



ADB Green BONDS

Asian Development Bank green bonds, rated triple A, support its developing member countries' efforts to mitigate greenhouse gas (GHG) emissions and adapt to the consequences of climate change, while delivering environmentally sustainable growth to help reduce poverty and improve the quality of life of their people.

Addressing Climate Change in Asia and the Pacific

Environmental sustainability is a prerequisite for economic growth and poverty reduction in Asia and the Pacific. Human-induced climate change is threatening the development and security of Asia and the Pacific and the poor are particularly vulnerable to these changes and are already suffering from rising sea levels and increasingly devastating droughts, storms, and floods. Urgent action is needed to integrate both mitigation of GHG emissions and climate change adaptation measures into the region's development strategy in order to put Asia firmly on a path toward green growth.

ADB plays an important role in leading the region to a low-carbon and climate-resilient future through financing and introduction of innovative technologies.

From 2011 to 2014, ADB approved over \$13 billion in climate financing, with \$12.6 billion in loans, grants, guarantees, and equity investments, and \$438 million in technical assistance. ADB's own resources provided \$11.18 billion while external resources contributed a little over

Fast Facts

- **6 out of 10** nations most vulnerable to climate change are in Asia and the Pacific.
- **More than 60%** of the region's population work in sectors most at risk from climate change.
- **64 million** Asians will be pushed into poverty for every 10% rise in food prices resulting from climate change.
- An estimated increase from **300 million to 410 million** Asian urban dwellers are at risk of coastal flooding by 2025.
- Inland, the number of people at risk will rise from **245 million to 341 million** by 2025.

\$2 billion. Through mechanisms such as the Climate Investment Funds, multilateral development banks have mobilized \$6.5 billion for climate action in developing countries, with \$2.5 billion earmarked for Asia and the Pacific. As an implementing entity of the Green Climate Fund, ADB has access to a potentially \$100 billion annual fund for climate change actions in Asia and the Pacific.

In line with its Strategy 2020, ADB is integrating climate change into its planning and investment to ensure continued economic growth and a sustainable future for all in Asia and the Pacific. In September 2015, ADB President Takehiko Nakao announced that ADB will double its annual climate financing to \$6 billion by 2020, which will see the proportion of funding spent by the bank on climate change rise to nearly a third of all financing compared to around a quarter now. Of the \$6 billion to be spent tackling climate change, \$4 billion will be dedicated to mitigation projects while \$2 billion will be for adaptation.

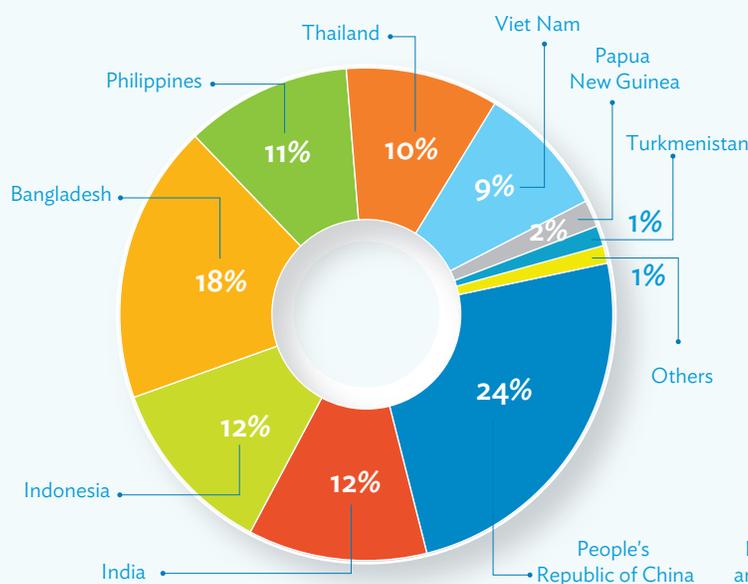
Eligible Project Selection Criteria

Green bonds have proven to be an effective tool to promote ADB's climate change strategy which identifies five priority areas:

