

WWW OF HOUSEHOLD FOOD WASTE

ABOUT THE PROJECT

East Waste is collaborating with the Fight Food Waste Cooperative Research Centre, the University of Adelaide, Green Industries SA, and Rawtec on the WWW (What, Where and Why) of Household Food Waste Behaviour project. This project provides deeper insights into at-home food disposal behaviours.



WHAT MAKES THIS PROJECT UNIQUE?

As part of the study, project partners commissioned South Australia's first large-scale household bin-by-bin kerbside audit. This audit is unique to Australia given:

- The bins were audited at an individual level across three waste streams that could be matched to the same household. Thus, the audit provides insights into food waste quantities and performance at the individual household level, rather than aggregated averages, and
- Food waste was sorted on presentation, food type and edibility:
 - the first sort identified how the food was presented in the bin (e.g. loose, in a compostable bag, packaged in containers)
 - the second sort identified the food type (e.g. dairy, fruit, etc)
 - the third sort was to estimate the proportion of food waste that was avoidable (ie. food that was intended for human consumption), as opposed to unavoidable (eg. inedible parts, like bones).

The audit was undertaken across 214 households in the City of Burnside.

WHATS INSIGHTS DOES THE STUDY PROVIDE?

The audit findings help to answer questions, such as:

- How does food waste generation and recycling performance vary by household?
- Do households that sort and recycle their food waste tend to waste less food?
- Is overall contamination of the organics stream driven by a few households that are grossly contaminating their bins?
- Are households that are good at recycling their comingled materials (e.g. paper, metals, glass) also good at recycling their food waste?
- Of the total households recycling their food waste via kerbside bins, what proportion are using compostable bags?

FOOD WASTE GENERATION

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- KERBSIDE AUDIT FINDINGS

HOW MUCH FOOD IS WASTED?

The average household disposed 3.6 kilograms (kg) of food waste per week at kerbside.² That's nearly 200 kg of food waste per year!

FOOD WASTE GENERATION VARIES BY HOUSEHOLD

The amount of food waste generated varies by household:



Low waste generators - Nearly a quarter (23.4%) of households waste less than 1 kg per week.



About half of households waste between between 1kg and 4.9 kg per week.



High waste generators - The remainder (23.4%) of households waste more than 5 kg per week.

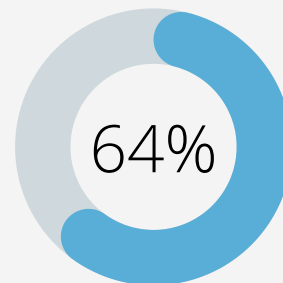
The next phase of the study will link the kerbside audit findings to household survey data. This will reveal how demographics, food shopping and food preparation behaviours influence food waste generation.

MOST WASTED FOOD TYPES

The main food types found in the bins were: **vegetables** (21%), **fruits** (20%), and **'meat, poultry & fish'** (9%). This was followed by bread (8%).



MOST FOOD WASTE IS AVOIDABLE



Nearly two-thirds (64%) of food waste could have been avoided if it had been eaten in time. The rest (36%) is unavoidable since is the inedible parts of the food, like eggshells.

² Total food waste at kerbside includes food (edible and inedible components) that is disposed into the residual, recycling and organics bins. This excludes food waste managed at-home through feeding to pets, home composting, etc.

FOOD RECYCLING

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- KERBSIDE AUDIT FINDINGS

DID YOU KNOW?

Across Metropolitan Adelaide, food waste can be recycled via kerbside organics bins. This includes all kinds of food, such as bones, meat, fruits, fish, vegetables, etc. The material is taken to commercial facilities to get turned into nutrient-rich compost, which is used by farmers to improve soil health.

AVERAGE RECYCLING PERFORMANCE

On average, households recycle 22% of their food waste at kerbside (via the organics bin).

Households tend to be better at recycling their fruits (at 25%) and vegetables (at 24%) at kerbside than other streams. By comparison, only:

- 14% of bread
- 9% of dairy and eggs
- 6% of meat, poultry and fish, and
- 4% of other pantry items is diverted for recycling at kerbside.



FOOD WASTE RECYCLING PERFORMANCE BY HOUSEHOLD

Kerbside food recycling varies by household:



Excellent recyclers - Nearly a quarter (24%) are recycling most of their food waste via organics bins. These households are good at recycling all food waste types.



In-between recyclers - Just over a quarter (26%) are recycling a small amount of their food waste. These households tend to be better at recycling their fruit and vegetables waste than other streams.



No recycling - Nearly half (47%) are not recycling any food waste via organics bins, but are placing food waste in residual bins.

A further 3% of households did not dispose of any food waste in the kerbside bins. These households are possibly managing their food waste using other systems, such as home composting.

FOOD RECYCLING

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DO COMPOSTABLE BAGS HELP FOOD RECYCLING?



Yes! Of the households that recycle their food waste, most (81.5%) are using compostable bags to do so. Households that use compostable bags, use about 1.5 bags per week on average

DO FOOD RECYCLERS ALSO WASTE LESS FOOD?

The audit found that people who recycle their food waste, also tend to waste less food. The reasons will be explored through future research.

ORGANICS BIN CONTAMINATION

Contamination remains a significant challenge within the kerbside collection system. The average contamination in the total organics bins audited was 4.1%. This varies by household from 0 to 93%.

The average contamination rate is largely driven by a small proportion of households who are grossly contaminating their bins. More than 80% of households have very low levels of contamination (<0.5%).

The top contaminants (% by weight) are:



**CONSTRUCTION
AND DEMOLITION
MATERIALS**
SUCH AS BRICKS
AND SOIL (40%)



**PLASTIC PACKAGED
FOOD**
(34%)



RESIDUAL WASTE
(23%)



**CONTAINERISED
FOOD**
(2%)

Getting residents to remove food waste from its packaging/containers before putting it in the organics bin would cut contamination by a third!