

Private players eye UAE water market

- Published: 15:00 June 3, 2010



- Dewa has given the go-ahead for private-public partnerships and is inviting foreign investment for the delayed Hassyan project - the UAE's first private sector plant commissioned by the authority. Dewa is now in negotiations to assign a consultant who will draw up a framework strategy for the privatisation and the consultant will be named this month.
- Image Credit: Gulf News Archive

Dubai: Private utilities companies and environmental analysts, thirsting to tap into the water market, are calling for greater privatisation of water provision services in the UAE.

"Definitely, this is the way to go in future. This is a trend in the UAE and GCC," said Emmad Haffar, managing director of Palm Water, a company under Palm Utilities.

"Definitely in the future there will be a greater direction towards private-public partnerships (PPP) under which the private companies will assist the government in finding solutions for water cooling and desalination and a whole scope of water projects."

Government bodies such as the Dubai Electricity and Water Authority (Dewa), have already jumped on this bandwagon.

"It is part of Dewa's strategy to partner with the private companies. It is market driven, the market is pushing towards this," said Dewa vice-president of Strategy and Business Development Waleed Al Salman.

"In all utilities in future you will find interaction from the partnership point of view between public and private and also encourage foreign investment from outside."

Al Salman said Dewa gave the go-ahead for private-public partnerships and inviting foreign investment for the delayed Hassyan project — the UAE's first private sector plant commissioned by the authority.

Privatisation framework

The authority is now in negotiations to assign a consultant who will draw up a framework strategy for the privatisation. The consultant will be named this month, he said.

The Hassyan project will cost approximately Dh8-Dh10 billion to generate 1,500 megawatts and 120 million gallons of water per day, he said.

"If we go with EPC, we will find one or two. There's no interest. Mostly the business model goes with independent private development," Al Salman said.

"We will benefit: We share the investment, attract technology and know-how to the region. It is more efficient with the private sector."

Abu Dhabi is already partnering with private German and Japanese companies for research and development on using renewable energy in desalination, according to Mohammad Dawoud, manager of the Water Resources Department at the Environment Agency Abu Dhabi.

The capital has invested in units for solar power desalination plants in remote areas, with one unit in Qasr Al Sarab and another in Al Ain, he said.

Mohammad Abdul Rauof, programme manager of Environment Research at the Gulf Research Centre, stated that the private sector has an "important role to play" as the market grows.

He said private projects, under close government control and monitoring, will ease the burden on authorities and allow them to concentrate on reforming and monitoring water policies.

While recommending privatisation of some water services, Dawoud noted that government monitoring is essential. Leaving utilities completely to the private sector could lead to high prices, questionable quality, and insufficient quantity, he said.

The UAE is expected to increase desalination capacity by 76 per cent to 14.1 million cubic metres a day by 2016, according to a recent study by Japanese investment bank Nomura Securities.

This comes amid expectations that the UAE's natural water resources are expected to shrink by 16 per cent in the next decade. In attempts to meet rising water demand in one of the world's driest regions, the GCC power generation and desalination sector is facing a record capacity-building programme over the next decade.

Given the growing role of private developers in this sector, the biggest challenge for utilities may well not be building capacity but securing ways to fuel it.

For with new gas allocations at a premium in most nations in the region, the GCC is increasingly turning to alternative energy the MEED Insight report said.

The region's first coal-fired power plant could be commissioned in Oman in 2015 and will be followed two years later by its first nuclear power station in the UAE, according to the report.

In other Arab countries, the privatisation of water procurement projects is already underway. Egypt recently approved a new law concerning the procurement of projects under the PPP models in the country.

This clears the way for a pipeline of potable water treatment and desalination projects to be tendered on a privately financed basis over the next two years, according to Egypt's PPP Central Unit.

The Ministry of Housing, Utilities and Urban Development and its subsidiary organisations will continue to lead these new projects on the client side.

In Qatar, a consortium led by Mumbai-based Larsen & Toubro has won a 691.2 million Qatari riyal (Dh696.7 million) contract to design and build an expansion to the Doha South wastewater treatment plant.

In the Ras Azzour desalination tender in Saudi Arabia, the low bidder was an ACWA Power Sasakura/Samsung Engineering/Degrémont consortium with a cost per cubic metre per day of capacity of \$1,846, according to a Global Water Intelligence (GWI) report, giving private companies a competitive financial edge.

Comparing the public and private models for procurement projects, the GWI report highlights the advantages of privatisation.

"The problem with the public procurement model is that it is difficult for a public procurement agency and its engineering advisors to determine at the outset what plant specifications will deliver the lowest cost of water over a 20-year period," the report said.

"Instead, they tend to set a number of quality and performance criteria and leave the bidder teams to come up with the best price which meets these conditions. It leaves very little room for creativity," it added.

"By contrast, a private developer can work closely with its chosen contractor to devise the configuration of the plant which will deliver the cheapest water over the lifetime of the contract," the report said.

