

The background of the cover features a faded, semi-transparent image of a modern city skyline with various skyscrapers and a green park area in the foreground where a group of people is walking away from the viewer. The overall color palette is light and airy, with a mix of blues, greens, and greys.

**KEY INDICATORS**  
for Asia and the Pacific  
**2012**  
43rd Edition

**HIGHLIGHTS**

Asian Development Bank

© 2012 Asian Development Bank

All rights reserved. Published in 2012.

Printed in the Philippines.

Publication Stock No. ARM124911-3

The views expressed in this publication do not necessarily reflect the views and policies of the Asian Development Bank (ADB) or its Board of Governors or the governments they represent.

By making any designation of or reference to a particular territory or geographic area, or by using the term “country” in this document, ADB does not intend to make any judgment as to the legal or other status of any territory or area.

ADB does not guarantee the accuracy of the data included in this publication and accepts no responsibility for any consequence of their use.

ADB encourages printing or copying information exclusively for personal and noncommercial use with proper acknowledgment of ADB. Users are restricted from reselling, redistributing, or creating derivative works for commercial purposes without the express, written consent of ADB.

Asian Development Bank  
6 ADB Avenue, Mandaluyong City  
1550 Metro Manila, Philippines  
Tel +63 2 632 4444  
Fax +63 2 636 2444  
[www.adb.org](http://www.adb.org)

## **Key Indicators for Asia and the Pacific 2012 Highlights**

The *Key Indicators for Asia and the Pacific 2012* is the flagship annual statistical data book of the Asian Development Bank (ADB). It presents the latest available economic, financial, social, environmental, and Millennium Development Goals (MDGs) indicators for ADB regional members. Data are grouped into MDGs and regional tables. Briefs and nontechnical analyses are also included for each group. Data that were gathered from ADB regional member can be downloaded from the ADB website or from <http://sdfs.adb.org>. The Special Chapter, "Green Urbanization in Asia," elucidates unique features of Asia's urbanization and the massive challenges caused by this unprecedented shift in the location of people and their economic activities. The chapter argues that proper management of the urbanization process can mitigate the environmental impacts and lead to a better life for Asia's urban residents, and the world in general.

## Part I: Special Chapter

# Green Urbanization in Asia

The vast number of people moving into Asian cities is historically unprecedented. As a consequence, the number of megacities is rising and cities are expected to have even higher population densities. This trend is expected to continue as the share of Asia's population living in urban areas is low relative to that in the rest of the world. The scale and the speed of urban expansion have contributed to the rise of Asia, but present challenges as well as opportunities for the region and the world. Most notable are the environmental challenges, such as the devastating floods during 2011 and 2012 in Bangkok, Beijing, and Manila.

To meet such challenges, Asia must follow a green urbanization path by instituting policies that exploit its late comer's advantage and the unique features of Asia's urbanization. Responses to the challenges include developing satellite cities linked by train, light rail, or metro (rather than highways) with megacities (cities populated by 10 million or more people); conserving resources and improving the efficiency; and promoting the use of new technologies and renewable energy. In addition, the green urbanization process must protect the urban poor to ensure that the growth is inclusive and sustainable.

### Asia's Urbanization has Unique Features

- **From 1980 to 2010, Asia added more than a billion people to its cities—more than all other regions combined—with a further billion set to be city dwellers by 2040.** This massive scale of urbanization is taking place most notably in the People's Republic of China (PRC), Bangladesh, India, Indonesia, and Pakistan. By the latest estimates, Asia is now home to almost half of all urbanites on earth and its urban population is more than three times that of Europe—the region with the second largest urban population.
- **Asia's urbanization is rapid, with the PRC transitioning from about 10% of its population in urban areas to about 50% urban in just 61 years, versus 210 years in Latin America and the Caribbean, 150 years in Europe, and 105 years in Northern America.** And Asia's urban population is projected to continue growing faster than that of any other region.
- **Urban Asia is characterized by higher density and most of the world's megacities.** Already, the three most densely populated large cities in the world (Mumbai, Kolkata, and Karachi, in that order), and 8 of the 10 densest, are in Asia. In 2010, Asia was home to over half—12 out of 23—of the world's megacities.
- **Asian urbanization still has a long way to go, with the number and sizes of cities growing larger and larger.** In 2010, the urban share of Asia's population

was still only 43%, compared with the worldwide share of 52%. By 2050, the urban share in Asia is projected to reach 63%, gaining on but still below the 67% global average. Thus, Asian cities will have even higher densities and, by 2025, the number of megacities in Asia is expected to increase to 21 of a global total of 37.

