



## PRIVATE PARTICIPATION IN INFRASTRUCTURE DATABASE

### PPI data update note 60

August 2011

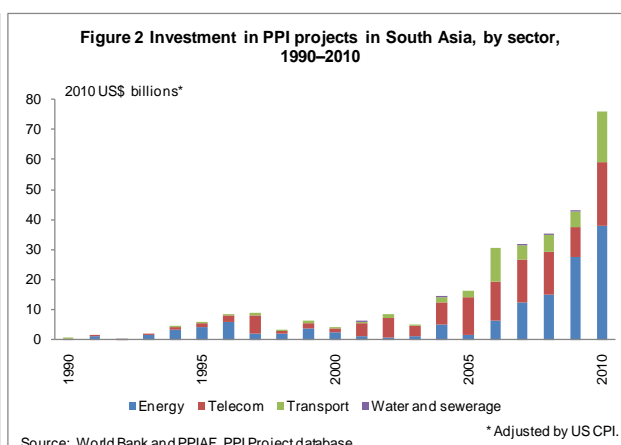
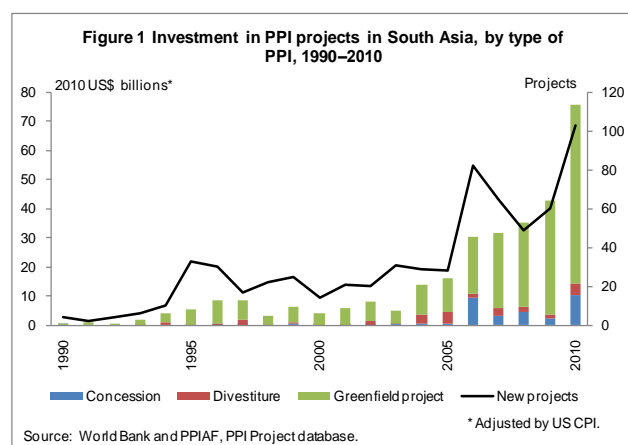
#### For fifth consecutive year India drove private activity in infrastructure in South Asia to a new peak in 2010

In 2010, 102 infrastructure projects with private participation reached financial or contractual closing in 4 low- and middle-income countries in South Asia, involving investment commitments of US\$47 billion (table 1).<sup>1</sup> Infrastructure projects implemented in the 1990–2009 period attracted new investment of US\$26.5 billion, bringing total investment commitments (hereafter, *investment*) to infrastructure sectors to US\$73.5 billion in 2010.<sup>2</sup>

The activity in 2010 represents an increase of 72% by investment and 70% by number of projects compared with 2009. The growth rate of investment is particularly significant given that investment in the region had been growing since 2006 but at a lower rate (figure 1). Investment in new projects grew by 54% from 2009, and additional investment in projects implemented in 1990–2009 rose by almost 120%.

Private activity in the region, however, shows marked differences across countries. In India, private activity is vibrant thanks to many policy and programs that the national and state governments have implemented to attract private investment into infrastructure sectors.<sup>3</sup> India has now become the largest market for private participation in infrastructure in the developing world. The country implemented 94 new projects in 2010 and saw investment amount to US\$71.9 billion in 2010, an 85% increase from 2009. That investment is the highest level that any developing country experienced in any giving year in the entire 1990–2010 period. India alone accounted for 43% of the total investment in projects with private participation in developing countries in 2010. In the other South Asian countries, private activity is sporadic and in many cases aims at easing crisis situations such as power outages.

Most of the PPI activity was directed to greenfield projects (BOT, BOO, merchant, and rental), which attracted 81% of regional investment and 50% of new projects. Concessions accounted for 48 of the new projects and 14% of the regional investment.



**Energy** had 42 projects in three countries and investment of US\$38.1 billion. That represents a 39% increase from 2009, and the highest PPI investment level ever in the sector. Energy accounted for 52% of regional investment in 2010.

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<sup>1</sup> The PPI Project Database currently uses the FY10 World Bank country classification released in July 2010. Investment data are in 2010 US dollar using the US CPI to adjust to 2010 values.