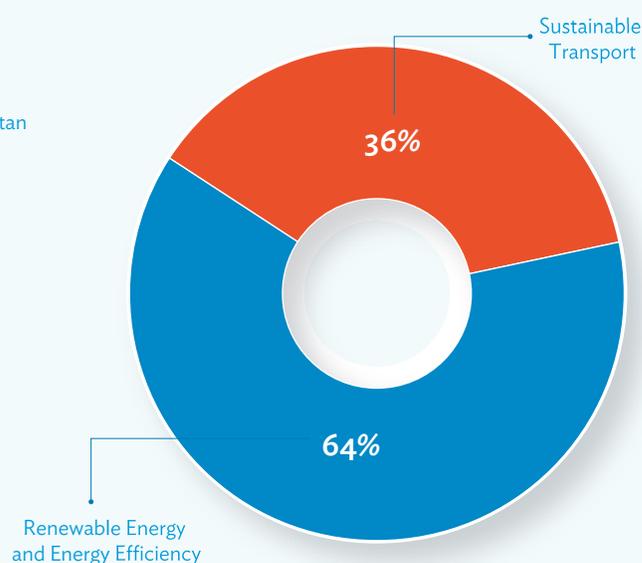
- (i) expanding the use of clean energy;
- (ii) encouraging sustainable transport and urban development;
- (iii) managing land use and forests for carbon sequestration;
- (iv) promoting climate-resilient development; and
- (v) strengthening policies, governance, and capacities.



Green Bond Commitments by Country



Green Bond Commitments by Sector



Mitigation projects include those that fall under the following sectors:

- renewable energy;
- energy efficiency;
- sustainable transport.

Climate change adaptation projects include those that fall under the following sectors:

- energy;
- water and other urban infrastructure and services;
- transport.

Eligible green bond projects are identified by ADB energy, climate change, and environmental specialists on a continuous basis. This is done by using the joint multilateral development bank approach for tracking and reporting climate change mitigation and adaptation finance,¹ and additional selection criteria for “green” projects as defined by ADB’s Green Bond Framework² that deliver environmentally sustainable growth.

¹ Asian Development Bank. 2015. *Joint Report on Multilateral Development Banks’ Climate Finance*. <http://www.adb.org/sites/default/files/related/42023/joint-mdb-report-climate-finance-2014.pdf>

² Asian Development Bank. ADB Green Bond Framework. <http://www.adb.org/sites/default/files/adb-green-bonds-framework.pdf>

Use of Proceeds

Green bond net proceeds are allocated within ADB’s treasury to a special subportfolio that is linked to ADB’s lending operations to eligible projects. So long as the green bonds are outstanding, the balance of the subportfolio will be reduced at the end of each quarter in respect of eligible projects. Pending such disbursements, the subportfolio will be invested in liquid instruments, consistent with ADB’s liquidity policy.

Green Bond Issuances to Date

Format	Issue Date	Maturity Date	Proceeds
Public	19 March 2015	19 March 2025	\$500 million
Private Placement	19 August 2015	19 August 2025	\$10 million
Total Green Bond Proceeds:			\$510 million

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 the majority of the world’s 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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List of ADB Green Bond Eligible Projects by Sector Target Impacts and Committed and Allocated Amounts

A. Renewable Energy and Energy Efficiency As of 31 December 2015

#	Link to More Information	Project Name (Number/Year Loan Approved and Description)	A/M ^a	Project Life (Years) ^b	Annual Energy Savings (MWh) ^b	Annual Energy Produced (MWh) ^b	Renewable Capacity Added (MW) ^b	Annual Greenhouse Gas Emission Avoided (Tons of CO ₂ eq) ^b	Target Results ^b	Committed Amount (US\$ mil)	Allocated Amount (US\$ mil) ^c
1	http://www.adb.org/projects/40061-013/main?page-2=1	Indonesia: Java-Bali Electricity Distribution Performance Improvement Project (2619/FY2010): reduce distribution system losses and with an energy efficient lighting program, reduce demand side energy consumption	M	40	400,000	na	na	330,000	<ul style="list-style-type: none"> • Deferral of new distribution network investment by \$100 million • Overall distribution loss reduced to 7% from 8.4% in 2008 • System average interruption frequency index reduced to 3.0 times per year per customer from 6.80 in 2008 	40.00	16.82
2	http://www.adb.org/projects/40682-013/main?page-3=1	China, People's Republic of: Integrated Renewable Biomass Energy Development Sector Project (formerly Rural Energy and Ecosystem Rehabilitation (Phase II)) (2632/FY2010): improve performance of biogas subsector through the demonstration of integrated renewable biomass energy system in poor rural areas of Heilongjiang, Henan, Jiangxi, and Shandong provinces in the PRC	M	15	27,222	92,000	--	1,000,000	<ul style="list-style-type: none"> • About 90% of the wastes of the subproject farms is collected and treated via the project biogas plant • About 70 million cubic meters of biogas produced every year for rural energy use • About 41,000 households, including 8,000 poor households, benefit from improved access to clean energy • About 27,000 farmers increased their incomes through expanded contract farming • About 9,000 poor households benefit from the use of organic fertilizer and sales of organic products • Greenhouse gas emissions reduced by about 1 million tons of carbon dioxide equivalent 	66.10	15.70
3	http://www.adb.org/projects/41504-023/main?page-2=1&page-3=1	Papua New Guinea: Town Electrification Investment Program - Tranche 1 (2713/FY2010): increase generation and use of renewable energy in provincial areas	M	30	na	35,600	6	35,000	<ul style="list-style-type: none"> • Installation of six additional small hydropower plants in target provincial areas by end 2016 • Reduced power outages by 20% in target provincial urban areas by end 2016 • Reduced fuel costs for PPL power generation by 60% in target provincial areas by end 2016 	40.90	8.08
4	http://www.adb.org/projects/44431-013/main?page-2=1&page-3=1	India: Gujarat Solar Power Transmission Project (2778/FY2011): develop the transmission infrastructure to evacuate power from the solar power generation plants to be located in the 2,500 hectares Charanka solar park located in Patan district of Gujarat; the solar park will host over 500 MW of both solar photovoltaic and concentrated solar power plants	M	40	na	na	na	na	<ul style="list-style-type: none"> • Up to 500 MW of power could be evacuated from the Charanka solar park over the transmission link to the Gujarat and national grid commencing in 2014 (2010 baseline: 0 MW) 	80.00	35.47

