

Submission to the Senate Inquiry into the Management of Australia's Waste Streams: Dr Ruth Lane and Assoc Prof Ralph Horne, RMIT University

Second hand goods in Melbourne households: Reducing waste through extending product lifespans

While various Australian state governments have set targets for the reduction of waste to landfill, the emphasis to date has mainly been placed on the development of bulk materials recycling industries than on other strategies for waste reduction such as the reuse of second hand goods. Many second hand channels are informal and do not involve market transactions, making it difficult to collect information that could identify patterns and opportunities for increasing product life and reducing waste associated with these commodities.

This submission has been produced by Ralph Horne, Director of the Centre for Design at RMIT University, and Ruth Lane, Senior Lecturer in the School of Global Studies, Social Sciences and Planning, RMIT University. It summarises findings from a recent study of 306 households across Melbourne completed in March 2008, which provides new insights into household behaviours and practices regarding hard rubbish and second hand goods. The study suggests that significant opportunities exist to develop policies and practices which will deliver environmental savings in reduced waste and avoided pollution associated with extended product life, including greenhouse gas savings.

This submission is presented in 3 parts as follows:

1. Study parameters and purpose
2. Summary results of the study
3. Recommendations for future initiatives and policy

1. Study background and purpose

Several governments have set targets for the reduction of waste to landfill. For example, Victoria's waste management policy, *Sustainability in Action: Towards Zero Waste Strategy* (Victorian Government 2005) provides a 10-year plan for waste management in the state of Victoria. This sets out targets to 2014, including one for municipal waste of 65% recovery (by weight), through reuse, recycling or energy generation, by 2014. In common with equivalent policies in other Australian states, it also reiterates a commitment to the 'waste hierarchy' as a guiding principle, with its options based on environmental impact, ranking 'reduction' over 'reuse', over 'recycling', over 'recovery', with 'disposal' the last resort. Recycling, despite being only the third most desirable option in the waste hierarchy, has received the most attention to date with support for the establishment of bulk materials recycling industries. Reuse deserves more attention and is the subject of this study.

Given that householders have embraced recycling as 'normal' practice and increased their awareness of the need to reduce waste, we pose the question, 'Is our current approach to household waste missing opportunities for re-using things rather than just recycling materials?' To understand the potential for increasing the reuse of household goods, we first need to learn more about the extent to which second hand household goods currently circulate from one owner to another and identify the key channels used. While it is relatively easy to gather information about sales of new household goods through shops or online retail services, a great deal of the exchange in second hand goods occurs through less formal

channels such as garage sales, charity donations, school fetes and the scavenging of hard rubbish set out for kerbside collection. To begin to address this lack of information, we surveyed 306 Melbourne householders about their practices of acquiring and disposing of second hand goods. This allowed us to identify some of the more common 'routes of reuse' and highlighted patterns in household practices that were linked to acquiring, selling and disposing of second hand goods.

Survey respondents were recruited by three main methods:

- 1) With permission from Frankston City Council, a face-to-face survey was conducted at the Frankston foreshore and in the Frankston shopping precinct during the period when hard rubbish collections were underway in that municipality (51% of respondents).
- 2) A leaflet in the mailbox that was deposited at the same time as the notice about hard rubbish collection, providing details of the website for completing the survey online (38% of respondents).
- 3) Information distributed through various Council community networks (6% of respondents).

Approximately 60% of respondents were female and 40% were male. The geographic focus of the survey was primarily in the south eastern suburbs of Melbourne, between Moorabbin in the north, Frankston in the south, and eastwards to Ferntree Gully.

The householder survey comprised three sections:

- 1) Attributes of the respondent – these questions were all based on versions of the catalogue questions used by the ABS for obtaining socio-demographic information in the Commonwealth Census.
- 2) Attributes of the respondent's household – these questions comprised a mix of ABS catalogue questions and other questions to do with the dwelling itself.
- 3) Practices of acquiring and disposing of second hand goods – these questions quizzed respondents on the channels they had used during the last two years to acquire or dispose of used household goods and included questions about items that were either difficult to acquire or dispose of through second hand channels.

