



A baseline study of Australia's community recycling enterprises (CRE)

Final Report June 2012



QUT Business School
The Australian Centre for Philanthropy
and Nonprofit Studies

Prepared by The Australian Centre for Philanthropy and Nonprofit Studies, Queensland
University of Technology for Community Recycling Network Australia.

Foreword

This research was commissioned by Community Recycling Network Australia (CRNA) and undertaken by the Australian Centre for Philanthropy and Nonprofit Studies (ACPNS) at Queensland University of Technology (QUT). CRNA has partnered with ACPNS on this work, actively seeking community recycling enterprise participation in the research.

Contributors

This research was led by Jo Barraket. The report was prepared by Nina Yousefpour, Jo Barraket and Craig Furneaux.

Acknowledgments

The authors wish to acknowledge all staff, directors and volunteers of community recycling enterprises that gave freely of their time to participate in the study. The project steering committee provided valuable input on research design, case study selection and draft research instruments and reports. Thanks to:

Andrew Hamilton, Andy Vagg, Anita Saunders, Arthur Ziakas, Craig Rees, Darren Andrews, Greg Poultney, Mark Daniels, Miles Lochhead, Peter Cox, Sally Thompson, Tim Hankey.

We thank Peter Cox, Secretary of Community Recycling Network Australia for his significant contributions in initiating, shaping and engaging others in the conduct of this research.

This research was funded by Community Recycling Network Australia (CRNA), with funding support from Sustainability Victoria, New South Wales Office of Environment and Heritage, Department of Premier and Cabinet, and Social Traders.

Executive Summary

This report presents the findings on a baseline study of Australia's community recycling enterprises (CREs). The study sought to document the activities and impacts of these enterprises and to understand the conditions under which they succeed.

The purposes of the research were to generate evidence that can contribute to the development of practice and policy support for CREs, and to provide information that is useful to community groups wishing to establish new CREs. The study included a review of the existing literature in relation to CREs, an online survey of Australian CREs, and in-depth case studies of three CREs from various regions within Australia.

Findings from the study suggest that, while reuse and recycling are their core business activities, the majority of CREs identify local employment creation as the dominant purpose of their enterprise. We estimate that CREs in Australia employ at least 1,500 people, a considerable proportion of whom are facing significant barriers to employment in the open labour market.

CREs play an important role in local resource recovery; on average, CREs participating in this study diverted 2347 tonnes per year of resources from landfill alone. CREs also foster civic engagement, initiating and operating a range of innovative community activities. These innovations typically evolve from the need to both secure enterprise sustainability and fulfil organisational missions.

The survey data suggest that CREs that undertake multiple recycling and reuse activities perform better financially than those that undertake a smaller number of activities. The case study information suggests that successful CREs operate under a variety of organisational structures. They also keep their mission in mind while adapting in response to changing industry and public awareness of resource recovery.

The majority of CREs that participated in the study reported facing barriers to growth. These barriers included: governance and management challenges related to the social enterprise models being used; industry challenges including price fluctuations, rapidly changing market needs and a lag in associated regulation; and the complexities of demonstrating within price competitive environments the significance of the social value added of the CRE approach.

Contents

Foreword.....	3
Contributors.....	3
Acknowledgments.....	3
Executive Summary.....	4
Tables and Figures	6
1.0 Introduction	7
2.0 Defining Key Terms	7
3.0 Project Objectives	7
4.0 Review of the Literature	8
5.0 Methodology.....	9
5.1 Methods.....	9
5.2 Limitations of the Study	10
6.0 Findings	10
6.1 Size, composition and types of CREs in Australia	10
6.2 Local environmental, social and economic impacts	15
6.3 The conditions under which CREs develop into successful community business models.....	17
6.3.1 Case Studies	17
6.3.2 Barriers to Growth for CREs	31
7.0 Discussion and Conclusion	31
8.0 References	33
Appendix A: Survey Instrument	35
Appendix B: Case Study Framework	45
Appendix C: Interview Protocol	46

Tables and Figures

Table 1- Number of employees and volunteers (based on survey data).....	16
Table 2 - Destination and means of processing recovered materials.....	17
Table 3- Economic impacts	17
Table 4- Materials recovered.....	20
Table 5- Art from Trash Growth since 2006	21
Table 6- Donation allocations	22
Table 7- Volume projections for 2011-2012	24
Figure 1- Location of CRE (by state).....	11
Figure 2- Age of CRE	11
Figure 3- Type of business activity.....	12
Figure 4- Frequency of business activity.....	12
Figure 5- Average profit per number of recycling activities	13
Figure 6- Average income per source of income	13
Figure 7- Average expenditure	14
Figure 8- Collection method of materials	14
Figure 9- Source of recovered items.....	15
Figure 10- Main purpose for which the organisation exists	15
Figure 11- Material saved from landfill- 2010-2011 financial year.....	16
Figure 12- Resource Work Cooperative values.....	18
Figure 13- GLCR organisational structure	27

1.0 Introduction

Variouly owned and operated by nonprofit organisations, community groups, local governments and as joint ventures, community recycling enterprises (CREs) divert a significant amount of resources from landfill, contribute to their local economies by creating employment and building niche markets, and operate as important hubs for community interactions. CREs provide leadership in commercial and domestic resource recovery, modelling new technologies and behaviours that are often adopted more widely as a result of their presence. CREs have been acknowledged by industry and policy bodies as an important part of the waste minimisation, recycling and reuse landscape (Local Government Association of Queensland 2005). In addition to their environmental commitments and local economic impacts, many CREs incorporate explicit social objectives - such as purposefully employing disadvantaged people - into their operations.

While the benefits of CREs are generally agreed, little is known about the scale and scope of this group of enterprises in Australia, their activities and the benefits they produce. In 2011, Community Recycling Network Australia (CRNA) identified that baseline research was required to understand the nature and impacts of CREs in order to better support existing organisations and to share knowledge that could assist communities establish new CREs. This report was commissioned by CRNA to provide that baseline information.

2.0 Defining Key Terms

Community Recycling Enterprises (CREs)

Community Recycling Network Australia (CRNA) defines community recycling enterprises as enterprises that exist for the purpose of reducing waste to landfill while at the same time create jobs and volunteer positions through the resale of materials and equipment (CRNA).

Social enterprise

Social Enterprises are organisations led by an economic, social, cultural or environmental mission consistent with a public or community benefit. They:

- Trade to fulfil their mission;
- Derive a substantial portion of their income from trade; and
- Reinvest the majority of their profit/surplus in the fulfilment of their mission (Barraket, Collyer, O'Connor and Anderson, 2010).

Social Economy

Social economy can be understood as the impact of the third sector including not-for-profits, cooperatives and mutuals on the broader economy, operating next to public and private sectors (Haugh and Kitson, 2007).

3.0 Project Objectives

The purpose of this project was to advance our understanding of CREs in Australia.

The objectives of the study were to determine:

- The size, composition and types of CREs in Australia;
- Their local environmental, economic and social impacts; and
- The conditions under which they develop as successful community business models.

In addition, the research sought to generate information useful to new groups considering establishing a CRE by documenting the experiences and structures of good practice organisations operating in this field.

This report has been prepared for CRNA to:

- Detail the methodology and research findings;
- Reflect on the limitations of the study; and
- Provide insights into the CRE industry based on the findings of the research.

4.0 Review of the Literature

Over the last ten years, waste management and resource recovery have become important environmental issues as public awareness of environmental vulnerability, climate change and resource depletion increases. These often contentious debates centre on the issue of sustainability and ways to maintain economic well-being as well as preserving and enhancing the natural environment (Marsden, 2008). Recently, the social economy has become increasingly recognised as a means to address environmental and social issues facing communities. This has been attributed to the social economy's ability to address public and private sector failures (Bull, 2008). One aspect of the social economy is social enterprise. CREs have been operating in Australia for more than 25 years and form part of the suite of social enterprises that operate within the recycling industry. We note that other social economy organisations play an important contemporary and historical role in national recycling, with many charitable organisations having used the 'opportunity shop' model to generate social outcomes through materials reuse for many years (see NACRO, 2010).

The term 'social enterprise' encapsulates a wide range of organisations and structures, including community recycling enterprises. In comparison to the public sector, social enterprise is considered to be more adaptable and flexible and therefore able to overcome the risk-averseness and accountability limitations of public sector service delivery (Simmons, 2008). These benefits have largely been assumed within the literature, with limited empirical evidence demonstrating these benefits to date. In particular, there is little understanding of the specific contributions of CREs and the challenges that they face. Given that community recycling is a relatively recent movement, better understanding how these organisations operate, their community impacts, and their contribution to social and environmental sustainability warrants further attention.

The value of social enterprises is attributed to their hybrid nature, utilising private sector practices to achieve social aims traditionally associated with the public and voluntary sectors (Peattie and Morley, 2008). In the UK, the government's social enterprise policy has focused on the promotion of social enterprise as an innovative way of tackling social and environmental issues (Social Enterprise Coalition, 2003). The increased interest in social enterprise has emerged within a political and social environment that has a growing focus on sustainable development. This focus on sustainability is underpinned by the belief that the social, economic and environmental aspects of development converge and are not disparate. Social enterprises are believed to be ideally positioned to be able to contribute to sustainable development given the greater focus of these organisations on the 'triple bottom line' of economic, social and ecological goals (Wallace, 2005).

Within sustainability debates there is also a greater recognition that, despite globalisation, local participation is vital for environmental sustainability. Place-based initiatives and community action to address environmental concerns is becoming increasingly popular, with the rise of community gardens, recycling enterprises and charitable recyclers (see NACRO, 2010). Community involvement is considered paramount to the concept of sustainability given a community provides the key structures, in which, and by which, actions at the local level can influence environmental issues (Marsden, 2008).

CREs contribute to environmental sustainability. The study presented here documents some of these contributions. While recognising that CREs are not the same as charitable recyclers, each of these groups form part of the social economy's contribution to resource recovery. A study on charitable recyclers in Victoria found that during the year 2008/09, this group diverted approximately 36,160 tonnes from landfill (NACRO, 2010).

In addition to their environmental contribution, available research suggests that they also provide benefits economically and socially. Hines' (2008) UK study into social enterprise and waste management found that social

enterprises created tangible social benefits through employment and the provision of low or no cost refurbished products to low-income families. The social enterprise's contribution to the sustainability of the community included economic, social, environmental and cultural benefits. The study argued that waste management social enterprise connected the actions of people at the local and regional level which fittingly supports how actions at the community level can promote sustainability. By engaging communities, the social enterprise is ideally placed to deliver a range of activities that gives people ownership of their community's issues (Hines, 2008).

In comparison to other types of social enterprise, there are very few studies that examine CREs. This is problematic given that CREs differ from other social enterprises in terms of their industry conditions, support needs, mission and purpose. Not all organisations within civil society are the same. As Gerometta et al (2005 p. 2018) suggest, 'the ability to act in the public sphere is distributed unevenly among segments of the overall civil society'. This raises potential problems with generalising social enterprise findings across different organisations. The minimal research that focuses specifically on CREs suggests that greater empirical research needs to be done within the CRE sector to better understand the impacts, and the specific resource and institutional support needs of these organisations.

While there has been some state level research on the impact of the 'charitable recycling industry' (see NACRO, 2010), there has been no Australian research about CREs specifically. In both the UK and the US, governments are promoting the use of social enterprise to recover resources, with small amounts of funding to support social enterprise waste organisations (Hines, 2008). However, within Australia there is little understanding of the prevalence of these organisations, their contribution, and the support structures they need to operate; this study aims to address these gaps. Caution must be exercised when generalising from research from different contexts such as the US and the UK, particularly given that the social economy is embedded in its historical, institutional, and local contexts (Moulaert and Ailenei, 2005). Research must account for these contextual differences and therefore a closer examination into the specific challenges and opportunities that face community recycling enterprises in Australia is needed.

5.0 Methodology

5.1 Methods

The research reported on here was conducted in three phases.

Phase One: A review of the available literature and existing research on community recycling enterprises and related organisations was undertaken in order to consider the kinds of questions we should be asking and to identify any basis for comparing results with previous work. Very few related studies were identified as a result of this work. The main outputs of this phase were the literature review presented above and a set of draft questions which informed the survey and case study instruments.

Phase Two: An online survey of CREs identified by CRNA and through related professional networks was conducted. The survey was drafted using information from the literature review combined with feedback from the project advisory committee. The survey instrument can be found in Appendix A.

The survey was promoted through the monthly CRNA bulletin which is received by approximately 200 individuals. In addition, these recipients were contacted by email and follow up telephone calls were made to 62 of these individuals, personally inviting them to participate in the online survey. The survey was also promoted by four local government associations of New South Wales, Victoria, Queensland and South Australia, via a bulletin advertisement. Organisations such as Social Traders, Social Ventures Australia, and Social Firms Australia also promoted the survey through their networks. Finally the research team at QUT promoted the study through the Social Enterprise Twitter network, which has approximately 1100 followers.

Twenty-eight CREs participated in the survey.

Phase Three: Case studies of three CREs in regional, rural and metropolitan areas were undertaken. These cases document their business models, their local environmental and social contributions and their local economic impacts, and the conditions under which success has occurred. Case study selection was based on geography and CRNA's perception of the enterprise's success with consideration that cases be appropriate and informative for industry and also for any new groups endeavouring to start a CRE.

