

## Bahrain unveils water masterplan



Bahrain has unveiled a master plan to ensure it always has water on tap and will pump hundreds of millions of dollars into improving and protecting its water supply over the next few years.

A new Water Resources Council will bring responsibility for the country's supplies under one management, to improve efficiency.

The government will also invest hundreds of millions of dollars in the next few years to further develop the water supply and sanitary sectors, said Works Minister Fahmi Al Jowder, who is also the Minister in Charge of the Electricity and Water Authority (EWA).

He was speaking in Singapore at the Middle East Business Forum, held as part of Singapore's International Water Week.

Al Jowder said Bahrain was reinforcing its close ties with Singapore, which has attained outstanding achievement in various areas related to water distribution leakage, water conservation and waste water management.

"In this context, we are signing a memorandum of understanding with our counterparts in Singapore which is intended to initiate projects that can provide practical solutions for some of the difficulties and problems that we are encountering in Bahrain and to benefit from Singapore's experience," he said.

The water sector in Bahrain is governed by three independently standing entities namely the EWA, the Works Ministry and the Municipalities and Agriculture Ministry, said Al Jowder.

The EWA is responsible for the provision and management of water supplies and services for the whole country, including supply of blended water of approved quality for potable water.

The waste water collection, treatment and production of treated sewage effluent is the responsibility of the Works Ministry.

The Municipalities and Agriculture Ministry is responsible for the management of ground water.

"The Bahrain government has realised this institutional gap in the management of these resources and a legislation in this regard will be passed shortly to establish the Water Resources Council," said Al Jowder.

"Through this important step in the institutional reform a closer interaction and a more integrated water resources management will be realised."

Despite these challenges, said Al Jowder, Bahrain has been able to provide potable water to 100 per cent of population.

The sanitation coverage has reached 88 per cent, and is targeted towards 100 per cent by 2015.

The average per capita consumption of water in Bahrain is high, at 440 litres per day, compared to 170 in Singapore, said Al Jowder.

At present, Bahrain's water chain comprises groundwater, desalinated water and treated sewage effluents.

Water desalination is a prime source of potable supplies.

More than 70 per cent of the total water supplies, including for agriculture, are obtained from the groundwater resources.

The average daily water supply in the EWA network has reached 110 million gallons per day, of which 20 per cent comes from groundwater abstraction. The total installed desalination capacity has reached 143m gallons per day.

"There are further plans to expand the present production facilities and it is anticipated that production level will reach 200m gallons per day upon completion of our present power and water expansion projects by 2011," said Al Jowder.

"In parallel, major expansion in the transmission and storage facilities are being carried out commensurate with water production expansion and target storage of three days."

The government has implemented a series of sanitary engineering projects for the different facilities of wastewater collection, treatment and disposal, the minister said.

Since the first availability of treated sewage effluent (TSE) in 1977, its production has been gradually increasing and it is expected to reach 450,000 cubic metres per day by 2015. -