2. Summary results of the study

Our survey results confirm the importance of both formal and informal channels for the circulation of second hand goods among Melbourne households. The following factors were found to be statistically linked to second hand goods practices:

- Household composition
- Employment status
- Education level
- Country of birth
- Dwelling types and residential tenures
- Car ownership

Some key findings are:

- 96% of all survey respondents reported that they reused materials in the home and the most commonly reused materials were plastic bags (95%)
- The most common means used to dispose of unwanted household goods are through kerbside recycling bins and council hard rubbish collections.
- Many people also make conscious decisions to give things away, most commonly to friends and relatives within Melbourne (74%) or by dropping them off at a shop or

facility (73%).

- Charity bins are also widely used (57%) and many people report donating items to doorknock appeals (45.8%).
- Many respondents also noted that they taken items to 'the tip', some had hired skip bins from private contractors, and some referred to the use of 'Freecycle', an online not-for-profit subscriber list where individuals post information about items they would like to give away.
- 62% of people have acquired goods as gifts from family or friends and 41% reported that they had acquired goods free by scavenging hard rubbish.
- People appear much more likely to give things away than sell them. Less than half the respondents had used second hand channels in the last two years and among these the most common channels used to sell used goods were online forums such as EBay.
- People are more likely to have recently purchased second hand goods than they are to have sold them. 62% purchased items from second hand shops, 34% purchased items online and 20% purchased items by responding to an advertisement in a newspaper.

Overall these findings show that informal exchanges, such as gifting to family or friends or donating to charities, are more commonly used to acquire and dispose of used household goods than buying and selling. Sex, education level and employment status are predictors of second hand activity generally, as is the presence of children under 15 years age in the household. Women were more likely than men to engage in second hand activities. Respondents who gave their occupation as 'domestic duties' were most likely to engage in second hand activities, and 'students' and 'retirees' were least likely to.

Perhaps unsurprisingly, households with children are more active in acquiring and disposing of goods. More surprisingly, households with male children use second hand channels but do not tend to purchase second-hand goods, whereas households with female children were more likely to purchase goods through second hand channels (newspapers and online) but less likely to sell them.

Those most likely to give things away were 'Fully Employed' people and those employed in 'Domestic Duties'. 'Students' and those on 'Work for the Dole' were less likely to give things away than those in other employment categories. 'Retirees' and 'Students' were least likely to purchase second hand goods, followed by those who were 'Fully Employed'. These results confirm that women at home with children are the most active sector of the population involved in second hand activities. Also, households with people over 65 years of age are more likely to acquire goods from family or friends in Melbourne but less likely to buy or sell used goods online. A surprising finding was that women over 65 tend to give more things away.

Households earning less than \$2000 per week were significantly more likely to acquire goods through non market means than those earning more. Households in the income bracket of \$1000-\$1500 were the most likely to buy online. Households in the income bracket \$1500-\$2000 were most likely to give things away to friends or relatives in Melbourne and those earning over \$2000 per week were most likely to give things away to friends or relatives outside of Melbourne.

People born in Australia are more likely to buy and sell second hand goods than those born outside of Australia and this pattern was more pronounced for buying than selling. This may be associated with a better knowledge of second hand channels among Australian born residents. Households where the main language spoken at home was English were more likely to reuse materials in the home, particularly plastic bags.

Those who have lived longer than average at their current address are more active in acquiring second hand goods, perhaps because they are more likely to have friends and relatives living in the same area that they could acquire things from. Also, people living in detached houses are more likely to give things away than people in other types of accommodation. Stand alone houses may contain more space and include additional structures such as sheds so that residents living in such dwellings may have a greater capacity to accumulate household goods. Indeed, households with spare rooms are more likely to acquire goods through all second hand channels but particularly through non-market channels. Finally, the presence of a family car is associated with higher use of both kerbside bins and hard rubbish collections. Somewhat surprisingly, the absence of a car correlated with scavenging hard rubbish. It may be that the lack of a car is associated with commuting by walking and that people using footpaths have a closer view of the contents of hard rubbish piles and are consequently more likely to stop and scavenge. However this explanation is quite speculative and needs to be further tested.