A full description of the case study framework is provided in Appendix B. These data were sought through semi-structured interviews with senior staff of each enterprise, website information, media reports and any publicly available documents. A copy of the full semi-structured interview protocol is attached in Appendix C. Within the three case study enterprises, four interviews involving five interviewees were conducted.

5.2 Limitations of the Study

Due to the relatively small sample size in both survey responses and case studies, the generalisability of findings must be treated with caution. A total of 28 enterprises responded to the survey. Based on the population of CREs in Australia known to CRNA, this represents a response rate of 40%. However, given the relative newness of the naming of CREs, there are likely to be more enterprises consistent with the definition of CREs used in this study that were not captured by the research.

Case studies are designed to provide rich insights rather than generalisable information. Those presented in this study document the experiences of successful enterprises as leading examples in the industry, rather than universal understanding of the performance of all CREs. A greater number of case studies including organisations at different stages of development would provide further insights into the conditions under which CREs succeed.

The research process illuminated the difficulties of capturing information about the impacts of CREs through a snapshot study. 'Impacts' by definition refer to long term effects. In the case of organisations that are engaged in an environmental industry with social and economic goals, impacts are typically multi dimensional rather than singular, and complex for individual organisations to track. Where possible, organisational impacts have been documented in both the survey and case study findings.

Finally, the process of undertaking the research highlighted the competitive pressures experienced by some CREs in a rapidly changing industry and regulatory environment. As a result of these pressures, there were some sensitivities amongst participating organisations in publicly disclosing information related to the research questions.

6.0 Findings

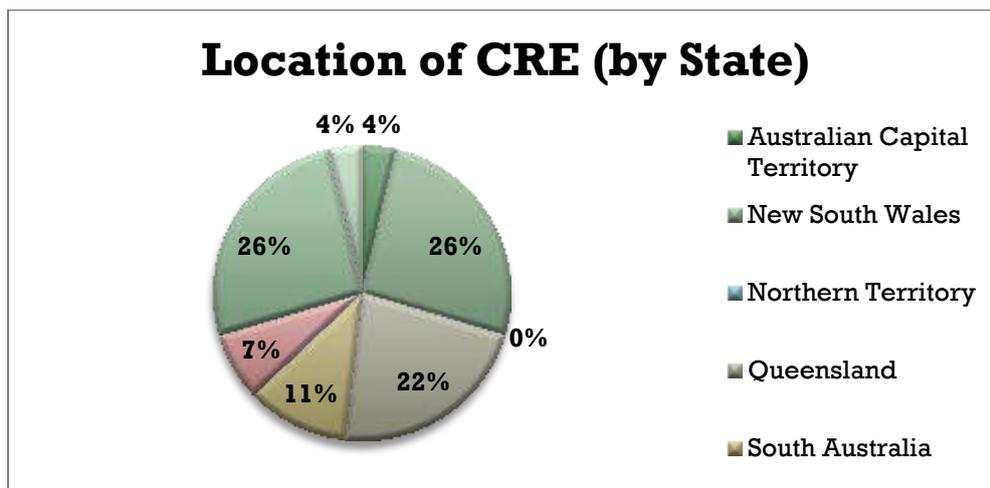
The research presented here draws on analysis of pre-existing data, as well as analysis of information collected via the online survey and case study research. Findings from each of these sources have been integrated and are presented here in response to the objectives of the research outlined above.

6.1 Size, composition and types of CREs in Australia

The Australian recycling industry, of which CREs are a part, directly and indirectly employs more than 40, 000 people (Australian Council of Recycling, no date). However, there is no known population of CREs in Australia. CRNA has identified 70 organisations that are consistent with their definition of CRE. However, given the relative newness of this terminology, it is likely that there are more. CREs form part of Australia's social enterprise sector (see Section 2.0 for the definition of social enterprise used here). There are an estimated 20, 000 social enterprises in Australia (Barraket et al, 2010).

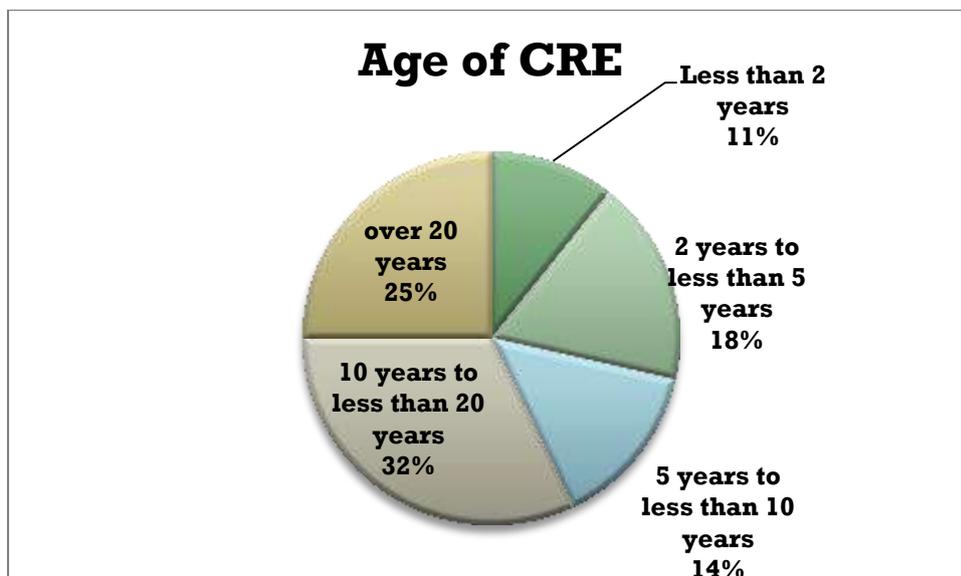
CREs that responded to the survey operated in all states and territories except the Northern Territory, with a larger proportion operating in New South Wales, Victoria and Queensland.

Figure 1- Location of CRE (by state)



Participating CREs ranged in age from less than two years to over twenty years. The majority of responding organisations (57%) were ten years or older. All case study CREs have been operating for more than 15 years.

Figure 2- Age of CRE



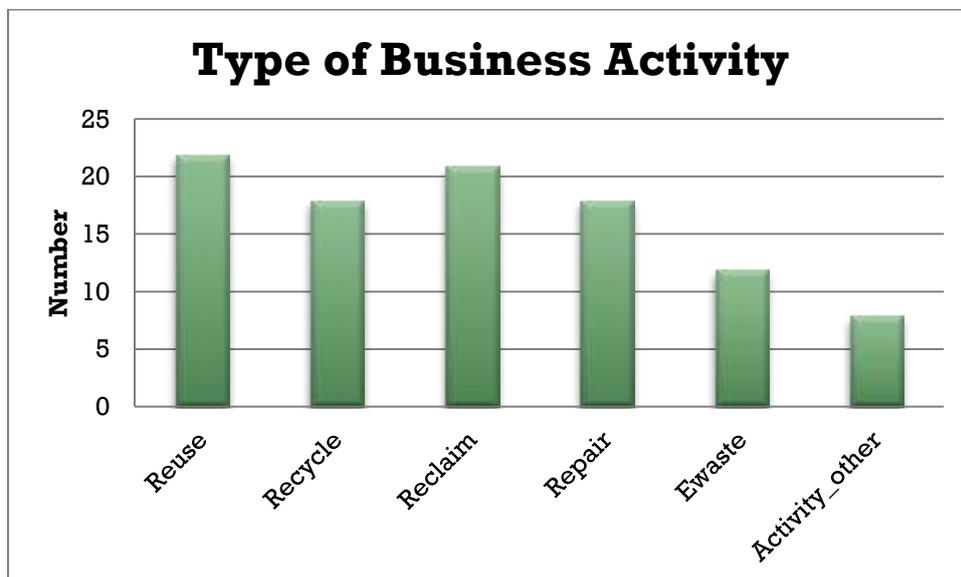
The number of FTE employees is 19 CRE organisations (68%) employed less than 20 staff, and would be therefore classified as a small business by the ABS. Nine CREs (32%) employed between 20 and 200 staff, denoting they are a medium sized enterprise based on ABS definitions. A total of 404 FTE employees were engaged, with an average of 14 paid staff, and a range between 0 and 60.

The significant majority of responding organisations (68%) were businesses owned by nonprofit organisations. Other ownership types included: community owned businesses (14%), privately owned businesses (7%), community run projects/programs (7%) and local government owned-volunteer operated enterprise (4%). One case study enterprise operated under a cooperative structure.

In terms of business activities, 50% of responding enterprises reported that they ran a single venture. Twenty-nine percent operated multiple ventures of different types, while 21% operated multiple ventures of the same type. Half the responding organisations operated from a single location, while half operated from multiple locations, with 18% operating from more than five locations.

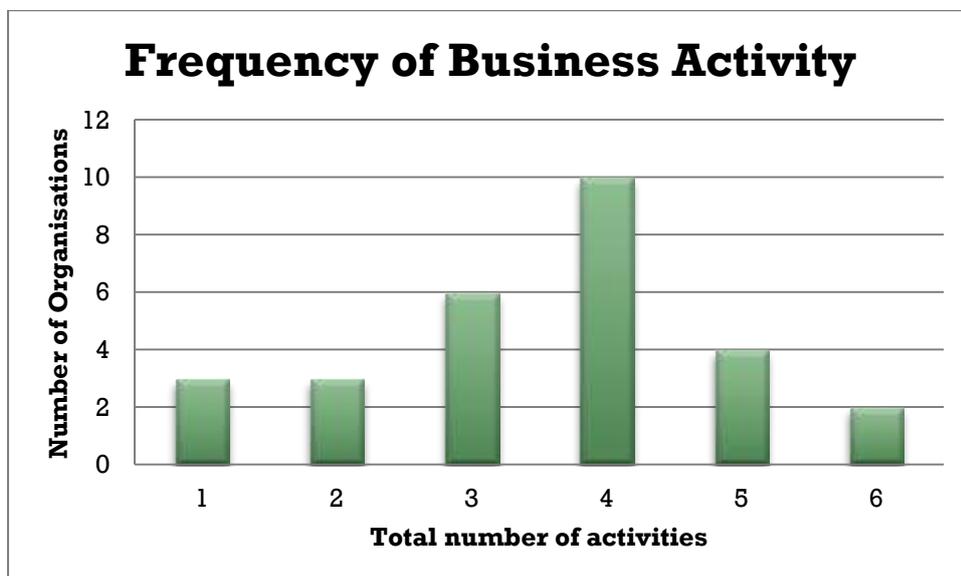
The nature of business activities varied across responding organisations, with reuse and reclamation of goods the most frequently cited activities (79% and 75% respectively), followed by repair (64%), recycling (64.3%), processing of eWaste (43%) and other (29%).

Figure 3- Type of business activity



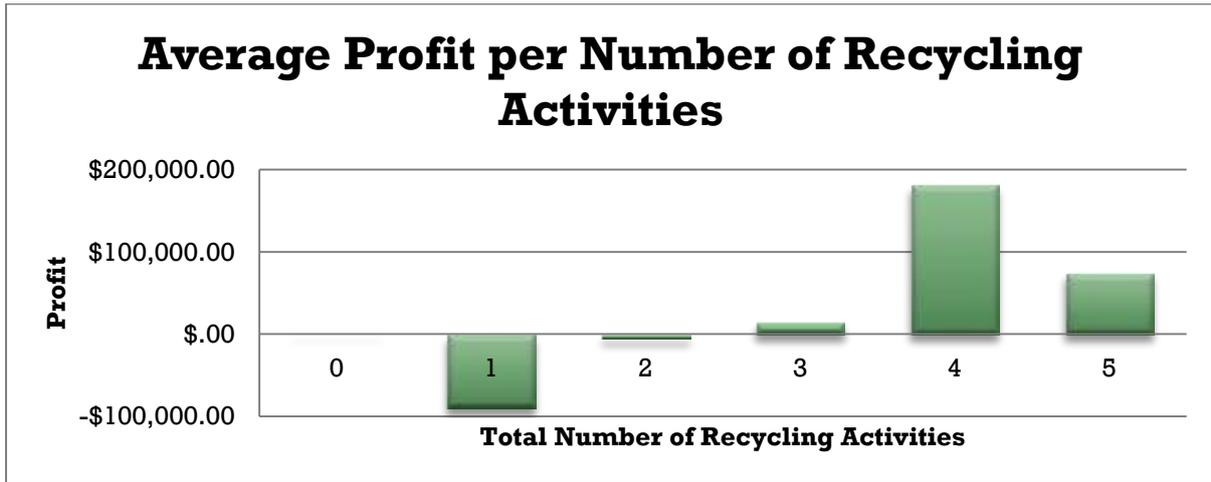
While some organisations only undertook a single form of recycling, most organisations undertook more than one, with four activities the most frequently cited number of activities undertaken.