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5	http://www.adb.org/projects/46906-014/main	China, People's Republic of: Agricultural and Municipal Waste to Energy Project (7368/2899/FY2012): increase power generation from agricultural wastes, a form of renewable energy resource	M	40	na	744,000	126	382,800	<ul style="list-style-type: none"> Comprehensive utilization rate of crop straw improves to 85% by 2020 (2010 baseline: 70%) Total installed capacity of agricultural WTE plants in the PRC reaches 20 GW by 2020 (2010 baseline: less than 2 GW) 	60.00	-
6	http://www.adb.org/projects/46906-014/main	China, People's Republic of: Agricultural and Municipal Waste to Energy Project (7368/2900/FY2012): increase power generation from municipal solid wastes, a form of renewable energy resource	M	40	na	496,000	84	255,200	<ul style="list-style-type: none"> 70% of MSW in the PRC is properly treated, with 30% incinerated in cities, by 2020 (2010 baseline: 63.5% of MSW properly treated, with 14.7% incinerated in cities) Total installed capacity of municipal WTE plants in the People's Republic of China reaches 3 GW by 2020 (2010 baseline: about 500 MW) Approximately an additional 7,300 tons per day of waste is treated by 2018. 	40.00	-
7	http://www.adb.org/projects/46914-012/main	Regional: Southeast Asia Regional Energy Efficiency Sector (7371/2919/FY2012): support the investment program to expand and upgrade energy efficiency services in Cambodia, Indonesia, the Lao PDR, Malaysia, the Philippines, Thailand, and Viet Nam by removing financial constraints and the information barriers that inhibit the development of the energy efficiency market	M	20	150,000	na	na	90,000	<ul style="list-style-type: none"> The project achieves annual energy savings of at least 150,000 MWh from energy efficiency projects by 2019 The project results in average annual avoidance of 90,000 tons of carbon emissions by 2019 Average annual net savings of \$10 million from energy efficiency projects by 2019 	20.00	8.18
8	http://www.adb.org/projects/46930-014/main?page=2=1	China, People's Republic of: Dynagreen Waste to Energy Project (7377/2960-02/FY2012): increase power generation from municipal solid wastes (MSW), a form of renewable energy resource	M	40	na	610,000	120	450,000	<ul style="list-style-type: none"> 2.8 million tons of MSW is treated per annum on average by 2018 About 610 gigawatt-hours of clean energy is produced annually by WTE plants by 2018 CO₂ emissions are reduced by approximately 450,000 tons per annum by 2018 Up to 700 local workers employed by nine WTE plants during operation CNY45 million of local goods and services procured during operations on average per annum starting 2018–2019 	100.45	67.81

