



## PRIVATE PARTICIPATION IN INFRASTRUCTURE RESEARCH GROUP

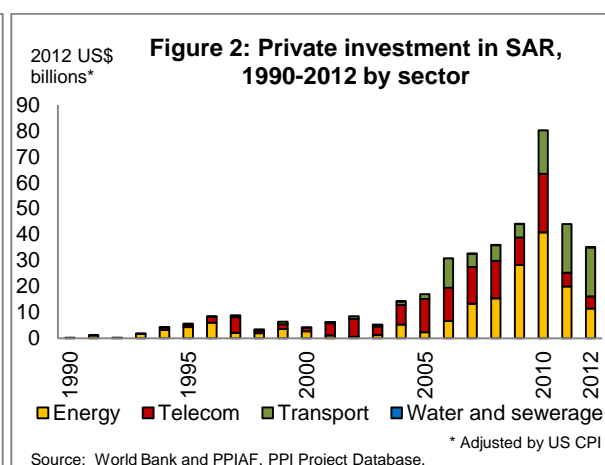
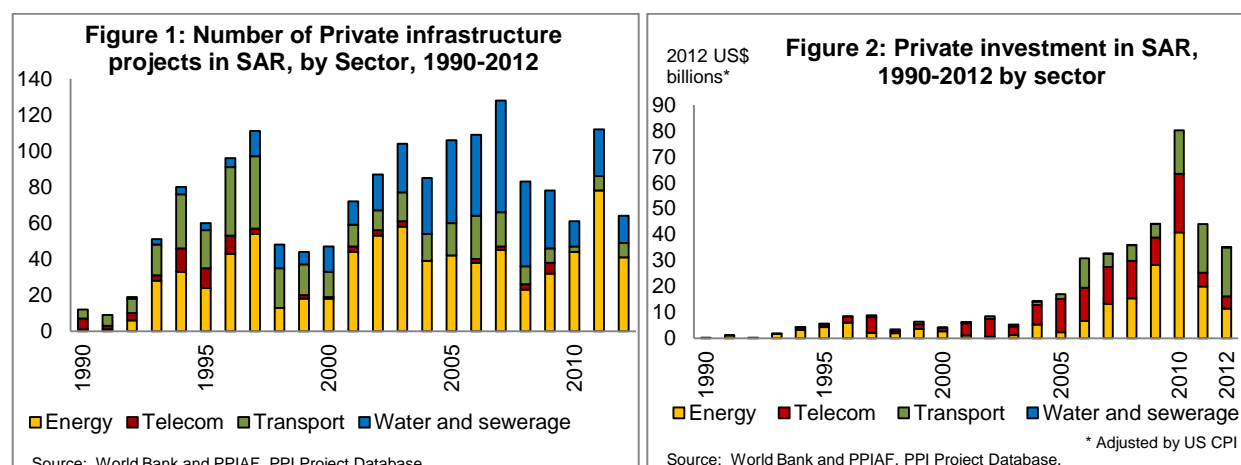
Note 95

October 2013

# Infrastructure Policy Unit 2012 South Asia PPI Data Update

## Investments in South Asia drop by 20 percent to pre-Global Financial Crisis levels

In 2012, 128 new infrastructure projects reached financial or contractual closure in low and middle income countries in the South Asia region (SAR) region: Bangladesh (7), India (106), Nepal (1), Pakistan (9), Sri Lanka (5). Total investment commitments (hereafter, *investment*) in all infrastructure projects reached US\$35.1 billion, of which US\$29.4 billion were investments in new projects, and \$5.7 billion were additional investments in existing projects. As compared to 2011 investment levels, total investments decreased by 20 percent in 2012 to levels seen before the global financial crisis. The year prior to 2011 was an exceptional year, with \$80.2 billion in investments in 2010 fueled by telecom licenses. South Asia attracted 19 percent of global PPI investments and was the second most active region after Latin America and the Caribbean. The number of transactions continued the upward trend started in 2008.<sup>1,2</sup>

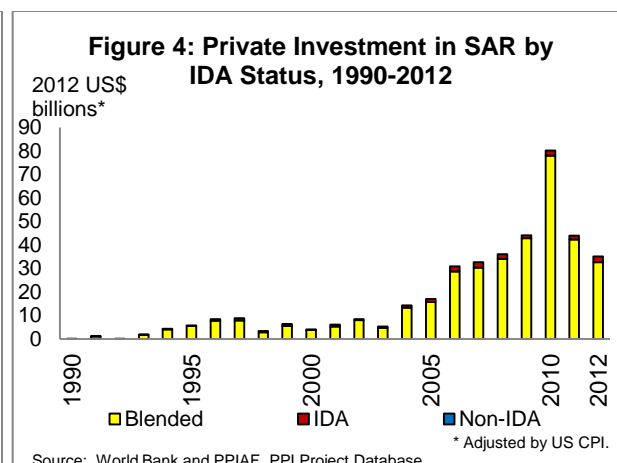
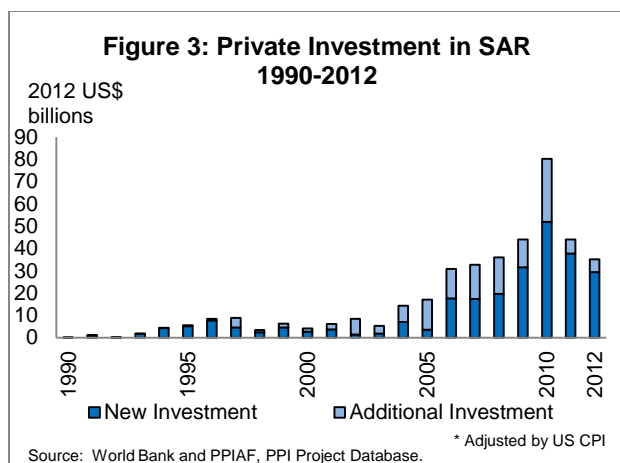