Figure 4- Frequency of business activity



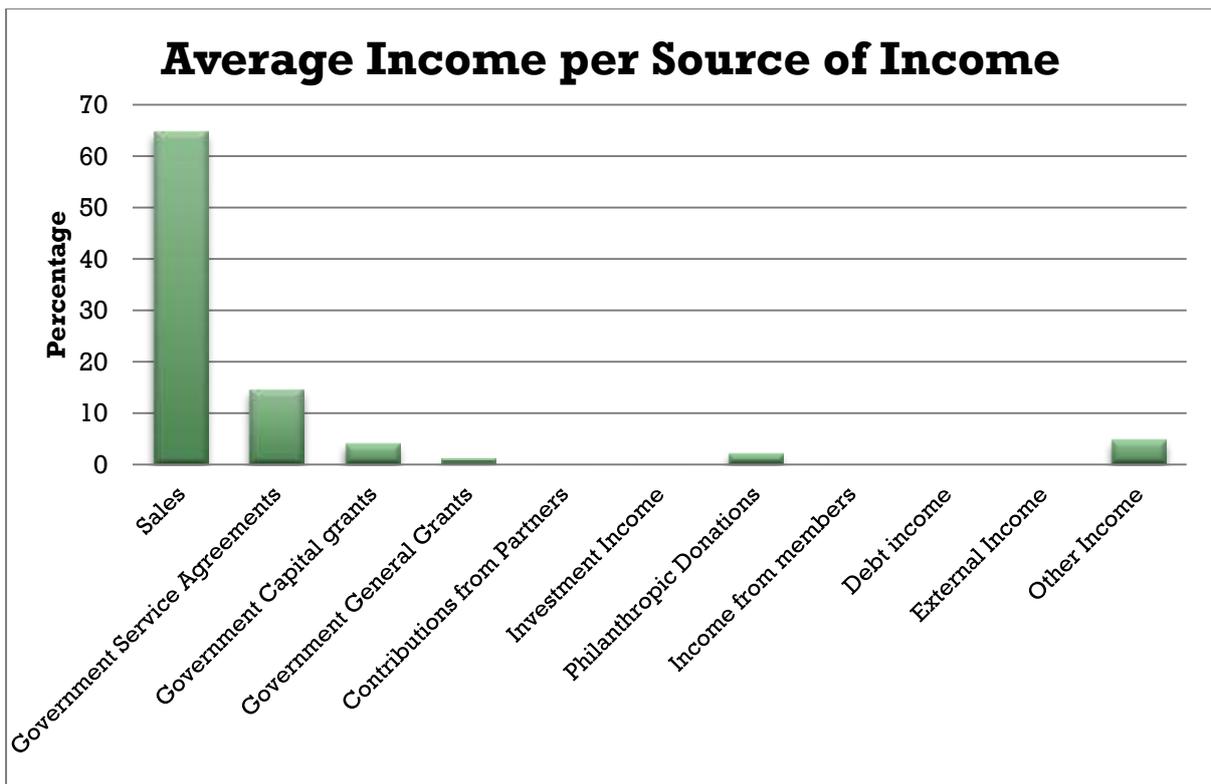
When comparing the financial performance of responding organisations with the number of activities they undertake, it was found that organisations that undertake more than three separate activities are more likely to make a profit than others. There is no apparent relationship between the age of organisations in the sample and the number of activities they undertake. Thus younger organisations are just as likely as more established ones to provide a wide scope of recycling activities.

Figure 5- Average profit per number of recycling activities



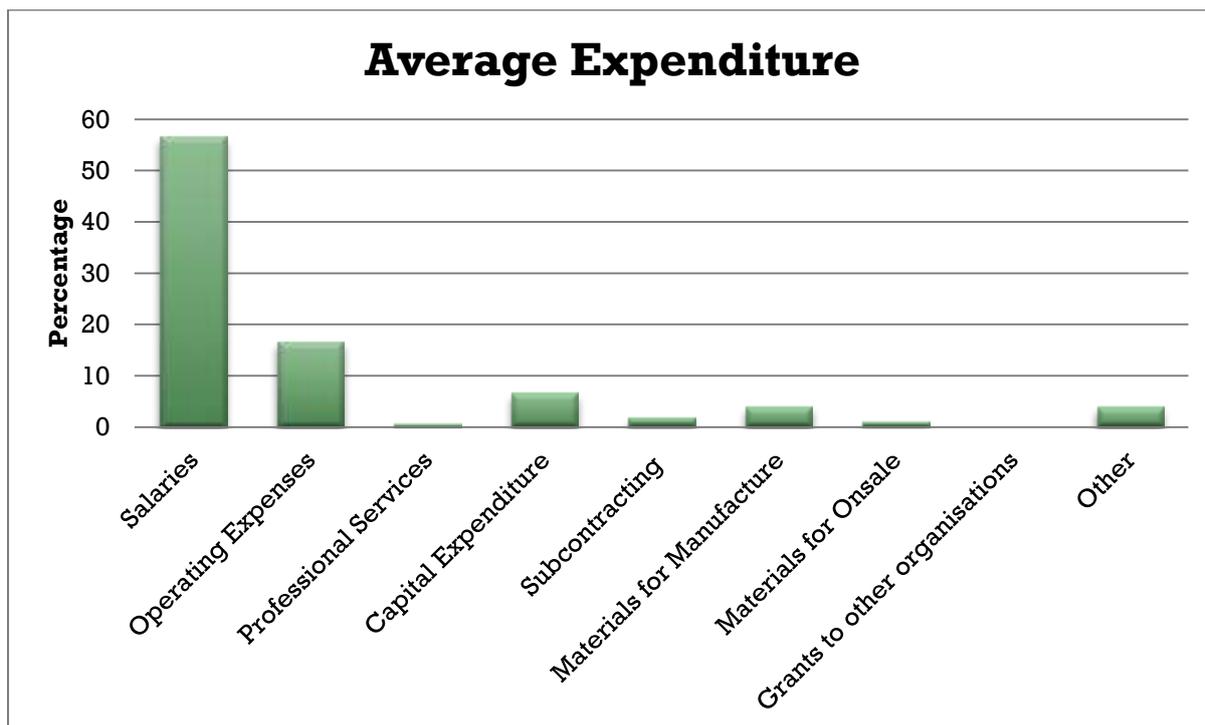
On average, the greatest source of income for participating CREs was derived from the sale of goods and services to the public (65%) and government service agreements (15%).

Figure 6- Average income per source of income



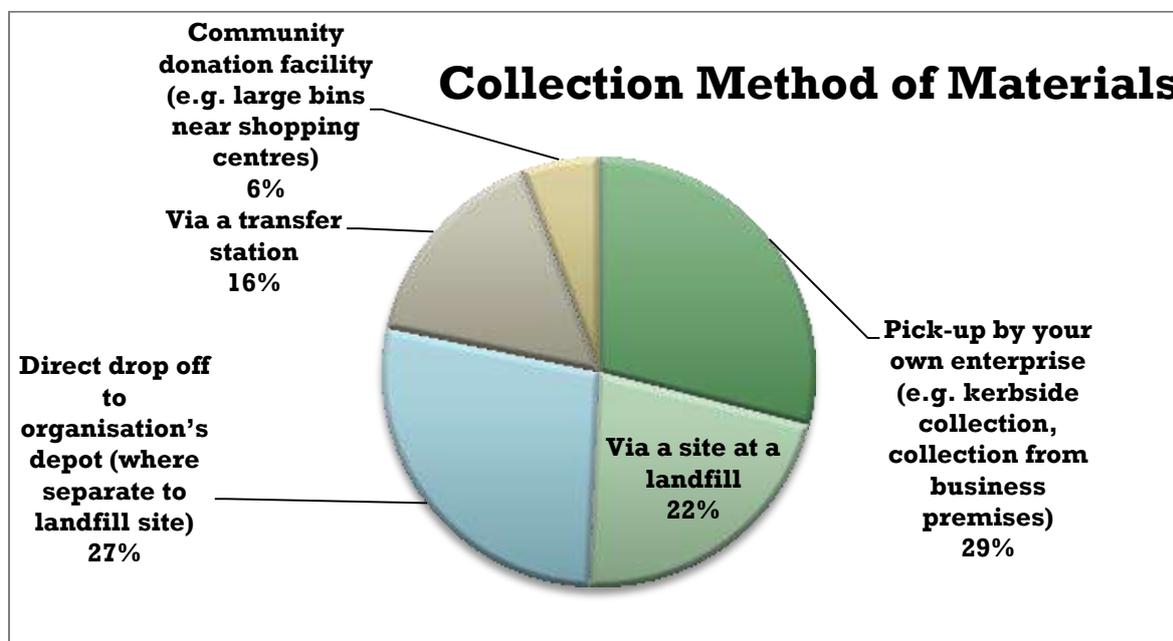
On average, the largest source of expenditure amongst participating organisations was on salaries and wages (57%) followed by other operating expenses (17%).

Figure 7- Average expenditure



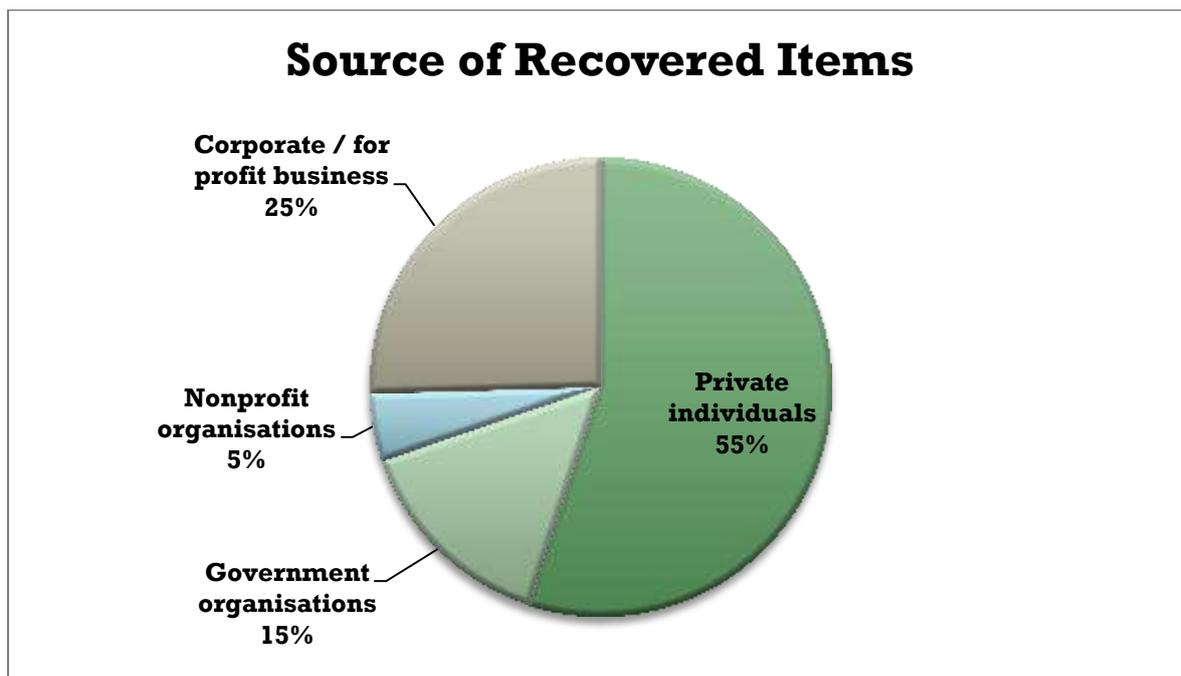
Goods were collected by participating organisations in a variety of ways, with the majority of collection occurring through CRE pick-up (29%), direct drop off to the CRE depot (27%) and via a site at a landfill (22%). Other collection methods identified in the case study research included deconstruction of on-site building materials.

Figure 8- Collection method of materials



Recovered items were sourced primarily from private individuals (55%), but also from businesses (25%), government organisations (15%) and nonprofit organisations (5%).

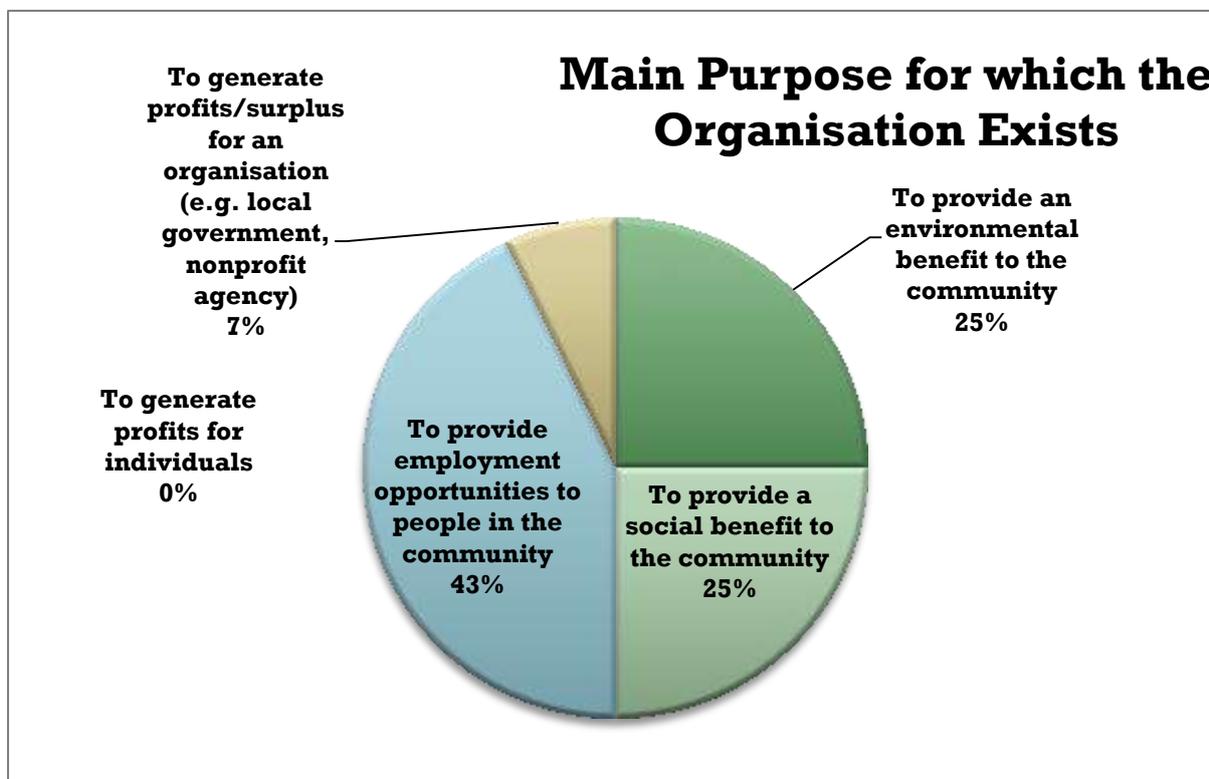
Figure 9- Source of recovered items



6.2 Local environmental, social and economic impacts

Surveyed organisations were asked to identify the main reason that their organisation exists. The most frequently cited response (43%) was to provide employment opportunities for people in the community, followed by providing a social benefit to the community (25%) and an environmental benefit to the community (25%).

