



Social research report

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Summary

At a glance

The NSW Government's *Waste Less, Recycle More* initiative aims to improve waste and recycling behaviours in the community.

This study

The NSW Environment Protection Authority (EPA) is responsible for improving household waste and recycling practices. To help us do this, we commissioned a study of 1200 NSW residents to uncover their knowledge, attitudes and behaviour around waste and recycling.

Survey findings

Respondents fit into five segments. Segments 1 (Champions), 2 (Diligents) and 3 (Captives) will recycle even if it takes more effort, and most are at least somewhat concerned about environmental problems. Segments 4 (Good intentions) and 5 (Hard-to-reach) don't recycle, or won't recycle with effort, and have varying degrees of concern about the environment.

Most people interviewed (82%) were in segments 1, 2 and 3. They had the desired knowledge and attitudes, and felt that they disposed of waste and recycled properly much of the time. Only 18% held misconceptions and didn't often recycle or dispose of waste properly.

Yet, perceived knowledge tended to be greater than actual knowledge. While most claimed concern for the environment and knowledge of proper recycling and waste disposal methods, their behaviour often showed otherwise.

Avoiding food waste, disposing of problem waste correctly, and preventing illegal dumping emerged as the most problematic areas.

Conclusions and recommendations

This report recommends that the EPA's communications and education programs focus on:

- reinforcing correct attitudes and increasing correct behaviour for most householders
- correcting misconceptions and changing behaviour among the remaining 18%.

1. This study

The five-year *Waste Less, Recycle More* initiative is a holistic approach to improving waste and recycling behaviours in NSW households. It includes several program areas and sub-initiatives to help residents manage and recycle household waste.

The EPA commissioned TNS Australia to complete this community benchmark study. We will use the findings to frame and tailor our programs, and to monitor their impact.

Researchers interviewed 1200 NSW residents aged 16+ to investigate current knowledge, attitudes and behaviours toward household waste management and recycling, both generally and across four EPA program areas: **general recycling**, **organics**, **problem waste**, and **illegal dumping**.

⊙ See pages 1–10

2. Survey findings

Overall, NSW residents have the desired attitudes and are adopting desirable behaviours towards household waste disposal and recycling. Of those sampled, 82% stated that they will recycle even if it takes more effort (segments 1 to 3, explained below).

Our challenge is to reinforce positive attitudes and behaviours within this large group, while correcting misconceptions and improving behaviour among the remaining 18% (segments 4 and 5).

NSW householders fit into five segments

Researchers identified five core segments of the NSW population, based on respondents' behavioural traits and attitudes. These segments, and standard demographic information, were used in the overall data analysis and appear throughout this report.

1.	Champions (26%)	Recycle a range of household waste even if it takes more effort, and are concerned a great deal about environmental problems.
2.	Diligents (39%)	Recycle even if it takes more effort and are fairly concerned about environmental problems.
3.	Captives (17%)	Recycle even if it takes more effort but are not concerned, or only a little concerned, about environmental problems.
4.	Good intentions (10%)	Don't recycle, or recycle only if it doesn't take any more effort, but are concerned (to a large or fair extent) about environmental problems.
5.	Hard-to-reach (8%)	Don't recycle, or recycle only if it doesn't take any more effort, and are not concerned, or only a little concerned, about environmental problems.

Most people are concerned about the environment

- Most respondents (85%) expressed concern about environmental problems. Of these, 30% were concerned 'a great deal' (driven by those aged 30+, those with a university education, and segment 1, Champions) and 55% were concerned 'a fair amount'.
- People were most concerned about future generations (38%), followed by the health effects of pollution (16%) and maintaining ecosystems (13%).
- **⊙** See pages 11–14

Knowledge and attitudes are positive but behaviour can improve

Researchers investigated respondents' knowledge, attitudes and behaviours towards household waste and recycling, and, in more detail, the EPA's four program areas.

Household waste and recycling management

Knowledge

- Awareness of council waste disposal and recycling services was high (i.e. garbage collection service, 96%; recycling service, 93%; council pick-up services, 84%; garden waste bins, 71%).
- The lower percentages for pick-up services and garden waste bins may reflect less awareness of services or variations in service provision.

Attitudes

- Nearly all respondents (89%) were concerned by the amount of waste society produces. 34% were strongly concerned.
- Those most concerned were segment 1 (Champions), women, and people aged 50–69.

Behaviours

 Concern didn't always translate into action through correct waste disposal and recycling. This was most apparent when handling less common forms of household waste (like batteries and chemicals).

⊕ See pages 15–20

Program area: General recycling

Knowledge

- Perceived knowledge was high: 86% of respondents claimed to be confident about which items should go into which bins and 96% claimed to fully understand the environmental benefits of recycling.
- But actual knowledge fell short: only 41% correctly believed that recycling helps to save natural resources, while 20% believed that mixing incorrect items into recycling waste doesn't matter.

Attitudes

- Respondents' attitudes were mostly positive: 62% agreed that recycling household waste is very important and 'the right thing to do'.
- Barriers to recycling included hassle (perceiving it to be 'too difficult'), time (perceiving it to be labour-intensive, and therefore time-intensive) and not believing in its benefits (including perceiving it to be 'over-rated' as an issue).

Behaviours

- 97% stated that they recycle common household waste. While 78% of these do so even it takes more effort, 20% only do so if no extra effort is needed.
- Reluctance to recycle with effort was more common among young people (aged 16–29), those living in single and group households, and those from culturally and linguistically diverse (CALD) backgrounds.

