financing Program. With an initial target of \$100 million in contributions, the facility consists of the Netherlands Trust Fund and the Multi-Donor Trust Fund, with contributions from Australia, Austria, Norway, and Spain. The facility also supports in-country work for project preparation and implementation, as well as reforms and capacity development.

In India, ADB's **Orissa Integrated Irrigated Agriculture and Water Management Investment Program** is working to improve productivity, water-use efficiency, and sustainability of irrigated agriculture. It also aims to improve the efficiency of irrigation service delivery and water resources management, with empowered water users' associations progressively taking over operation and maintenance roles. Approved in August 2008 under a \$188 million multitranche financing facility, this project supports the Government of India in promoting state sector reforms through its 1987 and 2002 National Water Policy. The policy advocates participatory irrigation management and integrated water resources management to promote and sustain more efficient water use.

In Indonesia, ADB recently approved the Integrated Citarum Water Resources Management Investment Program to support ongoing efforts to improve water and land management in the country's most strategic river basin. Funded under an ADB multitranche financing facility, the project will have access to over \$500 million over its 10-year life span as part of an integrated investment program. The project has eight components that will work towards reducing poverty and improving health, environmental quality, and living standards in the basin.

In Uzbekistan, ADB's **Surkhandarya Water Supply and Sanitation Project** will improve living standards and public health for about 340,000 people living in Surkhandarya Province. The outcome will be safe, reliable, inclusive, and sustainable water supply and sanitation services and improved community hygiene. In addition to investments in physical infrastructure for system rehabilitation and upgrade, the project will address the critical planning, management, financial, operational, and customer relations needs to improve the efficiency of service delivery. The urban sector plays a central role in the economic growth and development of countries in Asia and the Pacific. The wellbeing of millions of poor people in the region depends in large part on effective urban planning and access to affordable public services.

Though cities on average provide 80% of the economic base of the economy, large disparities have emerged as poverty has urbanized. Over 200 million people live in poverty in the region's cities and many more are vulnerable to economic and environmental shocks. With another 1.1 billion Asians projected to be added to city populations in the next 20 years, already pressing problems—such as pollution, lack of potable water, slums, and traffic congestion may only get worse.

The Asian Development Bank (ADB) is responding to these challenges by promoting livable cities that are competitive and environmentally attractive. ADB's infrastructure operations are not limited to building physical assets; they also include improving the delivery of infrastructure services and creating an enabling environment to address the issues of climate change, water supply, sanitation, waste management, and urban transport.

#### Established in 2008, ADB's **Cities Development Initiative for Asia (CDIA)**

is linking cities to the financing they need to provide better urban services for their citizens. The initiative strengthens the links between participating cities' urban planning and investment programs and projects, thus contributing to the promotion of sustainable and equitable urban development. It was cofounded with Germany's Federal Ministry for Economic Cooperation and Development and joined by Sweden and Spain.



In the year since its launch, the CDIA has identified opportunities for around \$10 billion in investment in areas such as public transport, inner city revitalization, water and wastewater, solid-waste management, and energy efficiency. These projects will result in environmentally responsible infrastructure that will have a positive impact on hundreds of millions of people in cities throughout Asia.

In addition, many projects have significant climate change benefits. For example, in Mongolia, the CDIA is supporting the **Ulaanbaatar Urban Rehabilitation Project**. The project will build on successful pilot programs that have reduced heat loss in precast panel apartments, thereby reducing coal consumption and greenhouse gas emissions and providing higher quality and more affordable housing for low-income groups. The project provides important lessons which can be applied to inefficient buildings in urban centers across Asia and the Pacific.

In the Lao People's Democratic Republic, the CDIA is supporting the development of environmental infrastructure in Pakse, which is a candidate for the Association of Southeast Asian Nations' green city program. The CDIA is developing a "rapid green assessment" methodology which can be used across the program and is assisting in preparing investments in waste management, drainage, and wastewater. Information and communication technology (ICT) includes voice communications, the internet, and other informatics technologies. As an integral element of sustainable development, ICT is driving efficient economic operations and enabling collaborative and systematic use of information and knowledge. It is also one of the most dynamic sectors, having experienced exponential growth in recent decades.

However, despite the huge potential of ICT, the level of usage and pace of diffusion are inadequate, and the benefits are unevenly distributed. This is particularly evident in least-developed countries and rural and remote areas. Although around 70% of people in the region use a mobile phone, only 14% have access to the internet and only 3% have access to broadband internet. Consequently, the use of ICT for development applications—such as e-government, e-health, and e-education—remains limited.

In the future, it is vital to maximize the potential of ICT for development and ensure equal and universal opportunities for access and capacity. The Asian Development Bank (ADB) is helping the region achieve this vision under three strategic thrusts:

- creating an enabling environment by improving policy, strengthening public institutions, and providing infrastructure;
- building human resources for general ICT literacy and professional skills and through the use of ICT; and
- developing ICT applications and information content through ADBsupported projects and activities.

Under these thrusts, and in support of the World Summit on the Information Society Declaration (2003), ADB has selectively financed broadband infrastructure to improve regional connectivity and rural access under a public–private partnership. ADB has also used ICT as a project component to achieve sector development objectives, with ICT applications ranging from web portals and electronic databases to management information systems and business applications for administration, agriculture, education, finance, trade, and customs.



