

PRIVATE PARTICIPATION IN INFRASTRUCTURE DATABASE

PPI data update note 4

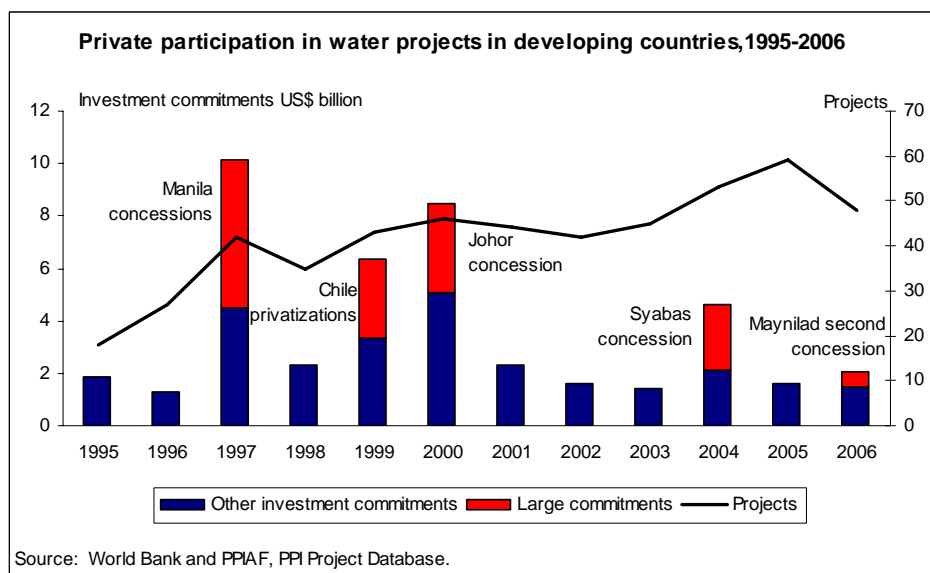
July 2007

Private activity in water shows mixed results in 2006

In 2006, 12 low- and middle- income countries implemented at least 48 projects that involved investment commitments totaling US\$2 billion,¹ according to just-released data from the Private Participation in Infrastructure Database. The annual number of water projects involving the private sector declined by 20 percent from the peak level of activity in 2005 and by 10 percent from activity in 2004, but still remained at one of the highest levels since 1995. Annual investment commitments stayed within the US\$1-2 billion range of the past five years.

Highlights of 2006

New private activity focused on treatment plants, which accounted for 32 of the 48 water contracts. The remaining 16 contracts were for utilities. New private activity was highly concentrated in 2006. China accounted for 43 percent of investment and 67 percent of projects. The Philippines followed with 25 percent of investment, thanks to the large Maynilad second concession.



All but one of the treatment plant projects were located in China and added a total installed capacity of at least 2,970 thousands of cubic meters per day. The remaining project was a sewerage treatment plant in Mexico. The water utility contracts provided service for sizable populations in several regions. Nine contracts provided for 1.25 million water connections, with East Metro Manila's Maynilad Water Services (second concession) being the largest one with 537,000 connections, followed by Senegalaise des Eaux second lease with 428,000. Seven other utility contracts accounted for a total population in their service areas of 3.6 million, with the largest contracts being those for Chinese Changshu Water Utilities (1.5 million), Russian Krasnodar Water Utility (710,000), Omani Muscata Wastewater Service (700,000), and Russian Tyumen

¹ Data on water contracts with private participation include primarily medium and large projects as reported by the media and other public sources. Small-scale private service providers, which also play an important role in the water sector, are not generally included due to the lack of public information. Other contracts could have also been omitted for the same reason.

Water Utility (511,000). By type of contract, there were 13 concessions, 22 greenfield projects, 9 lease contracts, and 4 management contracts.

Regional activity: Five regions reported financial closure on new water projects.

