



Private Participation in Infrastructure¹ Database (PPIDB) – Half Year Update (January – June 2016)

- Investment² in infrastructure³ with private participation in developing countries totaled US\$29.5 billion in H1 2016, compared with US\$25.3 billion in H1 2015 at the same point in time, signaling a steady market after a large drop in 2013.
- Continuing the trend of past years, renewable energy's share of PPI remained high at 75 percent of all energy projects totaling 76.
- Latin American and the Caribbean was the top region by number of projects and investment value for H1 2016, mainly driven by Brazil's recovery.
- Six projects reached financial closure in H1 2016 in IDA countries, with Uganda accounting for three of them.

This note is a product of the Public-Private Partnership Group of the World Bank, and the Private Participation in Infrastructure Database (PPI Database), written by Jenny Chao and Seong Ho Hong.

1

KEY FINDINGS

According to the data, investment in infrastructure with private participation low- and middle-income countries was slightly higher in H1 2016 than in H1 2015 (at the same point in time).⁴ Though falling since 2013, PPI investments in the first half of this year have signaled that investment amounts are stabilizing.

Renewables continued to have a strong presence in H1 2016. Of 76 energy projects, 57 relied on renewable technologies: wind, solar PV, and hydropower. Renewable energy investments totaled US\$9.3 billion or 47 percent of the total investment in power projects. As each region relies on different renewable energy technologies to varying degrees, in East Asia and Pacific (EAP), 13 of the 15 renewable power generation projects were solar PV; whereas, in Latin America and the Caribbean (LAC), solar (8), hydro (7), and wind (9) were more evenly distributed in 24 projects, while in South Asia (SAR) wind power outnumbered solar six to four.

Water and sanitation investments of US\$446.2 million were 50 percent less in H1 2016 than in H1 2015 at the same point in time. This is partly because of exceptionally high investments in water and

¹ Private Participation in Infrastructure (PPI) as defined by the Private Participation in Infrastructure Database http://ppi.worldbank.org/resources/ppi_methodology.aspx

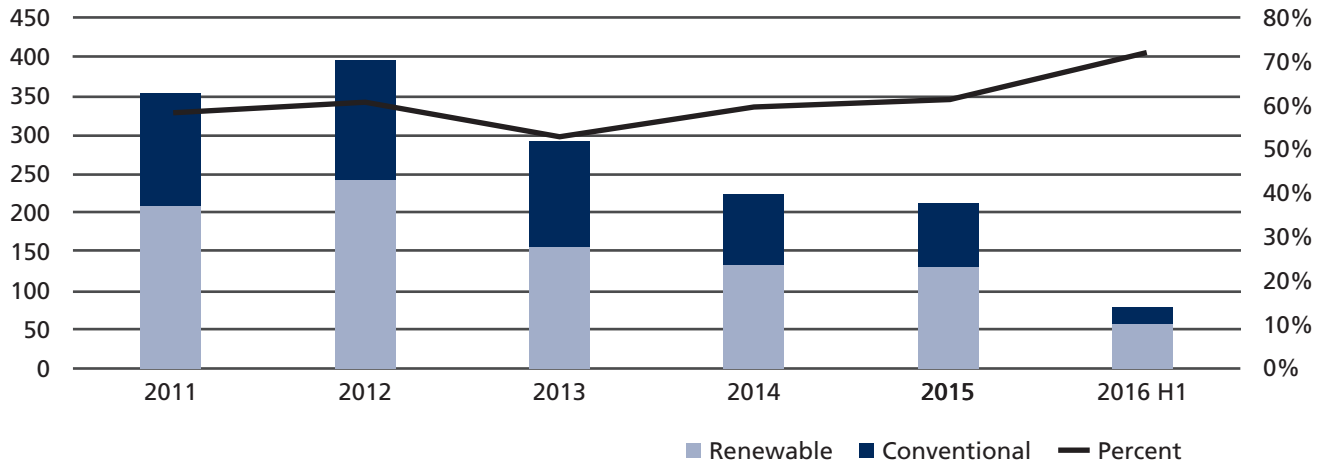
² "Investment" refers to investment commitments at the time of financial closure.