Figure 10- Main purpose for which the organisation exists



Eighty-six percent of responding organisations reported that they provided training and employment opportunities for job seekers, while 14% did not. Fifty-four percent of respondents reported that their CRE provided educational activities around resources in landfill and sustainability, while 46% did not.

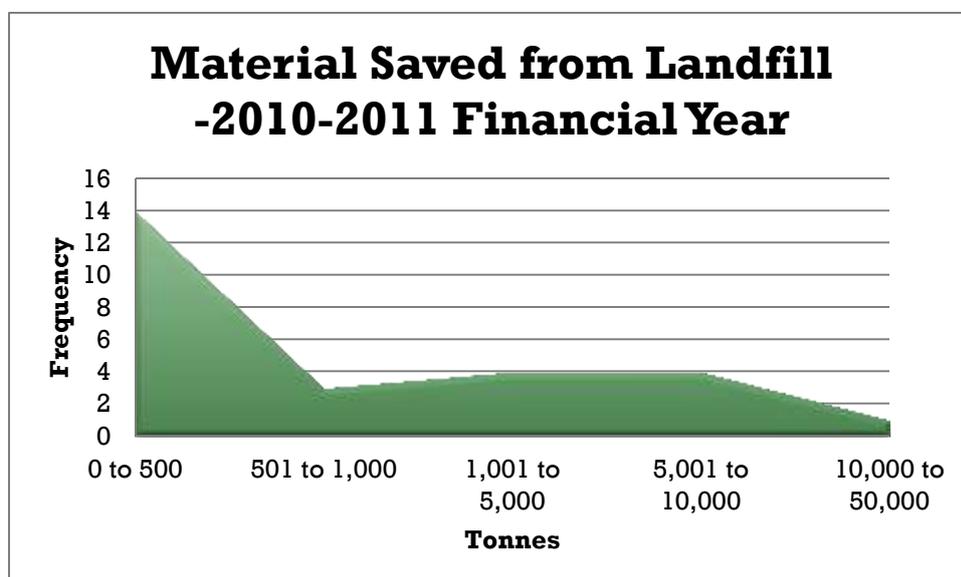
Organisations who participated in the survey employed a total of 609 people (or a full time equivalent of 404) in the 2010-2011 financial year. They trained 56 trainees and involved 316 volunteers in their operations during this period. The number of volunteers that CREs involved varies; one of the case study enterprises alone currently involves 90 volunteers.

Table 1- Number of employees and volunteers (based on survey data)

	Average (per CRE)	Total
Number of Paid Staff	25	609
Staff Full Time Equivalent Positions	14	404
Number of Trainees	2	56
Number of Volunteers	11	316

On average over 2,000 tonnes of material were saved from landfill each year by CREs that participated in the survey¹. Annual tonnage ranged from 0 tonnes for new enterprises to 15,000 tonnes, with the total reported tonnage for the sample being 61,017 tonnes, and the average being approximately 2,347 tonnes.

Figure 11- Material saved from landfill- 2010-2011 financial year



Survey respondents were also asked about the destination of materials recovered and the means by which they were processed in the 2010-2011 financial year. Table 2 below details these responses.

¹ One organisation reported 7,500 m3 of material (volume not weight), which is excluded from the above data as it is a different measure.

Table 2 - Destination and means of processing recovered materials

	Recycling of resources <i>(e.g. aluminum, paper, wood, plastic, cardboard)</i>	Recycling of E-Waste <i>(e.g. computers)</i>	Sales to the public <i>(e.g. white goods, furniture, building materials)</i>	On-selling to other organisations	Placed in landfill / waste disposal
Minimum	0%	0%	0%	0%	0%
Maximum	100%	100%	97%	80%	30%
Mean	29%	20%	39%	8%	4%
Median	10%	5%	36.5%	0%	2.5%
25% percentile	0%	0%	0%	0%	0%
50% percentile	10%	5%	36.50%	0%	2.50%
75% percentile	56.25%	19%	70%	5%	5%

The data show that there are different recycling strategies underway in different organisations. For example, with recycling of resources, some organisations do not undertake this activity at all, whereas for other organisations this is their sole activity. While the mean for recycling of resources is 29%. Over 50% of organisations undertake this activity at a very low level (median of 10%). Similarly for recycling of eWaste, some organisations did not undertake this activity at all, whereas for others it was their sole activity (100%). Selling to the public is the highest activity at all measures – whether mean, median or percentile. On-selling to other organisations was the second lowest, with 50% of CREs not undertaking this at all. Placement of goods in landfill was the lowest activity. For 25% of participating CREs, no materials were placed in landfill at all.

CREs contribute economically by employing local people, value adding to recovered goods, onselling those goods and related services, and generating financial profits or surpluses. Table 3 below summarises the economic contributions of those organisations that participated in the survey and estimated totals for the sector as a whole, for the 2010/2011 financial year.

Table 3- Economic impacts

	Total For Sample (28)	Average (per CRE)	Estimated Total for Sector²
Total Number of Paid Staff	609	25	1,523
Number of FTE Employees	404	14.43	1,010
Annual Tonnage of Goods Recovered	61,017	2346.81	152,543
Income	\$22,548,843	\$805,315.82	\$56,372,108
Profit	\$ 1,754,042	\$ 62,644.36	\$ 4,385,105

6.3 The conditions under which CREs develop into successful community business models

6.3.1 Case Studies

The purpose of this section of the report is to provide descriptive case studies of successful CREs, as examples of good practice for industry reference. Case studies are presented on the following enterprises; the Resource Work Cooperative in metropolitan Tasmania, Endeavour Recycling Shop Morgan Park in regional Queensland, and Great Lakes Resource Recovery in rural NSW.

² Estimates are derived from calculating the survey total as a proportion of the identified population of CREs in Australia. The response rate of 40% to the survey suggests that the sample is representative. However, given the small sample size and small known population of CREs, estimations of totals for the whole sector may not be completely accurate.

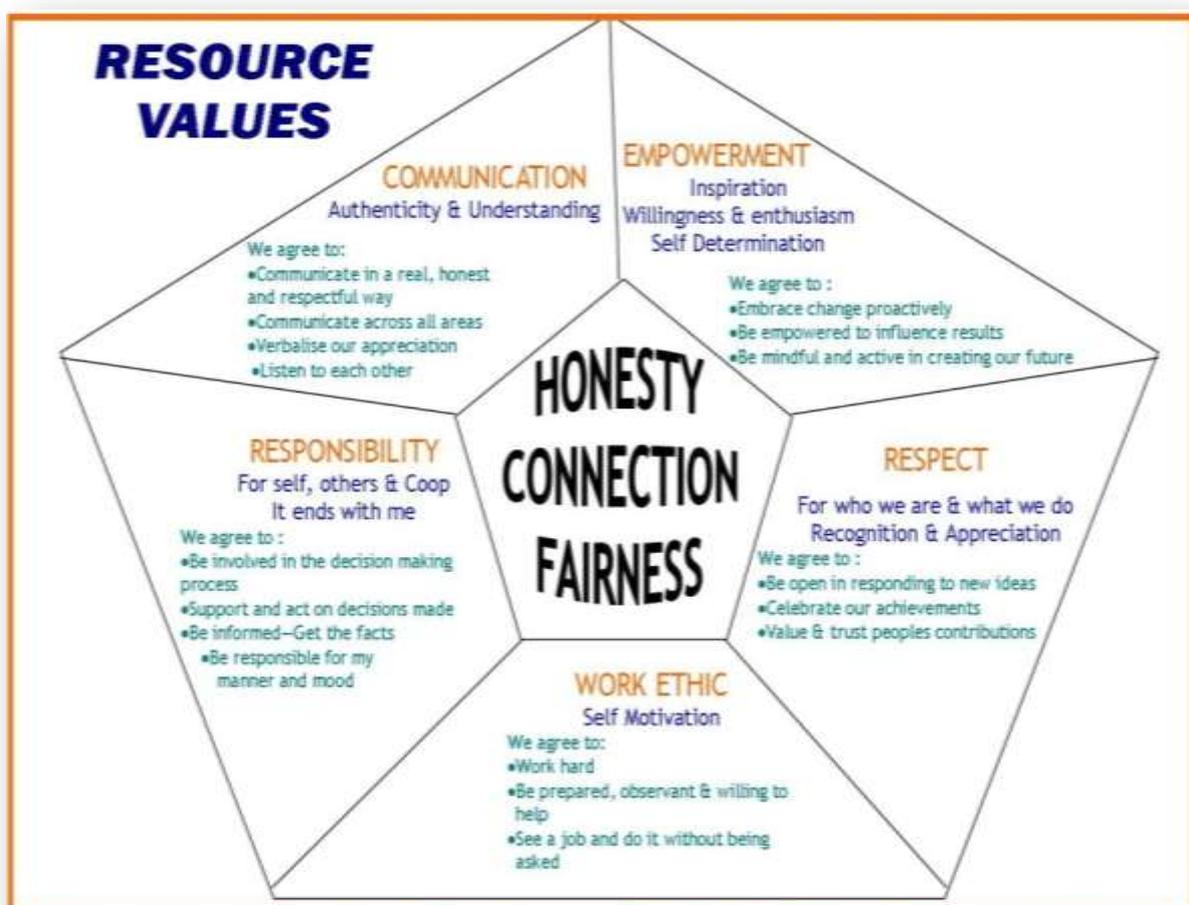
Insights drawn from the case studies were derived from information based on the case study framework provided in Appendix B. While most enterprise information was collected, some information around outcomes, impacts and financial records was of a sensitive or confidential nature and therefore has not been published in this report. Detailed records around impacts, other than those on recycling volume, have not been formally recorded by the enterprises. Therefore it is important to read the cases as an indication of what outcomes and impacts the enterprises provide, since it has not been within the scope of this project to collect extended information in this area.

6.3.1.1 Resource Work Cooperative

The Resource Work Cooperative formed in 1993. In 1994 they established a license with the Hobart City Council to salvage from the Hobart landfill. Since 1995 they have operated the South Hobart Tip Shop and also the CBD Collectables Shop Since 2000. Their conception was inspired by a small group of people interested in sustainability, who were salvaging from various landfills in Australia, and saw the opportunity in starting a business from Hobart’s landfill.

Mission statement: To excel as a sustainable, socially and environmentally conscious enterprise, which focuses on the reuse of resources and operates on a cooperative model (Resource Work Cooperative, 2011).

Figure 12- Resource Work Cooperative values



Resource Work Cooperative has been an innovative enterprise and has received several industry awards, including the Small Business Award, Minister’s Award for Environmental Excellence in Tasmania, and the award for Environmental Excellence in 2010.

Enterprise model and structure

Resource Work Cooperative identify themselves as a social enterprise operating within a cooperative structure (Resource Work Cooperative, 2011). They are owned and operated by their workers. Revenue is invested in the business and any surplus is used to create more employment and buffer against future income loss to support current workers.

The cooperative has a general membership of workers/owners, a board of management elected by, and drawn from, the membership, and also a coordinator who acts as an interface between the two. They hold monthly meetings which are open to all. As a cooperative, workers are committed to maintaining a flat management structure and utilise consensus decision-making. Some decision-making falls to the board, while decisions on other issues are open to the general membership. The decision-making process is something the cooperative aims to refine, to better allocate which decisions are more relevant to the board and those that should more appropriately be open to all members.

There are currently 30 members in the cooperative and membership is organised in the following way, as described by a senior staff member:

There's active and inactive members. When we hire someone after 3-6 months, they're offered membership, prior to that they come to meetings but they need to be a member to vote. As people leave they're still on the books as members. They can turn their membership in or they can stay inactive. An active member is someone who generally works there but also comes to meetings (Resource Work Cooperative, 2012b).