- **In East Asia**, three countries incorporated private activity into water projects. In China, 32 projects were granted, involving investment of US\$890 million. Of those contracts, 31 were for water and sewage treatment plants. The remaining one was a water utility lease contract to the Changshu Water Supply Company. In the Philippines, the controlling stake in Maynilad Water Services concession was finally re-awarded, but with significantly smaller investment commitments (US\$504 million) than in the first concession (US\$3,690 million in 1997). In Thailand, a water utility concession for Muang and Baankai districts was also implemented.
- **In Europe and Central Asia**, private activity was reported in Czech Republic, Hungary, Poland, Russian Federation, and Slovak Republic. In Czech Republic, two lease contracts for water utilities in Prostejov and Slany were implemented. In Hungary a management contract for the Erd region was implemented. In Poland, another management contract was issued for Wozniky Water Services. In Russia, two concessions (Krasnodar Water Utility and Tyumen Water Utility) and a lease contract for Krasnokamsk Water Utility were implemented. In Slovak Republic, two lease contracts were granted for water utilities in Banska Bystrica and Poprad.
- **In Latin America**, there were two new contracts: a concession for Cucuta Water Utility in Colombia, and a sewerage treatment plant in Colima, Mexico. The level of activity was the lowest in the region since the early 1990s.
- **In the Middle East and North Africa**, private activity took place just in Oman, with a five-year management contract for wastewater services in the capital city of Muscat.
- **In Sub-Saharan Africa**, private activity was limited to one management contract and a lease contract. The management contract was for Maluti-a-Phofung water service provision in South Africa. The lease contract was in Senegal: Senegalaise des Eaux was awarded a five-year extension of the ten-year lease contract, initially granted in 1996.

Potential new projects: In addition to the 48 implemented projects, at least 11 water contracts were awarded in 2006, but did not reach financial closure or were not signed by December of that year. Among those contracts are a 30-year public-private partnership to treat 100 percent of the wastewater in the city of Rio Claro in Brazil's Sao Paulo state; a management contract for Kathmandu's water utility in Nepal; three management contracts for water utilities in the Algerian cities of Oran, Constantine, and Annaba; and six treatment plants in Algeria.

Cancelled and distressed projects: In 2006, the number of cancelled and distressed private water contracts grew by 11 projects, totaling 54 water contracts cancelled by 2006. That was 10 percent of all water projects and over 30 percent of committed investment in 1990-2006. The contracts cancelled in 2006 were: Elsaban Water Concession (Albania), Aguas Argentinas (Argentina), Aguas del Gran Buenos Aires (Argentina), Aguas provinciales de Santa Fe (Argentina), Aguas Tratadas de Xalapa (Mexico), Aguas de la Costa (Uruguay), Rayong Waterworks (Thailand), and four treatment plants in China (Shanghai Fengxian Saur Water, Xianyang Water Treatment Plant, Xiao Shun Jiang Water Project, and Zhuozhou Sewage Treatment Plants).

Concluded projects: Four water utility contracts concluded in 2006: three management contracts (South African Johannesburg Water, Lebanese Tripoli Water, Jordanian Amman Water Treatment and Distribution), and a concession (Brazilian Mirassol Water and Waterwaste System). So far, there are plans to award a new contract only for the Brazilian utility.

See list of projects by region in the text page.

Summary table of water projects involving private participation by region, 2006

Note: ".." denotes missing data, "n.a." stands for not applicable.