³ "Infrastructure" refers to energy, transport, and water projects serving the public in low- and middle-income countries, including natural gas transmission and distribution, but excluding oil and gas extraction.

⁴ PPI data is available throughout the year and continuously added to the PPI Database; therefore, the numbers in this note are subject to change.

sanitation in the first half of last year. In H1 2016, China and Brazil were the two major markets for water project investments. Of the 12 projects, seven were in China; four in Brazil; and one in Peru.

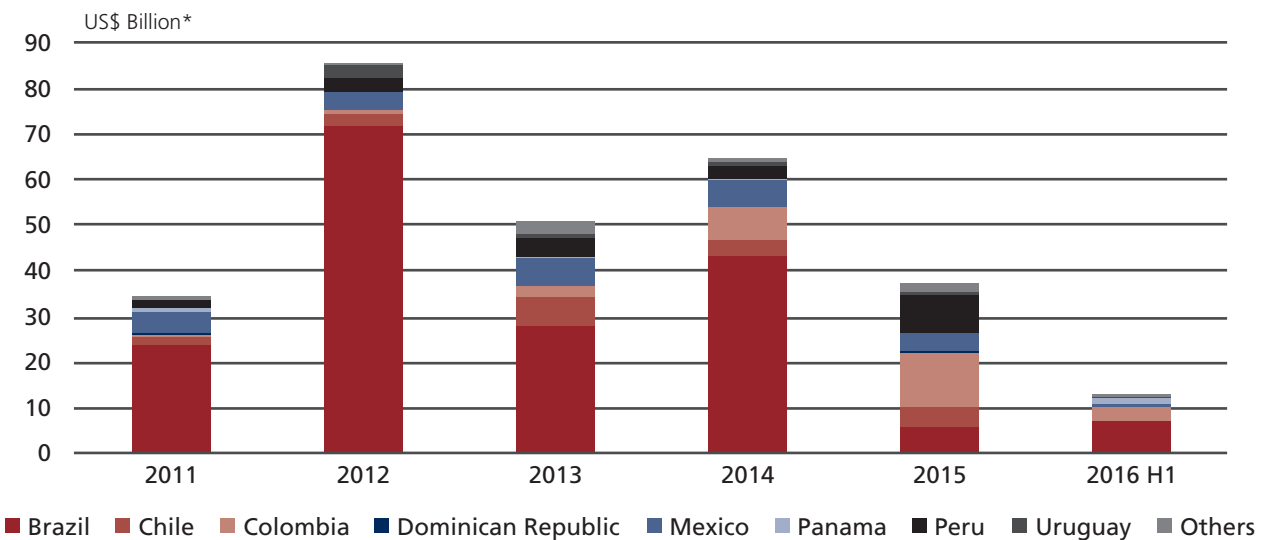
FIGURE 1: NUMBER OF RENEWABLE ENERGY PROJECTS COMPARED WITH CONVENTIONAL ENERGY PROJECTS



Source: World Bank, PPI Project Database.

The LAC region remained the largest investment market in H1 2016, with Brazil showing some signs of recovery. Last year was the first time in five years that Brazil did not lead the market in Latin America. However, in H1 2016, the country captured 56 percent of LAC's total investment. Investments in H1 2016 in Brazil already exceed the country's total investment in all of 2015. Furthermore, Panama closed four projects (totaling US\$1.4 billion), helping ensure that the region had the highest private participation in infrastructure in the first half of 2016.