<sup>2</sup> Data on infrastructure projects with private participation include primarily medium-size and large projects in low and middle income countries as reported by the media and other public sources. Small-scale projects are generally not included because of lack of public information. More information is available at <http://ppi.worldbank.org/>.

<sup>3</sup> Information on the programs for attracting private participation in infrastructure sectors in India can be found at [infrastructure.gov.in](http://infrastructure.gov.in) and [www.pppinindia.com](http://www.pppinindia.com)



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- India accounted for 36 energy projects and 99% of regional investment in energy.
- Bangladesh implemented five energy projects, all which were rental power plants with contract periods ranging from three to five years. These projects are a short term solution to the power crisis in the country.
- Nepal implemented a 15.6 MW hydro power plant under a BOT contract.
- In India, electricity generation accounted for 39 projects and US\$35.4 billion in investment. Those projects involved 26.9 GW in new capacity and 2.3 GW of partially divested capacity.
- There were also two electricity transmission projects with investment worth US\$698 million and 1,100 kilometers of length. In addition, India sold a 17% stake in Power Grid Corporation of India Limited (PGCIL) via an initial public offering, bringing the divested share in the company to 31%. The first sale of PGCIL's shares took place in 2007.
- India also signed a 20-year franchise with a private operator for electricity distribution in Kanpur and Agra in Uttar Pradesh. Together those two areas serve 742,000 connections.
- Greenfield projects were the most common type of PPI, accounting for 40 of the 42 new projects and US\$34.2 billion in investment. The other new projects were a partial divestiture (Nathpa Jhakri Power Corporation Limited) and one lease contract (the franchise for electricity distribution in Kanpur and Agra).

**Telecom** had two new projects and attracted of US\$21.2 billion. That represents an increase of over 100% compared with 2009, and the highest level of investment in the sector in the entire 1990-2010 period. The sector accounted for 29% of regional investment in 2010.

- The investment growth was driven by the issue of 3G spectrum in India. The country, which accounted for 96% of regional investment in telecommunications, auctioned 3G for its 22 circles in May 2010 and raised US\$11.8 billion in license fees from the private telecommunications operators.
- New telecom projects accounted for 16% of the investment in the sector, and additional investment in projects implemented in 1990–2009 for the remaining 84%.
- Investment went mainly to multi-service providers (54%) and mobile operators (44%).

**Transport** saw 57 projects in two countries and investment of US\$14.3 billion. That represents an increase of 180% from 2009 and the highest level of investment in the sector in the entire 1990-2010 period. Transport accounted for 19% of regional investment in 2010.

- India accounted for all but one project. Outside India, Maldives closed financing for a US\$478 million airport concession for Male International airport, which included the construction of a new passenger terminal.
- Roads comprised most of the activity in India, accounting for 49 projects and investments of US\$12.7 billion. These road projects, most of which were for expanding highways from two to four lanes, represented over 4,870 kilometers.
- India also had five greenfield port terminals reaching financial closure in 2010. Those projects were located at Kandla, Paradip, Salaya and Murmugao Ports. The port terminals were for dry bulk coal cargo, except for one in Kandla Port, which was a multi-purpose terminal.
- In railways, India saw the 6.1-km, Rapid MetroRail Gurgaon reached financial closure in 2010.
- In airports, Maharashtra state in India and Reliance signed and implemented a 95-year concession for a package of five small private airports in 2010.

**Water and sewerage** had one new project in 2010. Nepal signed a four-year management contract for the Kathmandu water utility covering a population of 160,000.



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**Table 1. Infrastructure projects with private participation reaching financial or contractual closure in South Asia in 2010**