| East Asia and Pacific | | | | | | | | | | |
|-----------------------|---------|------------------------|--|----------------|-----------------|---|---------------------------------------|----------------------------------|----------|---|
| | Country | Financial closure year | Project name | Project status | Sub-sector | Type/subtype of private participation | Investment commitment (US\$ millions) | Capacity type | Capacity | Sponsor |
| 1 | China | 2006 | Anhui Xiuning County Wastewater Treatment Plant | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 10 | Cubic meters per day (thousands) | 40 | Shanghai Fudalefumen Environmental Protection Engineering Co. Ltd. (100% / China) |
| 2 | China | 2006 | Beijing Underground Waste Water Treatment Facility | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 13.8 | Cubic meters per day (thousands) | 40 | Bio-Treat Technology (100% / China) |
| 3 | China | 2006 | Caijiabo Wastewater Treatment Plant | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 7.5 | Cubic meters per day (thousands) | 50 | CNA Group (51% / Singapore) |
| 4 | China | 2006 | Changshu Water Supply Company Ltd. | Operational | Utility | Management and lease contract/ Lease contract | 0 | Cubic meters per day (thousands) | 648 | SUEZ (25% / France), New World Infrastructure (25% / Hong Kong, China) |
| 5 | China | 2006 | Chongqing Wastewater Treatment Plant | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 37.6 | Cubic meters per day (thousands) | 302 | SUEZ (25% / France), New World Infrastructure (25% / Hong Kong, China) |
| 6 | China | 2006 | Dengzhou City Wastewater Treatment Plant | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 40 | Cubic meters per day (thousands) | 30 | Sinomem Technology Ltd. (100% / Singapore) |
| 7 | China | 2006 | Deqing Potable Water Treatment Plant | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 20 | Cubic meters per day (thousands) | 104 | Darco (100% / Singapore) |
| 8 | China | 2006 | Fengtai County Water Supply Facility | Operational | Treatment plant | Greenfield project/ Build, own, and transfer | 17.8 | Cubic meters per day (thousands) | 104 | Shanghai Excellent Trade Co. (50% / China), Asia Environment Holdings Limited (35% / Singapore) |
| 9 | China | 2006 | Ganyu County Sewerage Treatment Facility | Operational | Treatment plant | Greenfield project/ Build, own, and transfer | 48.5 | Cubic meters per day (thousands) | 20 | Zou Ben Qiang (23% / China), Goldis Bhd (78% / Malaysia) |

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|----|-------|------|--|--------------|-----------------|--|-------|----------------------------------|-----|---|
| 10 | China | 2006 | Haining City Water Treatment Plant | Operational | Treatment plant | Concession/ Build, rehabilitate, operate, and transfer | 6.8 | Cubic meters per day (thousands) | 360 | Salcon Bhd (60% / Malaysia) |
| 11 | China | 2006 | Henan Jiaozuo Wastewater Treatment Plant (Phase one) | Operational | Treatment plant | Concession/ Rehabilitate, operate, and transfer | 15 | Cubic meters per day (thousands) | 100 | Chongqing Kangda Environmental Protection Co. Ltd. (100% / China) |
| 12 | China | 2006 | Henan Jiaozuo Wastewater Treatment Plant (Phase two) | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 24 | Cubic meters per day (thousands) | 150 | Chongqing Kangda Environmental Protection Co. Ltd. (100% / China) |
| 13 | China | 2006 | Henan Shangqiu Wastewater Treatment Plant (Phase one) | Operational | Treatment plant | Concession/ Build, rehabilitate, operate, and transfer | 11 | Cubic meters per day (thousands) | 80 | Chongqing Kangda Environmental Protection Co. Ltd. (100% / China) |
| 14 | China | 2006 | Ji'an Luozishan Wastewater Treatment Plant | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 0 | Cubic meters per day (thousands) | 80 | Sinomem Technology Ltd. (100% / Singapore) |
| 15 | China | 2006 | Jilin Siping City Wastewater Treatment Plant | Operational | Treatment plant | Concession/ Rehabilitate, operate, and transfer | 19 | Cubic meters per day (thousands) | 90 | Sinomem Technology Ltd. (100% / Singapore) |
| 16 | China | 2006 | Jingzhou City Water Treatment Plant | Operational | Treatment plant | Concession/ Rehabilitate, operate, and transfer | 16.2 | Cubic meters per day (thousands) | 100 | China Water Affairs Group Ltd (51% / Hong Kong, China) |
| 17 | China | 2006 | Langfang City Water Treatment Project | Construction | Treatment plant | Concession/ Build, rehabilitate, operate, and transfer | 18.9 | Cubic meters per day (thousands) | 121 | Hyflux (41% / Singapore), Ramatex Group (60% / Malaysia) |
| 18 | China | 2006 | Liaoyang City Recycled Water Supply | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 9.7 | Cubic meters per day (thousands) | 30 | Hyflux (50% / Singapore), Ramatex Group (50% / Malaysia) |
| 19 | China | 2006 | Liuzhou Water Services | Operational | Treatment plant | Management and lease contract/ Lease contract | 432.5 | Cubic meters per day (thousands) | 455 | Veolia Environnement (51% / France) |
| 20 | China | 2006 | Lv Liang City Water Reservoir and Piping Network | Construction | Treatment plant | Greenfield project/ Build, own, and operate | 32.1 | Cubic meters per day (thousands) | 40 | Asia Water Technology (100% / Singapore) |
| 21 | China | 2006 | Ning Jin County Waste Water Plant | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 4.2 | Cubic meters per day (thousands) | 30 | CNA Group (26% / Singapore) |
| 22 | China | 2006 | Shandong Linyi Nanfang New District Wastewater Treatment Plant | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 0 | Cubic meters per day (thousands) | 80 | Chongqing Kangda Environmental Protection Co. Ltd. (..% / China) |