FIGURE 2: INVESTMENT IN LATIN AMERICA AND THE CARIBBEAN, BY COUNTRY



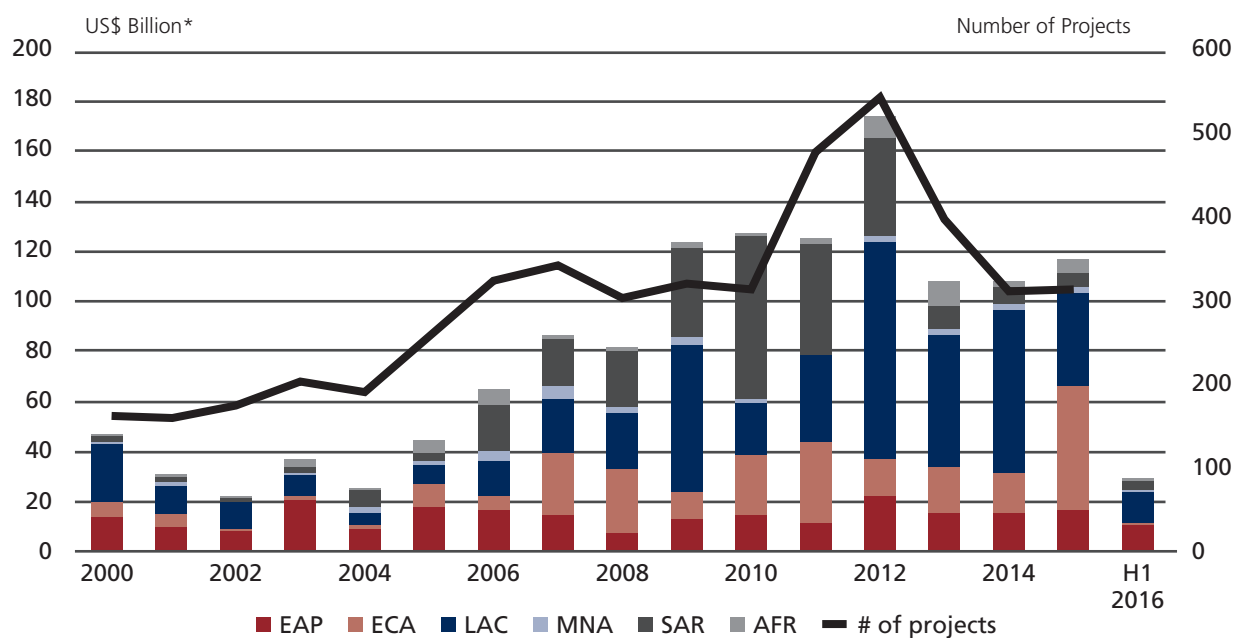
Source: World Bank, PPI Project Database.

* Adjusted by US CPI

2 GLOBAL OVERVIEW

Investment commitments in H1 2016 for private infrastructure projects in low-to-middle-income countries totaled US\$29.5 billion across 103 projects. LAC captured 43 percent of the global total followed by EAP, with 34 percent; SAR, 12 percent; Sub-Saharan Africa (SSA), 4 percent; and Europe and Central Asia (ECA) and the Middle East and North Africa (MENA), both 3 percent.

FIGURE 3: TOTAL INVESTMENT IN ENERGY, TRANSPORT, AND WATER BY REGION



Source: World Bank, PPI Project Database.

* Adjusted by US CPI

3 IDA COUNTRIES

With a total commitment of about US\$354.5 million, IDA countries had six projects in H1 2016: five electricity generation projects and one port project. This is lower than the US\$1.1 billion investment in H1 2015. However, this drop could be explained by the lack of information available in IDA countries—as 2015 projects have had more time for information to become public—as well as by megaprojects in Nepal and Bangladesh in 2015. Notably, three out of the six IDA projects were in Uganda, possibly coinciding with the country's PPP law passed in 2015.