Of these 30 members, 26 are currently active, with 16 fulltime workers and 10 casual workers. Volunteer workers are recruited for suitable projects only and are generally aligned with these projects based on their interests. This cooperative structure has been a successful model for the enterprise, fostering mutual ownership and responsibility amongst the people involved.

Enterprise activities

Historically, the cooperative salvaged directly from the face of the landfill and this continues to be their main method of gaining materials. From the landfill, they salvage for 1-1 ½ hours, 4-5 times per day. In general they salvage around 2.5 tonnes of materials per day. As well as salvaging, Resource Work Cooperative also accept donations of anything that can be reused or recycled, through a drop off system, where the public bring reusable goods direct to the Tip Shop. These items are then sold at the Tip Shop, or the Collectables Shop. There is also a pickup service that runs two days per week.

Most recently, Resource Work Cooperative has run several building demolition projects for private businesses, builders, and government, recovering reusable material from buildings.



This has become a new and successful activity of the enterprise. Materials recovered from building deconstruction include (Resource Work Cooperative, 2012a):

- Hardwood framing & roofing/ floor timber,
- Weatherboards and floorboards,
- Windows, internal & external doors, as well as steel security doors & gates,
- Roofing tin, flashing and guttering,
- Bricks from the chimney & concrete blocks from the footings,
- Copper wiring plus steel & copper pipe work,
- Fittings such as a heat exchanger, fridge/ freezer, hot water cylinder, sinks, toilet, cast-iron bath, lighting, carpets, blinds, and even a discarded computer was processed through their eWaste program.

Another minor business activity they operate is a litter service for the local council, which they spend approximately 30 hours per month on.

In light of growing problems with eWaste, Resource Work Cooperative and Hobart City Council jointly developed an interim eWaste plan and, from September 2010 to October 2011, processed approximately 95 tonnes of eWaste. They have recovered the following materials from electronic items (Resource Work Cooperative, 2011):

- CPUs,
- Memory chip boards,
- Mixed circuit and mother boards,
- Transformers,
- Motors,
- Copper Wiring,
- CD/ DVD drives,
- Hard drives,
- Aluminum (i.e. from heat sinks),
- Thin gauge/ pressed steel, which includes a large skip for recycling obsolete white goods.

The following table provides a summary of volume (kg) of materials reused and recycled during 2011:

Table 4- Materials recovered

Source of material	Volume (kg)
Council agreements	
Salvaged from landfill	403, 500
Drop off	196, 656
<i>Total</i>	<i>698, 106</i>
Other	
Deconstruction	70, 000
<i>Overall Total</i>	<i>768, 106</i>

Source: Resource Work Cooperative, 2011.

The Cooperative's activities are centred on a 'waste hierarchy' model, where reuse is valued above recycling and this philosophy has driven their methods of collection and redistribution.

Other initiatives

As well as their main business activities, Resource Work Cooperative is highly engaged in the community. Committed to an ethos of creating employment, waste minimisation and education (Resource Work Cooperative, 2012b), the Cooperative has been involved in various other activities including; hosting the annual event 'Art from Trash' which is an art exhibition and competition, that showcases art made from materials otherwise destined for landfill. Other major events and activities they have initiated are; 'AppleLand' which is a five yearly exhibition of old photos and film recovered from landfill, and educational tours "providing teachers with the opportunity to integrate sustainability into their teaching and learning programs" (Resource Work Cooperative, 2011).

Impacts

While, historically, the Resource Work Cooperative has held reuse and recycling as one of its core activities, other areas of activity and impact were seen as equally important. A discussion with Cooperative staff reveals the following:

I often think that apart from the physical reduction of waste, on the scale of a landfill, in volumes it's not a massive amount compared to what goes into the landfill, but it's as much the education of simply being there over 15 years and people starting to recognise what we represent – that waste isn't something that's just gone and you keep buying new stuff. They see a shop that's full of useful valuable material, recognise that it employs over 20 people for over 15 years. I think we are a symbol of change in attitude, so that people recognise that all this stuff has a value. You know we've created an industry where there wasn't jobs before (Resource Work Cooperative, 2012b).

Job creation has been another significant area of impact. Relative to large scale recyclers, smaller CREs like the Resource Work Cooperative may not in fact recycle as much waste, but their benefits extend beyond the financial bottom line. The Cooperative makes the following comment on this topic:

So we actually have a really high ratio of employment and if you compared us to recycling where they have a huge factory and a lot of infrastructure – they go through an awful lot of goods but they have maybe only a handful of jobs (Resource Work Cooperative, 2012b).

As well as environmental and economic outcomes and impacts, the Cooperative's initiatives within the community have been a source of benefit that has been extended to community members. A major initiative of theirs is the annual 'Art from Trash' exhibition that they curate. This event has been successful and has engaged artists, schools and people who wish to view the exhibition or purchase artworks. Since 2006 the Cooperative has experience significant growth. Growth of the event and areas of community involvement is indicated in the table below.

Table 5- Art from Trash Growth since 2006

Participation	Artists	(Schools)	Artworks	Visitors	(Schools)	Sales
Year						
2006	49	(4)	51	*	*	*
2007	40	(0)	48	*	*	*
2008	50	(0)	60+	1500		2000
2009	65	(9)	85+	2300	(250)	4800
2010	136	(20)	150+	3500	(700)	3800
2011	143	(32)	150+	4500	(600)	7200

Source: Resource Work Cooperative, 2011. *No record

As well as 'Art from Trash', the Cooperative curate 'AppleLand', which as stated previously is an exhibition of salvaged and archived photos. This has been a historical contribution to Tasmania.



Finally, the Cooperative stipulates in their constitution that annually, 5% of profits will be donated, usually to international nonprofits. Below is a summary of their donations since 2010.

Table 6- Donation allocations

Year	Donations description
2010	<ul style="list-style-type: none"> • \$2750 to "This Life Cambodia" • \$750 to "The Tibetan Children's Fund"
2011	<ul style="list-style-type: none"> • \$150 to post salvaged shoes and clothing to Lombok indigenous tour guides. • \$50 to sponsor a child's fee for "Circus Quirkus" (Lions Club). • \$500 dish donated to Salamanca Arts Centre fund raising auction.
2012 (at the time of publication)	<ul style="list-style-type: none"> • \$1689 to "Wildflower Home" • \$1625 of microloans to "Good Return"

The impacts described above have been some of the major benefits that the Resource Work Cooperative has generated, particularly during more recent years of operation.

Financial information

The Resource Work Cooperative is predominantly self-financed through their business activities. However, in 2010 they initiated a grants program, hiring a professional on a casual basis to identify grant opportunities. They received their first grant in 2011, which resulted in the purchase of a truck used for their pickup service. The Cooperative is working to professionalise their grant seeking process to help respond to the various projects they have scheduled.

Challenges

Recycling as an industry has changed dramatically since the inception of the organisation. One of the major issues the Cooperative faced in earlier years was public attitudes. They were perceived to be 'scavengers'. This has changed dramatically through their presence and education efforts, establishing a strong, supportive relationship with the community and Council.

While to date the Cooperative has been successful in achieving their mission and objectives, they face a series of internal and external challenges that they are working to address. These include:

- Structural issues, in terms of a longer decision-making process inherent in consensus decision making, which they have tried to address through improving internal communication via an internal newsletter;
- Managing work performance issues amongst member-owners;
- Challenges in retaining employees due to a relatively flat pay structure;
- Uncertainty around what will be collected from the landfill;
- Changing nature of waste management in Tasmania and relying on the landfill, which they address by diversifying their activities; and
- Competition.

The Resource Work Cooperative is highly engaged with internal and external issues affecting their enterprise, and these challenges have not impeded their growth and success as a self-funded enterprise. They focus on engaging in a wide range of activities, addressing the current challenges listed, to remain competitive and to progress with their various projects.

Future directions

As an organisation that is self-funding, diversification of activities and innovation has been ongoing. Recent plans for expansion have included; extension of salvaging from landfill and growing the Tip Shop in light of Council's plans to redesign the landfill to a waste transfer station, expansion of the pickup service, and establishing a clothes/ textiles only shop in conjunction with a workshop for engaging newly arrived migrants. One of their latest expansion projects which began operation on the 1st May 2012 is a transitional employment program combined with an eWaste plan. The Cooperative has described it as follows:

You know we're constantly battling with eWaste and the new Product Stewardship that's coming in, but we're expanding that at the moment where we're working with Colony 47, they're a service provider for the homeless and mental health, so we're actually doing a transitional employment thing, with them (Resource Work Cooperative, 2012b).

These innovations have been a product of both the ethos of the enterprise and the members, and the need to remain viable as a business.

6.3.1.2 Endeavour Recycling Shop (Warwick/Morgan Park)

Endeavour Industries Warwick is one of many enterprises of the Endeavour Foundation and was established over two decades ago. They began as a cardboard recycler which dealt directly with the global packaging company, Amcor. In 2006 they established an agreement with local Council to develop a tip shop and recovery facility at a landfill operated by Council at Morgan Park. More recently, they were approached by Council to run a similar facility at Stanthorpe. This opportunity is understood to be direct result of their prior success and experience relating to recycling. In earlier years, the enterprise was recycling around one tonne of cardboard per week and has gradually expanded to currently processing approximately 50 tonnes per week as well as processing plastics, metals and other recyclables.



Apart from their recycling business, the main motivation for establishing the enterprise was to create supported employment for people with disabilities. This continues to be central to their mission and is line with Endeavour Foundation's mission as one of the largest non-government disability service providers in Australia.

Enterprise model and structure

Endeavour Industries Warwick operate their own recycling depot as well as the Council facilities at both Morgan Park and Stanthorpe. The Foundation has a hierarchical structure, comprising a state-wide board and management team as well as regional committees representing other stakeholders. The Foundation's state management team oversees all major strategic decisions regarding the development of the recycling opportunities. The case study enterprise itself is relatively small and has only one level of operational management.

Endeavour Foundation Industries provides supported employment for people with disabilities through developing viable businesses. 'Operation and Management of Recycling Facilities' is one the major product areas of Endeavour Industries (Endeavour Foundation, 2012a) and the case study site was established as a long term viable enterprise, able to create work for supported employees under this stream. Endeavour's recycling shops are each set up differently to serve different needs within their regions. In an interview with a representative from Endeavour Industries, the following comment was made:

Different size communities or groups, operate different size facilities that cater for different needs. For example, what we do at Buderim is different from what is done at Warwick. Warwick's got a total population of say 25,000, whereas Buderim has approx 100,000 people and could get 400-600 cars a day through, whereas Warwick would get a lot less (Endeavour Recycling Shop, 2012a).

Endeavour Industries at Warwick also runs the Morgan Park site and, more recently, the Stanthorpe site. In total across all sites, the enterprise involves 37 supported employees, 7 fulltime staff, 8 part-time and casual staff, and 12 volunteers.

Enterprise activities

Endeavour Industries Warwick's business activities are centred on recycling and waste management. They predominantly recycle cardboard and paper, as well as some plastics, metals and various other materials. They operate a drop off and collection system, recycling to commercial businesses, a document destruction service and also run tip shops at Warwick and Stanthorpe. They are also responsible for servicing 18-20 transfer stations for Council in the region.

The following table is a forecast of volume of material for 2011-2012, based on previous year records.

Table 7- Volume projections for 2011-2012

Material	Volume (t)
Goods sold in shop and diverted from land fill	97
Cardboard	150
Plastic	52
Ferrous Metals (Steel)	185
Non Ferrous Metals	8
Glass	44
TOTAL	536

Source: (Endeavour Foundation, 2011)

The enterprise indicates that they are continually experiencing an increase in volume of materials (Endeavour Foundation, 2012b).

Other initiatives

As well collection of materials for reuse and recycling, the enterprise supports the Endeavour Car Rally and runs recycling education programs in schools. School programs are for promotional and educational purposes. They target predominately primary school children, which they believe are more receptive of new ideas and to the concept of recycling.

Outcomes and Impacts

An extended relationship with Council, and expansion through operation of additional sites have been understood to be an indication of the benefits, provided by the case study enterprise. A representative from Endeavour Industries made the following comment on the role of community recyclers such as the Warwick enterprise described in this case:

In a large commercial arrangement, the big players tend to deal with the other big players, usually dealing with bulk mainstream items, then you've got the network of community groups that pick up what amounts to be a large portion of the recyclable materials stream. Those big commercial entities are usually more interested in large volume arrangements (Endeavour Recycling Shop, 2012a).

While interested in operating a viable business, profit is not the only motivation for the enterprise. Rather, generating employment for people with a disability, environmental and community benefits are core areas of focus.

Creating employment for people with a disability is one of their most significant impacts. Employment options are limited for people with a disability, and the Tip Shop forms part of Endeavour Industries, which is one of the largest employers of people with disabilities. The enterprise employs 37 supported workers, and is focused on giving them the opportunity to learn skills, it would be otherwise difficult for them to gain:

If we didn't have our guys (supported workers), we wouldn't be here. The whole point of anything we do at Endeavour is to create employment for our guys. The point is to create employment, give the guys skills that they can use. We have guys who have gone onto full employment outside of here. Our high level [supported workers] have forklift licenses and can drive quite well (Endeavour Recycling Shop, 2012b).