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9	http://www.adb.org/projects/43207-013/main?page=2=1	Philippines: Market Transformation through Introduction of Energy-Efficient Electric Vehicles Project (2964/FY2012): generate global environmental benefits and reduce the carbon footprint of the tricycle industry through the introduction of low-carbon e-trike technology	M	10	1,538,611	na	na	332,150	<ul style="list-style-type: none"> • At least 20,000 e-trikes operating by December 2014; 50,000 by 2015; and 100,000 by 2017 • At least two retailers distributing lithium-ion and other high-energy-density batteries locally • Five solar charging stations of 200 kilowatts each established by 2014 • At least 100 locally assembled charging stations are installed in selected project areas by 2017 • At least 30% of operators of public charging stations are women (only for daytime shifts) • Battery recycling options are studied and recommendations implemented by 2017 • Targeted beneficiaries attended operations and maintenance workshops conducted by accredited institutions (at least one workshop per LGU, total of 10 workshops by 2017) 	228.43	0.85
10	http://www.adb.org/projects/46934-014/main	Thailand: Central Thailand Solar Power Project (7384/2992/FY2013): increase solar power generation; diversify energy mix through the addition of renewable energy capacity	M	25	na	90,000	57	66,576	<ul style="list-style-type: none"> • More than 90,000 MWh of solar power delivered to the off-taker per annum, on average, during the first 10 years of operation (2014–2024) • 66,576 tons of carbon dioxide equivalent emissions avoided per annum, on average, during the first 10 years of operation (2014–2024) • At least 50 FTE permanent staff positions filled from commercial operations date • 57 MW solar power capacity commissioned by the fourth quarter of 2013 • At least 150 people FTE employed during construction • Local purchase of goods and services amounting to more than B1,725 million (\$54 million equivalent) during construction 	52.00	-
11	http://www.adb.org/projects/45224-003/main?page=2=1	India: Rajasthan Renewable Energy Transmission Investment Program - Tranche 1 (3052/FY2013): support transmission facilities to evacuate renewable energy from renewable energy park to the state and national grid	M	40	na	na	na	na	<ul style="list-style-type: none"> • Bulk renewable energy-dedicated power transmission system expanded • Institutional capacity for renewable energy parks and transmission system developed 	62.00	3.88

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12	http://www.adb.org/projects/46058-002/main?page-2=1	China, People's Republic of: Qinghai Delingha Concentrated Solar Thermal Power Project (3075/FY2013): increase solar power generation using concentrated solar power technology; increase share of renewable energy in the total primary energy consumption	M	25	na	197,000	50	154,446	<ul style="list-style-type: none"> • 50 MW Qinghai Delingha plant operates reliably delivering designed output (baseline: 0 MW in 2013) • 197 GWh of clean electricity generated annually, thereby avoiding 154,446 tons of CO₂ per year by 2017 (baseline: 0 GWh in 2013) 	150.00	0.37
13	http://www.adb.org/projects/42916-014/main?page-2=1	Indonesia: Sarulla Geothermal Power Generation Project (7397/3089/FY2013): increase use of geothermal resources for power generation	M	30	na	2,529,000	320	1,300,000	<ul style="list-style-type: none"> • Annual electricity production of 2,529 GWh from 2018 onward • Net reduction of 1.3 million tons of CO₂ equivalent emissions per year from 2018 onward • Annual corporate tax paid averages at least \$20 million per annum • Employment equivalent to 100 full-time skilled or semiskilled jobs provided during operations by 2020 • Women comprise at least 20% of the technical or laboratory and administrative positions during operations by 2020 • Indigenous peoples comprise 20% of the semiskilled labor from the affected area (Pahae Jae and Pahae Julu) and the North Tapanuli Regency during operations by 2020 	250.00	151.80
14	http://www.adb.org/projects/48209-001/main?page-2=1	India: IND: ACME-EDF Solar Power (3175/FY2014): increase solar power generation capacity by 20 MW	M	25	na	38,000	20	35,340	<ul style="list-style-type: none"> • 38,000 MWh generated annually from 2018 onward • 35,340 tons of CO₂ avoided annually from 2018 onward • FTE employment of 14 people for operation and maintenance services from 2018 onward 	9.79	9.28
15	http://www.adb.org/projects/48209-001/main?page-2=1	India: IND: ACME-EDF Solar Power (3176/FY2014): increase solar power generation capacity by 20 MW	M	25	na	38,000	20	35,340	<ul style="list-style-type: none"> • 38,000 MWh generated annually from 2018 onward • 35,340 tons of CO₂ avoided annually from 2018 onward • FTE employment of 14 people for operation and maintenance services from 2018 onward 	9.81	9.39
16	http://www.adb.org/projects/48209-001/main?page-2=1	India: IND: ACME-EDF Solar Power (3177/FY2014): increase solar power generation capacity by 20 MW	M	25	na	38,000	20	35,340	<ul style="list-style-type: none"> • 38,000 MWh generated annually from 2018 onward • 35,340 tons of CO₂ avoided annually from 2018 onward • FTE employment of 14 people for operation and maintenance services from 2018 onward 	9.79	9.28