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|----|-------------|------|--|-------------------------------|-----------------|--|-------|-----------------------------------|-----|---|
| 23 | China | 2006 | Shandong Wendeng Dashiupo Town Water Plant | Operational | Treatment plant | Greenfield project/ Build, own, and transfer | 1.5 | Cubic meters per day (thousands) | 10 | Weihai Dean Water Engineering Co. Ltd. (100% / China) |
| 24 | China | 2006 | Suzhou Wastewater Treatment Facility | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 62.7 | Cubic meters per day (thousands) | 150 | Bio-Treat Technology (100% / China) |
| 25 | China | 2006 | Suzhou Wastewater Treatment Plant | Operational | Treatment plant | Concession/ Build, own, and transfer | 10 | Cubic meters per day (thousands) | 80 | Chongqing Kangda Environmental Protection Co. Ltd. (100% / China) |
| 26 | China | 2006 | Tianchang City Water Plant | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 11 | Cubic meters per day (thousands) | 100 | Long Quan Group (100% / Malaysia) |
| 27 | China | 2006 | Tianjin Muncpal Water Treatment Plant | Operational | Treatment plant | Greenfield project/ Build, own, and transfer | 2 | Cubic meters per day (thousands) | 20 | China Water Group, Inc. (100% / China) |
| 28 | China | 2006 | Tongliao Wastewater Treatment Plant | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 13 | Cubic meters per day (thousands) | 100 | Beijing Sound Environment Industry Group (77% / China) |
| 29 | China | 2006 | Wuhan City Waste Water Treatment Facility | Operational | Treatment plant | Concession/ Build, own, and transfer | 0 | Cubic meters per day (thousands) | 0 | Bio-Treat Technology (100% / China) |
| 30 | China | 2006 | Xiangfan Xiangcheng Guanyinge Wastewater Treatment Plant | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 13 | Cubic meters per day (thousands) | 100 | Beijing Sound Environment Industry Group (100% / China) |
| 31 | China | 2006 | Zhangzhu Town Waste Water Treatment Plant | Canceled | Treatment plant | Management and lease contract/ Lease contract | 2 | Cubic meters per day (thousands) | 10 | Asia Environment Holdings Limited (..% / Singapore) |
| 32 | China | 2006 | Zhejiang Lishui Yunhe Wastewater Treatment Plant | Construction | Treatment plant | Greenfield project/ Build, own, and transfer | 0 | .. | .. | Hans Technologies (100% / United States) |
| 33 | Philippines | 2006 | Maynilad Water Services (second privatization) | Operational | Utility | Concession/ Build, rehabilitate, operate, and transfer | 503.9 | Number of connections (thousands) | 537 | DM Consunji Inc. (42% / Philippines), First Pacific (42% / Hong Kong, China) |
| 34 | Thailand | 2006 | Rayong Waterworks | Distressed/ Intl. Arbitration | Utility | Concession/ Build, rehabilitate, operate, and transfer | 18.8 | Number of connections (thousands) | 44 | Eastern Water Resources Development and Management Public Co. Ltd. (East Water) (100% / Thailand) |