⊙ See pages 21–31

Program area: Organics

Knowledge

- There was a knowledge gap around food waste: 24% didn't know that it is the largest type of waste in the average NSW household garbage bin (by weight).
- Knowledge of composting was strong: 91% agreed that composting can improve the structure, fertility and health of the soil.

Attitudes

- Many showed positive attitudes and concern about food waste. The study did not directly explore attitudes to garden waste.
- 72% expressed concern about the amount of food they throw away.
- 40% agreed that a busy lifestyle makes it hard to avoid wasting food.

Behaviours

- Only 12% stated that they throw away more food than they should;
 60% claimed to throw away 'very little'.
- Those with garden waste generally used a council kerbside collection service (59%) or a compost heap or worm farm (43%) to dispose of it.
- In the last year, 22% had placed garden waste in a red-lidded garbage bin, citing a lack of facilities or collection services (43%), convenience, or that it was only a small amount.
- Men are mainly responsible for household garden waste disposal.

⊙ See pages 32–40

Program area: Problem waste

Knowledge

- There were low or conflicting levels of knowledge in this program area. For example, while 94% agreed that some common household items can harm the environment and need special disposal, only 54% believed that problem waste can be recycled if disposed of correctly.
- Older people and segment 5 (Hard-to-reach) knew less about disposing of problem waste correctly.

Attitudes

- Most expressed positive attitudes and intentions.
- 81% would travel to a special location to dispose of an item correctly. People aged 16–29, and segments 4 (Good Intentions) and 5 (Hard-to-reach) were less willing.

Behaviours

- Positive attitudes (and intentions) were not being converted into action.
- Infrequent experience with problem waste means that many people don't know how and where to dispose of it correctly. For example, of the 7% of respondents who had disposed of household chemical waste in the past year, 31% placed it in the red-lidded garbage bin.

⊙ See pages 41–48

Program area: Illegal dumping

Knowledge

- Knowledge was high: 79% agreed that leaving items next to a charity bin or outside a shop is illegal dumping.
- Positively, 91% knew that asbestos can't be placed in the redlidded garbage bin.

Attitudes

- 27% incorrectly believed that charities can recycle all unwanted items regardless of condition.
- People were uncertain about the legality versus social acceptability
 of some kerbside dumping: 21% disagreed that leaving goods next
 to charity bins or outside shops is illegal dumping; 27% had left
 unwanted goods outside a charity shop or bin or on the kerb for
 passers-by or neighbours.
- 88% found it convenient to dispose of unwanted goods correctly.
 Those who were more likely to find it inconvenient included people living in apartments and segment 4 (Good intentions).
- Behaviours
- Few admitted to leaving items outside a charity shop (14%) or leaving items on the kerbside for others to collect (13%).
- **⊙** See pages 49–56

Different age groups have different information needs

- Most respondents used local council websites (55%) or other websites (11%) for information on waste management and recycling. Younger people preferred online information, while older people were likely to prefer more traditional channels like council newsletters and meetings.
- Younger people most often wanted more information, while older people requested more services and bins.
- **⊙** See pages 57–63

3. Conclusions and recommendations

Our future waste and recycling communications and community education programs will be guided by this study's results and recommendations.

Develop programs that reinforce or improve behaviour

Program area: General recycling

- Reinforce and reward existing positive behaviours, then focus on correcting misconceptions.
- Provide a strong (or stronger) reason to act to encourage and convince those who are either sceptical or misinformed of the benefits.
- Use a 'persuasion'-based social marketing campaign to influence attitudes and reinforce positive behaviours to ensure they continue.

Program area: Organics

- Focus on eliminating perceived barriers by providing more services or facilities.
- Raise awareness of food waste and its consequences, and the facilities for correctly disposing of organic waste.

Program area: Problem waste

- Highlight the existing facilities and services for correctly disposing of less common household, renovation and chemical waste.
- Consider that many people dispose of these materials infrequently, so information must be available when needed.

Program area: Illegal dumping

 Counter entrenched beliefs and 'normalised' incorrect behaviours. For example, show that it is not legal or socially acceptable to give unusable items to charities or leave goods next to charity bins or shops.

Communication and information

• Explain how to dispose of special items correctly and give locations for existing facilities.

→ See pages 64–65

Target specific segments or demographic sub-groups

Segments

People in segment 1 (Champions) already show positive attitudes and behaviours towards recycling, while people in segment 5 (Hard-to-reach) are unlikely to change. Therefore, initial marketing efforts should focus on the remaining two-thirds of the community.

These segments – 2 (Diligents, 39%), 3 (Captives, 17%) and 4 (Good intentions, 10%) – hold either positive or neutral attitudes, but could improve their behaviours. Many already recycle some items but could recycle more material types.

Support and communications strategies should:

- give occasional recyclers stronger reasons to believe in the outcomes of action, and reinforce their good behaviour through education and motivation
- help people with positive attitudes who do not yet recycle to act (e.g. give practical information on recycling, as well as strong reasons to believe).

Demographic sub-groups

The groups with the least desirable behaviours and attitudes, who may benefit most from targeted marketing, were:

- younger people (aged 16–29)
- renters
- apartment dwellers
- people from a CALD background.

Or, a population-level communications strategy could be used, testing educational material on groups that are only marginally lagging.

⊕ See pages 65–71