#	Link to More Information	Project Name (Number/Year Loan Approved and Description)	A/M ^a	Project Life (Years) ^b	Annual Energy Savings (MWh) ^b	Annual Energy Produced (MWh) ^b	Renewable Capacity Added (MW) ^b	Annual Greenhouse Gas Emission Avoided (Tons of CO ₂ eq) ^b	Target Results ^b	Committed Amount (US\$ mil)	Allocated Amount (US\$ mil) ^c
17	http://www.adb.org/projects/48209-001/main?page=2=1	India: IND: ACME-EDF Solar Power (3178/FY2014): increase solar power generation capacity by 20 MW	M	25	na	38,000	20	35,340	<ul style="list-style-type: none"> • 38,000 MWh generated annually from 2018 onward • 35,340 tons of CO₂ avoided annually from 2018 onward • FTE employment of 14 people for operation and maintenance services from 2018 onward 	9.81	9.39
18	http://www.adb.org/projects/48209-001/main?page=2=1	India: IND: ACME-EDF Solar Power (3179/FY2014): increase solar power generation capacity by 20 MW	M	25	na	38,000	20	35,340	<ul style="list-style-type: none"> • 38,000 MWh generated annually from 2018 onward • 35,340 tons of CO₂ avoided annually from 2018 onward • FTE employment of 14 people for operation and maintenance services from 2018 onward 	10.79	10.37
19	http://www.adb.org/projects/48209-001/main?page=2=1	India: IND: ACME-EDF Solar Power (3180/FY2014): increase solar power generation capacity by 100 MW	M	25	na	190,000	100	176,700	<ul style="list-style-type: none"> • 190,000 MWh generated annually from 2018 onward • 176,700 tons of CO₂ avoided annually from 2018 onward • FTE employment of 70 people for operation and maintenance services from 2018 onward 	50.00	-
20	http://www.adb.org/projects/46453-002/main?page=2=1	Cook Islands: Renewable Energy Sector Project (3193/FY2014): increase solar power generation capacity by 3 MWp	M	25	na	4,870	3	2,930	<ul style="list-style-type: none"> • By end of 2016: Solar photovoltaic power system of core subprojects (with 780 kW of installed capacity) connected to the existing power grid on Mangaia, Mauke, and Mitiaro islands (2012 baseline: 0%) • By end of 2017: Solar photovoltaic power system of noncore subprojects (2,400 kW) connected to the existing power grid on Atiu, Aitutaki, and Rarotonga islands (2012 baseline: 0%) • By end of 2017: Energy efficiency policy implementation plan is developed (2012 baseline: 0%) • Capacity of Office of Energy Commissioner and Renewable Energy Development Division (REDD) (10 staff in total) for renewable energy technology assessments and tariff setting in private sector-funded projects developed (2012 baseline: 0%) • The updated Cook Islands Renewable Energy Chart Implementation Plan, which incorporates load demand update, viable renewable technology choice, and least-cost investment plan, developed (2012 baseline: 0%) 	11.19	0.32

#	Link to More Information	Project Name (Number/Year Loan Approved and Description)	A/M ^a	Project Life (Years) ^b	Annual Energy Savings (MWh) ^b	Annual Energy Produced (MWh) ^b	Renewable Capacity Added (MW) ^b	Annual Greenhouse Gas Emission Avoided (Tons of CO ₂ eq) ^b	Target Results ^b	Committed Amount (US\$ mil)	Allocated Amount (US\$ mil) ^c
									<ul style="list-style-type: none"> • Project management support for REDD and Te Aponga Uira (Rarotonga Power Authority) to implement core and noncore subprojects (six in total) completed (2012 baseline: 0%) 		
21	http://www.adb.org/projects/48233-001/main	Thailand: Subyai Wind Power Project (7435/3219/ FY2014): increase wind power generation capacity by 81 MW	M	20	na	128,950	81	65,000	<ul style="list-style-type: none"> • At least 120,000 MWh of wind power delivered to the offtaker per annum (2016–2026) • At least 65,000 tons of carbon dioxide equivalent emissions avoided per annum (2016–2026) • 81 MW wind power capacity commissioned by the first quarter of 2016 • More than 250 people (45 FTE) employed during construction • Local purchase of goods and services amounting to over B1,000 million (\$29.5 million) during construction 	53.00	33.78
22	http://www.adb.org/projects/48325-001/main	Philippines: 150-Megawatt Burgos Wind Farm Project (7442/3246/ FY2015): increase wind power generation capacity by 150 MW	M	20	na	370,000	150	160,113.70	<ul style="list-style-type: none"> • Approximately 370 GWh of wind power delivered to the grid per year, on average, from 2015 (2012 baseline: 75 GWh per year) • 150 MW wind power capacity commissioned by the first quarter of 2015 	20.00	19.60
23	http://www.adb.org/projects/48423-001/main	Philippines: Tiwi and MakBan Geothermal Power Green Bonds Project (7551/3266/ FY2015): involve refinancing of capital expenditure (including acquisition and plant rehabilitation) and ongoing operation and maintenance in Tiwi and Makban, two major geothermal power generation complexes in Luzon	M	na	na	na	na	na	<ul style="list-style-type: none"> • Full subscription of up to P10.7 billion of peso denominated Tiwi–MakBan green project bonds in the third quarter of 2015 (2015 baseline: N/A) • Climate bond certificate application issued by fourth quarter 2015 (2015 baseline: N/A) • ADB public knowledge product disseminated by 2016 (2015 baseline: N/A) • Implement risk-sharing agreement with at least one coguarantor by third quarter of 2015 (2015 baseline: N/A) 	40.64	-
24	http://www.adb.org/projects/49263-001/main	Thailand: Northeastern Thailand Wind Power Project (7462/3366/FY2015): increase wind power generation; diversify electricity generation mix	M	20	na	411,000	260	222,000	<ul style="list-style-type: none"> • Wind power facilities (including transmission line and substation) with 260 MW of capacity commissioned by the second quarter of 2018 • Employment for more than 250 people generated during construction by 2018 • Local purchase of goods and services amounts to more than B3,000 million (\$82 million) during construction 	157.50	-