TABLE 1: PROJECTS IN IDA COUNTRIES IN H1 2016

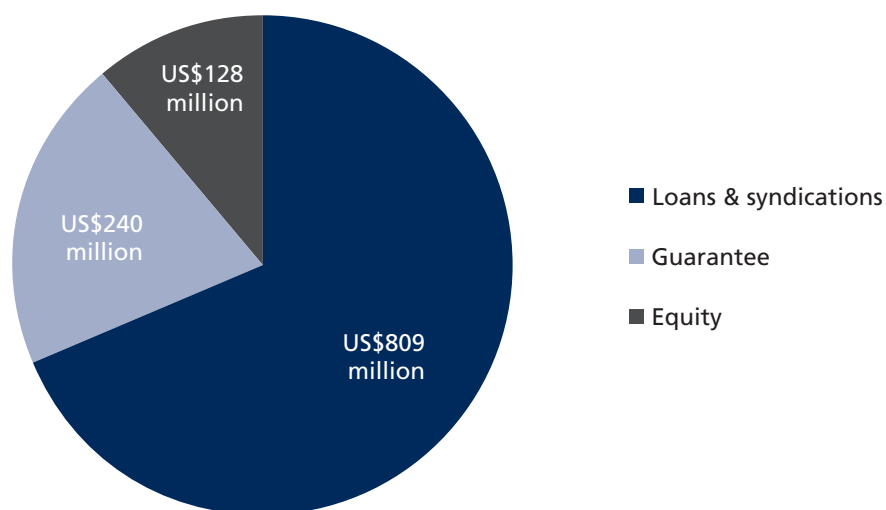
Country	Project	Amount (US\$ millions)	Type of Project
Uganda	Soroti Solar Power Plant	\$14.26	Electricity generation (solar)
Uganda	Lubilia Kawembe Hydropower Project	\$15.7	Electricity generation (hydro)
Uganda	Nyagak III Hydro Power	\$14.5	Electricity generation (hydro)
Bangladesh	United Ashuganj Energy (Natural Gas)	\$170	Electricity generation (natural gas)
Honduras	Los Prados Solar Park	\$100	Electricity generation (solar)
Myanmar	Myanmar Industrial Port Modernization	\$40	Ports

4 MULTILATERAL SUPPORT

In H1 2016, 17 of the 103 projects had multilateral support totaling \$1.2 billion, with US\$809 million in loans or syndications; US\$128 million in equity; and the remaining amount in the form of a guarantee by the Multiple International Guarantee Agency. Five of the 17 projects were in LAC; three each in SAR and SSA; and two each in ECA, EAP, and MENA. Multilateral loans accounted for 7 percent of the debt provided in H1 2016 (based on the projects which have complete information on financing sources).

Multilateral support was much more present in IDA countries. Five of the six IDA projects in H1 2016 enjoyed multilateral financing totaling US\$156 million, comprising US\$104 million from the International Finance Corporation; US\$40 million from the Central American Bank for Economic Integration; and the remaining US\$16 million from the East Africa Infrastructure Fund.

FIGURE 4: MULTILATERAL SUPPORT IN H1 2016 (US\$1.17 BILLION)



Source: World Bank, PPI Project Database.