## This Unprecedented Urbanization Poses Enormous Challenges

The scale, speed, and density of Asia's urbanization will present many challenges. Increasing urban crime rates, expanding slums, and rising inequality may ensue. Above all, this unparalleled urbanization will add to the already enormous environmental stress in Asia. The *Key Indicators 2012* special chapter focuses on pollution and vulnerability to flooding as urbanization in Asia proceeds.

The special features of Asia's urbanization make the challenges all the more serious as the current low level of urbanization suggests that Asia still has a long way to go. The fast pace of urbanization means little time for adjustment or learning. The growing size and number of megacities will be difficult to manage, and high density makes cities more vulnerable to catastrophic events and disease. Green policies need to be at the core of Asian urban development in the 21st century if the challenges are to be properly managed.

- **Vulnerability to flooding will increase with urbanization: by 2025, a projected 410 million urban Asians will be at risk of coastal flooding.** Over 300 million were already at risk of coastal flooding in 2010, and about 250 million were at risk of inland flooding such as what struck Bangkok last year. The number of urbanites who are vulnerable to inland flooding will also rise, to roughly 350 million by 2025. More than half the population in large cities such as Dhaka, Ho Chi Minh City, and Tianjin are at risk from both inland and coastal flooding.
- **More than half of the world's most polluted cities are in Asia, and air pollution contributes to half a million deaths a year in the region.** Urban air pollution in Asia is higher than in other regions. A staggering 67% of Asian cities (versus 11% of non-Asian cities) fail to meet the European Union's air quality standard (of 40 micrograms per cubic meter [ $\mu\text{g}/\text{m}^3$ ] for particulate matter with diameter of 10 micrometers or less [ $\text{PM}_{10}$ ]).
- **From 2000 to 2008, average per capita greenhouse gas emissions for Asia grew by 97% versus only 18% for the world, with most of the emissions coming from urban areas.** Moreover, the environment may degrade further as Asia continues its growth. Based on the environmental Kuznets curve for Asia, which shows rising and then declining environmental degradation as income rises, Asia is still on the rising side of the carbon dioxide ( $\text{CO}_2$ ) and  $\text{PM}_{10}$  curves. The average income per person of Asia in 2010, at roughly \$6,100 in 2005 PPP, is still well below the "turning point," at around \$41,000 in 2005 PPP, for  $\text{CO}_2$ .
- **Future  $\text{CO}_2$  emissions, if left unchecked under a business-as-usual scenario, could reach 10.2 metric tons per capita by 2050, three times the 2008 level,**

**with disastrous consequences for Asia and the rest of the world.** Three of the top five CO<sub>2</sub> emitting economies are in Asia, and per capita emissions are rising at an alarming rate.

- **In 2010, the region was home to 506 million slum dwellers, or more than 61% of the world's total slum-dwelling population.** South Asia alone hosts almost 38% of the region's slum dwellers. Almost 408 million people, or over one-fourth of Asia's urbanites, still lack access to improved sanitation facilities.

## But There is Hope: Urban Agglomeration Can Help Improve the Environment if Properly Managed

The environmental Kuznets curve is not an immutable law. Urbanization can help as it promotes development of the service sector, which generally pollutes less than manufacturing; prompts traditional manufacturers to relocate away from major city centers; economizes on the provision of environment-related infrastructure and services such as piped water, basic sanitation, and solid waste disposal; contributes to significantly higher labor productivity; and facilitates innovation, including for green technologies. Rising educational attainments, the growth of the middle class, and declining birth rates typically associated with urbanization can also have broadly beneficial impacts on resource use and the environment.