#	Link to More Information	Project Name (Number/Year Loan Approved and Description)	A/M ^a	Project Life (Years) ^b	Annual Energy Savings (MWh) ^b	Annual Energy Produced (MWh) ^b	Renewable Capacity Added (MW) ^b	Annual Greenhouse Gas Emission Avoided (Tons of CO ₂ eq) ^b	Target Results ^b	Committed Amount (US\$ mil)	Allocated Amount (US\$ mil) ^c
25	http://www.adb.org/projects/42016-013/main?page-2=1&page-3=1	China, People's Republic of: Qinghai Rural Water Resources Management Project (2738/FY2011): increase water use efficiency, convert existing lift irrigation to gravity irrigation, improve agricultural extension services, and empower farmer associations for irrigated agricultural service and management	M	--	49,410	na	na	43,649	<ul style="list-style-type: none"> • Spring wheat yield increased from 4.6 t/ha in 2009 to 5.7 t/ha by 2016, and winter wheat yield increased from 5.8 t/ha in 2009 to 7.2 t/ha by 2016 • High-value crops diversified on additional 3,000 ha by 2016 Irrigation water use efficiency increased from 35% in 2009 to 56% by 2016. <ul style="list-style-type: none"> • Gravity irrigation cover increased from 26% to 89% of the irrigated areas in project countries • Average operation and maintenance cost including electricity reduced from CNY 0.168/m³ for lift irrigation to CNY 0.033/m³ for gravity irrigation 	45.32	15.47
Total committed and allocated for renewable energy and energy efficiency									1,617.52	425.84	

FTE = full-time equivalent; GWh = gigawatt-hour; MW = megawatt; MWh = megawatt-hour; WTE = waste to energy; MSW = municipal solid wastes.

^a Column indicates whether the project aims to mitigate climate change (M) or adapt to climate change (A).

^b "--" means not measured/not reported for this project and "na" means not applicable. Expected impacts/results are based on ex-ante estimates. Greenhouse gas emission reductions presented in this report use the IFI harmonized approach to GHG accounting.

^c "-" means no disbursements as of 31 December 2015.

