#### The 2018 Watermark Award recipients are:

### Singapore Refining Company Private Limited

Achieving water efficiency in an energy-producing sector



Following a water audit that was carried out to identify streams for recycling, Singapore Refining Company Private Limited built an on-site effluent treatment recycling plant (ETRP). Through ceramic microfiltration and reverse osmosis, removing suspended solids, oil, grease and other contaminants from the treated used water, the ETRP improves the water quality to NEWater standards for recycling purposes.



The recycled water is then reused in processes within SRC. The plant currently operates at 2,000m3/day, and can meet approximately 20% of SRC's NEWater demand. SRC's recycling rate is at 40%.

United Microelectronics Corporation (Singapore Branch) Water recycling drives water efficiency



Committed to environmental protection and water consumption reduction, and as a responsible corporate towards the community and the environment, United Microelectronics Corporation (UMC) (Singapore Branch) has the second highest water recycling rates in the wafer fabrication sector in Singapore at 61%, while the average for this sector is around 42%.



UMC's implementation of the second rinse recycling is commendable and has helped contribute to the high recycling rate. In 2015, the company built a Hydrofluoric (HF) wastewater treatment plant to treat its wastewater to required standards. Other water saving measures implemented by UMC include: recycling Air Handling Unit condensate water and use of recycled water at local scrubber systems.

# **Carlton City Hotel Singapore**

## Hotel with a difference



Between 2014 and 2016, Carlton City Hotel Singapore has seen a drop of about 4,233m3 in water consumption. The hotel recovers condensate water from the Air Handling Units and reuses it for the cooling towers. Its remote monitoring system, coupled with a prompt maintenance regime, provides good preventive measures for possible water wastage.



The hotel also installed three-ticks-rated fittings in their guestrooms and common area toilets, under PUB's Mandatory Water Efficiency Labelling Scheme (MWELS). The hotel also places message cards in rooms to encourage hotel guests to reuse their linens and towels, thus saving water used for laundry. Water conservation posters are displayed prominently within the staff compound to promote water saving behaviours.

#### **Qifa Primary School**

### Water stewardship beyond school's boundaries



Qifa Primary School rallies its entire population to report leaky pipes and water wastage as soon as possible to prevent unnecessary water wastage.



To further reduce water consumption, the school uses self-closing delayed action taps and replaced liquid soap with foam soap as less water is required to rinse off foam, as compared to liquid soap. The school regularly monitors its water use by checking the meter reading for any sudden surge in consumption.

## Chung Cheng High School (Main)

### A collective effort to save water



Chung Cheng High School (Main) has a water efficiency management system implemented in accordance with the requirements in Singapore Standard SS 577, including a systematic process of monitoring water consumption, review the effectiveness of water saving measures taken, communicating and creating awareness on the importance of water conservation to staff and students, and initiating measures to reduce water consumption within the school.



The school has a fault-reporting system that encourages the staff and students to report faulty water fittings or leaks promptly. All taps in the school premise are self-closing to minimise wastage of water. The use of high pressure water jet is limited to only the washing of key common areas