Despite the fall in investment in 2012, the year-on-year growth of private investment of 13.8 percent since 2002 outpaced regional GDP growth, at 6.5 percent. Private investment in 2012 comprised 1.5 percent of regional GDP. As in the past, India had the most regional investment with \$31.2 billion, of which \$18.9 billion in the transport sector.

This note was written by Bastiaan Johan Verink, Infrastructure Finance Analyst to the Private Participation in Infrastructure Research Group, Infrastructure Policy Unit, Sustainable Development Network, World Bank Group.

<sup>1</sup> The PPI Project Database currently uses the FY12 World Bank country classification released in July 2012. Investment data are in 2012 US dollar using the US CPI to adjust to 2012 values. Data at <http://ppi.worldbank.org/> are reported in millions of current U.S. dollars unless otherwise indicated. Investment data are in 2012 US dollars, using the US CPI to adjust to 2012 values.

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



## **Sector focus**

In South Asia region, five countries implemented 67 new **energy** projects: Bangladesh (7); India (45); Nepal (1); Pakistan (9); and Sri Lanka (5). This represents a 12 percent decrease compared to 2011 activity levels. The investment amount in energy projects however, decreased by 43 percent, totaling \$11.4 billion. Of these projects, 63 were generation facilities which added 6.4GW, of which 53 projects were renewable energy projects, with a total capacity of 3.1GW. India added the largest generation capacity of 4.2GW to the grid through its 41 projects, the largest of which was the 1320MW Jas Infrastructure and Power coal plant. Bangladesh increased its generation capacity by 1.6GW with seven projects financially closed. Bangladesh' largest project was the 522MW Munshiganj Mawa Orion-Long King coal plant, which represented an investment of \$579 million. Pakistan expanded its generation capacity by 515MW, 356MW of which was due to the closure of seven wind farms backed by payment guarantees from the central government. Sri Lanka added 35MW to its grid. Nepal financially closed one project of 120MW with the Green Ventures Likhu IV hydropower plant.

Four transmission projects reached financial closure in India, totaling 3,753 kilometers for \$2.4 billion. The largest transmission project was the 1,290 kilometer Maharashtra Eastern Grid Power Transmission Company line awarded via direct negotiation for \$882 million. Existing energy projects added \$1.0 billion in investments.

No new **telecom** projects reached financial closure in 2012. However, 44 existing projects expanded their operations with additional investments of \$4.7 billion. Bharti Airtel in India made the largest additional investment of \$1235 million in 2012, lower than the largest investment in 2011 of \$1708 million by Vodafone Essar. Bharti Airtel accounted for 26 percent of the total recorded additional investment in existing telecom projects in the region, followed by Vodafone Essar (India), Uninor (India), and Idea Cellular (India), with investment sizes of \$973 million, \$777 million, and \$548 million respectively. The largest expansions outside of India involved GrameenPhone (Bangladesh) with \$181 million and Mobilink (Pakistan) with \$175 million.