The recycling enterprise has been a means of generating employment for people with a disability. Engaging these people in work and providing them with skills to enhance their employability is a major contribution of the enterprise. Some employees have gone on to find work outside of Endeavour.

Finally, in relation to the enterprise's impact on the community, management has described the reuse/ recycle shops as places that are 'really connected with community' (Endeavour Recycling Shop, 2012b). The shop at Warwick is visited by a large number of people within the local community and it has been described as a vibrant place. Moreover, volunteers at the shop, which contribute around 500 hours monthly, are often engaged with the enterprise for social purposes and, outside of their volunteer hours, meet weekly for a social outing.

Financial information

Financial inputs and decisions are made by higher levels of management of the Endeavour Foundation. Management have a particular focus on ensuring the long term viability of the enterprise. One interview respondent makes the following comment regarding financial decision-making:

We set goals and benchmarks, the place has got a budget. What happens budget time the commercial manager sits down with usually the local manager and from previous years budgets we look at setting improvements, new goals, areas of development (Endeavour Recycling Shop, 2012a).

The initial investment in the enterprise was made by both the Endeavour Foundation and local Council. For over 20 years the enterprise has maintained a contract with Council and sustaining this contract, which has included operation of additional sites over the last six years. This has meant a secure source of revenue for the enterprise.

Challenges

One of the biggest challenges in earlier years was the public's receptiveness to the enterprise. Initially there was little understanding of recycling and what the enterprise was trying to achieve:

When they first started people weren't terribly interested in recycling, some were of course. People thought they were doing you a favour by giving you their stuff. We used to have to charge a fee. (Endeavour Recycling Shop, 2012a).

Similarly, there was little interest in the purchase of recycled materials. During the earlier years of the Endeavour Industries Warwick's operation, there was not a stable market for the sale of recyclable materials. This issue is reflected in the following comment:

Standards for plastic have developed over the years, the whole industry has developed as a recycling industry, which makes the whole thing easier for a start. Before you just had to hunt around and hope that somebody wanted to buy the stuff (Endeavour Recycling Shop, 2012a).

Throughout the enterprise's and industry's evolution Endeavour Industries has developed strong community and local government support, as well as having a stable market for the sale of their materials through commercial businesses and the community.

One of the current challenges the enterprise experiences is the relatively low price of recycled materials. Price fluctuations and market volatility, although budgeted for, can often be unpredictable. For example:

Like the steel market place can go up and down. In six months it could go from \$100/tonne to \$20/tonne (Endeavour Recycling Shop, 2012a).

While the price of some products can be more stable, fluctuations can be difficult to adjust to, particularly in light of rising costs. The cost of fuel, particularly relative to the price received for recycled materials, and also freight costs have been identified as the enterprise's most significant current challenge.

Future directions

The last six years of operation have seen significant growth, with the enterprise having acquired new contracts for facilities at Morgan Park and Stanthorpe. To date, they have sustained and extended their agreement with Council. Currently being the main provider in the region due to ability to provide competitive services and having developed substantial expertise in the management of Resource Recovery Centres and Tip Shops. The enterprise is confident that they will remain competitive and are currently focused on continuing to improve their practices and increasing their market share.

6.3.1.3 Great Lakes Resource Recovery

As an enterprise of Great Lakes Community Resources (GLCR), Resource Recovery was established in 1991 in the Foster-Tuncurry region of New South Wales.



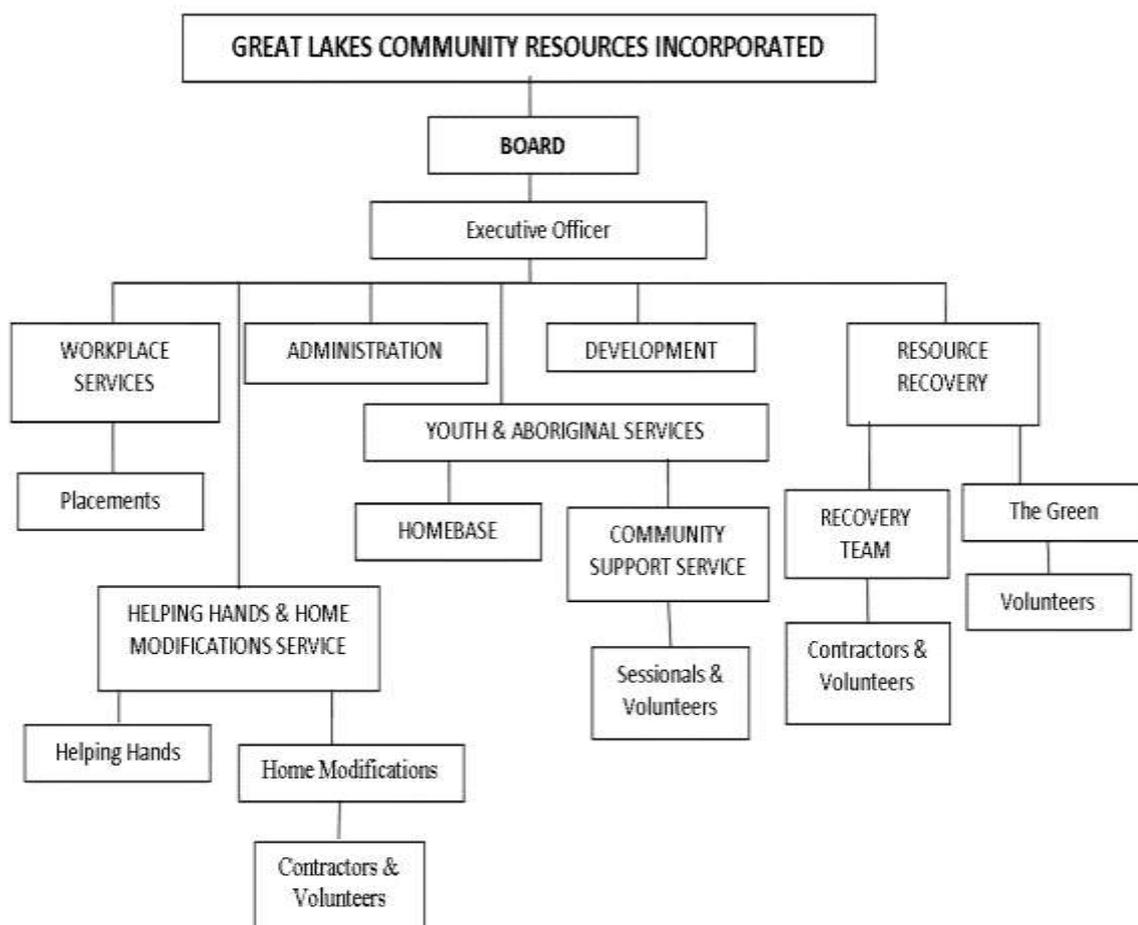
The enterprise was formed to respond to the need “for more environmentally sound management in the area of waste, and a need for more diverse employment opportunities in the local area” (Resource Recovery, 2012a). Since their inception, Resource Recovery has experienced and been recognised for their success, having been cited as a ‘best practice’ example in the 1994 Green Jobs Report and recently having won the 2011 Local Government Innovation in Waste Award, supported by the Waste Management Association Australia. The award acknowledged Resource Recovery’s commitment to providing opportunities for socially disadvantaged people in the region, which runs parallel to their business goals.

Foster-Tuncurry is characterised by high unemployment at 10.5% as recorded in 2006 (Great Lakes Council, 2012). Unemployment is especially high amongst Indigenous people in the area. In light of high unemployment, Resource Recovery seeks to provide opportunities for diverse employment, particularly targeting long-term unemployed men. Their parent organisation GLCR, is the largest single employer of Indigenous people in the region.

Enterprise model and structure

Resource Recovery is an incorporated, nonprofit community development association. They are one of the seven enterprises that fall under GLCR, which was originally established as a Skillshare - Federal Government - initiative. The following image represents GLCR’s governance structure and Resource Recovery’s position in the mix.

Figure 13- GLCR organisational structure



All major decisions are made through the Board of Management. GLCR also has a Finance Committee, where any decisions for purchases for example, are applied for via a business plan. Any day-to-day financial activities are administered by GLCR, although Resource Recovery is responsible for their own budget and has set key performance indicators (KPI).

Resource Recovery's major projects are; the Tuncurry Waste Management Centre which has a Weighbridge, Waste Handling and Minimisation programs, Dog and Cat Pound, 'The Green' community project, Site Management of Tea Gardens Landfill, Bulahdelah Transfer Station/Landfill, and the 'Work it Out' program which supports Community Service Order participants (GLCR, 2011).

Resource Recovery itself employs 20 full-time and 3 casual staff, as well as recruiting 90 volunteers who are predominantly involved with The Green community project. The employment structure was described in an interview as follows:

Currently we have the manager, we have an assistant manager, we have a foreman, eight weighbridge operators, two plant operators, a trainee plant operator, and we have staff where all they do is drive around and reclaim anything that's been thrown into the cell that can be reclaimed and we also have two guys that work in a restoration workshop, restoring old furniture. (Resource Recovery, 2012b).



Creating employment opportunities is central to Resource Recovery's mission.

Enterprise activities

Having been successful in Council's tendering process since 1991, Resource Recovery has managed the three waste facilities at Tuncurry, Bulahdelah and the Tea Gardens. From these sites, they collect from the landfill anything that can be reclaimed, including metals, building materials, bric-a-brac, and furniture. Anything that has a resale value is collected and sold through their shop. However, with a focus on supporting employment opportunities and their staff, the enterprise has been flexible in taking on a variety of business activities to support employment goals. The following comment highlights this:

Anywhere there's an opportunity to expand and make a dollar we take because it all goes back into employment you see (Resource Recovery, 2012b).

Resource Recovery has also held agreements with Council to manage a Dog and Cat Pound and maintain public litter bins, provide a commercial recycling pickup service, a document shredding service, and provide quality training and assessment in 'Transport & Warehousing and Waste Management' (Resource Recovery, 2012a). Recently they also established a 'Green Bikes Group', which was set up to restore old bikes. Combining these business activities has meant more opportunities for employment. Consequently they have been able to optimise on a diverse skills set amongst employees, to deliver the variety of services.

Other initiatives

As well as these business activities, Resource Recovery has been active within the community. Some of their major initiatives include:

- 'The Green' which is managed in partnership with their parent organisation GLCR. They showcase environmentally sustainable living practices and invite the community to learn and participate;
- Ongoing work with offenders and ex-offenders through a Community Service Orders partnership, to provide support and connections for these people (GLCR, 2011);
- Initiatives undertaken in partnership with other enterprises under GLCR (GLCR, 2010).
- Construction of sustainable facilities such as water wise/permaculture gardens, a carbon neutral office and library from a shipping container; and
- Regular social events, workshops and tours involving around 200 community members throughout the year.

Resource Recovery has been employment and community focused, undertaking a stream of activities enabling community members to partake and learn through the initiatives listed above.

Outcomes and Impacts

During the 2011 financial year, Resource Recovery experienced strong growth financially, increased employment and training, and expanded their products and services (GLCR, 2011). Their mix of business and community activities has generated environmental, social and economic outcomes.

One of their major impacts was presented in the monthly CRNA bulletin (CRNA, 2011), where Resource Recovery stated:

This landfill was expected to have reached end of life 2 years ago and still has approx 5-7 years left.

This has been a significant impact environmentally and economically. This will become particularly important in light of a new Carbon Tax, where Resource Recovery has stated that they would be in a good position to mitigate Council's exposure to the tax.

Beyond their environmental contributions, employment has been a strong focus for the enterprise. They currently employ 23 staff, of which eight are Indigenous and three have been new traineeships created in 2012. They have a flexible attitude to training and select training opportunities based on employee interests. In an interview, Resource Recovery made the following comment on their employees:

Probably 90% of our employees have been long-term unemployed, ex offenders, alcoholics, you list it they're here. The thing they've never seen before is an opportunity and we've given that to them. You give them opportunity, treat them with respect and we've got fantastic employees. (Resource Recovery, 2012b).

They have specifically targeted those from backgrounds of disadvantage. In line with this ethos, Resource Recovery has been unique in their work with people fulfilling community service orders and having initiated a program which aims to address the cycle of criminal offense amongst people who have been given community service orders for small crimes:

We've got a program called work-it-out, and that came about because we service community service orders here. So they come here and do their hours. What we found was most of the people had made mistakes, and they'd dug themselves in such a hole that they didn't know how to get out of it, so we thought there's got to be a way of doing this. We applied a few times and got rejected, then finally got funding, where we've now got a system in place where they're interviewed, they're assessed if there's anything we can help them with. Like some have trouble with housing, fines, fines is massive, financial assistance as far as budgeting. We found that when we helped them through the process and treated them with respect and like people, we didn't see them again. (Resource Recovery, 2012b).

This has been a significant innovation for the enterprise.

As well as providing employment opportunities, and supporting ex-offenders, the enterprise has been committed to the development of their staff, supporting employees through periods such as university gap years and assisting employees with tertiary education options and costs.

In terms of their role and benefit to the community, 'The Green' is a new major initiative of GLCR and Resource Recovery and has been a way in which members of the local community have connected and engaged with each other and the enterprise. 'The Green' provides opportunities for people to learn and participate in sustainability practices, and also to engage with each other socially. Often the enterprise involves people who would otherwise not have these opportunities. One example of this is in inviting elderly citizens to participate in 'The Green' activities:

The beauty of the green is that people in nursing homes can come here and actually do gardening, where they wouldn't be able to do that in a nursing home (Resource Recovery, 2012b).

