



2015 Sub-Saharan Africa (AFR) PPI¹ Update

- Total investment² in infrastructure³ with private participation in Africa increased by 151 percent from US\$2.5 billion in 2014 to US\$6.3 billion in 2015
- Nearly all investment targeted power generation, with 22 projects totaling US\$6.2 billion reaching financial closure
- Uganda and Zambia had PPI investment following a two-year hiatus
- Multilateral development banks provided 12 loans for six projects

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 Henry Kasper and edited by Jenny Chao.

1 OVERVIEW

Growing PPI investment. Overall PPI investment in AFR reached US\$6.3 billion in 2015, up from US\$2.5 billion in 2014, representing a 151 percent increase. Investment was primarily driven by South Africa's Renewable Energy Independent Power Producer Procurement (REIPPP) Program, closing 16 of the region's 23 projects and accounting for US\$4.0 billion of the total US\$6.3 billion. The region's total is 31 percent and 55 percent higher than the five-year average of US\$4.8 billion and 10-year average of US\$4.1 billion, respectively. While 2015's total investment is AFR's third highest ever, only six countries had commitments in 2015—the fewest since 1995. Nonetheless, several countries including South Africa and Nigeria reentered the PPI market, after having no investment in 2014. Two countries—Uganda and Zambia—also had commitments after a two-year hiatus.

Support from multilateral development banks (MDB). MDB support was present in six of the region's 23 projects in 2015. The vast majority of assistance comprised direct loans. Projects worth a total of US\$3.2 billion received US\$363 million (nine loans) from MDBs.

2 SECTOR OVERVIEW

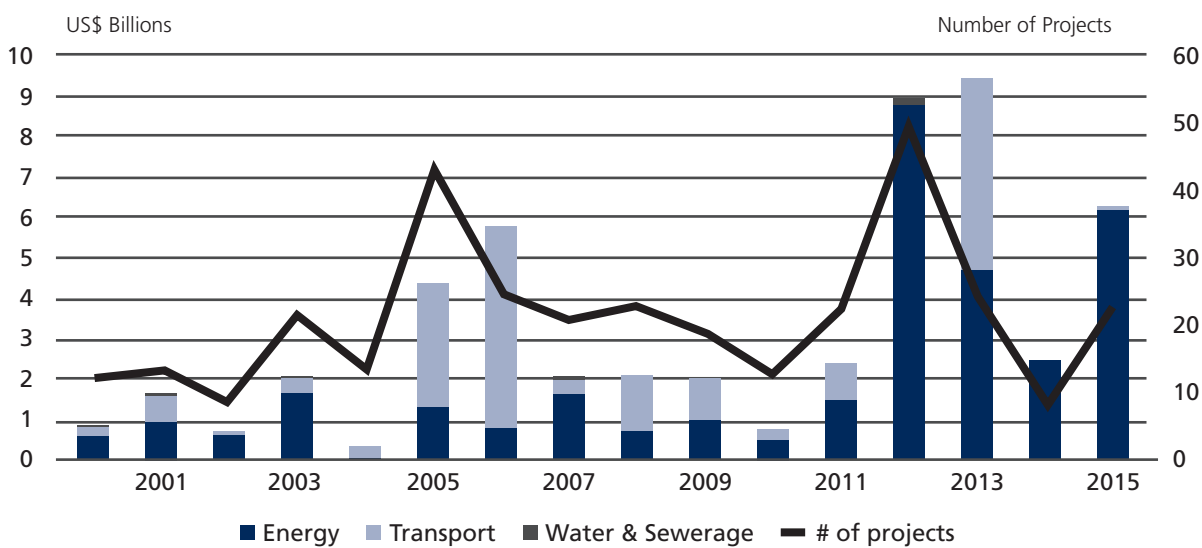
Of the 23 projects closing in 2015 in AFR, 22 were in energy, representing 98 percent of investment, with one in transport. The US\$6.2 billion energy investment is 71 percent above the five-year average of US\$3.6 billion and 161 percent above the 10-year average of US\$2.4 billion. Conversely, the single transport project

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

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.

FIGURE 1: TOTAL INVESTMENT IN ENERGY, TRANSPORT, AND WATER & SEWERAGE



Source: World Bank, PPI Project Database.