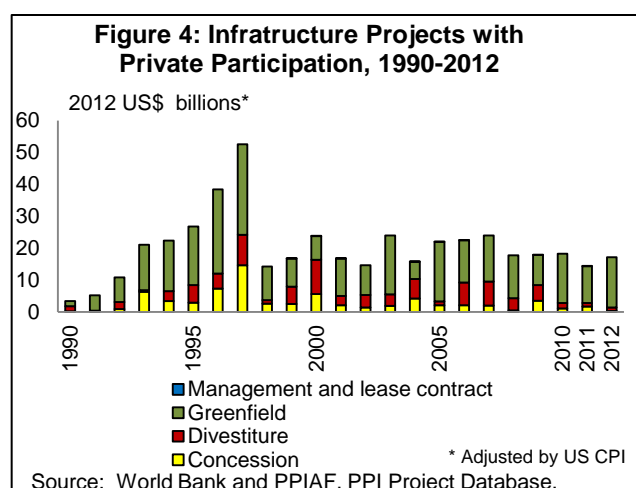
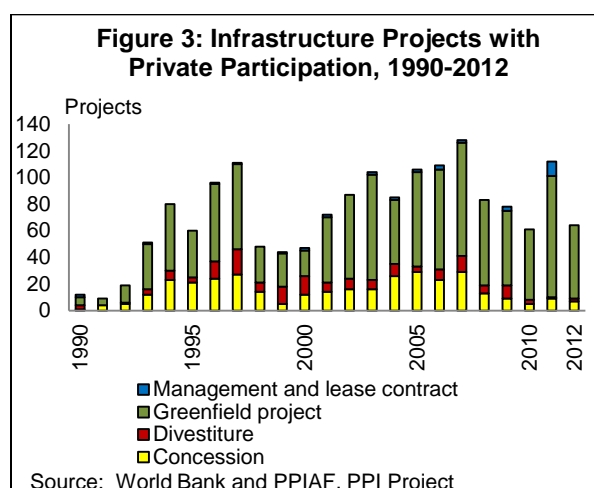
In the **transport** sector, 60 projects reached financial closure in 2012 with a total investment of \$18.9 billion, all of which were road projects in India. Two of these projects were greenfield contracts and the remaining 58 projects were brownfield concessions. The project with the largest amount of investment was the 556km GMR Kishangarh Udaipur Ahmedabad Expressway bid under Negative Viability Gap Funding (NVGF), with \$3.4 billion investment. This represented 18 percent of the total investments for new transport projects in 2012 in the region. Of this amount, \$1.8 billion involved payments by the concessionaire to the government and \$1.5 billion of expected capital expenditure. The 102 kilometer IRB Ahmedabad Vadodara Super Express Tollway ranked

second by investment size, with an investment commitment of \$1.8 billion, or 10 percent of the total investment for new transport projects in 2012. No existing projects had additional investment commitments.

In the **water and sewerage** sector, one new concession with a total investment of \$116 million closed in India: the Nagpur 24x7 Water Supply water utility project, with 450,000 connections. No existing projects had additional capital expenditures.

### **Contract Type**

Greenfield contracts were the most common type of PPI in 2012, with 69 projects accounting for 54 percent of projects, followed by brownfield concessions (59 projects, 46%). No divestitures or management and lease contracts were recorded in 2012 which is in line with the global pattern. Of the 16 divestitures recorded in 2012, almost 88% took place in Europe and Central Asia. With regards to investment size, brownfield concessions were the most active type of PPI involving \$18.1 billion, followed by greenfield projects with \$11.4 billion.



### **Regional Outlook**

In the South Asia region, investment levels in India have historically been a major component of regional investments. In India however, private developers have been dependent on state-owned banks for the majority of debt provision. In recent years, indebtedness in the infrastructure sector has been building and companies increasingly have difficulties servicing their obligations. After a period of credit expansion, the banking sector is approaching exposure limits to the asset class and faces increased levels of Non-Performing Assets (NPA). Meanwhile, the Indian Rupee has devalued approximately 30 percent in the past two years, putting additional pressure on foreign debt obligations. While the infrastructure deficit in the country remains a critical development challenge, other sources of finance will be needed to drive the expansion of infrastructure investments. Under the Twelfth Five-Year Plan (2012-2017), the government estimates an investment need of \$1000 billion, of which 47 percent is expected to come from private sources. This is an increase from 38 percent under the Eleventh Five-Year Plan, and 22 percent in the period before that. Tools to meet this demand include the promotion of non-recourse financing, project bond solutions and infrastructure debt funds, as well as improvements to the enabling environment and an increasing role for development banks. Together, the government aims to increase infrastructure investments from seven percent of GDP to nine percent in the coming years, with an increasing reliance on private capital. The IMF World Economic Outlook predicts GDP growth to recover from 3.8 percent in 2013 to an average of 6.3 percent between 2014 and 2018.

With over 300 projects in the pipeline, and a total value of \$90 billion, the state-owned infrastructure investment vehicle India Infrastructure Finance Company (IIFCL) is expected to play a central role. Expectations are that the infrastructure project pipeline of IIFCL will grow by more than 40 projects annually between 2014 and 2019. The Asian Development Bank is working towards extending a loan of \$700 million to the IIFCL in order to facilitate direct project lending. Another \$750 million is under negotiation with a consortium of the European Investment Bank, the French Development Agency and Japan International Corporation Agency. IIFCL was also authorized by the government to issue \$2 billion in tax free bonds. Investment priorities include power generation, roads, and the facilitation of transportation in an increasingly urbanized environment.

In Bangladesh, the priorities are in power generation, water and sanitation, and transportation services. Electricity has reached around 60 percent of the population, consuming on average 279kWh per year, one of the lowest consumption rates in the world. Still, the available generation capacity of 6500MW does not meet peak demand of 8000MW. In Pakistan, limited fiscal space, combined with substantial infrastructure needs are drivers favoring private participation in the sector. The International Finance Corporation is working with the governments of Punjab and Sindh to explore private participation in the infrastructure sector. Renewable energy generation projects including wind and hydropower may see continued investments, but coal plants and projects related to regional interconnectivity such as international highways may as well.

