

## MIDDLE EAST IN BRIEF

- Abu Dhabi's national energy company, **TAQA**, saw income from its power and water division rise 13% to AED1.7 billion (\$453 million) year-on-year in the first quarter of 2011. The commissioning of the Fujairah 2 IWPP added to the rise at TAQA, which owns stakes in eight IWPPs in the Middle East. Total revenue for the quarter was AED5.5 billion (\$1.5 billion).

- Dubai-based developer and operator **ACWA Emirates** has been awarded two contracts to construct water and wastewater projects in Saudi Arabia. One plant will produce 11,000m<sup>3</sup>/d of water for irrigation at the Princess Noura Bint Abdul Rahman University for Women in Riyadh. The other will treat and reuse 12,000m<sup>3</sup>/d wastewater through MBR technology in Al Shumaisi.

- The Dubai Municipality has set up a joint venture with Japan's **Hitachi Plant Technologies** to carry out a feasibility study into using treated sewage water to recharge underground aquifers. It comes less than a year after neighbouring emirate Abu Dhabi started work on a scheme transporting water from one of its desalination plants to the inland Liwa aquifer.

- The **Oman Power and Water Procurement Company** has said there it expects there to be new desalination capacity commissioned at the Barka and Sohar sites within the next few years. It is set to launch a study shortly to look into procurement procedures after announcing its power and water requirements for the coming seven-year period.

- Prequalification for the desalination strand of the Yanbu 3 power and water plant in Saudi Arabia has been further extended to 3rd July this year. The **Saline Water Conversion Company** opened the qualifying process for the EPC contract for the 550,000m<sup>3</sup>/d thermal plant in May 2010, but it has been held back on several occasions when specifications for the project were changed.

- The financial backers of the Muharraq wastewater BOT in Bahrain have adjusted their deadline for financial close by three months after the project was disrupted by unrest in the island country. **Natixis**, **Credit Agricole** and **SMBC**, along with export credit agency **Kexim**, now aim to reach financial close on the 100,000m<sup>3</sup>/d project by July this year.

## COMMENT

## Water in 'start-up nation'

Tom Scotney looks at how Israel is bridging the commercialisation gap for new technology companies in the water sector.

On a recent trip to Israel with some representatives of the global environmental press, the biggest topic for discussion was the book *Start-Up Nation: The story of Israel's economic miracle*, a few copies of which had found their way into the hands of the journalists there.

The book claims that the combination of universal military service, strong universities and a national sense of *chutzpah* is making the country a hub for technology development, entrepreneurialism and attracting venture capital.

This certainly seemed to be the case in some of the technology companies looking for a start in the industry, with some impressive technologies on offer from a frighteningly young set of entrepreneurs. But despite the innovation on offer, getting water start-ups to commercialisation seems a tall order.

Water is big news in Israel, perhaps more so than anywhere else in the world. Picking up the newspapers every morning, the latest on rainfall, desalination and infrastructure is there on the front page, along with the war, politics and celebrity that makes up the news around the world.

And the government is keen to see the benefits of 'start-up nation' push forward the money coming into the country from abroad. According to Assaf Barnea, the CEO of water business incubator and capital fund Kinrot Ventures, Israeli exports into the global water technology sector currently bring in about \$2 billion in revenue a year. He believes this figure could eventually become \$10 billion a year, if new technologies are developed through to the market.

But new technology faces many hurdles on the way to the market in the water world. A long adoption process is matched with a conservative buyers market, and the fact that actual financial investment in water technology has still not matched up to the amount of interest shown.

Despite the money available for starters in water technology in Israel – Kinrot offers up to half a million dollars to the right firms – making the leap into commercial operation is still the big block.

Barnea sums his work up, saying: "Water technology and environmental technology take a long time to get going. This is R&D with a capital 'R'."

It's not as if the technologies being incubated at Kinrot don't have immediate financial implications. One start-up we met on the trip, Diffusair, claims to have aeration bubble technology that can cut in half the energy requirements of wastewater treatment plant aeration – a process that accounts for up to 1.5% of total national energy use in Western countries.

Some may not even think of the water industry as an opportunity when it comes to enterprise. David Solomon is CEO of Aquarius Spectrum, an acoustic leakage detection start-up spun off from technology developed during his time in the army, and now being developed under the aegis of Kinrot. Solomon had not considered the water sector before being approached by Kinrot and offered funding to pursue his technology for use in water distribution.

One startup that has managed to lever a way into the market is network management software specialist TaKaDu, which has continued to grow, most notably with the contract to reduce leakage in the Thames Water network in London. But having a software service that can sit on top of existing technology makes it a sight easier to market than something that would require a lengthy installation process. Even so, they company has found it a prudent market tactic to offer free trials to companies thinking of using the technology – not an option for the majority of new technologies.

Given all the trouble water technology companies face in getting to the market, the support they get in Israel seems to be as good as any, with the work of the universities, and organizations like Kinrot Ventures. It made a serious breakthrough earlier this year when Hong Kong-based Hutchison Water agreed to a deal that would see it put up to \$2.5 million into Kinrot start-up TACount. Countries looking to develop their own water technology exports could learn a lot from the incubation/investment model.