* Adjusted by 2014 US CPI

TABLE 1: TOTAL INVESTMENT COMMITTED BY SECTOR IN 2015

	Number of Transactions	Average Investment Commitment (US\$ millions)	Total Investment (US\$ millions)	% of Total	% Change from 5-year average
Energy	22	\$280	\$6,163	98%	+71%
Transport	1	\$134	\$134	2%	-91%
Water & Sewerage	0	\$0	\$0	0%	--
Total	23	\$274	\$6,297	100%	+31%

Source: World Bank, PPI Project Database.

valued at US\$134 million was 91 percent below the five-year average of US\$1.5 billion (Figure 1 and Table 1).

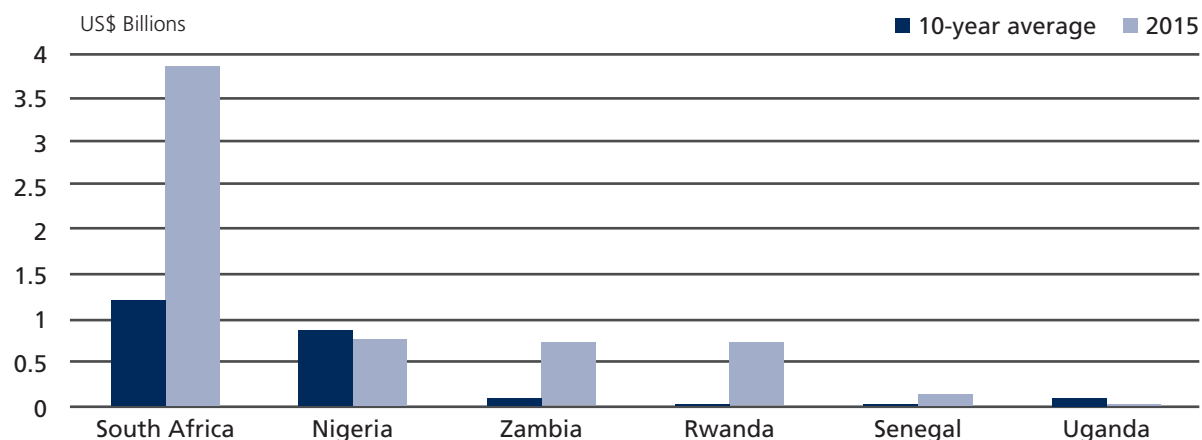
Energy investment of US\$6.2 billion was made entirely in electricity generation. The 22 power projects were spread across all six countries: South Africa (16), Uganda (2), Nigeria (1), Rwanda (1), Senegal (1), and Zambia (1). The number of power generation projects is the second highest ever and above the 10-year average of 15 projects per year. At US\$280 million, the average power project was also relatively high, surpassed only in 2002 and 2014. Regarding energy technologies, most investment went to solar power (US\$2.4 billion), followed by wind (US\$1.6 billion); natural gas (US\$880 million); coal (US\$830 million); diesel (US\$114 million); hydro (US\$45 million); and waste (US\$26 million).

One **transport** project closed in 2015. The US\$134.5 million Dakar-Diamniadio Toll Road extension in Senegal was a build-operate-transfer project to extend and operate a 17-kilometer stretch of highway connecting Dakar's international airport to coastal tourist areas. The single deal was a marked departure from significant commitments in transport in past years. For example, the 2015 total of US\$134.5 million is down from US\$4.7 billion in 2014 and the 10-year average of US\$1.7 billion per year. Noticeably absent in 2015 were port deals. The previous 10 years witnessed significant commitments in ports, averaging US\$1.1 billion per year.

3 TOP COUNTRIES

Sub-Saharan Africa closed 23 deals totaling US\$6.3 billion. Investment in the top countries compared to the 10 year average is shown below in Figure 2.

FIGURE 2: TOTAL INVESTMENT IN TOP COUNTRIES IN 2015 VERSUS 10-YEAR AVERAGE



Source: World Bank, PPI Project Database.

* Adjusted by 2014 US CPI

The top market for PPI investment in 2015 was **South Africa**, where the country's REIPPP Program boosted commitments to US\$4 billion in 16 projects. In 2015, 16 renewable deals reached financial closure, each benefitting from a long-term offtake agreement with Eskom, the government-owned utility company in South Africa. Of these 16 projects, eight were solar; seven, wind; and one, biomass. The US\$4 billion in commitments marks a dramatic turnaround from zero PPI projects in 2014. Going forward, South Africa's government successfully tendered Round 4 of the REIPPP Program in April 2015, procuring 12 projects totaling 1,000 megawatts of capacity, most of which should close in 2016.