People also participate in 'The Green' in a voluntary capacity. There are 90 people working approximately 450 hours per month. The enterprise believes in working towards sourcing paid work for volunteers, and in 2012 the three new traineeships they created were from 'The Green' Volunteers.

Financial information

Resource Recovery has held a major contract with Council since 1991 to operate three landfills. Their financial inputs are approximately 50% from contractual arrangements, including grants and 50% from private work. Around 15% of income is derived from grants and the remainder is from commercial works (CRNA, 2011). Resource Recovery highlighted that their grants income has been quite small - around \$120,000 per year, relative to a \$1.5M turnover (Resource Recovery, 2012b). While they do not rely heavily on grants, those grants they do secure give the enterprise additional capacity to carry out their community initiatives. All major financial decisions are made by the auspicing organisation, GLCR.

Challenges

One of the biggest challenges Resource Recovery has expressed is that, although the waste industry faces many issues, there is not adequate seed funding to address them. A typical example of this has been issues around the processing of eWaste. Currently there is no plan, and having received 40 tonnes of eWaste within a four-month period, it has been understood to be a significant sustainability issue. Resource Recovery sees processing eWaste as an opportunity, not only for environmental benefit but also for generating employment:

It's very labour intensive and it's very low skilled labour so we could give a lot of people work. (Resource Recovery, 2012b).

Over the last three years Resource Recovery has encouraged initiation of an eWaste processing plant in their local area, with relatively little response. The new Product Stewardship Bill, addresses this issue to an extent.

Another issue has been the loss of commercial opportunities due to relatively higher prices of the enterprise. Recently, Resource Recovery sought to expand their business and tendered for operation of an additional landfill. However, as indicated in an interview with Resource Recovery, due to costing based on high value work, their tender application was unsuccessful:

We were they only one they had confidence in that could do the job. The only problem was that we wanted a bit too much money to do it. So they chose to do it themselves (Resource Recovery, 2012b).

Although this has been an ongoing challenge, the enterprise believes that the industry is changing as local governments come to realise the multiple benefits enterprises like Resource Recovery can provide.

Future directions

Resource Recovery is constantly looking for opportunities to expand, particularly in gaining contracts to operate landfills. Although their most recent expansion opportunity was unsuccessful, which they understand is due to cost for the service, they are confident that local governments and the waste industry more broadly are coming to understand the value in enterprises such as themselves. They believe that the upfront cost of doing the job correctly outweighs the future cost of correcting mistakes, and this is becoming more widely understood as demand for recycling and materials recovery grows. Furthermore, the added social, economic and environmental benefits of the social enterprise model provide a competitive edge for the enterprise.

6.3.2 Barriers to Growth for CREs

Survey participants were asked to indicate whether they experienced barriers to growth or expansion and if so what they perceived were the main barriers. Unsurprisingly a large portion (70%) of CREs reported experiencing barriers to growth. The main barriers identified were:

- Waste/resource policy;
- Time and resources;
- Lack of revenue and cash flow;
- Competition with the market price for goods and cheap imports;
- Private sector competition;
- Lack of business infrastructure and volunteers.

These barriers were also reflected in case study experiences. Case study participants were asked about current and past challenges. The main issues that arose from case studies were around waste/resource policy, price of goods for recovered material, competition within a changing industry, and challenges communicating the full (social, environmental and financial) value of some CRE activities.

7.0 Discussion and Conclusion

Community Recycling Enterprises are principally concerned with local employment creation and environmental protection through resource recovery and reuse. As a form of social enterprise, they are businesses that are led by their mission, trade to fulfil that mission and reinvest a substantial proportion of their profit or surplus in mission fulfilment.

The research findings indicate that CREs produce significant environmental, economic and social benefits within the communities in which they operate. These include:

- Local economic benefits through employment creation, skills development, niche market development and value adding, and contribution to local supply chains;
- Environmental benefits through direct resource recovery and community education;
- Social benefits through improving social inclusion and building social capital between people from different backgrounds; and
- Civic and cultural benefits through reinvesting in other community-based activities and organisations.

The research presented here suggests that Australian CREs employ at least 1500 people and recover at least 152,000 tonnes of resources from landfill each year. These estimates are likely to be conservative, given that the full population of CREs in Australia is not known. This study presents a first attempt to generate baseline information on CREs in Australia. As more organisations self-identify as CREs, more accurate estimates of the sector's contributions will be able to be generated.

The survey findings suggest that commercial performance of CREs is affected by the number and types of business activities undertaken, with those with more diverse business activities performing better financially. However, care must be taken when generalising from these findings given the small sample size. Material from both the case

studies and the survey indicate that being able to both respond to and anticipate change within a rapidly moving industry is important to the organisational success of CREs.

The data collected in this project point to the importance of governments – and particularly local governments – in the success and sustainability of CREs. The regulatory environment can enable or constrain CRE activity. Local governments in particular also play important roles as purchasers from and suppliers to CREs. In some cases, local governments also operate as partners to or owners of CREs.

Although CREs are in the business of resource recovery, they are predominately concerned as a group with creating local employment opportunities, including opportunities for those facing multiple disadvantages in accessing mainstream employment. In this sense, and when including their other social, civic and cultural contributions described above, CREs add considerable social value in addition to the financial and environmental value produced through their business activities. The social value added is a core contribution of CREs, rather than a happy side effect. Various aspects of their business models ranging from governance to selection of business activities to pricing reflect CREs' primary commitments to creating social value.

However, the research also suggests that demonstrating and tracking all aspects of the social value added is a complex process beyond the current resource capabilities of many CREs. A more integrated understanding of the local economic, social and environmental value produced may be required if CREs are to effectively communicate the full effects of their business operations, particularly where local government is a primary purchaser. Documenting and communicating this value, itself, requires resources to which many CREs may not have access. Further opportunities for shared learning around this issue would be beneficial to the CRE sector as a whole.

The research findings also suggest that, in some cases, there is a need for local governments to develop a more subtle appreciation of the different kinds of value created for local government areas by the social enterprise models used by CREs. Greater 'joined up thinking' across different functional areas of local government is needed if the full potential of these hybrid business models to deliver value to communities is to be realised.

The findings from this research were somewhat constrained by limited response rates from CREs. This, in part, reflects the usual challenges for community-based organisations needing to balance competing priorities against minimal time and human resources. However, the research team also identified some reluctance on the part of CREs to participate in the research due to growing competitiveness of the industry in which they operate. Businesses that exist for a public or community benefit are no less affected by the competitive pressures of their industries than their mainstream business counterparts. Further research activities aimed at advancing this sector would need to take this into account when planning research methodology and when considering how and by whom research findings will be used.

8.0 References

- Australian Council of Recycling (no date). Retrieved 23 May, 2012, from <http://www.acor.org.au/>
- Barraket, J., N. Collyer, M. O'Connor and H. Anderson. 2010. *Finding Australia's Social Enterprise Sector: Final Report* Vol. June, 2010: Australian Centre for Philanthropy and Nonprofit Studies.
- Bull, M. 2008. Challenging Tensions: Critical, Theoretical and Empirical Perspectives on Social Enterprise Entrepreneurial Behaviour and Research 14 (5): 268-275.
- CRNA (2011). *Resource Recovery wins important award*. The Community Recycling Network Bulletin. VIC, Australia, Community Recycling Network Australia.
- Local Government Association of Queensland (2005). *Community Based Recycling in Queensland: A guide for local government*. Online resource: Retrieved 23 May, 2012
http://lgag.asn.au/c/document_library/get_file?uuid=f35fbd3f225d3c82a23235bff4ac2e31&groupId=10136
- Endeavour Foundation (2012a). Retrieved 25 April, 2012, from <http://www.endeavour.com.au/>
- Endeavour Foundation (2012b). Volume projections 2011-2012.
- Endeavour Foundation Recycling Shop (2012a). *Interview 1*. Brisbane, Queensland University of Technology.
- Endeavour Foundation Recycling Shop (2012b). *Interview 2*. Brisbane, Queensland University of Technology.
- Gerometta, J., H. Haussermann and G. Longo. 2005. Social Innovation and Civil Society in Urban Governance: Strategies for an Inclusive City *Urban Studies* 42 (11): 2007-2021
- GLCR (2010). *Annual Report 2010*. Great Lakes, NSW, Great Lakes Community Resources.
- GLCR (2011). *Annual Report 2011*. Great Lakes, NSW, Great Lakes Community Resources.
- Great Lakes Council (2012). *Community Profile*. Retrieved 2 May, 2012, from <http://profile.id.com.au/Default.aspx?id=252&pg=111&gid=200&type=enum>
- Haugh, H. and M. Kitson. 2007. The Third Way and the Third Sector: New Labour's Economic Policy and the Social Economy *Cambridge Journal of Economics* 31 (6): 973-994.
- Hines, F. 2008. Social Enterprise and Waste Management: Employment, Engagement and Environment For Sustainable Local Communities. In *Sustainable Communities: New Spaces of Planning, Participation and Engagement*, ed. T. Marsden. Amsterdam: Elsevier
- Marsden, T. 2008. Denial or Diversity: Creating New Spaces of Engagement for Sustainable Development In *Sustainable Communities: New Spaces for Planning, Participation and Engagement* ed. T. Marsden. Amsterdam: Elsevier.
- Moulaert, F. and O. Ailenei. 2005. Social Economy, Third Sector and Solidarity Relations: A Conceptual Synthesis From History to Present *Urban Studies* 42: 2071-2088.
- NACRO (2010). *Victorian Charitable Recycling Industry Waste Impacts Study: 2008/09*. Melbourne, Australia, National Association of Charitable Recycling Organisations.

- Peattie, K. and A. Morley. 2008. Eight Paradoxes of the Social Enterprise Research Agenda *Social Enterprise Journal* 4 (2): 91-107.
- Resource Recovery (2012a). Retrieved 23 April, 2012, from <http://www.resourcerecovery.org.au/>
- Resource Recovery (2012b). *Interview*. Brisbane, Queensland University of Technology.
- Resource Work Cooperative (2011). *Annual Report 2011*. Hobart, Tasmania, Resource Work Cooperative.
- Resource Work Cooperative (2012a). Retrieved 23 April, 2012, from <http://resourcetipshop.com/>
- Resource Work Cooperative (2012b). *Interview*. Brisbane, Queensland University of Technology.
- Simmons, R. 2008. Harnessing Social Enterprise for Local Public Services: The Case of New Leisure Trusts in the UK *Public Policy and Administration* 23 (3): 278-301.
- Social Enterprise Coalition. 2003. *There's More to Business Than You Think: A Guide to Social Enterprise* London Social Enterprise Coalition.
- Wallace, B. 2005. Exploring the Meaning(s) of Sustainability for Community Based Social Entrepreneurs *Social Enterprise Journal* 1: 78-89.

Appendix A: Survey Instrument

	PARTICIPANT INFORMATION FOR QUT RESEARCH PROJECT
Baseline Survey of Australia's Community Recycling Enterprises	
QUT Ethics Approval Number 1100001221	

RESEARCH TEAM

	Australian Centre for Philanthropy and Nonprofit Studies – QUT Business School
Principal Researcher:	Associate Professor Jo Barraket
Associate Researcher:	Craig Furneaux
Research Assistant:	Nina Yousefpour

DESCRIPTION

Community Recycling Enterprises (CREs) provide significant benefits for their communities, however little is known about the scale and scope of the industry, nor the enterprises, which comprise it. The purpose of this project is to develop a baseline understanding of the nature and impact of this industry, in order to support existing and new CREs. You are invited to participate in this project because you have been identified as a key individual whose enterprise is a CRE. This project is being undertaken as part of a research project conducted by Researchers at the Queensland University of Technology (QUT) in partnership with Community Recycling Network Australia.

PRIVACY AND CONFIDENTIALITY

Your responses will not be individually identifiable in the questionnaire nor in any publications arising from the research. This project is funded by Community Recycling Network Australia, with funding support from Sustainability Victoria, New South Wales Office of Environment and Heritage, Department of Premier and Cabinet, and Social Traders. The funding bodies will not have access to the data obtained during the project, although they will have access to the publicly available report.

PARTICIPATION

For this survey you will need to prepare some information such as number of staff/volunteers, your turnover and how it is produced and tonnage you are recycling. Your participation in this project is entirely voluntary. If you do agree to participate, you can withdraw from the project without comment or penalty. If you withdraw, on request, any identifiable information already obtained from you will be destroyed. Your decision to participate, or not participate, will in no way impact upon your current or future relationship with QUT, or with Community Recycling Network Australia. Your participation will involve this online questionnaire, which will take approximately 20 minutes to complete. Questions will include information on your CRE: its enterprise model, together with the economic, social and environmental impacts that it is making.

EXPECTED BENEFITS

It is expected that the CRE industry as a whole will benefit greatly from this survey, along with any new groups expecting to start a CRE.

RISKS

There are no risks beyond normal day-to-day living associated with your participation in this project.

CONSENT TO PARTICIPATE

By completing the questionnaire you give consent to participate in this project.