"In some cases this may mean that inferior parts or materials are used, but it is the developer, rather than the public sector client, who is taking the risk on poor performance."

The scale of the savings on the engineering, procurement and construction (EPC) contract, combined with the risk transfer and lower operating costs associated with a private finance model, are likely to outweigh the lower capital costs that the public sector is said to enjoy.

This is the reason nearly half of all major desalination plants are now procured on a privately financed basis, the report said.

Public agency risk

The report predicted that the trend towards private finance will likely continue as the risk associated with lending to public bodies increases. A private developer supplying a public water agency is a better credit risk than the public agency itself because the private developer has better security, the report explains.

"If you lend money to a public water agency which defaults, all you can do is complain about it. You have no security. If you sell water to a public water agency which doesn't pay for it, you can turn off the tap," the report notes.

But others are wary of water privatisation efforts.

The United Nations High Commissioner for Human Rights is working on a proposal to introduce a human right to water, which may be worded so as to restrict private sector participation in the industry.

Independent investigator Catarina de Albuquerque has been appointed to look into the role of the private sector in the human right to water.

Jack Moss of Aquafed, the International Federation of Private Water Operators, said it is hard to imagine the commercial consequences on future tendering processes, if there are high-level UN statements questioning the compatibility of private businesses with human rights.

Bahrain takes initiative to pipe cooled water

The Tabreed Northshore District Cooling project in Bahrain, the first of its kind in the country, has reached a milestone with the completion of two 87-metre micro-tunnels under a highway in Manama.

The pipes will carry district cooling water from the Diplomatic Area chiller plant to the Bahrain Financial Harbour, Reef Island, and other northshore developments.

The Diplomatic Area chiller plant, which is nearing completion, will supply chilled water to the Bahrain World Trade Centre and other developments on the south side of King Faisal Highway.

The project will provide a network of chilled water and cooling to Manama's densely populated urban areas, significantly reducing the cost of providing air-conditioning to offices, residential towers and shopping malls.

Air conditioning is a major component of energy usage and analysts estimate that nearly 70 per cent of all energy within the Gulf region is used for cooling buildings.

The new project is expected to be completed this summer and will supply 22,800 metric tonnes of chilled water per day to Bahrain's growing population.

In separate developments, Oman is installing 24 mobile water desalination units to supply 22.7 million litres of water to Muscat's residents daily.

Located just outside Muscat, the units will be supplying nearly 10 per cent of the daily potable water needs of one million residents in the Omani capital.

Septech, a regional water infrastructure company, was appointed by the Public Authority for Electricity and Water (PAEW) to instal what they claim are the world's largest mobile desalination units.

Structure of plant

The structure of the plant, a series of pre-engineered and manufactured Sea Water Reverse Osmosis containers, also allow for rapid deployment as per PAEW's requirements.

"The really unique thing about this system is that it can be reconfigured for use in a variety of ways after it has served its purpose in Muscat," said Septech chief executive officer David Heffernan.

"In the currently planned format, we'll be using 24 systems to convert 60 million litres of sea water into 22.7 million litres of drinking water. But once the city of Muscat's growing needs are met by the expansion of the permanent facility, these units could be split up to supply the water needs of several remote communities with smaller populations."

Heffernan noted that there is a demand for water solutions across the GCC region, Pakistan, and Australia.

Factbox

Global challenge

- 300 million people get their water from the sea or from brackish groundwater that is too salty to drink. This figure is double the number a decade ago.
- By 2016, new desalination plants may add up to 13 billion gallons a day to the global water supply.
- 16 million gallons of water are produced daily by the world's 14,450 desalination plants. Gulf countries rely mostly on seawater.
- Desalination took off in the 1970s in the Middle East and has since spread to 150 countries.
- Desalination meets 98 per cent of the UAE's water needs

- The UAE is the biggest producer of desalinated water in the world, producing 1.7 billion cubic metres a year from more than 30 plants. Second is Saudi Arabia with 1.2 billion cubic metres a year, followed by Kuwait with 0.6 billion, according to a 2009 report by the Water Commission in Riyadh.
- The GCC produces 4.2 billion cubic metres a year, according to the report.
- The Middle East accounts for over 50 per cent of the world's desalinated sea water.
- Home to 6.3 per cent of the world's population, the Middle East contains only 1.4 per cent of the world's renewable fresh water.
- 97.5 per cent of the water on Earth is salty.
- 2.5 per cent of the water on Earth is fresh but about two-thirds of it is frozen. The rest of it is liquid surface water and groundwater.
- 12 of the world's water-scarce countries (those with less than 1,000 cubic metres of renewable fresh water per person per year) are in the Middle East and North Africa (Mena). They include Algeria, Tunisia, Libya, Jordan, Qatar, Saudi Arabia, Yemen, Oman, the UAE, Bahrain and Kuwait.