



**Sassafras Solutions**

11 Sassafras Court  
Boronia Vic 3155

Email: s-wills@bigpond.net.au  
Phone 03 9762 5870  
Mobile 0417 548 732

ABN: 4244 760 7579

**Geelong Waste Wise Network  
Business Recycling recommendations**

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## **1. Project scope**

This report was undertaken by Sassafras Solutions and is based on 'Waste Wise Geelong Network Survey Report, August 2005', the survey proforma used and discussions with Simone Budd, Project Manager, Waste Wise Geelong Network. The raw survey data was not viewed. In addition research and discussions were undertaken to determine findings from programs aimed to increase business recycling (see Appendix 1 for reviewed programs).

This report includes data interpretation and recommendations to increase business recycling in Geelong based on the survey results and information from other projects.

This report refers to:

- businesses: includes commercial and industrial businesses including SME (small to medium enterprises). It does not include the construction and demolition sector.
- service providers: those that supply general waste and/or recycling services
- WWGN: Waste Wise Geelong Network

## **2. Waste Wise Geelong network background**

Thus far the program model has been:

1. Develop the Waste Wise Geelong Network with the concept launched October 2004.
2. Recruit businesses.
3. Provide opportunities for the businesses to work together to reduce waste.
4. Business recycling identified as an opportunity.
5. Meeting with service providers. Refer to Appendix 2 for issues raised.
6. Survey of businesses undertaken in August 2005.
7. Project Manager follow-up with surveyed businesses that were interested in Waste Wise.
8. Second meeting with Service providers scheduled for November 2005.



### **3. Geelong survey results**

#### **3.1. Main findings**

These findings should be read in conjunction with 'Waste Wise Geelong Network Survey Report, August 2005'.

#### **Garbage**

- 82% of businesses have a garbage collection
- There are at least 11 garbage contractors working in the area
- 70% use 240 l sized MGB(s) for garbage
- Potentially recyclable materials go in the garbage bin
- 13% of businesses share a garbage bin/skip

#### **Recycling**

- There are at least 10 recycling contractors working in the area
- At least 8 recyclers also offer garbage services
- At least 1 paper recycler does not offer garbage services
- There is little/no organics recycling occurring<sup>1</sup>
- 40% of businesses recycle printer cartridges

Note that the two findings of:

- 47% have a paper recycling collection
- 7% have a co-mingled collection

are not clear. Most contractors supply one recycling service, which is a fully co-mingled recycling service (paper and bottles/cans in one bin) as the local MRF (Materials Recovery Facility) in Geelong can process mixed materials. The survey question asked about paper (questions 11-15) and co-mingled (Questions 16-21) recycling separately but the results of questions 15 and 21 indicate that respondents were talking about a fully co-mingled system. The raw survey data may need to be analysed to determine overall rates of recycling.

#### **Buy Recycled**

- 50% of respondents know/believe they purchase paper with some recycled content
- 41% of respondents used recycled printer cartridges

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<sup>1</sup> Businesses are not always fully aware of where their waste goes, there have been instances where businesses believe their waste is recycled and it actually is landfilled.



## **Waste Wise<sup>2</sup>**

- 16% of respondents (25) had heard about Waste Wise
- 37% of respondents (54) wanted to hear more about Waste Wise

### **3.2. How the findings tally with what the service providers are saying**

Service providers indicate that businesses sharing bins is an issue. 13% of businesses share bins/skips. While this is not a large percentage, the process of sharing can give rise to complaints. On these types of issues the WWGN needs to determine to what extent they get involved (if at all) in these issues between businesses and service providers.

The results of the size of the recycling bin (Question 13) indicate that service providers are providing a range of bin sizes (120lt up to skips) for recycling which would suit most business's recycling needs. From the survey results there appear to be a range of service providers.

### **3.3. How the results compare to other surveys**

Note that these surveys have different sample sizes, geographical locations and types and sizes of businesses surveyed. Refer to the reports for full survey methodology and samples. However the results provide an indication of where the Geelong businesses are.

<b>Measure</b>	<b>Geelong</b>	<b>Casey<sup>3</sup></b>	<b>Sydney<sup>4*</sup></b>
Have a garbage service	82%	86%	81% (90%)
Businesses recycling paper	47%	51% <sup>5</sup>	73%
Recycling toner cartridges	41%	NM	44% (46%)
Not recycling/don't know	42%# (min)	56.4%	47% (32%)
Garbage service providers	11 (min)	15	NM
Recycling service providers	10 (min)	38	NM

NM: not measured

\* mail survey results then phone survey

# estimated, based on total survey – paper recycling – co-mingled – kitchen organics (best scenario, assuming only one recycling type per

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<sup>2</sup> Not aware of other studies that measure this, but figures seem good

<sup>3</sup> Commercial Waste Strategy for Shopping Centres, 2004 Page 2, see 7.1

<sup>4</sup> Business waste survey Sydney Metropolitan area, 2004, all data from Executive summary, see 7.2

<sup>5</sup> Page 15 of report, note this is paper and cardboard



business, actual figure may be higher) Raw survey data would need to be analysed to determine actual rates.