QUESTIONS / FURTHER INFORMATION ABOUT THE PROJECT

If you have any questions or require any further information project please contact one of the research team members.

Associate Professor Jo Barraket	Craig Furneaux	Nina Yousefpour
Australian Centre for Philanthropy and Nonprofit Studies – QUT Business School		
+61 7 3138 7699	+61 7 3138 1186	+61 7 3138 1020
jo.barraket@qut.edu.au	c.furneaux@qut.edu.au	n.yousefpour@qut.edu.au

CONCERNS / COMPLAINTS REGARDING THE CONDUCT OF THE PROJECT

QUT is committed to research integrity and the ethical conduct of research projects. However, if you do have any concerns or complaints about the ethical conduct of the project you may contact the QUT Research Ethics Unit on +61 7 3138 5123 or email ethicscontact@qut.edu.au. The QUT Research Ethics Unit is not connected with the research project and can facilitate a resolution to your concern in an impartial manner.

Thank you for participating in this research project.

STATEMENT OF CONSENT

By completing this questionnaire, you are indicating that you:

- have read and understood the information document regarding this project
- have had any questions answered to your satisfaction
- understand that if you have any additional questions you can contact the research team
- understand that you are free to withdraw at any time, without comment or penalty
- understand that you can contact the Research Ethics Unit on +61 7 3138 5123 or email ethicscontact@qut.edu.au if you have concerns about the ethical conduct of the project
- understand that non-identifiable data collected in this project may be used as comparative data in future projects
- agree to participate in the project

Please read this before starting:

We are seeking one response per community recycling enterprise; you may wish to clarify who is completing the survey on behalf of the enterprise before you start.

We will be asking you some questions that require responses about enterprise activities related to the 2010-2011 financial year. You may want to make sure you have this information to hand before you start the survey. If exact figures are not available, please provide careful estimates.

If your enterprise was not operating in time periods specified in the questions, please complete the survey to the greatest extent possible.

If you leave the survey and wish to complete it later, you can return to it as long as you are on the same computer you started on.

1. In this enterprise, the position that best describes you is:

Please pick one of the answers below or add your own variant.

- Chief executive or most senior employee
 - Chair or president of the board/management committee
 - Senior employee with direct oversight of the enterprise
 - Board/management committee member but not a staff member (non-executive director)
 - Enterprise owner
 - Other (please specify)
-

SOME PRELIMINARY QUESTIONS ABOUT YOUR COMMUNITY RECYCLING ENTERPRISE

2. In what state does your enterprise operate? [add response format – dropdown list of states]

(drop box of states)

3. How long has your enterprise been operating?

- It is not yet fully operational
- Less than 2 years
- 2- less than 5 years
- 5- less than 10 years
- 10 – less than 20 years
- More than 20 years

4. Does your enterprise (please select all that apply):

Please check all that apply and/or add your own variant.

- Reuse waste / collected goods (e.g. household items) in order to sell to the public
 - Recycle waste / collected goods in order to process new items for sale to the public (e.g. refurbishment of computers)
 - Recycle waste in order to re-claim resources (e.g. steel, aluminium, wood, plastic, cardboard)
 - Repair goods prior to resale (i.e. furniture, electrical goods)
 - Process E-Waste
 - Other (please specify)
-

5. Does your enterprise provide training and employment opportunities for jobseekers?

- Yes No

6. Does your enterprise provide educational activities around waste and sustainability?

- Yes No

7. Which of these best describes the ownership structure of your recycling enterprise? (select one only)

Please check all that apply and/or add your own variant.

- A business owned by a nonprofit organisation
 - A community owned business (such as a cooperative or community owned company)
 - A business owned by a local government authority
 - A privately owned business
 - Other (please specify)
-

8. Which of the following best describes the main reason your enterprise exists (please select one only):

Please pick one of the answers below.

- To provide an environmental benefit to the community
 - To provide a social benefit to the community
 - To provide employment opportunities to people in the community
 - To generate profits for individuals
 - To generate profits/surplus for an organisation (e.g. local government, nonprofit agency)
 - Other (please specify)
-

9. Please select the best description of the business structure of the community recycling enterprise you are reporting on in this survey (please select one only):

Please pick one of the answers below.

- A single venture (e.g. a stand-alone community recycling enterprise such as a tip shop, recycle shop or reuse warehouse)
- Multiple ventures of the same type (e.g. a group of recycling sites operating in different areas)
- Multiple ventures of different types (e.g. a tip shop plus a reuse warehouse)

10. What number of locations was operated by this enterprise as at June 30, 2011?

- 1 location
- 2 locations
- 3-5 locations
- More than 5 locations

11. What was the total volume of goods reused/ recycled by your enterprise in the 2010/2011 financial year, that would have otherwise gone to landfill?

- Tonnes

12. Please indicate the rough percentage % of recovered materials in the 2010/2011 financial year which were (please indicate the percentage in the boxes on the left with the total adding to 100%):

Recycling of resources (e.g. aluminium, paper, wood, plastic, cardboard)

Recycling of E-Waste (e.g. computers)

Sales to the public (e.g. whitegoods, furniture, building materials)

On-selling / donating items to other organisations

Placed in landfill / waste disposal

13. Please indicate the source of recovered items (in percentage % terms) during the 2010/2011 financial year (Please indicate the percentage with the total adding to 100%):

Private individuals

Government organisations

Nonprofit organisations

Corporate / for profit business

Other (please specify)

14. Please indicate how goods are collected (select all that apply):

Pick up by your own enterprise (e.g. kerbside collection, collection from business premises)

Via a site at a landfill

Direct drop off to organisation's depot (where separate to landfill site)

Via a transfer station

Community donation facility (e.g. large bins near shopping centres)

Other (please specify)

WE ARE INTERESTED TO KNOW A LITTLE ABOUT YOUR PAID AND UNPAID WORKERS

15. In the last pay period in June 2011 (please provide your best estimate if you do not have exact figures) what was the enterprise's (please type the figures into the boxes next to each item):

Total number of paid staff

Equivalent full time staff

Total number of staff who were trainees (that is, *paid through federal or state government training subsidies*)

Total number of volunteers and unpaid workers

INCOME AND EXPENDITURE

We are interested in estimating the economic impact of Australian community recycling enterprises. To do this, we need to ask you some questions about your enterprise's financial activities. The questions in this section refer to the 2010-2011 financial year. Please note, this information will only be viewed by the QUT research team and will be reported on in aggregate form only. No financial information about individual enterprises will be reported on or passed on to Community Recycling Network Australia or any other party.

16. What was your enterprise's total income and expenditure for the 2010/2011 financial year?

PLEASE NOTE: If you are reporting on multiple ventures, please provide these figures as an aggregate report on all ventures.

Income

\$ _____

Expenditure

\$ _____

17. What was the reported operating profit (surplus) or loss (deficit) before tax and extraordinary items for the 2010/2011 financial year?

NOTE: If you are recording a loss, please denote with a minus sign.

\$ _____

18. In the 2010/2011 financial year, what proportion of income came from (please include as a percentage, with the total adding to 100%):

- Income derived from goods or services provided by the enterprise directly to consumers (e.g. sale of products to individuals or organisations)
- Government payments for service delivery, where the volume of services is specified and paid in the proportion of services delivered (e.g. local government contracts)
- Contributions from a partner organisation or auspicing organisation
- Revenue from investments or capital assets (e.g. rent, interest)
- Government funding for specific capital items (e.g. to make capital improvements or purchase equipment or buildings, etc.)
- General purpose funding from government (i.e. which may be provided for a specific purpose, but which is not dependent on the delivery of a specified volume of services)
- Philanthropic grants or bequests
- Contributions from individual members
- Debt finance (e.g. loans from banks, building societies, personal credit)
- Finance from external investors
- Other (please specify)
- Total

19. In the 2010/2011 financial year, what proportion of your expenditure was spent on the following (please include as a percentage, with the total adding to 100%):

- Salaries and wages
- Running costs (e.g. rent, lighting, equipment rental, vehicle rental, insurances)
- Contracting of professional services (e.g. legal, accounting, business development advice)
- Acquisition of capital assets (e.g. purchase of property, vehicles, equipment)
- Sub-contracting of services
- Purchase of materials for the purposes of transformation (e.g. raw materials used in the development of new products)
- Purchase of materials for the purposes of resale (e.g. processed items purchased to be sold on)
- Grants, investments or contributions to other organisations
- Other (please specify)
- Total

20. Has your enterprise faced any barriers to growth or expansion?

Yes

No

21. If you answered yes to Question 20, can you briefly describe these barriers in the space provided below?

Thank you. When you click on the following button you will complete the survey.

CRICOS No. 00213J

The survey has now finished.

Community Recycling Network Australia publishes a monthly E-Bulletin. If you would like to receive it and gain information of what is happening in enterprises around Australia please fill in below. Please note that this information is separate from the survey you just completed and in no way will be linked to the information you have provided.

Enterprise name:

Address:

Contact phone/email:

Appendix B: Case Study Framework

Case Topics	Data Sources	Indicators
History of enterprise	Interviews, website information, annual reports, media reports.	Dates Mission statement, values statements Interview recount on history
Business model	Interviews, website information, annual reports, publicly available documents.	Legal status Governance structure (e.g. board, management committee) Number and composition of ventures Number and geographic composition of locations. Number of employees and volunteers
Enterprise activities	Interviews, website information, records of impact, annual report, inventory reports, publicly available documents.	Number and types of categories of materials reused/recycled (metal/plastic/wood/electronics/cardboard/household goods/refurbishment/eWaste) Interviewee accounts of why and where from particular categories of material are reused/recycled Types and materials sourced from private individuals, government organisations, and corporate businesses
Impacts	Interviews, records of impact, annual report, inventory reports, interviews, website information, media reports.	Total tonnage of materials reused/recycled Tonnage reused/recycled per type of material. Tonnage waste reduction Amount saved Number of trainees Total number of paid employees EFT total of paid employees Total number of new jobs created by the enterprise Total number of disadvantaged jobseekers employed through the enterprise Total number of volunteers Average monthly number of volunteer hours Number and types of community activities
Financial inputs and performance	Annual reports, interviews, publicly available documents.	Income per category of recycled material Total annual turnover Value of debt finance (e.g. loans) Types and proportions of startup capital Types and proportions of income
Challenges	Interviews.	Interview discussion around barriers Interview discussion around overcoming barriers Loan rejection, asset deficient, no insurance, difficulty maintaining surplus

Appendix C: Interview Protocol

Baseline Study of Australia's Community Recycling Enterprises

Semi-structured interview schedule

[Introduction and background to the project provided and questions answered]

Signed consent form has been received: yes

Participant would like copy of summary report: yes no

Interview Questions

- Can you tell us a little bit about your community recycling enterprise? [Prompts: History of the organisation? Number of staff members and volunteers? What materials do you recycle and by what methods?]
- What was the motivation for establishing this enterprise?
- What does the enterprise contribute to your community? Socially, environmentally and economically?
- Can you tell us a little bit about the governance structure of the enterprise [Prompts: Does it have a board or management committee? How are decisions made?]
- What were some of the challenges you faced in getting the enterprise started? How did you handle them?
- What are some of the challenges that you currently face? How do you handle them?
- How have the enterprise's operations been financed? [Prompts: How did you raise the initial capital? Have you sought investment or borrowed from banks?]
- Have you faced any challenges getting access to finance? If so, what have these been?
- Have you been tracking the enterprise's impacts in any way [if yes, please describe]?
- Do you currently have any plans to grow the enterprise or introduce new activities? If so, how do you plan to go about this?
- Is there anything else you would like to tell me about the enterprise?

Thank you for your time

COMMUNITY RECYCLING NETWORK AUSTRALIA
AIMS AND OBJECTIVES

Mission.

- Community Recycling - reducing waste, creating local jobs, strengthening communities.

Objectives:

- Provide an effective voice and focal point for community recycling in Australia.
- Sustain a Network able to provide support, advice, guidance and mentoring to local organisations.
- Increase the profitability and/or scale of member enterprises.
- Influence the political environment in support of community reuse / recycling.
- Provide local jobs for those facing barriers to work.
- Work towards a shared zero waste future.

Criteria for membership.

Organisations or individuals committed to:

- Reducing waste
- Creating jobs
- Strengthening communities
- Social enterprise

Governance:

The Steering Committee is made up of individuals that believe in the mission and objectives of CRNA. Whilst the organisations that these people represent are critical, it is the individuals participating that will determine the success of the Network.

Resources:

Sponsorship and Membership provide secretariat support for the Network's activities.

CRNA can learn from the New Zealand and Scotland Community Recycling Networks.

- <http://www.communityrecyclers.org.nz> - <http://www.crn.org.uk> - <http://www.crn.org.uk>

Activities:

- Get the right governance structure.
- Identify and access resources.
- Publish a monthly bulletin.
- Direct people to member websites.
- Create a web presence to host existing information and resources.
- Collect profiles on each enterprise to post to the website.
- Collate a database of community recyclers
- Hold an annual national event.
- Develop a membership of active enterprises
- Develop a political lobbying framework.
- Develop a national E-Waste recycling service among members.

What this looks like:

- Transparent information sharing
- Collaborative research on key issues
- Becoming a recognised lobbyist
- Being strategic on things like carbon credits and advocacy
- Industry leader in creating jobs through waste management
- A membership of 100 organisations