| Europe and Central Asia | | | | | | | | | | |
|-------------------------|--------------------|------------------------|--|----------------|------------|---|---------------------------------------|-----------------------------------|----------|---|
| | Country | Financial closure year | Project name | Project status | Sub-sector | Type/subtype of private participation | Investment commitment (US\$ millions) | Capacity type | Capacity | Sponsor |
| 1 | Czech Republic | 2006 | Prostějov Water Company | Operational | Utility | Management and lease contract/ Lease contract | 0 | Number of connections (thousands) | 17.5 | Veolia Environnement (100% / France) |
| 2 | Czech Republic | 2006 | Slany water and wastewater | Operational | Utility | Management and lease contract/ Lease contract | 0 | Number of connections (thousands) | 5.2 | Veolia Environnement (100% / France) |
| 3 | Hungary | 2006 | The Erd region water management contract | Operational | Utility | Management and lease contract/ Management contract | n.a. | Number of connections (thousands) | 25 | Veolia Environnement (100% / France) |
| 4 | Poland | 2006 | Wozniky water services | Operational | Utility | Management and lease contract/ Management contract | n.a. | Number of connections (thousands) | 2.5 | Veolia Environnement (100% / France) |
| 5 | Russian Federation | 2006 | Krasnodar Water Utility | Operational | Utility | Concession/ Rehabilitate, operate, and transfer | 110 | Population (thousands) | 710 | Alfa Group (100%/ Russian Federation) |
| 6 | Russian Federation | 2006 | Krasnokamsk Water Utility | Operational | Utility | Management and lease contract/ Lease contract | 0 | Population (thousands) | 53 | Russian Utility Systems (RKS) (100% / Russian Federation) |
| 7 | Russian Federation | 2006 | Tyumen Water Utility | Operational | Utility | Concession/ Rehabilitate, operate, and transfer | 168 | Population (thousands) | 511 | Alfa Group (100%/ Russian Federation) |
| 8 | Slovak Republic | 2006 | Banska Bystrica water and wastewater | Operational | Utility | Management and lease contract/ Lease contract | 13.6 | Population (thousands) | 81.7 | Veolia Environnement (100% / France) |
| 9 | Slovak Republic | 2006 | Poprad water and wastewater | Operational | Utility | Management and lease contract/ Lease contract | 0 | Population (thousands) | 55.2 | Veolia Environnement (100% / France) |

| Latin America and the Caribbean | | | | | | | | | | |
|---------------------------------|----------|------------------------|--|----------------|-----------------|---|---------------------------------------|-----------------------------------|----------|---|
| | Country | Financial closure year | Project name | Project status | Sub-sector | Type/subtype of private participation | Investment commitment (US\$ millions) | Capacity type | Capacity | Sponsor |
| 1 | Colombia | 2006 | Aguas Kpital de Cucuta | Operational | Utility | Concession/ Rehabilitate, operate, and transfer | 305 | Number of connections (thousands) | 130 | Aguas Kpital (75% / Cuba) |
| 2 | Mexico | 2006 | Colima municipality wastewater treatment plant | Operational | Treatment plant | Greenfield project/ Build, own, and transfer | 25 | Cubic meters per day (thousands) | 69 | Tecnologica Intercontinental (100%, Mexico) |

| Middle East and North Africa | | | | | | | | | | |
|------------------------------|---------|------------------------|----------------------------|----------------|------------|--|---------------------------------------|------------------------|----------|--------------------------------------|
| | Country | Financial closure year | Project name | Project status | Sub-sector | Type/subtype of private participation | Investment commitment (US\$ millions) | Capacity type | Capacity | Sponsor |
| 1 | Oman | 2006 | Muscat Wastewater Services | Operational | Utility | Management and lease contract/ Management contract | n.a. | Population (thousands) | 700 | Veolia Environnement (100% / France) |

| Sub-Saharan Africa | | | | | | | | | | |
|--------------------|--------------|------------------------|--|----------------|------------|--|---------------------------------------|-----------------------------------|----------|---|
| | Country | Financial closure year | Project name | Project status | Sub-sector | Type/subtype of private participation | Investment commitment (US\$ millions) | Capacity type | Capacity | Sponsor |
| 1 | Senegal | 2006 | Senegalaise des Eaux second lease | Operational | Utility | Management and lease contract/ Lease contract | n.a. | Number of connections (thousands) | 428 | Bouygues (57.8%, France) |
| 2 | South Africa | 2006 | Maluti-a-Phofung water service provision | Operational | Utility | Management and lease contract/ Management contract | n.a. | Number of connections (thousands) | 59 | Amanz' aBantu Services (.. / South Africa), Water and Sanitation Services South Africa (WSSA) (.. / South Africa) |