



Water – Monthly Theme Update

January 2010

Sewage treatment in China

Similar technologies, but different business performance

During a tour of China in September 2009, SAM's water utilities analyst had the opportunity to visit many Chinese companies, some of them active in the field of wastewater treatment

Technologies



China Everbright International's sewage clarification basin in Jinan

- The processes and technologies for treating sewage in China are similar to those used in Europe and are based on plant and processes developed by international companies such as Trojan, Andritz, Air Blower, Flottweg, Alfa Laval, Toshiba and ITT
- The extent of sewage treatment depends on the intended use of the end product. A high proportion – up to 60% - of wastewater is recycled, especially in Northern China, and is used for irrigation, manmade sewers and toilet flushing. UV radiation and chemical processes are employed to disinfect the wastewater.
- Biogas is only produced in larger plants and is used to generate electricity in-house. Such production is not very common, as Chinese sewage does not contain very high levels of fat.

Business performance

- The most successful companies are those still under 50% state ownership which work closely with the authorities. Other key criteria: a full project pipeline, access to capital, strong operating performance, general contractor, use of innovative technologies, growth in line with the market
- Growth markets: central and western China
- Biggest private companies: Veolia, Beijing Capital, Beijing Enterprise Water
- Revenues from the sewage treatment business derive from wastewater charges gathered by an authorized “collector” along with the fees for the drinking water supply. The collector then hands the money to the local authority, which in turn gives it to the sewage plant operator. With this system, it can take up to 6 months for the company to actually bank the revenues.

Company: Beijing Enterprise Water

Wastewater treatment

Employees:	1'403
Figures in HKD million 30.06.2008	
Total revenue:	11
Net profit:	-9
Market cap. (31.01.10):	8'810

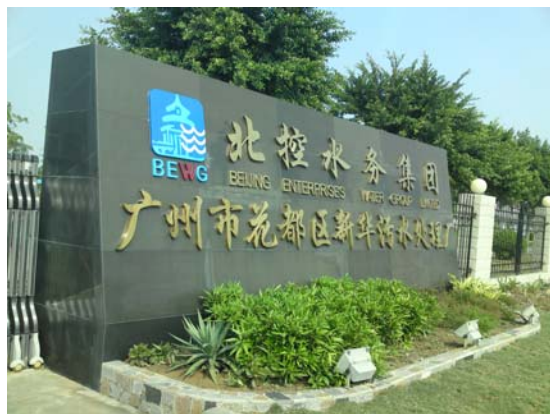
Source: Bloomberg

Company description

- Beijing Enterprise Water (BEW) operates 24 sewage treatment plants and 6 drinking water purification plants in 11 Chinese provinces, making it one of the country's top five water supply and wastewater treatment companies. In 2008 it acquired ZKC, BEW's research arm, which now manages most of the projects.
- BEW also acts as a general contractor (EPC) in both China and abroad
- In strategic terms, BEW wants to be active in every stage of the water industry's value chain, i.e. the construction and operation of reservoirs, preparing simple untreated water, sewage collection & clarification, and treatment of sewage sludge. The company has no plans to get involved in the supply of drinking water.
- The government owns a 57% stake in BEW.

Analyst's opinion

- Wastewater treatment is a growing business in China. The government's 5-year plan sets a target of 70% of municipal sewage being treated by 2010.
- BEW is ideally positioned to grow in line with the market. It has achieved a critical mass, has a presence in many provinces, boasts a strong operating performance, enjoys discounted bank loans, acts as a general contractor and has won a prestigious 5-year contract to build all the remaining Malaysian sewage treatment plants (brokered by the Chinese government).
- The company is also active in central China, in the provinces where growth will be more dynamic than in the coastal provinces.
- BEW's target: 11 million m³/d compared with 5 million at present. Since previous targets have been exceeded, it is quite feasible that BEW will actually achieve them
- Asset injection is expected from the parent company. Equity will presumably be needed for this.



Source: SAM

Investment Strategy Water

Theme View:

- Major Chinese cities have already and will further increase rates for waste water treatment to finance the needed investments in new plants and infrastructure.
- Regulation turned negative in the Brazilian state of Minas Gerais. The water utility was not able to get the increase in water prizes approved.
- British water utilities outperformed after authority OFWAT released the final decision about the water prices in UK and some rumors about possible merger & acquisitions reached the market.
- Reuse of water will grow faster than desalination as this technology is more affordable.

Portfolio Implications:

- Companies benefiting from the growth opportunities in the Chinese water market are overweight. However, stock selection becomes more important after stock prices of Chinese companies increased significantly.
- Reduced exposure to Brazilian water utilities as there is a lot of uncertainties in further approvals of water prices, especially in Minas Gerais.
- British water utilities are attractive and are neutral weighted in the portfolio.
- The fund is overweight in companies which supply technology for reuse of water such as Danaher or ITT.

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