



# ADB Clean Energy BONDS

## Clean Energy Activities

On 25 September 2015, world leaders adopted the 2030 Agenda for Sustainable Development at the United Nations Sustainable Development Summit. It includes a set of 17 Sustainable Development Goals (SDGs) to end poverty, fight inequality and injustice, and tackle climate change by 2030. In December 2015 during the 21st Conference of Parties on Climate Change (CoP21) in Paris, 195 countries forged a new climate pact to keep global warming below 2°C. This will require massive international climate financing and technical assistance specifically for the energy sector.

For decades, the Asian Development Bank (ADB) has been assisting the energy sectors of its developing members. It has been (i) financing energy infrastructure such as power plants, transmission, and distribution systems; (ii) training and supporting government agencies; and (iii) instituting power sector reforms and enhancing governance. ADB's assistance to the energy sector has been evolving to focus more on the sustainable development goals, specifically climate change. By 2020, ADB targets to invest \$6 billion in climate finance: \$4 billion for mitigation (mostly for clean energy projects) and \$2 billion for adaptation.

ADB recorded \$2.5 billion in clean energy investments across Asia and the Pacific in 2015. This is the fifth year in a row where clean energy investments have been above the \$2 billion annual target. These investments will result in 618 megawatts of additional renewable energy capacity, 4.5 terawatt-hours electricity savings, and 22 million tons of carbon dioxide avoided when the projects are up and running.

Gearing up for the post-CoP21 era of implementation, ADB—together with the United States Agency for International Development, Korea<sup>1</sup> Energy Agency, and World Resources Institute—organized the 2016 edition of the Asia Clean Energy Forum on 6–10 June 2016 at the ADB Headquarters in Manila. The objective was to share best practices in policy, technology, and finance to meet the region's climate and energy security challenges. The forum brought together more than 1,000 government officials, project developers, sector experts, equipment and service providers, advocates, researchers, and development specialists.

ADB has raised over \$820 million of clean energy bonds since 2010. Proceeds raised through the clean energy bonds will be used to finance a pool of projects related to the clean energy field in Asia and the Pacific.

### ADB invested **\$2.5 billion** in clean energy in 2015<sup>2</sup>



This marks the fifth year in a row that clean energy investments have been above \$2 billion annually.



Source: ADB Database 2015.

<sup>1</sup> ADB recognizes “Korea” as the Republic of Korea.

<sup>2</sup> Out of \$2.5 billion in 2015, \$2.2 billion was funded by ordinary capital resources.

## ADB 2015 Clean Energy Investment Indicators

ADB Clean  
Energy Program

\$2.5 billion in clean energy  
investments in 2015

CO<sub>2</sub>e = Equivalent carbon dioxide,  
GWh = gigawatt-hour, MW = megawatt, TJ = terajoule.

Source: ADB database.

1,481 GWh/year renewable electricity generation

4,479 GWh/year electricity saved

37,994 TJ/year direct fuel saved

618 MW added renewable energy generation capacity

21.9 million tons CO<sub>2</sub> eq/year abated

## EXAMPLES OF CLEAN ENERGY PROJECTS

### China, People's Republic of: Beijing-Tianjin-Hebei Air Quality Improvement-Hebei Policy Reforms Program

Sector Classification: Energy  
Project Term: 2015-2017  
ADB Total Loan Package: \$300 million

#### PROGRAM SUMMARY:

ADB approved its first policy-based loan of \$300 million to the People's Republic of China (PRC) to help address the long-standing air pollution problem of the greater Beijing capital region. Such efforts will also contribute to the PRC's commitment to reduce greenhouse gas emissions by cutting the region's coal consumption, as discussed at the 21st Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change in Paris.

The program supports the Hebei provincial government in increasing its efforts to improve air quality in the greater capital area (Beijing municipality, Tianjin municipality, and Hebei province) which is home to about 109 million people and accounts for 10% of the national gross domestic product. Concentrations of inhalable particulate matter in the area have reached several times higher than cities in developed countries, becoming a significant cause for concern not only for local residents but also for neighboring countries and the rest of the world.

With ADB support, the program will include policy actions to switch from coal to cleaner energy, promote public transport in urban areas, and increase use of biomass for energy in rural areas. It will also develop a monitoring and analysis system and help strengthen environmental regulatory enforcement. Job support and social protection will be provided for workers affected by industrial transformation.



### Indonesia: West Kalimantan Power Grid Strengthening Project

Sector Classification: Energy  
Project Term: 2013-2016  
ADB Total Loan Package: \$49.5 million

#### PROJECT SUMMARY:

The project is perfectly aligned with ADB's Energy Sector Assessment Strategy and Roadmap, which supports investment in strategic transmission assets that connects regions or countries across seas or international boundaries to optimize power networks by reducing the overall need for reserve capacity, improving system reliability, removing transmission bottlenecks, and transmitting cheaper power from one area to the other, addressing overall regional socioeconomic and environmental improvement.

In West Kalimantan, Sumatera and the other outer islands of Indonesia, most of the power generation is either oil or diesel based, and, as a result, cost of power generation is more than 25 cents per kilowatt-hour. Large numbers of customers also do not have access to grid-connected power supply in those areas, and the power grid will need strengthening to accommodate new customer connection. In addition to strengthened network, supply to new customers will need new generation capacity, especially low-cost power generation to reduce the overall cost of power generation.

The project will (i) deliver clean hydropower from Sarawak that will displace fossil fuel-based power in West Kalimantan and (ii) reduce CO<sub>2</sub> emissions by 400,000 tons/year starting 2020.



## Our Vision—An Asia and Pacific Free of Poverty

ADB's vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries reduce poverty and improve the quality of life of their people. Despite the region's many successes, it remains home to half of the world's extreme poor. 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.



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