ADB's ICT-supported projects during 2000– 2008 numbered 169—62 loans and 107 technical assistance and grant projects—and amounted to \$3.7 billion.<sup>4</sup> To promote the use of ICT in ADB operations, ADB has operated two specialized funds: the Japan Fund for ICT (\$10 million), and the Republic of Korea e-Asia and Knowledge Partnership Fund (\$20 million).

ADB is also addressing the "digital divide" issue. One ongoing program is the rural e-development initiative in Bangladesh, Bhutan, Cambodia, India, Mongolia, and Nepal, part of which is being implemented in partnership with the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP).

ADB is also collecting good policy practices and lessons on rural ICT development with the International Telecommunication Union to improve government capacities in related policy development.

This is the entire total for the projects, not just the ICT components.

To ensure economic growth, countries in Asia and the Pacific must spend 6%–7% of their gross domestic product on infrastructure. However, in the Asian Development Bank's (ADB's) developing member countries, recent public sector investment has averaged a mere 3%–4%, leaving a significant investment shortfall.

In response, ADB is working to create the right access and incentives for financing and investment in sustainable infrastructure. We are doing this by mobilizing concessional resources, catalyzing private sector investments, and maximizing the use of market-based mechanisms, such as the carbon and insurance markets.

ADB's **Private Sector Operations Department** focuses on direct investments, as well as funds investments, to fill the early stage financial and skills gaps of developing country project managers. Over the past two decades, ADB has brokered major public–private partnerships in the water and energy sectors. These projects—facilitated by ADB through financing loans, equity, and grants, and by providing guarantees and other financing risk management instruments—have resulted in major improvements in infrastructure that continue to benefit hundreds of millions of people throughout Asia and the Pacific.

ADB is also helping countries take advantage of the carbon market to make low-carbon infrastructure projects more viable. ADB's **Carbon Market Initiative** provides technical and financial support to help developing countries implement Clean Development Mechanism projects under the Kyoto Protocol. Eligible projects span the energy, transport, water, and urban sectors.

The Carbon Market Initiative's **Asia Pacific Carbon Fund**, started in May 2007, provides up-front finance in return for greenhouse gas reductions up to December 2012. The fund provides over \$150 million to cofinance projects that are eligible for the Clean Development Mechanism. So far it has committed over \$50 million to greenhouse gas mitigation projects across Asia and the Pacific. A number of other projects are in the pipeline, and the fund expects to commit the entire \$150 million to projects by the end of 2009.

The Future Carbon Fund, the most recent fund under the Carbon Market Initiative, will leverage carbon credits beyond 2012. Operational since January 2009, this fund has received financing commitments from partners that include the Flemish region of Belgium, Finland, and Sweden. The fund is expected to reach \$100 million with public and private sector partners by late 2009, and there are plans to commit the fund to projects during 2010–2013. As of mid-2009, the Future Carbon Fund is one of only three schemes in the world that can provide carbon financing to developing countries for efforts beyond 2012, and is the only scheme that can make the bulk of the funds available up front, when projects need it most.

ADB is also working with partners to make sustainable investments more affordable and competitive. For example, ADB is an executing agency of the **Global Environment Facility**. In this role it can assist developing member countries to access Global Environment Facility grant resources for climate change mitigation and adaptation activities. In addition, ADB is an implementing agency of the **Climate Investment Funds**, which are administered by the World Bank and provide new, largescale financial resources to promote climate change mitigation and adaptation projects in developing countries. **The Sustainable Infrastructure Division** supports the strategic focus and quality of ADB operations in energy, transport, water, urban development, and information and communications technology. A team of experts in these areas works to

- establish ADB-wide sector policies and best practices,
- develop new innovative services and initiatives, and
- provide quality support to operations departments to develop sustainable infrastructure projects.

Sustainable Infrastructure Division	
Department	Regional and Sustainable Development Department
Specialty	Institutional focal point for scaling up sustainable infrastructure investment in developing member countries
Areas of expertise	<ul> <li>Carbon finance</li> <li>Energy</li> <li>Information and communications technology</li> <li>Transport</li> <li>Urban development</li> <li>Water</li> </ul>
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#### Sustainable Infrastructure and the Asian Development Bank

Impressive economic gains in Asia and the Pacific have been accompanied by a decline in the region's natural capital and unprecedented levels of air and water pollution. Meanwhile, hundreds of millions of people in the region are still not enjoying the benefits of recent economic expansion. Disparities in incomes and living standards are growing wider, and the worldwide financial crisis will likely amplify these disparities. And due to the impacts of climate change, the region's remaining poor are growing more vulnerable to natural disasters, sea level rise, and droughts.

The Asian Development Bank is committed to responding to these challenges by supporting the development of sustainable infrastructure in the region. Through our public and private sector operations departments and our Sustainable Infrastructure Division, we are developing loans, investments, technical assistance projects, and regional programs that promote cutting-edge, cost-effective, and clean technologies. In all of our efforts, we are working to build good governance and development capacities in our developing member countries, including improving the cost-effectiveness of public services and broadening inclusiveness so that the poor are able to participate in, benefit from, and contribute to the growth process.

#### About the Asian Development Bank

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries substantially reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to two thirds of the world's poor: 1.8 billion people who live on less than \$2 a day, with 903 million struggling on less than \$1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

Based in Manila, ADB is owned by 67 members, including 48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.