*In fact, the environment–urbanization curves in Asia have been shifting favorably over time, thanks to better technologies and policies.* The curves have shifted down and to the left during the last two decades, meaning lower emissions and pollution at the same level of urbanization, and that the peaks come sooner. Between the 1990s and 2000s, the shifts have led to 20% less PM<sub>10</sub> (µg/m<sup>3</sup>) and 27% less CO<sub>2</sub> emissions per capita than would have otherwise been expected.

## Policies for Asia's Green Urbanization

To ensure a green urbanization path, conservation and efficiency improvements will be essential because of the combined speed and scale of Asia's urbanization. Promoting new frontiers that are built using renewable resources and new technologies is also important in order to benefit from the region's late comer advantage. And as Asia learns from the mistakes of others and its own past, there is recognition that urban growth must be inclusive and sustainable.

In particular, green urbanization strategies in Asia should take into account the distinctive characteristics of Asia's urbanization that will lead to a different pattern of city development. Unlike Europe and the United States, Asia does not have the luxury to live in suburbs and drive to city centers for work. The region needs to develop environment-friendly satellite cities that are linked to megacities by rail or metro rather than highways. In Asia's urbanization, critical masses of people will be in relatively small areas, making it important to take advantage of cost effectiveness in supplying essential services

such as piped water and sanitation. Finally, after the highly commendable and recent rapid expansion of physical infrastructure in Asia, the growing challenge now is to improve the quality of infrastructure, paying special attention to safety standards and resilience to natural disasters.

- **Enhancing efficiency and conservation to reduce consumption of resources and energy**
  - **It is important to get prices right, so they incorporate full social costs and benefits to allocate resources efficiently.** This can be done by imposing congestion and emission charges, as implemented in Singapore, and removing inefficient subsidies, as in Indonesia. Other examples are the introduction of carbon taxes, as in the Republic of Korea, and use of increasing block pricing for water, electricity, and other public utilities, as in the Philippines.
  - **Introduce regulations and standards in a timely manner.** Implementing appropriate regulations and standards can help to correct for market or coordination failures on air, water, vehicles, and appliances, as in India. The government can construct green industrial zones to assist manufacturing to relocate, as in Indonesia. Improved regulations can also help to reduce or prevent urban sprawl.
  - **Use rapid public transport for connectivity and less pollution.** Speedy connections to and from satellite cities can ease congestion in central megacity hubs. A bus rapid transit system, as in the PRC, and subways, as in India, for densely populated cities can lower environmental consequences and enhance the quality of life.
- **Promoting new frontiers that use renewable resources and new technologies**
  - **Advance or adapt technology for environmental protection and efficient resource use.** A good example is using waste-to-energy plants to reduce pollution and at the same time generate renewable energy, as in the Philippines and Thailand. Green technology can be acquired either by imports or innovated through research and development, as in the PRC.
  - **Incorporate environmental priorities in city planning.** This is under way through building new and satellite cities with renewables as primary energy sources, as piloted in the PRC. Urban sprawl can be tackled by developing a local system of compact, walkable satellite cities centered around high quality train, light rail, or metro systems, without heavy reliance on highways and major roads for connection, and by reviving city centers.
  - **Employ alternative energy and “smart” electricity grids to promote efficiency and reduce emissions.** More power can be generated using renewable resources to meet rising demand.

- **Protecting the poor for social harmony and inclusiveness**
  - **Enhance resiliency and reduce vulnerability to disasters.** This can be done by constructing houses in safe areas, improving housing affordability for the poor, and investing in drainage infrastructure and climate forecast technology.
  - **Progress must also be made to improve urban slums.** Useful policies include granting land titles to slum dwellers, issuing housing vouchers linked in value to the length of a resident's tenure in the city, and providing basic services to slum areas.
- **Public finance, transparency, and accountability to facilitate green urbanization**
  - **Public finance to support green cities.** This can be accomplished by broadening tax and revenue bases and by increasing access to broader and deeper capital markets by local urban governments to lower their financing costs for urban infrastructure and public services.
  - **Incentivize politicians to ensure transparency and accountability.** Avenues include disclosing city government performance to the public and nongovernment organizations, and launching national competitions or campaigns to encourage a "race to the top" where high performance is rewarded.