#### **Featured project: IRB Ahmedabad Vadodara Super Expressway (India) | Concession (BROT) | 25 years**

IRB Infrastructure Developers was awarded the 25 year concession of the Ahmedabad Vadodara Super Expressway in April 2011 by the National Highway Authority of India (NHAI). The section was part of NH-8, an existing four lane highway. Under the concession, the developer was expected to design and construct an additional two lanes as well as operate and maintain the project thereafter. The project was the first project of the Ultra Mega Highway Program, part of the National Highway Development Project Phase V to ease congestion in the region.

#### **Contract Information**

The special purpose vehicle IRB Ahmedabad Vadodara Super Express Tollway Private Limited won the competitive tender by quoting the highest premium payment to NHAI. The winning bid involved a sum of \$61.9 million for the first year of operations and agreed to escalate at 5 percent annually, adding up to a total amount of \$873 million over the life of the concession. In total, 22 bidders prequalified of which 13 submitted final bids. The bidder in second place quoted a premium 60 percent less. Under the contract, the concessionaire was allowed to recover capital and operation costs via tolling, subject to annual revisions linked to the Wholesale Price Index (WPI). The EPC contract was awarded to Modern Road Makers, the construction branch of IRBIDL. Construction was expected to start in January 2013 and commissioning was planned for December 2015.

#### **Financial Information**

Financial closure was reached in February 10<sup>th</sup> 2012. Under the arrangement, the project would have a debt-to-equity ratio of 68/32 with an expected capital cost of \$976 million. The debt comprised a INR 33 billion rupee denominated debt portion with a maturity of 18 years and a 12 month grace period to be repaid in 168 monthly installments. It was priced at 12.35%. The second tranche consisted of a \$100 million US dollar denominated loan priced at six month LIBOR+495bps following the rupee denominated repayment profile. The arranger was Bajaj Consultant. Participating banks were IDFC, Punjab National Bank, ICICI, Andhra Bank, Bank of India, Indian Overseas Bank, Union Bank of India, and IIFCL.

**Table 1 - Projects with private participation reaching financial or contractual closure in the South Asia region in 2012.**

Energy	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
1	Bangladesh	Munshiganj Mawa Orion-Long King coal-fired plant	Construction	Electricity generation	Greenfield project	Build, own, and operate	578.9	MW	522	Long King (50% / China), Orion Group (50% / Bangladesh)
2	Bangladesh	Haripur Marubeni combined cycle plan	Construction	Electricity generation	Greenfield project	Build, operate, and transfer	370	MW	360	Marubeni Corporation (100% / Japan)
3	Bangladesh	Meghnaghat II Power Plant	Construction	Electricity generation	Greenfield project	Build, own, and operate	300	MW	450	Summit Industrial and Mercantile Corp. (50% / Bangladesh), General Electric (50% / United States)
4	Bangladesh	Hosaf Fenchugonj Rental Power Plant	Operational	Electricity generation	Greenfield project	Rental	59.2	MW	50	Hosaf Group (100% / Bangladesh)
5	Bangladesh	Fujian Keraniganj HFO Power Plant	Operational	Electricity generation	Greenfield project	Build, own, and operate	59.2	MW	50	Fujian Longking Company (50% / China), Maisha Group (50% / Bangladesh)
6	Bangladesh	Midland Ashuganj Natural Gas Plant	Construction	Electricity generation	Greenfield project	Build, operate, and transfer	32	MW	51	Viyellatex Group (50% / Bangladesh), Youth Group (50% / Bangladesh)
7	Bangladesh	Acorn Juldah HFO Rental Power Plant	Operational	Electricity generation	Greenfield project	Rental	23.7	MW	100	Acorn Infrastructure Services (100% /

Energy	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
										United Kingdom)
8	India	Jas Infrastructure and Power Limited	Construction	Electricity generation	Greenfield project	Build, own, and operate	1384.7	MW	1320	Abhijeet Group (100% / India)
9	India	Western UP Power Transmission Company Limited	Construction	Electricity transmission	Greenfield project	Build, operate, and transfer	941	MW	863	Cobra Group (84% / Spain)
10	India	Maharashtra Eastern Grid Power Transmission Company Limited	Construction	Electricity transmission	Greenfield project	Build, operate, and transfer	882.3	MW	1290	Adani Group (74% / India)
11	India	Rajasthan Sun Technique Energy Private Limited	Construction	Electricity generation	Greenfield project	Build, own, and operate	368.3	MW	100	Reliance ADA Group (100% / India)
12	India	Shirpur Power Private Limited	Construction	Electricity generation	Greenfield project	Build, own, and operate	329.9	MW	300	Sintex Industries Limited (100% / India)
13	India	Bhopal Dhule Transmission Company Limited	Construction	Electricity transmission	Greenfield project	Build, operate, and transfer	320.2	MW	990	Vedanta Resources Plc (100% / United Kingdom)
14	India	Bothe Windfarm Development Private Limited	Construction	Electricity generation	Greenfield project	Build, own, and operate	244.7	MW	174.6	Continuum Wind Energy (100% / Singapore)
15	India	Jabalpur Transmission Company Limited	Construction	Electricity transmission	Greenfield project	Build, operate, and transfer	218.5	MW	610	Vedanta Resources Plc (100% / United Kingdom)