Energy					
Country	Project Name	Type Of PPI	Segment	Total Investment*	Sponsors
Bangladesh	Thakurgaon 50MW Diesel Rental Power Plant	Greenfield project (Rental)	Electricity generation	12	Rahimafrooz (100% / Bangladesh)
Bangladesh	Bheramara 110 MW Diesel Rental Power Plant	Greenfield project (Rental)	Electricity generation	26	Otobi Ltd. (100% / Bangladesh)
Bangladesh	Khulna 55 MW Quick Rental Power Plant	Greenfield project (Rental)	Electricity generation	13	Aggreko Plc (100% / United Kingdom)
Bangladesh	Ghorasal Quick Rental Power Plant	Greenfield project (Rental)	Electricity generation	34	Aggreko Plc (100% / United Kingdom)
Bangladesh	Pagla Quick Rental Power Plant	Greenfield project (Rental)	Electricity generation	12	Aggretech AG (..% / Germany), Primordial Energy Ltd. (..% / Bangladesh)
India	Caparo Energy Limited	Greenfield project (BOO)	Electricity generation	143	Carapo Group (100% / United Kingdom)
India	Monnet Power Co Ltd	Greenfield project (BOO)	Electricity generation	1,093	Monnet Group (..% / India)
India	Dhonithanda Wind Project Limited	Greenfield project (BOO)	Electricity generation	26	Bhoruka Power Corporation Limited (100% / India)
India	EMCO Energy Limited	Greenfield project (BOO)	Electricity generation	761	GMR Group (100% / India)
India	Kanpur and Agra Power Distribution Fanchise	Management and lease contract (Lease contract)	Electricity distribution	144	Torrent Group (100% / India)
India	Ind-Barath Thermal Power Limited (IBTPL)	Greenfield project (Merchant)	Electricity generation	284	Ind-Barath Power Infra Private Ltd (100% / India)
India	Bajaj Energy Private Ltd	Greenfield project (BOO)	Electricity generation	507	Bajaj Hindustan (100% / India)
India	Krishnapatnam Ultra Mega power plant	Greenfield project (BOO)	Electricity generation	3,826	Reliance ADA Group (100% / India)
India	KSK Mahanadi Power Co Ltd	Greenfield project (BOO)	Electricity generation	3,363	KSK Energy Venture (100% / India)
India	Wardha Power Company (WPCL)	Greenfield project (BOO)	Electricity generation	528	KSK Energy Venture (74% / India)
India	Prayagraj Power Generation Co. Ltd.	Greenfield project (BOO)	Electricity generation	2,515	Jaiprakash Associates Ltd (100% / India)



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India	Sangam Power Generation Co. Ltd	Greenfield project (BOO)	Electricity generation	1,662	Jaiprakash Associates Ltd (100% / India)
India	Ind-Barath Utkal Power Company	Greenfield project (BOO)	Electricity generation	696	Ind-Barath Power Infra Private Ltd (79% / India)
India	Lanco Babandh Power Ltd	Greenfield project (BOO)	Electricity generation	1,515	Lanco Group (100% / India)
India	GMR Chhattisgarh Energy Private limited (GCEPL)	Greenfield project (BOO)	Electricity generation	1,813	GMR Group (100% / India)
India	GMR Rajahmundry Energy Ltd	Greenfield project (Merchant)	Electricity generation	719	GMR Group (100% / India)
India	Indiabulls Realtech Ltd (Nasik Thermal Power)	Greenfield project (BOO)	Electricity generation	1,750	Indiabulls Group (100% / India)
India	Hinduja National Power Corp Ltd (HNPCCL)	Greenfield project (BOO)	Electricity generation	1,213	Hinduja Group (100% / India)
India	GVK Power (Goindwal Sahib) Ltd	Greenfield project (BOO)	Electricity generation	648	GVK Group (100% / India)
India	Jhabua Power Limited (Madhya Pradesh Power Project Phase I)	Greenfield project (BOO)	Electricity generation	636	Avantha Group (85% / India)
India	Mundra-Mohindergarh Power Transmission Line Project	Greenfield project (BOO)	Electricity transmission	601	Adani Group (100% / India)
India	Jhajjar KT Transco Pvt Ltd	Greenfield project (BOT)	Electricity transmission	97	Techno Electric And Engineering Company Ltd (49% / India), Kalpataru Power Transmission Ltd (51% / India)
India	VISA Raigarh Power Project Phase I	Greenfield project (BOO)	Electricity generation	573	Visa Group (100% / India)
India	L&T Uttaranchal Hydro Power Ltd	Greenfield project (BOT)	Electricity generation	228	Larsen & Toubro Limited (100% / India)
India	Abhijeet MADC Nagpur Energy Private Limited (AMNEPL)	Greenfield project (BOT)	Electricity generation	302	Abhijeet Group (26% / India)
India	SJVN Ltd	Divestiture (Partial)	Electricity generation	91	Others (10% / ..)
India	NSL Tidong Power Generation Private Limited (NTPGL)	Greenfield project (BOT)	Electricity generation	144	Nuziveedu Seeds Pvt. Ltd. (100% / India)
India	Kumardhara Small Hydel Power Plant	Greenfield project (BOT)	Electricity generation	28	Bhoruka Power Corporation Limited (100% / India)
India	Vaayu India Power Corporation Ltd	Greenfield project (BOO)	Electricity generation	257	Enercon India Ltd (100% / India)