Asia's current urbanization is different from historical experience in terms of speed and scale, and is generating and confronting unprecedented challenges. It also comes with forces that, if properly managed, can help to address the challenges. Asia's future depends on using best practices and policy innovations to promote green urbanization, thereby ensuring a better life for its urban residents, and the world.



## Part II: Millennium Development Goals Trends

Despite Asia and the Pacific region's remarkable success in lifting many people out of poverty, reducing the poor from about 1.5 billion in 1990 to approximately 830 million in 2008, it is still home to roughly two-thirds of the world's poor. Many economies in the region are expected to achieve the targets for reducing extreme poverty, providing universal primary education, and promoting gender equality. However, the region's performance on health targets is mixed. While it has reduced the prevalence of HIV and has arrested the spread of tuberculosis, similar to other regions in the world, it is not expected to achieve the MDG targets for reducing child mortality and improving maternal health by 2015. With respect to environmental sustainability, forest cover is still shrinking, but the areas placed under protection have increased and the slum population, as a percentage of urban population, has declined. While the region has made significant progress in providing access to improved drinking water sources, the provision of improved sanitation facilities remains a more difficult problem. With respect to global partnerships, the proportion of bilateral aid to ADB's developing members that is untied has been rising and debt service ratios have generally declined to a manageable range.

### MDG 1: Eradicate Extreme Poverty and Hunger

- A majority of the countries in Asia and the Pacific saw declining extreme poverty rates but the proportion of the population living on less than \$1.25 a day at purchasing power parity (PPP) remains over 20% in eight countries, including the populous countries of Bangladesh, India, and Pakistan.
- While the poor are moving out of extreme poverty, the number of poor living on less than \$2.00 (PPP) a day remains high—13 of the region's economies have poverty headcount ratios over 40%.
- While most countries are able to significantly lower their proportions of working poor, many still have working poverty rates above 10% and vulnerability rates above 50%.
- Gains were achieved in curbing hunger. A majority of the economies saw progress in reducing the proportions of underweight/malnourished children and undernourished people.

### MDG 2: Achieve Universal Primary Education

- Most of the region's economies are on their way to achieving primary school net enrollment targets, with 30 of 42 reporting economies achieving net enrollment rates of 95% or higher. But in Nepal, Pakistan, and Papua New Guinea (PNG), primary school net enrollment rates remain below 75%.

- While net enrollment rates in Asia and the Pacific are generally high, in 2009 or the nearest years, 65% of the region's developing economies (26 of 40) were not able to reach the cutoff rate of 95% of primary school entrants reaching the last year of primary schooling (the "expected cohort survival rate").
- The average net enrollment rate in East Asia (96.6%) is comparable to the average of developed countries in the world, at 97.1%. The other subregions in Asia and the Pacific have net enrollment rate averages ranging from 91.5% to 95.4%, which are at par with other regions in the world and which are significantly higher than Sub-Saharan Africa (76.2%).
- In terms of the expected cohort survival in primary education, the progress made by East Asia, Southeast Asia, and Central Asia (97.3%–98.7%) is at par with the developed regions (100.0%). South and West Asia registered average survival rates below 90%.
- Only about one-fourth of the reporting developing economies (12 of 44) have youth literacy rates below 95%, suggesting that, overall, the youth will perform well in the labor market.

### **MDG 3: Promote Gender Equality and Empower Women**

- The region has made substantial progress toward eliminating gender disparity at the primary level of education. Almost two-thirds of the 46 reporting economies have achieved gender parity in primary education.
- Eighteen of the 46 reporting economies have gender parity indexes higher than 1.03, implying higher secondary school enrollment among girls than boys.
- More than half of the reporting economies (21 of 40) had gender disparity indexes above 1.03 at the tertiary level, but there is wide variation across economies.
- Most economies in the region posted gains in female representation in national parliaments; Nepal had the highest rate of female representation (at 33%) in the national parliament in 2012.