Energy	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
16	India	Tadas Wind Energy Limited	Operational	Electricity generation	Greenfield project	Build, own, and operate	218.5	MW	200.8	Infrastructure Leasing & Financial Services (IL&FS) (100% / India)
17	India	Beta Wind Farm (Tamil Nadu) Private Limited	Operational	Electricity generation	Greenfield project	Merchant	198	MW	156	Shriram Group (100% / India)
18	India	Beta Wind Farm (Gujarat & Andhra) Private Limited	Construction	Electricity generation	Greenfield project	Build, own, and operate	183.4	MW	144	Shriram Group (100% / India)
19	India	Godavari Naukh CSP Solar Plant	Construction	Electricity generation	Greenfield project	Build, own, and operate	148.9	MW	50	Godavari Power & Ispat Limited (100% / India)
20	India	Nagai Power Private Limited	Construction	Electricity generation	Greenfield project	Merchant	143.7	MW	150	KVK Energy Private Ltd. (100% / India)
21	India	MEIL Green Power (Anantpur) Limited 50MW CSP	Construction	Electricity generation	Greenfield project	Build, own, and operate	134.7	MW	50	Megha Engineering & Infrastructures Limited (100% / India)
22	India	NuPower Renewables (Tirunelveli) Windfarm 100.5MW	Operational	Electricity generation	Greenfield project	Build, own, and operate	133.1	MW	100.5	NuPower Renewables Limited (100% / India)
23	India	Rayala Wind Power Company Private Limited	Construction	Electricity generation	Greenfield project	Build, own, and operate	120.5	MW	100.8	Greenko Group (100% / India)
24	India	CLP (Jaisalmer) Windfarm 102.4MW	Construction	Electricity generation	Greenfield project	Build, own, and	120	MW	102.4	China Light and Power Ltd. (100% / Hong Kong,

Energy	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
						operate				China)
25	India	Fortune Five Hydel Projects Private Limited	Construction	Electricity generation	Greenfield project	Build, own, and operate	114.3	MW	100.8	Greenko Group (100% / India)
26	India	Torrent Sangli 75MW Windfarm	Construction	Electricity generation	Greenfield project	Build, own, and operate	97.5	MW	75	Torrent Group (100% / India)
27	India	NSL Wind Power Company (Satara) Private Limited	Construction	Electricity generation	Greenfield project	Build, own, and operate	96.4	MW	75	NSL Sugars Limited (100% / India)
28	India	Welspun Energy Jodhpur Solar Project 50MW	Operational	Electricity generation	Greenfield project	Build, own, and operate	90	MW	50	Welspun Energy Limited (100% / India)
29	India	Tata Mithapur Solar Plant	Operational	Electricity generation	Greenfield project	Build, own, and operate	78.2	MW	25	Tata Enterprises (100% / India)
30	India	SLREPL 25 MW Banskantha Solar Project	Operational	Electricity generation	Greenfield project	Build, own, and operate	72.7	MW	25	Moser Baer India Limited (100% / India)
31	India	Mytrah Vayu (Pennar) Private Limited	Operational	Electricity generation	Greenfield project	Build, own, and operate	72.6	MW	63	Caparo Group (100% / United Kingdom)
32	India	Bhilwara Green Energy Limited_49.5MW Windfarm	Operational	Electricity generation	Greenfield project	Build, own, and operate	59.6	MW	49.5	LNJ Bhilwara Group (100% / India)
33	India	ReNew Wind Energy (Vashpet) Windfarm	Operational	Electricity generation	Greenfield project	Build, own, and operate	59.2	MW	45	Renew Power Limited (100% / India)



Energy	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
34	India	Bindu Vayu Urja (Jamanvada) Private Limited	Operational	Electricity generation	Greenfield project	Build, own, and operate	58.7	MW	52.5	Caparo Group (100% / United Kingdom)
35	India	GMR Charanka Solar Plant 25MW	Operational	Electricity generation	Greenfield project	Build, own, and operate	56.1	MW	25	GMR Group (100% / India)
36	India	Torrent Jamnagar Windfarm_49.6 MW	Operational	Electricity generation	Greenfield project	Build, own, and operate	54.6	MW	49.6	Torrent Group (100% / India)
37	India	ReNew Wind Energy (Karnataka) Private Limited	Construction	Electricity generation	Greenfield project	Build, own, and operate	52.2	MW	50.4	Renew Power Limited (100% / India)
38	India	SEI Solar Power Jodhpur Solar Project	Construction	Electricity generation	Greenfield project	Build, own, and operate	50.6	MW	20	SunEdison LLC (..% / United States), CHINT Group (..% / China)
39	India	NSL Wind Power Company (Phoolwadi) Private Limited	Operational	Electricity generation	Greenfield project	Build, own, and operate	49.4	MW	49.5	NSL Sugars Limited (100% / India)
40	India	Essel MP Energy Limited	Construction	Electricity generation	Greenfield project	Build, own, and operate	39.1	MW	20	Essel Group (100% / India)
41	India	Moser Baer (Porbandar) Solar Project	Operational	Electricity generation	Greenfield project	Build, own, and operate	34.8	MW	15	Moser Baer India Limited (100% / India)
42	India	BLP Wind Project (Amberi) Private Limited	Operational	Electricity generation	Greenfield project	Build, own, and operate	33.2	MW	26.2	Bharat Light and Power (100% / India)

