

# Upsurge in firms using Newater

Cheaper than potable water,  
purer for some processes

■ BY AMRESH GUNASINGHAM

SIX years after its launch, Singapore's ultra-pure reclaimed water – Newater – continues to make a splash as a cheaper and cleaner alternative to potable water for companies seeking to improve their bottom lines.

A check of national water agency PUB's annual report for the year ending March shows more than 300 companies used piped Newater, spending close to \$66 million on it, compared to 24 companies using it when it was introduced in 2003.

The 300 were primarily in the retail, wafer manufacturing and petrochemical industries.

This translates to about 180,000 cu m of Newater used here every day – enough to fill 72 Olympic-sized swimming pools – an increase from the 27,000 cu m a day consumed in 2003.

There are two main reasons for indus-

tries turning to the high-grade water, reclaimed from passing used water through a series of membranes and ultra-violet radiation: purity and cost.

Cleaner than tap water, Newater is a valuable feedstock for wafer-fabrication plants and electronic companies, said the PUB.

It is cheaper too, priced at \$1 per cu m compared to \$1.52 per cu m for potable tap water, which carries a tax.

By escaping the tax, the 300 firms making heavy use of Newater saved close to \$39 million in the last financial year.

Mr Chong Hou Chun, director of PUB's water supply network, said companies stood to save up to 30 per cent on their water bills by switching to the reclaimed water.

Wafer fabrication plant Systems on Silicon Manufacturing, which was the first to make the switch to Newater in the manufacturing of integrated circuits

in 2003, saves \$700,000 annually from the 1.5 million cu m of Newater it uses, said its vice-president of corporate services, Mr Lee On Nam.

Retail group CapitaLand uses Newater at seven retail malls in air-conditioning cooling towers and fire sprinkler water tanks.

Said a spokesman: "We started to use Newater as the cost is lower compared to potable water and there is no water conservation tax."

Newater meets more than 15 per cent of Singapore's total daily water needs, a figure the PUB hopes to double next year as production increases.

The plants at present pump to industrial areas in Woodlands, Ang Mo Kio, Jurong, Tuas, Tampines and Pasir Ris, as well as the city.

A PUB spokesman said production at Singapore's four Newater plants in Ulu Pandan, Seletar, Kranji and Bedok had been ramped up to cope with the increasing demand.

A \$180 million plant in Changi built by SembCorp – the fifth and largest to date – will produce 228,000 cu m a day – enough to fill 91 Olympic-sized swimming pools once completed next year.

PUB will also progressively pump more of the reclaimed water into Singapore's reservoirs to meet about 2.5 per cent of total daily water consumption by 2011. The ultra-pure Newater is mixed with raw water in reservoirs to pick up essential minerals for the body that it lacks.

Dr Seetharam Kallidaikurichi, director of the Institute of Water Policy at the Lee Kuan Yew School of Public Policy, believes Newater will become a firm component of the "business cycle" here.

"The perception (of Newater) and its value to society has evolved. As it becomes cheaper to industries, they will no longer be competing for freshwater supplies, which are the more expensive commodity."

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