### **MDG 4: Reduce Child Mortality**

- Progress with improving child survival is slow in Asia and the Pacific region, as in all other developing regions. By 2010, only 4 of 43 economies had reduced their under-5 mortality rates (U5MRs) or child mortality rates to one-third of 1990 values, and 28 economies are not expected to meet the MDG target by 2015.
- Bangladesh, Bhutan, the Lao People's Democratic Republic (Lao PDR), the Maldives, Mongolia, Nepal, and Timor-Leste have become early achievers or will meet the MDG target by 2015, a significant improvement from having more than 100 children under-5 years dying for every 1,000 live births in 1990.

- In the region in 2010, under-5 and infant mortality improved from the 1990 levels, but still, in 2010, close to 3.2 million children under 5 years of age died, about 2.5 million of them before reaching 1 year. Compared to 1990, in 2010 the U5MR was halved in South Asia and was reduced by about 25% in Central Asia. Infant deaths account for a significant proportion of the U5MR.
- In 2010, about 85% of the region's children had been immunized for measles, a leading cause of childhood death. The PRC had immunized 99% of its 1-year-old children against measles, one of the region's highest rates. The proportions of 1-year-olds immunized against measles were lowest in South Asia and the Pacific.

## **MDG 5: Improve Maternal Health**

- In Asia and the Pacific, maternal health has been improved significantly, with the maternal death rate—measured by the maternal mortality ratio (MMR)—reduced by more than half the 1990 levels. However, the region is not likely to reach the MDG target by 2015, as this requires a further 25% reduction of the MMR. Among the 33 developing economies with available data, 24 are expected to meet the goal only after 2015. This situation is similar in other developing regions.
- MMRs decreased in economies where deliveries attended by skilled health professionals and antenatal care coverage increased. By 2010, South Asia's MMRs had declined to 201 deaths per 100,000 live births from 622 in 1990.

## **MDG 6: Combat HIV/AIDS, Malaria, and Other Diseases**

- By 2009, HIV prevalence had declined significantly in Cambodia, Myanmar, and Thailand where it was high in 2001. Almost all economies increased access to antiretroviral drugs for those with advanced HIV infection.
- The incidence and prevalence rates of tuberculosis and the death rates associated with tuberculosis in most countries in the region have declined. However, the Marshall Islands and some economies in Central and West Asia are regressing in meeting the goal of halting or reversing the tuberculosis incidence.
- Although the incidence of malaria remains high in many economies in the region, the death rates associated with malaria in 2008 were generally low, for economies with available data at less than 7 per 100,000 population, except in Myanmar and the Pacific.

## **MDG 7: Ensure Environmental Sustainability**

- Deforestation continues to threaten the region. Between 1990 and 2010, land area covered by forest shrank in 23 of the region's economies, with the largest percentage decreases in Cambodia (16%), Timor-Leste (15%), Indonesia (13%),

and Myanmar (11%). Some economies increased their forest cover during the period through large-scale afforestation programs—including in the PRC; Samoa; Taipei, China; and Viet Nam.

- Per capita carbon dioxide emissions in the region are highest in Australia, Brunei Darussalam, the Republic of Korea, Nauru, and Palau. Notable is the reduction in per capita carbon dioxide emissions in Singapore from 15.6 tons in 1990 to 7.0 tons in 2009, but this is still considerably higher than the rate of the world's developing regions, at 3.0 tons.
- More than half of the reporting economies have either reached or are on track to achieve the target of halving the proportion of population without access to improved water sources. However, about half of the economies in the region are not expected to achieve the target for improved sanitation.
- For countries where data are available, the slum population as a percentage of urban population declined during 1990–2009. In 2009, only the South Asia subregion had an average that (at 35.0%) was higher than the developing world's average slum population (at 32.7%).

