

Award-winning paper in 2013

Papers published in *Municipal Engineer* are eligible for awards from the Institution of Civil Engineers. Papers from any of the ICE journals can be nominated for several awards. In addition, each journal has awards dedicated to their specific subject area.

On Friday 17 October 2014, ICE president Geoff French presented an award to the following paper published in *Municipal Engineer* in 2013. The editorial panel nominated their best papers and an awards committee chaired by Quentin Leiper allocated the awards.

James Hill Fund Award

The James Hill Fund Award, presented for the best paper on a municipal engineering subject, was awarded to Basu *et al.* (2013).

Abstract

Food waste is the most difficult waste fraction of household waste to manage because it is wet and putrescible. It becomes odorous and it attracts flies and scavengers. When it sticks to other wastes, it reduces the yield of dry recyclables. Home composting has the benefit of proximity but many are unwilling or unable to practise it. Source segregation and storage for kerbside collection and treatment works for many households but not for all, participation is especially low among households in flatted properties. The

in-sink food waste disposer (FWD) is used extensively in Australia, New Zealand and the USA but it has been relatively underutilised in Europe. Using data from the published literature, the global warming potentials for landfill, incineration and centralised composting were calculated to be respectively +743, +13 and –14 kgCO₂e/t food waste; anaerobic digestion was approximately –170 kgCO₂e/t food waste irrespective of whether the food waste is delivered by truck or by FWD and the public sewer. Surahammar in Sweden has provided a unique opportunity to assess the impacts of FWD at community scale and compare them with results from laboratory studies and field trials. Over 14 years, FWD installation went from zero to 50% of households voluntarily; 4-weekly influent monitoring data from the wastewater treatment works of the town show that biogas increased by 46% but flow (water use) and chemical and biological load did not change significantly.

REFERENCE

Basu NB, Boral S, Mandal SK and Dey A (2013) Rehabilitation of Kolkata's first Victorian-age brick sewer. *Proceedings of the Institution of Civil Engineers – Municipal Engineer* **166**(4): 230–238, <http://dx.doi.org/10.1680/muen.12.00051>.