



## PRIVATE PARTICIPATION IN INFRASTRUCTURE DATABASE

PPI data update note 56

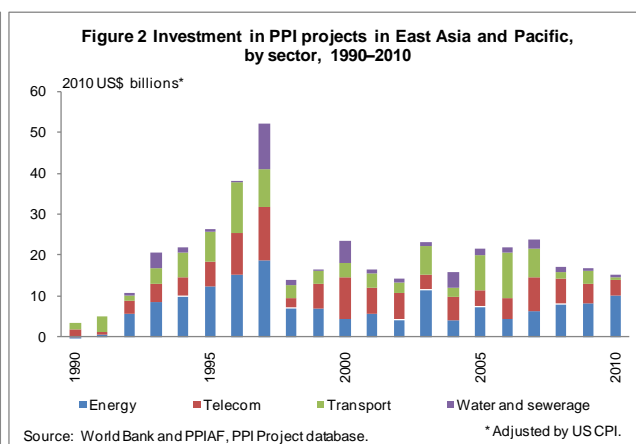
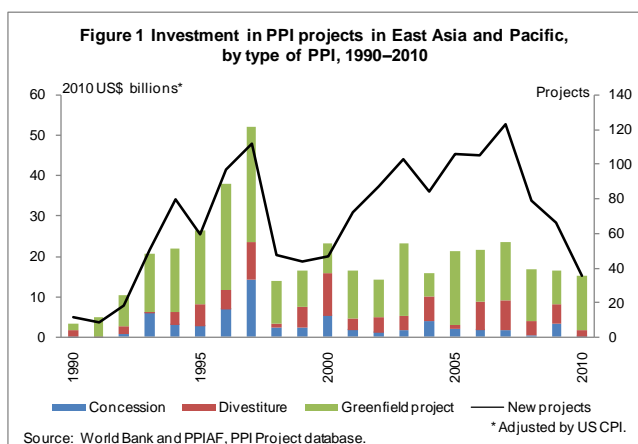
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### Private activity in infrastructure in East Asia and Pacific declined for third consecutive year in 2010

In 2010, 36 infrastructure projects with private participation reached financial or contractual closing in seven low and middle-income countries, involving investment commitments of US\$10.9 billion (table 1).<sup>1</sup> Infrastructure projects implemented in the 1990–2009 period attracted new investment of US\$4.3 billion, bringing total investment commitments to infrastructure in the region to US\$15.2 billion in 2010.<sup>2</sup>

The activity in 2010 represents a 9% decline by investment and 45% drop by number of projects compared with 2009. China, which saw the number of projects fall by 60% compared with 2009, explained the large decline in activity by number of projects.<sup>3</sup> Investments in new projects fell by 9% and in projects implemented in previous years by 10% compared with 2009.

Investment in the region was concentrated in the 1,470 MW Hongsa coal-fired power plant, which will export electricity from Lao PDR to Thailand (24% of regional investment in 2010), as well as in Indonesia (22%) and the Philippines (19%). China saw private activity decline significantly in 2010, accounting for just 6% of regional investment and 47% of the projects. By type of private participation, activity was concentrated on greenfield projects (BOT and BOO), which attracted 87% of regional investment and 30 of the 36 new projects (figure 1). Concessions followed with 3% of investment and five projects. Divestitures accounted for the remaining 10% of the investment and one new project.



**Energy** had 18 projects in six countries and investment of US\$10.3 billion in 2010. This represents a 26% increase from the level in 2009. Energy accounted for 68% of regional investment in 2010 (figure 2).

- Electricity generation attracted almost all of this activity, accounting for 17 projects and US\$10.2 billion in investment. These projects represented a total installed capacity of 5.6 GW. The remaining project was a transmission line in Cambodia.
- The four largest projects accounted for 70% of the regional investment in energy. Besides the export oriented Hongsa coal-fired power plant, the other large projects were GNPowder Mariveles coal power

This note was written by Koustubh Parulekar, consultant, Finance, Economics, and Urban Development Department, Sustainable Development Network, World Bank.

<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> It should be noted that beside the lower level of activity in China, these data also reflect the lower coverage of the PPI Database in China this year due to limited access to local sources this update.



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Plant, a merchant power plant in the Philippines, and Paiton III and Ciberon power plants selling electricity under Power Purchase Agreements to PNL, the state-owned electric utility in Indonesia.

- Cambodia implemented five projects (four power plants with a total capacity of 1 GW and one transmission line). Indonesia had two power plants with a total capacity of 1.5 GW and the Philippines three projects with 950 MW. Thailand implemented four small projects with a total capacity of 327 MW. Laos PDR had one 100 MW power plant beside Hongsa power plant.
- China implemented two wind-power projects, the lowest activity in the country since the early 1990s.