TABLE 2: TOTAL INVESTMENT IN AFR COUNTRIES IN 2015

	Number of Projects	Average Investment (US\$ millions)	Total Investment (US\$ millions)	% of Total Regional Investment
South Africa	16	\$248	\$3,973	63%
Nigeria	1	\$880	\$880	14%
Zambia	1	\$830	\$830	13%
Rwanda	1	\$320	\$320	5%
Senegal	2	\$124	\$249	4%
Uganda	2	\$23	\$45	<1%
Total	23	\$274	\$6,297	100%

Source: World Bank, PPI Project Database.

4 TOP DEALS IN THE AFR REGION

The top 10 projects in 2015 comprised nearly two-thirds of the region's investment, or US\$3.4 billion out of US\$5.6 billion.

Featured project: Xina Solar One CSP. In 2015, South Africa closed on the US\$900 million Xina Solar One CSP, located 30 kilometers east of the town of Pofadder, Khai-Ma Local Municipality, in Northern Cape Province. The 22-year build-own-operate project was the 3rd Window of South Africa's REIPPP Program. Once developed, the plant will produce clean energy, powering 90,000 households and preventing emissions of over 398,000 metric tons of carbon dioxide per year. The project was sponsored by Spain's Abengoa, along with South Africa's Public Investment Corporation, KaXu Community Trust, and the Industrial Development Corporation. A power purchase agreement was signed with Eskom.

The financing of the US\$900 million project comprised US\$648 million in debt and US\$252 million in equity, with a debt-to-equity ratio of 72:28. The equity portion was US\$93 million from Abengoa, while US\$47 million was split evenly among the three other developers. The debt portion was made up of loans from the Development Bank of Southern Africa Limited (US\$309 million); African Development Bank (US\$79 million); IDCSA (US\$53 million); Nedbank Limited, ABSA Capital, and FirstRand Limited (US\$53 million); and International Finance Corporation (US\$39 million).

The top 10 projects with private participation reaching financial closure in 2015 are shown in Table 3 below.

TABLE 3: TOP 10 DEALS IN THE AFR REGION IN 2015

Country	Project	Total Amount (US\$ million)	Sponsors (% Ownership/Sponsor Country)
South Africa	Xina Solar One CSP	\$900	Abengoa (40%/Spain); Public Investment Corporation (20% /South Africa)
Nigeria	Azura-Edo Independent Power Plant (gas-fired) Phase 1	\$880	Old Mutual PLC (15%/South Africa); Macquarie Infrastructure Group (15%/Australia); Aldwych International Ltd. (14%/U.K.); Asset & Resource Management Company Ltd. (6%/Nigeria); Amaya Capital Partners (25%/Nigeria); American Capital Energy & Infrastructure (25%/U.S.)
Zambia	Maamba Power Station (coal-fired) Phase I	\$830	Nava Bharat Ventures Ltd. (65%/Singapore); ZCCM Investment Holdings (35%/Zambia)
South Africa	Karoshhoek Solar One CSP	\$688	Actividades de Construccion y Servicios, or ACS Group (20%/Spain); Investec (15%/South Africa)
Rwanda	Akanyaru Valley Power Project (peat-fired)	\$320	Hakan Mining and Electricity Generation Inc. (51%/Turkey); others (49%)
South Africa	Khobab Wind Farm	\$281	Actis (24%/U.K.); Mainstream Renewable Power (16%/Ireland)
South Africa	Loeriesfontein 2 Wind Farm	\$281	Actis (24%/U.K.); Mainstream Renewable Power (16%/Ireland)
South Africa	Nojoli Wind Farm	\$266	Pele Clean Energy (30%/South Africa); Enel S.p.A. (60%/Italy)
South Africa	Pulida Solar PV Plant	\$266	Enel S.p.A. (53%/Italy); Shanduka Group (20%/South Africa)
South Africa	Mulilo De Aar 2 Wind Farm	\$253	Mulilo Energy Group (20%/South Africa); China Longyuan Power Group Limited (60%/China)

About the Private Participation in Infrastructure Projects Database:

The Private Participation in Infrastructure Database is a product of the World Bank's Public-Private Partnerships Group. 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 2015. 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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