3. Recommendations for future initiatives and policy

Although the findings from our survey of Melbourne householders provide only a preliminary understanding of patterns in the circulation of used household goods, they suggest there could be many possibilities for increasing their reuse, with the potential for significant reductions in domestic waste in line with the waste management hierarchy's imperative for 'reuse' over 'recycling'. However, the circulation of second hand goods is connected with social values as well as environmental values and should consequently be understood in relation to ideas of social or community sustainability. Seven key recommendations indicate areas of potential further research and policy development:

1. The study found links between demographic factors, household and transport infrastructure, and utilisation of current second hand networks. Further in-depth ethnographic type research is required to provide a deeper understanding of these linkages and inform policy and analysis capabilities regarding these determinants of potential future markets for second hand goods. **An interview study of Melbourne households is required to improve our understanding of the role of household dynamics, storage space and other domestic infrastructure in determining activity involving second hand goods.**
2. Some items were commonly cited as being difficult to dispose of, such as batteries, paint tins, building waste, fencing materials, engine oil, tyres, mattresses, beds, electrical goods, electronics such as computers and TVs, old children's toys and baby gear, polystyrene packaging and cardboard boxes. Large items such as furniture, refrigerators or large items of garden waste, were particularly difficult to dispose of, sometimes requiring access to a trailer to take them to a tip. Some of the responses to the question about items that were difficult to dispose communicated a level of frustration or stress linked to the inability to dispose of certain items responsibly. The items most commonly listed as being difficult to acquire were functional whitegoods such as washing machines or refrigerators and items of furniture, especially dining tables. **It is possible that there is an untapped potential for the sale of second hand goods, especially for items such as whitegoods and furniture, if appropriate facilities were available.**
3. Currently, householders tend to buy from second hand shops, but sell online. **It would be worth tracing the use of online forums to see how this changes over time.**

4. Householders giving things away are clearly motivated by feelings of social responsibility or environmental concerns as well as the more practical need to divest themselves of clutter. Some respondents elaborated on the diverse and often creative ways that they reused materials in the home in order to avoid generating waste. A large number of survey respondents mentioned that they had sold items via word of mouth, indicating that social networks may also be important for market transactions in second hand goods. **This suggests a significant point of connection between formal and informal economies that warrants further investigation.**
5. Historical evidence shows that the materials recycling industry in the US, now a mainstream business sector, emerged out of the informal economies generated by the activities of counterculture environmentalists during the 1970s. A recent study of the US recycling industry showed it to be constituted through a network of inter-related actors, including mainstream businesses and alternative community organisations that function together within a large and complex system. **This survey suggests there could be potential for some of the informal social networks that currently exist around second hand exchanges to become formalised to some extent by engaging with a market economy.**
6. We already know from the 2006 ABS survey that the provision of services such as kerbside recycling bins have strongly influenced household practices. The extent of the informal economy around scavenging hard rubbish collections suggests that strong potential exists for more formal economies to emerge in this area. A number of our survey respondents indicated that they hoped the goods they set out for hard rubbish collection would be taken by scavengers before being collected by the contractor, as they felt this to be a more socially or environmentally responsible outcome. These comments, along with the frustration expressed by those unable to dispose of items in a way they felt to be responsible, suggests a readiness to embrace new social norms and knowledge around the disposal of household goods that is currently thwarted by the lack of infrastructure and services. **Our survey findings point to the potential for households to be provided with additional services for the disposal of useable second hand goods in order to facilitate their redistribution within the broader population with social, environmental and economic benefits. Should such infrastructure and services be supplied, social norms would quickly consolidate around them along with relevant knowledge and skills.**
7. It is not currently known what the net greenhouse gas savings and other environmental and social benefits there may be arising from increased product life and use of second hand goods. **A study is required to provide estimates of life cycle environmental savings and to explore the social and economic costs and benefits of policies to facilitate use of and formal markets for second hand goods.**

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