Energy	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
43	India	Bindu Vayu Urja (Chakala) Private Limited	Operational	Electricity generation	Greenfield project	Build, own, and operate	32.9	MW	39	Caparo Group (100% / United Kingdom)
44	India	ReNew Wind Energy (Varekarwadi) Private Limited	Construction	Electricity generation	Greenfield project	Build, own, and operate	31.6	MW	25.5	Renew Power Limited (100% / India)
45	India	Vaayu Renewable Energy (Mahanadi) Private Limited	Construction	Electricity generation	Greenfield project	Build, own, and operate	30.9	MW	28	Vaayu Renewable Energy (Mahanadi) (100% / India)
46	India	Green Infra (Theni) Wind Energy Limited 25.5MW	Construction	Electricity generation	Greenfield project	Build, own, and operate	28.7	MW	25.5	Green Infra Wind Energy Limited (100% / India)
47	India	ReNew Wind Energy (Rajkot) Private Limited	Operational	Electricity generation	Greenfield project	Build, own, and operate	26.3	MW	25.2	Renew Power Limited (100% / India)
48	India	Green Infra (Satara) Wind Energy Limited 18MW	Construction	Electricity generation	Greenfield project	Build, own, and operate	21.4	MW	18	Green Infra Wind Energy Limited (100% / India)
49	India	Sunborne Energy Rajasthan Solar Private Limited	Construction	Electricity generation	Greenfield project	Build, own, and operate	9.9	MW	5	SunBorne Energy Services India Private Limited (100% / India)
50	India	Mytrah Energy Limited- 100.3MW Savalsang Windfarm	Construction	Electricity generation	Greenfield project	Build, own, and operate	0	MW	100.3	Caparo Group (100% / United Kingdom)
51	India	Bindu Vayu Urja (Kaladonger) Private Limited	Operational	Electricity generation	Greenfield project	Build, own, and operate	0	MW	96.6	Caparo Group (100% / United Kingdom)

Energy	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
52	India	Mytrah Energy Limited- 37.4MW Burgula Wndfarm	Construction	Electricity generation	Greenfield project	Build, own, and operate	0	MW	37.4	Caparo Group (100% / United Kingdom)
53	Nepal	Green Ventures Likhu IV HPP	Construction	Electricity generation	Greenfield project	Build, operate, and transfer	262.9	MW	120	LNJ Bhilwara Group (..% / India), Triveni Group (..% / Nepal)
54	Pakistan	K-Water Star Patrind HPP	Construction	Electricity generation	Greenfield project	Build, operate, and transfer	436	MW	147	Korea Water Resources Corporation (80% / Korea, Rep.), Others (20% / ..)
55	Pakistan	Zorlu Sindh Wind Farm	Construction	Electricity generation	Greenfield project	Build, own, and operate	158.7	MW	56.4	Zorlu Holding AS (100% / Turkey)
56	Pakistan	Fauji Kuttikun II Wind Farm	Construction	Electricity generation	Greenfield project	Build, own, and operate	135	MW	50	Fauji Foundation (55% / Pakistan), Tapal Group (20% / Pakistan)
57	Pakistan	Fauji Kuttikun I Wind Farm	Construction	Electricity generation	Greenfield project	Build, own, and operate	135	MW	50	Fauji Foundation (65% / Pakistan)
58	Pakistan	Tapal/Fauji Gharo Wind Farm	Construction	Electricity generation	Greenfield project	Build, own, and operate	126.5	MW	50	Fauji Foundation (..% / Pakistan), Tapal Group (..% / Pakistan)
59	Pakistan	Yunus Jhampir Wind Farm	Construction	Electricity generation	Greenfield project	Build, own, and operate	70	MW	50	Yunus Brothers (100% / Pakistan)