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India	CLP Theni wind farm	Greenfield project (BOO)	Electricity generation	65	China Light and Power Ltd. (100% / Hong Kong, China)
India	CLP Andhra Lake wind farm	Greenfield project (BOO)	Electricity generation	160	China Light and Power Ltd. (100% / Hong Kong, China)
India	Azure Power India (first plants in Punjab and Gujarat)	Greenfield project (BOO)	Electricity generation	60	Azure Power India (100% / India)
India	Indian Energy Theni Project Phase 1	Greenfield project (BOO)	Electricity generation	20	Indian Energy Limited (100% / United Kingdom)
India	Lanco Vidarbha Thermal Power Ltd	Greenfield project (BOT)	Electricity generation	1,517	Lanco Group (100% / India)
India	East Coast Energy Private Limited (ECEPL)	Greenfield project (BOO)	Electricity generation	1,437	Asian Genco (..% / Singapore), Athena Projects Pvt Ltd (..% / India)
India	Kapil Mohan & Associates Hydo Power Pvt. Ltd.	Greenfield project (BOT)	Electricity generation	23	Kapil Mohan & Associates Hydro Power Pvt (100% / India)
Nepal	Mai Hydropower Project (MHP)	Greenfield project (BOT)	Electricity generation	34	Sanima Hydropower (P) Ltd. (SHPL) (100% / Nepal)

Telecommunications					
Country	Project Name	Type Of PPI	Segment	Total Investment*	Sponsors
India	Etisalat DB Telecom Pvt. Ltd	Greenfield project (Merchant)	Mobile access	2,000	Dynamix Balwas Group (55% / India), Emirates Telecommunications Corporation (Etisalat) (45% / United Arab Emirates)
India	Videocon Telecommunications Limited	Greenfield project (Merchant)	Mobile access	1,390	Videcon Group (100% / India)



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Transport					
Country	Project Name	Type Of PPI	Segment	Total Investment*	Sponsors
India	Reliance Airport Developers Private Limited (RADPL)	Concession (BROT)	Airports	13	Reliance ADA Group (100% / India)
India	Rapid MetroRail Gurgaon Ltd	Greenfield project (BOT)	Railroads	238	Infrastructure Leasing & Financial Services (IL&FS) (74% / India), DLF Group (26% / ..)
India	Ashoka Belgaum Dharwad Tollway Pvt Ltd	Concession (BROT)	Roads	152	Ashoka Buildcon Ltd (100% / India)
India	Baharampore Farakka Highways Ltd	Concession (BROT)	Roads	218	Hindustan Construction Company Ltd (HCC) (100% / India)
India	Beawar Gomti NH Road	Concession (BROT)	Roads	78	Infrastructure Leasing & Financial Services (IL&FS) (100% / India)
India	Bijapur-Hungund Tollway Pvt Ltd	Concession (BROT)	Roads	245	Sadbhav Engineering Ltd (100% / India)
India	BSCPL Godhra Tollways Ltd	Concession (BROT)	Roads	173	BSCPL Infrastructure Ltd (100% / India)
India	Chenani Nashri Tunnelway Limited (CTNL)	Greenfield project (BOT)	Roads	814	Infrastructure Leasing & Financial Services (IL&FS) (100% / India)
India	Chhapra Hajipur Expressway Ltd	Concession (BROT)	Roads	178	Madhucon Projects Ltd (100% / India)
India	Dehradun Highways Project Limited (DHPL)	Concession (BROT)	Roads	151	Era Group (74% / India), Sibmost (26% / Russian Federation)
India	Essel Bhind Mihona Gopalpur Toll Roads Ltd	Concession (BROT)	Roads	20	Essel Group (100% / India)
India	Essel Sagar Damoh Toll Roads Ltd	Concession (BROT)	Roads	30	Essar Group (100% / India)
India	Farakka Raiganj Highways Ltd	Concession (BROT)	Roads	236	Hindustan Construction Company Ltd (HCC) (100% / India)
India	GMR Chennai Outer Ring Road Pvt. Ltd	Greenfield project (BOT)	Roads	255	GMR Group (90% / India)
India	GMR Hyderabad Vijayawada Expressways Private Limited	Concession (BROT)	Roads	383	GMR Group (74% / India), Punj Lloyd Limited (26% / India)
India	GMR OSE Hungund Hospet Highways Private Ltd	Concession (BROT)	Roads	361	GMR Group (51% / India), Oriental Structural Engineers Private Ltd. (49% / India)