B. Sustainable Transport As of 31 December 2015

#	Link to More Information	Project Name (Number/Year Loan Approved and Description)	A/M ^a	Target Results ^b	Committed Amount (US\$ mil)	Allocated Amount (US\$ mil) ^c
1	http://www.adb.org/projects/43441-013/main?page-2=1	Turkmenistan: North-South Railway Project (2737/FY2011): increase in accessibility, regional trade; contribute to economic growth and the development of an integrated and efficient railway system in the region	M	<ul style="list-style-type: none"> • Total national transit tonnage increased to 6 million tons (2008 baseline: 3 million tons) • About 1.6 million tons of minerals transported on the project railway in 2015 • Performance tracking system developed for periodic inspection, supervision, and testing • CO2 emissions reduced to 26,800 tons by 2020 (2008 baseline: estimated at 37,000 tons) 	23.38	4.60
2	http://www.adb.org/projects/40080-013/main?page-2=1&page-3=1	Viet Nam: Ha Noi Metro Rail System Project (Line 3: Nhon-Ha Noi Station Section) (2741/FY2011): facilitate public transport connectivity, greatly enhance access in five districts of Ha Noi, and be an important integral part of an improved public transport system, which aims to achieve increased public modal share through low-carbon transport that reduces greenhouse gas emissions.	M	<ul style="list-style-type: none"> • Peak loading of 785,000 passenger-kilometer per day and 5,800 passengers per hour per direction on line 3 by 2020 • Weighted average travel time per passenger along the project corridor reduced by 25% from 2011 baseline level of 52 minutes by 2020 	58.60	0.18
3	http://www.adb.org/projects/43332-043/main	China, People's Republic of: Railway Energy Efficiency and Safety Enhancement Investment Program - Tranche 3 (2765/FY2011): improves energy efficiency, environmental protection, and safety in PRC railways	M	<ul style="list-style-type: none"> • Energy efficiency, environmental protection, and safety enhancement equipment installed • Safety audit of a nominated railway administration completed • Capacity building provided 	50.00	37.21
4	http://www.adb.org/projects/36330-023/main?page-3=1	India: Railway Sector Investment Program - Tranche 1 (2793/FY2011): improve transport system and greater mobility through an efficient, safe, reliable, and environment-friendly railway system	M	<ul style="list-style-type: none"> • Expanded physical infrastructure and enhanced efficiency of infrastructure use • Improved operational efficiency • Implementation support provided to Ministry of Railways for mitigation and carbon credit activities 	27.27	9.92
5	http://www.adb.org/projects/42169-013/main?page-3=1&page-4=1	Bangladesh: Greater Dhaka Sustainable Urban Transport Project (2862/FY2012): provides a holistic solution for integrated urban mobility through an energy efficient sustainable urban transport system in Gazipur City Corporation, which forms part of north Greater Dhaka	M	<ul style="list-style-type: none"> • Project saves average 40,000 tCO2 equivalent/year (versus without-project scenario) • Air pollutants (PM10) annual level decreases by 20% (2006 baseline: 76.72 µg/m³) • Gazipur City Corporation (GCC) walkability index rating improves from 39 (2010: baseline) to 60 out of 100 • Residents' positive perception of public transport and urban life quality improves by 50% from 2012 baseline • BRT achieves 100,000 passengers/day ridership (at least 30% women) in first year of operation • Modal share of public transport increases from 40% (2011 baseline) to 50% 	12.59	0.04

#	Link to More Information	Project Name (Number/Year Loan Approved and Description)	A/M ^a	Target Results ^b	Committed Amount (US\$ mil)	Allocated Amount (US\$ mil) ^c
6	http://www.adb.org/projects/39256-024/main	Mongolia: Urban Transport Development Investment Program-Tranche 1 (2934/FY2012): increase use of bus rapid transit (BRT) system that reduces traffic congestion, travel time, fuel use, and excessive vehicle emissions including greenhouse gases	M	By 2020 <ul style="list-style-type: none"> • Bus travel time in BRT corridors is decreased by 30% during peak hours in the central business district compared to 2011 • Traffic delay is decreased by 30% during peak hours at major road intersections in BRT corridors compared to 2011 • Traffic accidents and casualties are reduced by 15% compared to 176 fatalities and 515 injuries in 2010 	2.10	0.00
7	http://www.adb.org/projects/39500-033/main?page=2=1	Viet Nam: Ho Chi Minh City Urban Mass Rapid Transit Line 2 Investment Program - Tranche 2 (2956/FY2012): establish a sustainable urban transport system for HCMC including integration of MRT and public bus system to improve the urban environment along the MRT2 corridor and reduce greenhouse gas emissions	M	<ul style="list-style-type: none"> • Construction of the first stage of MRT Line 2 completed, from Ben Thanh to Tham Luong with 10 stations and the remaining depot site works, including twin bored tunnels, underground stations, elevated station, transition, viaduct, spur line, track work and third rail 	100.00	0.32
8	http://www.adb.org/projects/45023-002/main?page=2=1&page=3=1	China, People's Republic of: Hubei-Yichang Sustainable Urban Transport Project (3014/FY2013): improve overall traffic flow, reduce congestion and associated emissions as well as noise level along the main corridor in the city centre by building BRT corridor including BRT depots, improving provision for pedestrian and bicycles facilities, and establishing parking management plan and other traffic demand management measures	M	<ul style="list-style-type: none"> • By 2018: Bus traffic speed increased to 25 km/h from 15 km/h in 2011 on BRT corridor • By 2018: Passenger travel time reduced to 10 minutes on average, from 20 minutes in 2011 • By 2018: Freight travel time between inland ports and logistics centers reduced by 20% from 2011 • By 2018: Pass-dam transshipment freight travel time to logistics centers reduced to 1 hour, from 2 hours in 2011 	6.30	4.17
9	http://www.adb.org/projects/46417-001/main?page=2=1&page=3=1	India: Jaipur Metro Rail Line 1-Phase B Project (3062/FY2013): provide mass rapid transit capacity for the city's major mobility corridors, aiming to reverse the rising shift to private cars and achieve a vision of an improved public transport system in Jaipur—optimizing general mobility, enhancing quality of life, and making the city more pleasant to live and work in	M	<ul style="list-style-type: none"> • Average daily number of passengers using Line 1-Phase B reaches 126,000 in the first year of operation (2018-2019) • Underground rail infrastructure of 2.3 kilometers and two stations completed by 2018 	35.20	3.57
10	http://www.adb.org/projects/43332-053/main	China, People's Republic of: Railway Energy Efficiency and Safety Enhancement Investment Program - Tranche IV (3082/FY2013): provide significant environmental and safety benefits by introducing environmental protection and railway safety enhancement equipment such as anti seismic bridge bearings, enhanced railway fasteners, heavy-duty switches, and signaling system facilities	M	<ul style="list-style-type: none"> • Transport capacity expanded in the southwestern PRC to 470 billion ton-kilometer for freight and 150 billion passenger-kilometer for passengers in 2020 • Cost of travel reduced from 35 fen/km in 2008 to 15 fen/km in 2020 • A 20% reduction in rate of accidents per billion traffic by 2020 from 2008 	36.00	4.78
11	http://www.adb.org/projects/32234-053/main	Bangladesh: Railway Sector Investment Program - Tranche 3 (3097/FY2013): improve railway transport capacity in the mainline network of Bangladesh Railway	M	<ul style="list-style-type: none"> • Number of daily passenger trains increased by 10 (2011 baseline: 289) • Number of annual passengers increased by 10% (2011 baseline: 66 million) 	20.00	0.03