Energy	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
60	Pakistan	Fauji Jamphir II Wind Farm	Construction	Electricity generation	Greenfield project	Build, own, and operate	66.5	MW	50	Fauji Foundation (0% / Pakistan), Tapal Group (..% / Pakistan)
61	Pakistan	Fauji Jhampir I Wind Farm	Construction	Electricity generation	Greenfield project	Build, own, and operate	66.5	MW	49.5	Fauji Foundation (0% / Pakistan), Tapal Group (..% / Pakistan)
62	Pakistan	SSJD Sindh Biomass Plant	Construction	Electricity generation	Greenfield project	Build, own, and operate	16.7	MW	12	SSJD Group (..% / United States)
63	Sri Lanka	RenewGEN Kaduwela Biomass Plant	Construction	Electricity generation	Greenfield project	Build, own, and operate	29	MW	10	RenewGEN Ventures (95% / India)
64	Sri Lanka	Daily Life Kalpitiya Wind Farm	Operational	Electricity generation	Greenfield project	Build, own, and operate	16.8	MW	10	Daily Life Renewable Energy (DLRE) (100% / Singapore)
65	Sri Lanka	Powergen Uppudaluwa Wind Farm	Operational	Electricity generation	Greenfield project	Build, own, and operate	14	MW	10.5	Windforce Private Limited (90% / Sri Lanka), Others (10% / ..)
66	Sri Lanka	Aitken Ambewala Wind Farm	Operational	Electricity generation	Greenfield project	Build, own, and operate	3	MW	3	Aitken Spence & Company Ltd. (100% / Sri Lanka)
67	Sri Lanka	PDL Koladeniya SHPP	Operational	Electricity generation	Greenfield project	Build, own, and operate	1.2	MW	1.2	Bank of Ceylon (100% / Sri Lanka)

Transport	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
1	India	GMR Kishangarh Udaipur Ahmedabad Expressway Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	3380.5	KM	555.5	GMR Group (100% / India)
2	India	IRB Ahmedabad Vadodara Super Express Tollway Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	1848.7	KM	102.3	IRB Infrastructure Developers Ltd (100% / India)
3	India	GVK Shivpuri Dewas Expressway Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	1156.6	KM	332.5	GVK Group (100% / India)
4	India	L&T East-West Tollway Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	918.9	KM	275	Larsen & Toubro Limited (100% / India)
5	India	L&T Great Eastern Highway Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	833.2	KM	209	Larsen & Toubro Limited (100% / India)
6	India	Ashoka Dhankuni Kharagpur Tollway Limited	Operational	Bridge and highway	Concession	Build, rehabilitate, operate, and transfer	800.9	KM	111.4	Ashoka Buildcon Ltd (100% / India)
7	India	Essel Walajahpet Poonamallee Toll Roads Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	654.5	KM	93	Essel Group (100% / India)

Transport	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
8	India	Agra Etawah Tollways Limited	Construction	Highway	Greenfield project	Build, operate, and transfer	620.2	KM	124.5	Ramky Group (100% / India)
9	India	Vijayawada Gundugolanu Road Project Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	598.3	KM	103.6	Gammon India Ltd (100% / India)
10	India	SEW LSY Highway Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	553.3	KM	206	SEW Infrastructure (70% / India)
11	India	Essel Gwalior Shivpuri Toll Roads Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	527.9	KM	125.3	Essel Group (100% / India)
12	India	L&T Deccan Tollways Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	483	KM	145	Larsen & Toubro Limited (100% / India)
13	India	Kiratpur Ner Chowk Expressway Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	457.8	KM	84.3	Infrastructure Leasing & Financial Services (IL&FS) (100% / India)
14	India	Solapur Bijapur Tollway Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	422.1	KM	110.5	Sadbhav Engineering Ltd (100% / India)
15	India	Ashoka Cuttack Angul Tollway Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and	389.9	KM	112	Ashoka Buildcon Ltd (100% / India)

Transport	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
						transfer				
16	India	ACP Tollways Private Limited	Operational	Highway	Greenfield project	Build, operate, and transfer	351.5	KM	115	Chetak Enterprises Pvt Ltd (33% / India), Patel Engineering Ltd (32% / India)
17	India	BSPCL Aurang Tollway Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	338	KM	150.4	BSPCL Infrastructure Limited (100% / India)
18	India	Lucknow Varanasi Tollways Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	305.1	KM	125.9	Atlanta Limited (49% / India), Essar Group (51% / India)
19	India	Patna Buxar Highways Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	301.4	KM	125.4	Gammon India Ltd (100% / India)
20	India	Shreenathji Udaipur Tollway Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	294.6	KM	79.3	Sadbhav Engineering Ltd (100% / India)
21	India	Yamunanagar Panchkula Highway Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	275.2	KM	104.8	Gammon India Ltd (100% / India)
22	India	Sushee IVRCL Arunachal	Operational	Highway	Concession	Build, rehabilitate, operate, and	266.6	KM	311	IVRCL Infrastructures & Projects Ltd.

Transport	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
		Highways Limited				transfer				(26% / India)
23	India	IVRCL Narnaul Bhiwani Tollways Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	240.3	KM	151	IVRCL Infrastructures & Projects Ltd. (100% / India)
24	India	Hospet Chitradurga Tollways Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	233.2	KM	124.5	Ramky Group (100% / India)
25	India	Sikar Bikaner Highway Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	179.6	KM	237.6	Infrastructure Leasing & Financial Services (IL&FS) (100% / India)
26	India	Chetak Tollways Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	156.6	KM	117	Chetak Enterprises Pvt Ltd (100% / India)
27	India	Wainganga Expressway Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	147.3	KM	46.2	JMC Projects (India) Limited (100% / India)
28	India	Vijayawada Machilipatnam Expressways Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	146	KM	63	Madhucon Projects Ltd (100% / India)
29	India	Transstroy Bhopal Biaora Tollways Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and	142.3	KM	105.6	Transstroy India Limited (74% / India), OJSC Corporation