## **MDG 8: Develop a Global Partnership for Development**

- In 2010, the net flow of official development assistance to developing economies amounted to \$128.5 billion, which is equivalent to 0.32% of the combined gross national income of Development Assistance Committee members, all of which are ADB members except for Greece. This fell short of the 2010 target of \$130 billion (at constant 2004 prices) of the Gleneagles Group of Eight (G8) Summit.
- From 2000 to 2010, the proportion of untied bilateral aid rose progressively. Developing ADB members received a total of \$37 billion, including net flows of long-term public and publicly guaranteed debt from official creditors and grants in 2010—a 4.8% increase from the 2009 allocation.
- A substantial drop in exports for many developing members in 2009, after the global financial crisis, arrested the steady decline of their debt service ratios (debt service to exports of goods and services). Except for Central and West Asia, where debt service ratios increased to over 40% in 2009, these ratios remained within manageable levels, at about 12% or less in the region.
- More than half of developing ADB members—12 that are landlocked and 12 small island economies—are given preferential access to major markets. The landlocked economies received about \$11.5 billion and the small island economies received about \$2 billion of net flows of public and publicly guaranteed debt in 2010.

## Part III: Regional Trends

The Asia and Pacific region is home to more than half of the world's population. About 46% of the region's populations live in urban areas and most economies are in the medium human development index (HDI) group. The region contributed about 36% of the global gross domestic product (GDP) in PPP terms and 34% of the total world exports of merchandise goods in 2011. The region's economic growth in 2011 has been higher than that of Europe and the United States. In most of the region's economies, there has been a shift toward greater capital formation and lower private consumption expenditure, as measured by their shares in GDP. International trade, including intraregional trade, has gained greater importance in the region over the past decade.

For ADB developing members, migrant workers' remittances continue to be an important external source of foreign exchange; foreign direct investment (FDI) flows have recovered from a drop in 2009; and the debt burden, as measured by external debt as a percentage of gross national income (GNI), has declined during the last decade. As food prices have been rising faster than the general inflation, there is greater risk of more people falling into extreme poverty, imperiling the gains that the region has achieved in poverty reduction.

The region accounted for close to 40% of world energy demand, with most electricity generated using fossil fuels (coal, oil, and natural gas). Fixed broadband internet subscriptions have surged over the last decade, but the region's average internet penetration level remains below that of the world as a whole. Starting a business is becoming cheaper and faster for most economies but combating corruption remains a problem in the region.

### People

- In 2011, Asia and the Pacific region was home to 3.9 billion people, or about 56% of the world's population. The population is projected to peak in 2050 and then fall to 4.0 billion in 2100, about the same level as in 2011.
- More than 40% of the region's population lived in urban areas in 2011. Of the world's 23 megacities (cities with at least 10 million population), in 2011, 12 are found in Asia.
- Total fertility rates fell from almost 4 children per woman in 1990 to about 3 in 2010 in almost all economies in the region during the last 20 years.
- High dependency ratios burdens government spending on education, pensions, and health care in the three developed economies in the region—Australia, Japan, and New Zealand—ranging from 13% to 23%.

- With most economies in the medium human development group, the region has made progress in the HDI during the last 10 years—the highest percentage improvements were in low-HDI economies: Afghanistan, Cambodia, Myanmar, and Timor-Leste.

## Economy and Output

- Asia and the Pacific contributed about 36% of global GDP (in PPP terms) in 2011; Europe, North America, and the rest of the world contributed 28%, 23%, and 14%, respectively. The PRC, India, and Japan accounted for more than 70% of the region's total GDP.
- In 2011, the region grew at an average rate of about 5.6%—significantly higher than the growth estimated for Europe (2.3%) and the United States (1.7%). Twenty-two economies in the region recorded slower growth and 18 had accelerated growth.
- Consumption expenditure was by far the largest expenditure component of GDP in 2011 in 24 economies in the region, although shares were generally lower than in 2001.