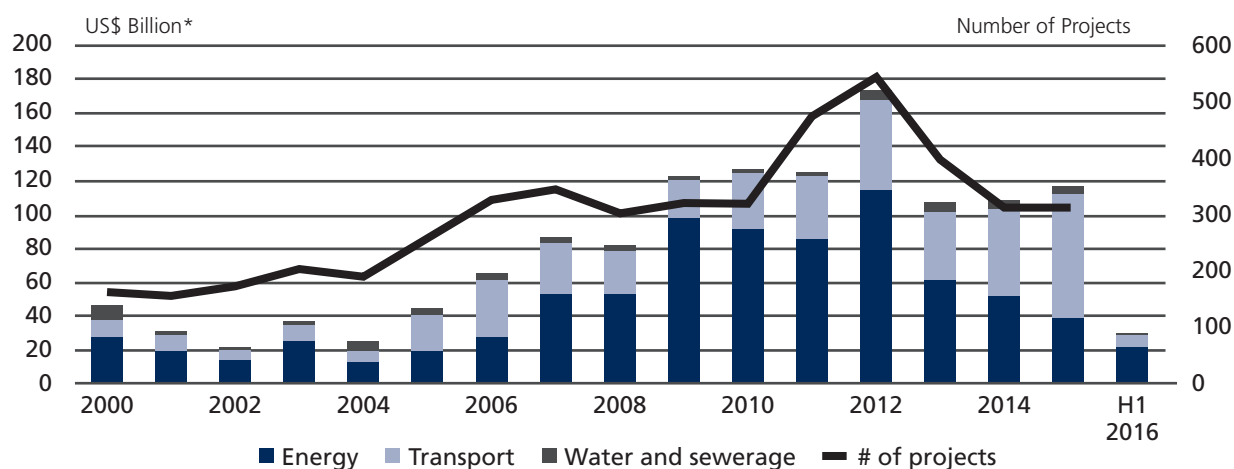
5 SECTOR OVERVIEW

The energy sector had the largest number of projects (76), followed by transport (15) and water and sanitation (12). Energy had the newest projects and largest investment—72 percent of the global total. Transport captured 25 percent, while water and sanitation had only 1 percent.

Electricity. All 76 energy projects during H1 2016 were in the electricity segment, with US\$19.7 billion in investment commitments—47 percent higher than the previous year. Electricity generation projects accounted for US\$18.3 billion in investments, while distribution and transmission projects accounted for US\$450 million and US\$983 million in investments, respectively. Approximately US\$9.3 billion of investments in electricity generation went to 57 renewable energy projects, 30 of which were solar.

Transport. Commitments in the transport sector, at US\$7.3 billion, were 10 percent below the previous year. Projects comprised seven roads, four ports, and four railway projects. Unlike previous years, railways attracted the most investment: US\$3.4 billion for four projects. No airport and seaport projects reached financial closure in H1 2016.

FIGURE 5: TOTAL INVESTMENT IN ENERGY, TRANSPORT, AND WATER BY SECTOR



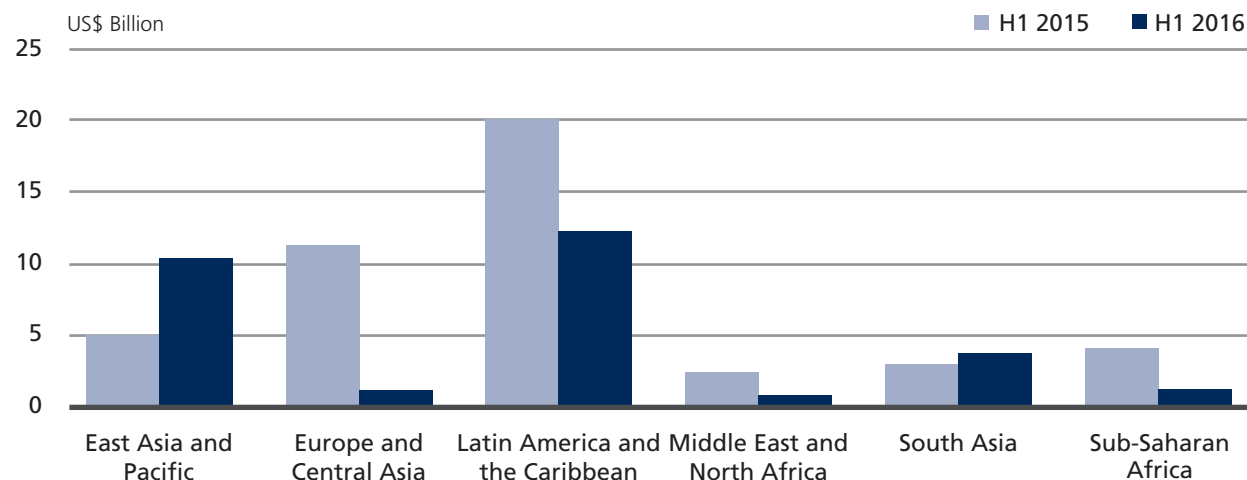
Source: World Bank, PPI Project Database.

* Adjusted by US CPI

Water. Water investments stood at US\$446.2 million, 50 percent below the investment in H1 2015. China and Brazil were the two major markets for water project investments. Of the 12 projects closing during H1 2016, seven were in China, four in Brazil, and one in Peru.