#	Link to More Information	Project Name (Number/Year Loan Approved and Description)	A/M ^a	Target Results ^b	Committed Amount (US\$ mil)	Allocated Amount (US\$ mil) ^c
12	http://www.adb.org/projects/43332-054/main	China, People's Republic of: Railway Energy Efficiency and Safety Enhancement Investment Program – Tranche 5 (3109/FY2014): support the development of a sustainable, energy-efficient, safe, reliable, affordable, and environment-friendly railway system in the PRC by procurement and installation of railway electrification system, railway electric power supply system, track safety operation and maintenance equipment, enhanced railway fasteners, antiseismic bridge bearings, railway telecommunication system, and railway signaling system	M	<ul style="list-style-type: none"> • Transport capacity expanded in the southwestern PRC to 470 billion ton-kilometer for freight and 150 billion passenger-kilometer for passengers in 2020 • Energy consumption on the PRC railways per unit of revenue is reduced by 23% from 2009 to 2020 	59.69	2.58
13	http://www.adb.org/projects/46168-001/main?page-2=1	Bangladesh: South Asia Subregional Economic Cooperation Railway Connectivity: Akhaura-Laksam Double Track Project (3169/FY2014): increase the capacity of the Dhaka–Chittagong corridor by completing double tracking on the entire corridor, which accounts for more than 40% of all passenger journeys by railway in Bangladesh and upgrading and reconstruction of the existing track	M	<ul style="list-style-type: none"> • Number of daily passenger trains from Dhaka to Chittagong increased to 17 (2013 baseline: 14 trains per day and direction) • Journey time of trains between Akhaura and Laksam reduced by 20% (2013 baseline: 77 minutes) 	227.56	-
14	http://www.adb.org/projects/40080-025/main?page-2=1	Viet Nam: Ha Noi Metro Rail System Project (Line 3: Nhon-Ha Noi Station Section) – Additional Financing (3363/FY2015): facilitate public transport connectivity, greatly enhance access in five districts of Ha Noi, and be an important integral part of an improved public transport system, which aims to achieve increased public modal share through low-carbon transport that reduces greenhouse gas emissions	M	<ul style="list-style-type: none"> • Peak loading of 785,000 passenger-kilometer per day and 5,800 passengers per hour per direction on line 3 by 2020 • Weighted average travel time per passenger along the project corridor reduced by 25% from 2011 baseline level of 52 minutes by 2020 	59.00	-
15	http://www.adb.org/projects/49094-001/main?page-2=1	Bangladesh: Railway Rolling Stock Project (3301/FY2015): increase railway transport capacity in the main line network of Bangladesh Railway	M	<ul style="list-style-type: none"> • Number of daily passenger trains increased by 10 (2011 baseline: 289) • Number of annual passengers increased by 10% (2011 baseline: 66 million) 	200.00	-
Total committed and allocated for sustainable transport					917.69	67.41

^a Column indicates whether the project aims to mitigate climate change (M) or adapt to climate change (A).

^b Expected impacts/results are based on ex-ante estimates. Greenhouse gas emission reductions presented in this report use the IFI harmonized approach to GHG accounting.

^c “-” means no disbursements as of 31 December 2015. 0.00 is less than \$0.01 million.