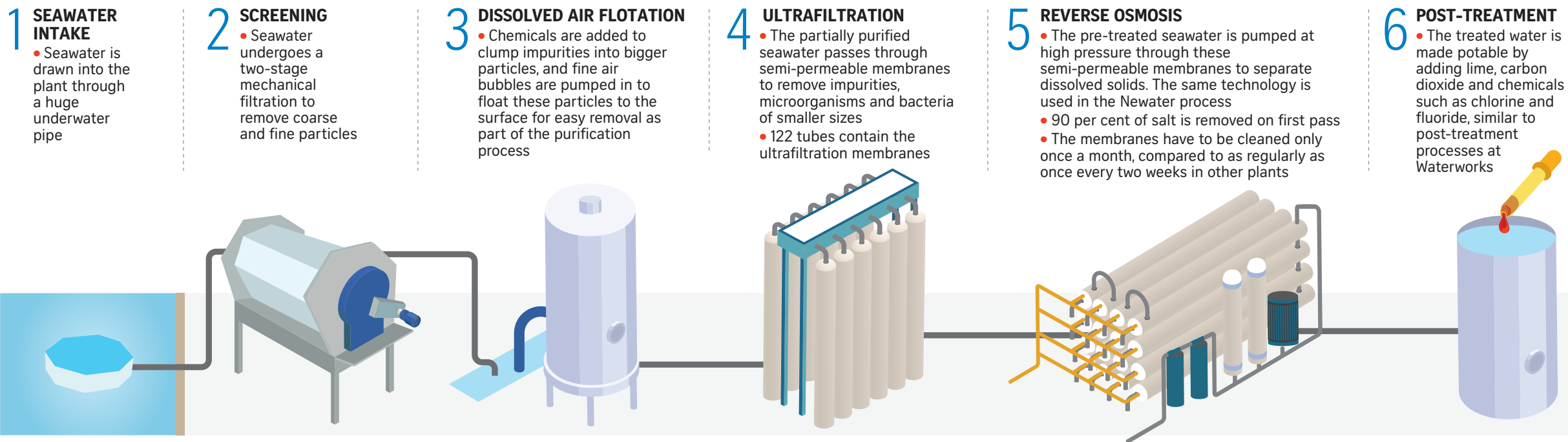


Most compact desalination plant

The \$217 million Tuas Desalination Plant officially opened yesterday, and this means 30 per cent of Singapore's water capacity can now come from desalination. The new facility can produce up to 30 million gallons of drinking water daily, and at 3.5ha is the most compact desalination plant in the country. The Straits Times looks at how the facility purifies seawater into drinking water.



DESALINATION PROCESS



BY THE NUMBERS

30mgd*
(136,000m³)

of drinking water each day; equivalent to the water demand of about 200,000 households

Compact footprint of about

3.5 ha

SOLAR PANEL

1.2MWp (megawatt peak) solar photovoltaic system on

55%

of the total roof surface area**

Generate **1.4 million kWh**

(kilowatt hours) of clean energy a year, sufficient for energy needs of the plant's admin building

ENERGY RECOVERY SYSTEM

50%

energy savings in the reverse osmosis desalination process and helps to keep the energy use for desalination to 3.5kWh per cubic metre

SUPPLY

2018

- Newater***

Up to

40%

OTHER SOURCES

- Water from local catchment
- Imported water

- Desalinated water***

Up to

30%

2060

- Newater***

Up to

55%

OTHER SOURCES

- Water from local catchment
- Imported water

- Desalinated water***

Up to

30%

*Million gallons a day **To be installed by end 2018 ***Percentage of demand