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India	Haridwar Highways Project Ltd	Concession (BROT)	Roads	241	Era Group (74% / India), Sibmost (26% / Russian Federation)
India	Hazaribagh Ranchi Expressway Limited	Concession (BROT)	Roads	190	Infrastructure Leasing & Financial Services (IL&FS) (100% / India)
India	Hyderabad Yadgiri Tollway Pvt Ltd	Concession (BROT)	Roads	105	Sadbhav Engineering Ltd (100% / India)
India	Indore Dewas Tollways Ltd	Concession (BROT)	Roads	131	Gayatri Projects Ltd (100% / India)
India	IRB Goa Tollway Private Limited	Concession (BROT)	Roads	182	IRB Infrastructure Developers Ltd (100% / India)
India	IRB Jaipur Deoli Tollway Private Limited	Concession (BROT)	Roads	304	IRB Infrastructure Developers Ltd (..% / India)
India	IRB Pathankot Amritsar Toll Road Private Limited	Concession (BROT)	Roads	246	IRB Infrastructure Developers Ltd (..% / India)
India	IRB Talegaon Amravati Toll Road Pvt. Ltd	Concession (BROT)	Roads	154	IRB Infrastructure Developers Ltd (..% / India)
India	IVRCL Indore Gujarat Tollways Ltd	Concession (BROT)	Roads	333	IVRCL Infrastructures & Projects Ltd. (100% / India)
India	Jaypee Infratech Limited (Yamuna Expressway)	Greenfield project (BOT)	Roads	1,754	Jaiprakash Associates Ltd (100% / India)
India	Jharkhand Road Projects Implementation Company Ltd (JRPICL)	Concession (BROT)	Roads	308	Infrastructure Leasing & Financial Services (IL&FS) (100% / India)
India	Jorabat Shillong Expressway Limited (JSEL)	Concession (BROT)	Roads	180	Infrastructure Leasing & Financial Services (IL&FS) (50% / India), Ramky Group (50% / India)
India	Kalyan Infratech Pvt Ltd	Concession (BROT)	Roads	41	Keti Infrastructure Pvt Ltd (100% / India)
India	L&T Krishnagiri Walajahpet Tollway Private Limited	Concession (BROT)	Roads	317	Larsen & Toubro Limited (100% / India)
India	L&T Samakhiali Gandhidham Tollway Private Limited	Concession (BROT)	Roads	306	Larsen & Toubro Limited (100% / India)
India	Mahakaleshwar Tollways Private Ltd	Concession (BROT)	Roads	75	SREI Infrastructure Finance Ltd (48% / India), Galfar Engineering & Contracting SAOG (Galfar) (26% / Oman), Varaha Infra Limited (26% / India)