6 REGIONAL OVERVIEW

FIGURE 6: REGIONAL INVESTMENT H1 2015 AND H1 2016



Source: World Bank, PPI Project Database.

Latin America and the Caribbean

By number of projects and investment value, the top region in H1 2016 was Latin American and the Caribbean. Brazil, Colombia, and Panama led, capturing 93 percent of the total investment. LAC attracted US\$13.1 billion in commitments, 43 percent of the global total. The 40 projects included 30 in energy, five

in transport, and five in water and sanitation. Out of 30 energy projects, 24 were renewable power plants. Most of the new investment was in Brazil, with 27 projects, followed by Panama with four, and Peru, Uruguay, and Paraguay with three each. By investment size, Brazil bounced back, compared with the previous year, while Mexico's investment shrunk significantly, compared with H1 2015. LAC was the top region by number of projects and investment value for H1 2016, mainly driven by Brazil's recovery (Figure 6).

East Asia and Pacific

EAP jumped from 4th to 2nd place as the region successfully closed 34 projects totaling US\$10.3 billion or approximately 34 percent of the global total for H1 2016. As in previous years, China had the largest number of projects reaching financial closure, with 24 of the 34 projects. However, by investment amount, China, with US\$1.9 billion, ranked only third after Indonesia (US\$4.3 billion) and the Philippines (US\$3.6 billion). Indonesia had only one project reaching financial closure in H1 2016: the Central Java Power Plant (coal-fired), whose large project cost placed Indonesia in 1st place by investment amount, singularly absorbing 42 percent of the total investment in EAP during H1 2016.

The energy sector led the way with 22 projects including 15 renewables, 13 of which were solar. There were also seven water projects, all of which were in China, and five transport projects.

South Asia

Seventeen projects reached financial closure during H1 2016 in South Asia, representing 12 percent of the global investment total. As usual, India had the majority of new projects (14); Pakistan had two and Bangladesh had one. Of the 17 projects in SAR, 15 were in energy, with 10 relying on renewable energy technology.

Sub-Saharan Africa

SSA had five projects for US\$1.18 billion, or 4 percent of the global total. Uganda led the region with the largest number of projects (3), all of which were renewable energy power plants. The number of projects in Sub-Saharan Africa fell significantly from 17 in H1 2015 to five, mainly because of an unusually high number of projects in South Africa the previous year under the Renewable Energy Independent Power Producer Procurement program.

Europe and Central Asia

ECA's share of the global total was only 3 percent in H1 2016, after having a big year in 2015, which included the closing of Turkey's megadeals in airports and roads. Moreover, all four projects in H1 2016 were located in Turkey, ECA's biggest target for PPI, and three of these were electricity generation projects relying on renewable energy.

Middle East and North Africa

MENA closed three deals totaling US\$830 million in Iran, Jordan, and Iraq. The largest project by cost was the Sulaymaniyah CCGT Plant conversion and expansion in Iraq at US\$500 million, representing 60 percent of the region's total for H1 2016.

About the Private Participation in Infrastructure Projects Database:

The Private Participation in Infrastructure Database is a product of the World Bank Group's (WBG) Public-Private Partnerships (PPPs) team. Its purpose is to identify and disseminate information on private participation in infrastructure projects in low- and middle-income countries. The database highlights the contractual arrangements used to attract private investment, the sources and destination of investment flows, and information on the main investors. The site currently provides information on more than 8,000 infrastructure projects dating from 1984 to H1 2016. It contains over 50 fields per project record, including country, financial closure year, infrastructure services provided, type of private participation, technology, capacity, project location, contract duration, private sponsors, debt providers, and development bank support. This project represents the best efforts of a research team to compile publicly available information on those projects, and should not be seen as a fully comprehensive resource. Some projects—particularly those involving local and small-scale operators—tend to be omitted because they are usually not reported by major news sources, databases, government websites, and other sources used by the PPI Projects database staff. For more information, please visit: <http://ppi.worldbank.org/>.

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