## Money, Finance, and Prices

- Money supply growth declined from 15.4% in 2010 to 14.6% in 2011 as economies adopted tighter fiscal and monetary policy to control inflationary pressures.
- Nonperforming bank loans have remained manageable in the region, but are high and rising for some countries in Central and West Asia.
- The consumer price indices (CPIs) of economies in the region have increased since 2010 on account of food prices and their heavy weight in the CPI. The food CPI moved faster than the general CPI in 2011, which affirms the global phenomenon of increasing food prices and puts more people at risk of falling into extreme poverty.

## Globalization

- Trade has gained greater importance in the region, which accounted for 34% of total world merchandise exports in 2011 versus 25% in 2001. Intraregional trade is high, with more than half of Asian and Pacific exports in 2011 going to economies within the region.

- As shown by increasing shares of service exports in GDP, trade in services is growing significantly more important to the region, particularly for economies such as Fiji; Hong Kong, China; the Maldives; Singapore; and Vanuatu. Tourism is a notably important engine of development for some economies, especially in the Pacific (e.g., the Cook Islands, the Maldives, Palau, Samoa, and Vanuatu).
- Migrant workers' remittances continue to be an important external source of foreign exchange for some economies in the region. Based on the average share in GDP for the last 5 years, remittances were most important to Tajikistan, with an average share of 42.2%; Tonga, with 23.3%; and the Kyrgyz Republic, with 23.2%.
- FDI flows in developing Asia posted recovery in 2010 from a drop in 2009 resulting from the global financial crisis. Of the 24 reporting economies, 15 had positive FDI growth in 2011.
- Among 36 economies in the region with data on external debt, nearly two-thirds showed a decrease in external debt as a percentage of GNI, ranging from 2% to 94% in 2010.

## Transport, Electricity, and Communication

- The total road network of developing economies, excluding the Pacific economies and the Maldives for which data are sparse, more than doubled, from 4.9 million kilometers in 1990 to 10.3 million kilometers as of 2009 or the latest year data are available. The PRC and India, which are the two most populous economies in Asia and have large land areas, account for almost two-thirds of the region's road network. However, economies with high per capita income, such as Japan and Singapore, have the region's highest road densities. Among the ADB developing members, the South Asian economies—Bangladesh, India, and Sri Lanka—have relatively high road densities.
- Most electricity in Asia is generated using carbon fuels (coal, oil, and natural gas), and the share of electricity generated from these carbon fuels increased substantially, from 68% in 1990 to 78% in 2009.
- The region has experienced a surge in fixed broadband internet subscriptions during the last decade, led by increases in subscriptions in the PRC, India, and the Republic of Korea. The region's average penetration level, at 6.4 per 100 population, is below the world's penetration rate of 8.5 but higher than in Africa (0.2) and the Middle East (2.1).

## Energy and Environment

- Asia and the Pacific region accounts for close to 40% of world energy demand, but most of the economies rely on imports to fill their energy requirements.
- Between 2000 and 2009, a majority of the economies improved their energy efficiency, with some improving their GDP per unit of energy use by more than 60%. This was achieved through technological advances, shifts in industrial structure toward services, and changes in government policies such as phasing out fuel subsidies. The general improvement in energy efficiency in the region is a welcome development, given that energy remains the largest contributor to greenhouse gas emissions, which increase with the region's continued economic growth.
- The region's fossil fuel consumption subsidy rates, though generally lower than those in the Middle East, are considerable, exceeding 20% of supply costs in several Asian countries. However, some economies have started to replace this type of subsidy with more targeted transfers to the poor.

## Government and Governance

- Fiscal balances continue to show improvements in most of the region's economies.
- Tax-to-GDP ratios rose in 2011 from 2010. Of 31 reporting economies in 2011 in the region, 24 have tax revenue shares that are lower than in developed members.
- In 2011, 8 of the 34 reporting economies registered increases ranging from 1.0 to 5.9 percentage points in government expenditure as a share of GDP.
- Starting a business is becoming cheaper and faster in most of the region's economies. The average days to start a business dropped to 28 in 2011 from 42 in 2006.
- Combating corruption remains a problem for many economies in the region. Only 9 of 41 economies that were surveyed are ranked on the corruption perception index as having minimal to average perceived corruption.