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India	Mokama-Munger Highway Ltd	Concession (BROT)	Roads	96	C&C Constructions Ltd (50% / India), BSCPL Infrastructure Ltd (50% / India)
India	Moradabad Bareilly Expressway Limited	Concession (BROT)	Roads	434	Infrastructure Leasing & Financial Services (IL&FS) (100% / India)
India	Navayuga Devanahalli Tollways Pvt Ltd - NDTPL	Concession (BROT)	Roads	192	Navayuga Group (100% / India)
India	Navayuga Dichpally Tollway Pvt Ltd	Concession (BROT)	Roads	85	Navayuga Group (..% / India)
India	Navayuga Udipi Tollway Pvt Ltd	Concession (BROT)	Roads	175	Navayuga Group (..% / India)
India	Oriental Nagpur Bypass Construction Pvt Ltd	Concession (BROT)	Roads	431	Oriental Structural Engineers Private Ltd. (100% / India)
India	Orissa Steel Expressway Pvt Ltd	Concession (BROT)	Roads	197	SREI Infrastructure Finance Ltd (50% / India), MBL Infrastructures Limited (50% / India)
India	Patna Highway Projects Ltd	Concession (BROT)	Roads	206	Gammon India Ltd (100% / India)
India	Pune Satara Road	Concession (BROT)	Roads	399	Reliance ADA Group (74% / India), Jiangsu Provincial Transportation Engineering Group Company (JTEG) (26% / China)
India	Pune Sholapur Road Development Company Limited (PACKAGE-II)	Concession (BROT)	Roads	306	Infrastructure Leasing & Financial Services (IL&FS) (100% / India)
India	Raiganj Dalkhola Highways Ltd	Concession (BROT)	Roads	150	Hindustan Construction Company Ltd (HCC) (100% / India)
India	Rayalseema Expressway Private Ltd	Concession (BROT)	Roads	358	KMC Constructions Ltd (54% / India), SNC Lavalin (36% / Canada)
India	Shirwal Phaltan Baramati Project (SPBDPL)	Concession (BROT)	Roads	84	IVRCL Infrastructures & Projects Ltd. (75% / India)
India	Shree Jagannath Expressway Pvt Ltd	Concession (BROT)	Roads	400	SREI Infrastructure Finance Ltd (48% / India), Galfar Engineering & Contracting SAOG (Galfar) (26% / Oman), Varaha Infra Limited (26% / India)
India	Simhapuri Expressway Ltd	Concession (BROT)	Roads	558	BSCPL Infrastructure Ltd (50% / India), KMC Constructions Ltd (50% / India)





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India	Supreme Manor Wada Bhiwandi Infrastructure Pvt Ltd	Concession (BROT)	Roads	94	Supreme Infrastructure India Ltd (..% / India), Tapi Prestressed Products (..% / India), Ram infrastructure Ltd (..% / India)
India	Thrissur Expressway Ltd	Concession (BROT)	Roads	267	KMC Constructions Ltd (..% / India), China Railway Construction 18th Bureau (Group) Co., Ltd (..% / China)
India	Topworth Tollways (Satna) Pvt Ltd	Concession (BROT)	Roads	31	Topworth Group (100% / India)
India	Transstroy Tirupati Tiruthani Chennai Tollways Pvt	Concession (BROT)	Roads	126	Transstroy India Limited (74% / India), OJSC Corporation Transstroy, (26% / Russian Federation)
India	Adani Murmugao Port Terminal Private Ltd	Greenfield project (BOT)	Seaports	115	Adani Group (..% / India)
India	Essar Bulk Terminal (Salaya) Limited	Greenfield project (BOT)	Seaports	190	Essar Group (100% / India)
India	Essar Bulk Terminal Paradip Ltd	Greenfield project (BOT)	Seaports	122	Essar Group (100% / India)
India	Paradip-I Coal	Greenfield project (BOT)	Seaports	122	Essar Group (100% / India)
India	RAS Infraport Pvt Ltd	Greenfield project (BOT)	Seaports	55	Regal Shipping (..% / India), Alpha Vinimay Pvt Ltd (..% / India), Sainath International Pvt Ltd (..% / India)
Maldives	Maldives Male International Airport	Concession (BROT)	Airports	478	GMR Group (77% / India), Malaysia Airports Holding Berhad (MAHB) (23% / Malaysia)

Water and sewerage					
Country	Project Name	Type Of PPI	Segment	Total Investment*	Sponsors
Nepal	Kathmandu Upatyaka Khanepani Limited (KUKL)	Management and lease contract (Management contract)	Water utility with sewerage	Not Applicable	BerlinWasser (100% / Germany)

Note: BOT= Build, Operate, and Transfer; BOO = Build, Own, and Operate; Concession (BROT) = Build, Rehabilitate, Operate, and Transfer.

\*in current US\$ millions

Source: World Bank and PPIAF, PPI Database.