Transport	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
						transfer				Transstroy, (26% / Russian Federation)
30	India	KNR Walayar Tollways Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	136.4	KM	54	KNR Constructions Ltd (100% / India)
31	India	Vindhyachal Expressway Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	134.5	KM	89	JMC Projects (India) Limited (100% / India)
32	India	Jind Haryana Border Toll Road Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	133	KM	68	Unity Infraprojects Limited (100% / India)
33	India	Lucknow Raebareli Toll Roads Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	131.9	KM	70	Essel Group (100% / India)
34	India	PNC Bareilly Nainital Highways Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	120.9	KM	54	PNC Infratech Ltd (100% / India)
35	India	Transstroy Krishnagiri Tindivanam Highways Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	112.3	KM	182.2	Transstroy India Limited (74% / India), OJSC Corporation Transstroy, (26% / Russian Federation)

Transport	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
36	India	Suratgarh Bikaner Toll Road Company Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	105.5	KM	237.6	MBL Infrastructures Limited (..% / India), SREI Infrastructure Finance Ltd (..% / India)
37	India	KNR Muzaffarpur Barauni Tollways Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	101.3	KM	107.6	KNR Constructions Ltd (51% / India)
38	India	Jaintia Highway Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	78	KM	102	Simplex Infrastructure (100% / India)
39	India	Ajmer Nagaur State Highway	Operational	Bridge and highway	Concession	Build, rehabilitate, operate, and transfer	75.4	KM	148.21	GVR Group (100% / India)
40	India	Manaj Tollway Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	71.7	KM	41	Man Infraconstruction Limited (..% / India), Ajwani Infrastructure Private Limited (..% / India)
41	India	Suratgarh Sriganganagar Toll Road Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	66	KM	78	Unity Infraprojects Limited (100% / India)

Transport	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
42	India	Abhijeet Toll Road Karnataka Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	63.8	KM	70	Abhijeet Group (100% / India)
43	India	Khandwa Agroh Pathways Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	59	KM	131.9	Agroh Infrastructure Developers Private Ltd (..% / India)
44	India	Chomu Mahla Toll Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	58	KM	89	Unity Infraprojects Limited (100% / India)
45	India	VIL Rohtak-Jind Highway Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	56.7	KM	48.6	Vijai Infrastructure Limited (100% / India)
46	India	Mhow Agroh Pathways Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	55.1	KM	69.4	Bla Infrastructure (..% / India)
47	India	MBL Highway Development Company Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	48.1	KM	75.6	MBL Infrastructures Limited (100% / India)
48	India	Atlanta Ropar Tollways Private Limited	Operational	Highway	Concession		45.4	KM	54.8	Atlanta Limited (100% / India)
49	India	DBL Nadiad Modasa Tollways	Operational	Highway	Concession	Build, rehabilitate, operate, and	41.4	KM	108	Dilip Buildcon Limited (100% /

Transport	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
		Limited				transfer				India)
50	India	VIL MPSV Tollways Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	28.4	KM	106.3	Vijai Infrastructure Limited (100% / India)
51	India	Tantia Batala Beas Tollways Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	24	KM	35.4	Tantia Construction Limited (100% / India)
52	India	Tantia Batala Beas Tollways Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	24	KM	35.39	Tantia Construction Limited (100% / India)
53	India	Kotkapura Muktsar Tollways Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	23.4	KM	30	Supreme Infrastructure India Ltd (.% / India), Subhash Projects & Marketing Ltd (.% / India)
54	India	Sehore Kosmi Tollways Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	19.2	KM	50.1	Ramky Group (100% / India)
55	India	Chetak Mitra Tollways Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	17.75	KM	100	Chetak Enterprises Pvt Ltd (52% / India)

Transport	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
56	India	Umari Phook Pratapur State Highway	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	14.5	KM	43.7	S&P Infrastructure Developers (..% / India), Bla Infrastructure (..% / India)
57	India	Gangotri Sarangpur Shujalpur Tollway Private Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	11.6	KM	38.5	Gangotri Enterprises Limited (100% / India)
58	India	MBL (MP) Toll Road Company Limited	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	11.1	KM	18.3	MBL Infrastructures Limited (100% / India)
59	India	Jalore Ramsingh Revdar State Highway	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	10.35	KM	77.8	D.K.Infrastructure Private Limited (100% / India)
60	India	Datia Bhandar Highway Project	Operational	Highway	Concession	Build, rehabilitate, operate, and transfer	10.2	KM	29.2	DP Jain & Company (100% / India)

Water & Sewerage	Country	Project name	Project status	Segment	Type of PPI	Subtype of PPI	Investment commitment (US\$ millions)	Capacity type	Capacity	Sponsors
1	India	Nagpur, 24x7 Water Supply Project	Operational	Water utility without sewerage	Concession	Rehabilitate, operate, and transfer	115.6	Number of connections (thousands)	450	Veolia Environnement (50% / France)

Note: .. denotes missing data; N/A means not applicable. Investment commitments include payments to the government and investment in physical assets.

Source: World Bank and PPIAF, PPI Database.