**Telecom** had no new project, but existing projects attracted investment of US\$3.5 billion. This represents a 27% drop from the level in 2009. The sector accounted for 23% of regional investment in 2009.

- Investment went mainly to mobile operators (56%) and multi-service providers (44%).

**Transport** had three new projects in two countries and investment of US\$751 million. This investment is an 76% drop from the level reported in 2009. Transport accounted for 5% of regional investment in 2010.

- The Philippines implemented two concessions for seaports: North Harbor concession and Batangas Port Phase 2.
- Vietnam implemented a seaport under a BOT contract: Cai Lan International Container Terminal LLC.
- In addition, Malaysia sold a 13.7% stake in Malaysia Airports Holdings Bhd in two tranches in 2010, bringing the divested share in the company to 31%. The first divestiture of Malaysia Airports' shares took place in 1999.

**Water and sewerage** had 15 new projects and investment of US\$635 million. This represents a 13% increase from the level in 2009. The sector accounted for 4% of regional investment in 2010.

- All 15 new projects were in China. This activity represented a 52% drop by number of projects and the third consecutive year of significant slowdown of private activity in China.
- The sale of a 5.7% stake in Chongqing Water Affairs, a water utility in Chinese Chongqing Municipality, through a public offering accounted for the 81% of sector investment. This project was also the only utility project in the region in 2010. Chongqing Water Affairs first attracted private participation in 2008 when Sino French Water, a joint venture between French Suez and Hong Kong based NWS Holdings, acquired a 15% stake in the company.
- The remainder of private activity in the sector went to wastewater treatment plants which accounted for 14 of the 15 water projects.




# PRIVATE PARTICIPATION IN INFRASTRUCTURE DATABASE

**Table 1. Projects with private participation reaching financial or contractual closure in East Asia and Pacific in 2010**

Energy					
Country	Project name	Type of PPI (Subtype)	Segment	Total Investment*	Sponsor
Cambodia	Cambodia Energy Limited	Greenfield project (BOO)	Electricity generation	140	Leader Universal Holdings (100% / ..)
Cambodia	North Phnom Penh - Kampong Power Transmission	Greenfield project (BOT)	Electricity transmission	107	Leader Universal Holdings (100% / ..)
Cambodia	Orussei Hydroelectric Power Plant	Greenfield project (BOT)	Electricity generation	558	China Huadian Corporation (100% / China)
Cambodia	Stung Russey Chrum Krom Hydropower Plant	Greenfield project (BOT)	Electricity generation	412	China Huadian Corporation (100% / China)
Cambodia	Stung Tatay Hydropower Plant	Greenfield project (BOT)	Electricity generation	540	China National Heavy Machinery Corporation (100% / China)
China	Gansu Guazhou Xiehe Wind Power Project	Greenfield project (BOT)	Electricity generation	249	China Windpower Group Limited (100% / China)
China	Jilin Taobei Baoshan Wind Farm Project	Greenfield project (BOO)	Electricity generation	58	Ashmore Energy International (AEI) (100% / United States)
Indonesia	Cirebon Coal-fired Power Plant	Greenfield project (BOT)	Electricity generation	850	Marubeni Corp. (33% / Japan), PT Tripatra (20% / Indonesia), Samtan (20% / Korea, Rep.), Korea Midland Power Corporation (KOMICO) (28% / Korea, Rep.)
Indonesia	Paiton III Thermal Power Plant	Greenfield project (BOO)	Electricity generation	1,450	Mitsui (50% / Japan), International Power (32% / United Kingdom)
Lao PDR / Thailand	Hongsa Coal Power Project	Greenfield project (BOT)	Electricity generation	3,710	Ratchaburi Electricity Generating Holding Plc (40% / Thailand), Banpu Public Company (40% / Thailand)
Lao PDR	Nam Lik 1-2 Hydropower Plant	Greenfield project (BOT)	Electricity generation	150	China International Water and Electric Corporation (90% / China)
Philippines	BacMan Geothermal Power Plant	Full divestiture	Electricity generation	28	Energy Development Co (EDC) (100% / Philippines)
Philippines	Cebu Coal-fired Power Plant	Greenfield project (BOO)	Electricity generation	451	Korea Electric Power Company (KEPCO) (60% / Korea, Rep.), Salcon Bhd (40% / Malaysia)



