

Zooming in on zero waste

Each day at Our Tampines Hub, two food waste eco-digesters turn 700kg of discarded food into non-potable water, liquid plant nutrients and organic fertiliser. When fully opened in August, 1.4 tonnes of food waste will be recycled at the hub daily.



Food waste from Our Tampines Hub's hawker centre, food outlets and supermarket is recycled by the eco-digester.

Sludge management system

Comprises a grease separator, microbial treatment and an ultra-fine filter.



The liquid plant nutrients produced are used to fertilise Our Tampines Hub's landscape and Eco-Community Garden. The various fruits, herbs and vegetables grown at the garden are used as cooking ingredients at culinary classes held at the hub's Wellness Centre.

- Bins filled with recyclable food waste are hoisted by a mechanical lift and the contents emptied into the digester.



- Customised microbes in powder form are added to the food waste in the digester to speed up the decomposition of the waste to convert it into slurry.



Since November last year, the eco-digester has helped to reduce the number of garbage trucks – each with a maximum capacity of 8,500 litres – needed to collect waste from Our Tampines Hub from three to one. This will save the management \$40,000 annually.

- The resulting slurry is channelled to a proprietary sludge management system.
- The end product is recycled water, liquid plant nutrients and organic fertiliser.
- Specially formulated enzymes are used to deodorise the recycled water.

About 5 per cent of the food waste is turned into organic fertiliser, which is packed and given to residents. About 250 packets are given out each month.



- The water collected is then used by the machine for self-cleaning or to clean the bin centre.
- The liquid plant nutrients and organic fertiliser are used on Our Tampines Hub's landscape or distributed to residents and partner organisations.