

Call to support reusable water initiatives

Every 1,000 litres of desalinated water results in 5.5kg of greenhouse gases, according to estimates. (FILE)



May 28, 2008

Private developers in the region should actively support reusable water initiatives and implement measures to save water and electricity and alleviate impending shortages, say experts.

Most GCC countries are undertaking massive construction projects but few developers have considered the demands they will create for power and water, according to Ghassan Ejje, former President and Director of the International Desalination Association.

The Middle East is set to spend billions upgrading its water and electricity infrastructure. The World Energy Council estimates investment in electricity generation and water desalination projects in the region will top \$120 billion (Dh440bn) by 2012.

Demand for drinking water is expected to increase from 3.9 billion cubic metres in 1999 to 8.8 billion cubic metres by 2010. The six GCC states have collectively spent more than \$40bn on building 550 desalination plants over the past 25 years.

But Safraz Dairkee of the Emirates Green Building Council, said the private sector would have to play its part in helping to meet soaring demand by investing in

sewage treatment plants and reusing water.

"We cannot expect the government alone to handle the requirements any more," he said. "The growth has been so fast and with our water consumption rate being among the highest in the world there is a need for private parties need to pitch in, especially when it comes to sewage treatment.

"There are three benefits to this. Firstly it will save a lot of power, secondly it will reduce the burden on the Al Aweer treatment plant – which is running to twice its capacity – and finally it will reduce greenhouse gases.

"Every 1,000 litres of desalinated water results in 5.5kg of greenhouse gases. Therefore it is essential for more and more people to invest in sewage treatment plants and reuse water."

The plant at Al Aweer has come under severe strain, forcing developers to initiate steps to construct their own treatment plants. A plant with a capacity of 25,000 cubic metres per day is to be built at the Burj Dubai, while Nakheel has announced plans to build facilities at Jumeirah Golf Estates, International City, the Palm Jumeirah and Sports City.

Ejjeh added: "There is a need for massive private investment even as efforts are made to explore renewable sources. Construction projects worth billions are under way in the Northern Emirates and without adequate water, electricity and sewerage treatment plants I don't know how all these major developments can progress.

"There are construction works going on that will create instant towns with more than 820,000 people in Ajman and Umm al Quwain.

"Even if the money is available there is a lack of available resources to produce power and when this is coupled with a shortage of equipment, resources and gas it becomes even more difficult."

Ejjeh said many completed buildings in Ajman and Sharjah were yet to be released due to a lack of electricity and water connections.

"The problem has been that several developers did not think about the shortage of power before they started work. Many of them just assumed the Sharjah or federal authorities would do some sort of magic, but I am not sure how much they can do. The result has been a huge increase in development without adequate planning."

All the emirates apart from Abu Dhabi are facing power shortages, with the problem most acute in the Northern Emirates. Ejjeh said the Sharjah and federal utilities were burning liquid fuel to maintain production levels.

"Although the first phase of the Dolphin project to supply natural gas from Qatar is operational, creating some relief, there has been no progress on Crescent

Petroleum's deal with Iran," added EjjeH.

Sharjah-based Crescent in 2001 signed a 25-year deal with the National Iranian Gas Export Company to buy gas from the offshore Salman field. The gas was to be pumped to Sirri Island and distributed to Dubai and Sharjah. Crescent had expected the first deliveries of gas in mid-2006. The pipeline and gas processing plants in UAE waters have long been complete, but no gas is being supplied from Iran following a dispute.

Referring to the shelving of the Salam City project in Umm Al Quwain, EjjeH said the Sharjah Electricity and Water Authority (Sewa) had declared it was unable to supply water and electricity for the development.

Imdad – a joint venture between Saudi-based Al Rajhi Investment Group and the Government of Umm Al Quwain – decided to build a desalination plant, but was unable to proceed because it could not obtain sufficient electricity to carry out the construction work. Meanwhile Gerhard Gleissner, Managing Director of the Abu Dhabi Water and Electricity Company, told Emirates Business yesterday the utility had been providing the Northern Emirates with some supplies to meet the basic needs of citizens.

"Last year we provided Dubai with 700MW and Sewa and Fewa with 400MW and 200MW respectively. This year we will be supplying Fewa with 400MW and Sewa with 200MW of power.

"While we can afford to cater to the basic needs there is no way we can supply power for all the upcoming developments in the Northern Emirates."