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Philippines	GNPower Mariveles Coal Power Plant	Greenfield project (BOO)	Electricity generation	1,000	GN Power (100% / Philippines)
Thailand	Amata B. Grimm Power 3 Ltd.	Greenfield project (BOO)	Electricity generation	156	Amata Power Co. Ltd (100% / Thailand)
Thailand	Changwat Lopburi Power Project	Greenfield project (BOO)	Electricity generation	250	Mitsubishi (34% / Japan), China Light and Power Ltd. (34% / Hong Kong, China), Electricity Generating Company (EGCO) (34% / Thailand)
Thailand	Navanakorn Gas-Fired Power Plant	Greenfield project (BOO)	Electricity generation	133	Toyo-Thai Corporation Public Company Limited (71% / Thailand), Nava Nakorn Public Company Limited (NNCL) (29% / Thailand)
Thailand	Sakon Nakorn and Nakorn Phanom Solar Power Plants	Greenfield project (BOO)	Electricity generation	51	Steel Intertech Public Company Limited (100% / Thailand)

Transport					
Country	Project name	PPI (Subtype)	Sub-sector	Total Investment*	Sponsor
Philippines	Batangas Port Phase 2	Concession (ROT)	Seaport	22	Asian Terminal, Inc. (100% / Philippines)
Philippines	North Harbor concession	Concession (ROT)	Seaport	321	San Miguel Corporation (SMC) (35% / Philippines), Harbour Centre Port Terminals (65% / Philippines)
Vietnam	Cai Lan International Container Terminal LLC	Greenfield project (BOT)	Seaport	155	Carrix (49% / United States)



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Water and sewerage					
Country	Project name	PPI (Subtype)	Segment	Total Investment*	Sponsor
China	Hunan Yongshun County Wastewater Treatment Plant	Greenfield project (BOT)	Sewerage treatment plant	13.5	Kaiyuan Enrionemtnal Protection Equipment Co Ltd (100% / China)
China	Liaoyang City River East New City Water Affairs Project	Greenfield project (BOT)	Water utility without sewerage	36.0	United Envirotech (100% / Singapore)
China	Nantong Pingchao Wastewater Treatment Plant	Greenfield project (BOT)	Sewerage treatment plant	1.5	Suzhou Zhongsheng Environmental Engineering Co., Ltd (100% / China)
China	Nantong Shigang Wastewater Treatment Plant	Greenfield project (BOT)	Sewerage treatment plant	1.5	Suzhou Zhongsheng Environmental Engineering Co., Ltd (100% / China)
China	Ningguo Gangkouzhen Wastewater Treatment Plant	Greenfield project (BOT)	Sewerage treatment plant	Not Available	Zhejiang Shangda EP Co. Ltd. (.% / China), Ningguo Huanneng Construction Co. Ltd. (.% / China)
China	Panjin City No. 2 Wastewater Treatment Plant	Concession (ROT)	Sewerage treatment plant	Not Available	BerlinWasser (100% / Germany)
China	Qinzhou Economic Development Zone Wastewater Treatment Plant	Greenfield project (BOO)	Sewerage treatment plant	9	SembCorp Industries (80% / Singapore)
China	Shaoyang Hongqiqu Wastewater Treatment Plant	Greenfield project (BOT)	Sewerage treatment plant	Not Available	Hunan Capital Investment Co. Ltd (100% / China)
China	Shenze County City South Wastewater Treatment Plant	Greenfield project (BOT)	Sewerage treatment plant	5.2	Changye Group (100% / China)
China	Tongliang County City East Wastewater Treatment Plant	Greenfield project (BOT)	Sewerage treatment plant	3.8	Chongqing Taixing Environmental Protection Engineering Co., Ltd (100% / China)
China	Yibin City Yangwan Wastewater Treatment Plant	Greenfield project (BOT)	Sewerage treatment plant	8.8	Sichuan Huajian uanbo Investment Co., Ltd (.% / China), Ziyang Haitian Water Affairs Co., Ltd. (.% / China)
China	Zaozhuang City Yicheng District Wastewater Treatment Plant	Concession (ROT)	Sewerage treatment plant	Not Available	Lianheruntong (100% / China)



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China	Zengcheng Xintang Wastewater Treatment Plant	Greenfield project (BOT)	Sewerage treatment plant	Not Available	Shenzhen Zhujiang EP Investment (..% / China), Citic Pacific (..% / Hong Kong, China)
China	Zhangjiakou Xuanhua District Yangfang Wastewater Treatment Plant	Concession (ROT)	Sewerage treatment plant	39	Kaidan Water Affairs Co Ltd (100% / Israel)
China	Zhuozhou Songlindian Wastewater Treatment Plant	Greenfield project (BOT)	Sewerage treatment plant	Not Available	Hubei Keliang Bio-Tech Co (100% / China)

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

\*in current US\$ millions

Source: World Bank and PPIAF, PPI Database.