With the above qualifications it would seem that in Geelong there are:

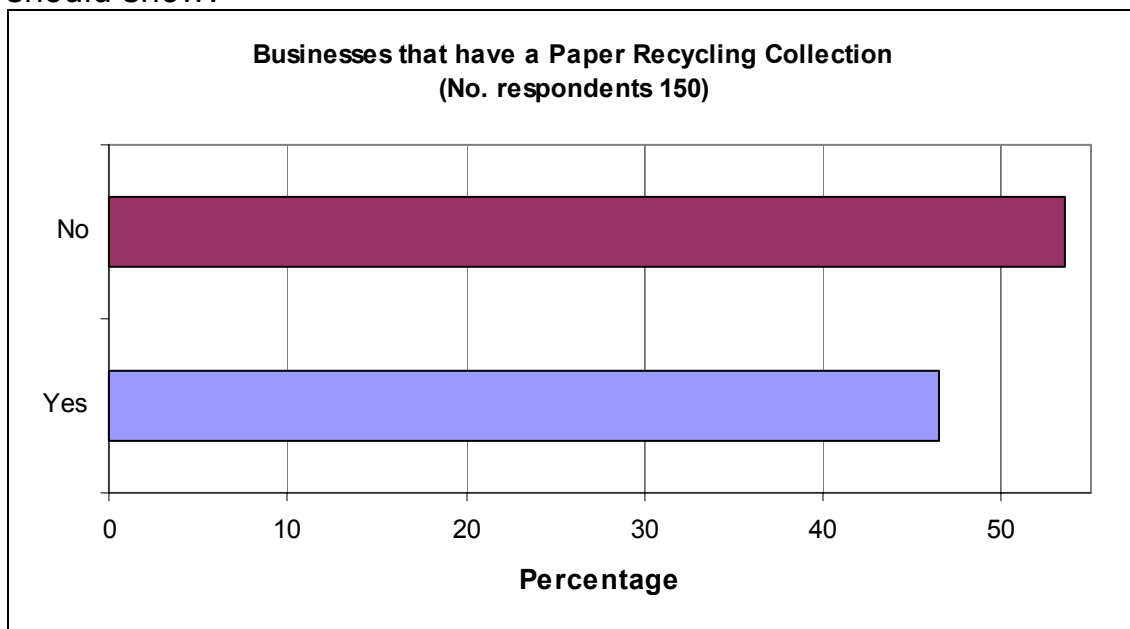
- Opportunities to increase paper recycling
- Opportunities to increase recycling generally
- A range of service providers already in the market to provide waste and recycling services

### **3.4. Other comments**

To ensure that the Geelong survey sample is representative the types and size of businesses from the survey needs to be compared to that of the whole population.

The raw data could be used to determine approximate volumes of waste and recyclables generated by the businesses by multiplying the size of bins by the collection frequency. However the size of bins is only provided for MGBs and not skips. Question 5 and 6, 12 and 13 could have been combined into one: What bin do you use? 120 l MGB, 240 l MGB, Skip: 1.5 m<sup>3</sup>, Skip 3 m<sup>3</sup>, other. Knowing the container size and number of containers weekly could have been used to estimate volumes of garbage and recyclables generated by the sample size.

Note that scale of graph 10 in the report is misleading. The graph should show:



## **4. Business recycling programs**

Generally recycling collections balance volume, market prices and pick ups. That is there needs to be sufficient volume of materials collected (to fill the truck), the material needs to be collected in the same area (to minimize transport costs) and there needs to be a good price for the product and the customers outlay (market prices). Additionally contamination needs to be kept to a minimum for most recycling services.

Business recycling presents a different issue from domestic kerbside recycling. Businesses can generate variable amounts of materials, the businesses can be distant from each other and customers may be unwilling to pay for services.

A number of different Council and agency models have been used to assist business recycling. The ones considered are referenced and summarised in Appendix 1, only existing programs were reviewed.

### **4.1. Findings**

Assisting business recycling is not easy and thus far there does not appear to be a sustainable model. The models studied were all had a collection service (i.e. not a drop off service). Drop off services have their place but collection services appear the predominant system.

Some programs with extensive face to face assistance to encourage recycling following the model:

1. Find out what the businesses want from face to face surveys
2. Determine what the contractor can offer from meetings, offer service
3. Speak to the businesses and tell them about the service, provide details of offer
4. Tell the contractors about the interested businesses
5. Follow-up to see what has happened

These programs are time consuming and costly and, despite good efforts, can have little customer recall with businesses complaining that they weren't contacted, consulted etc.

The main problem seems to be that each business has a variety of issues and each service provider has a variety of issues and trying to be in the middle to sort them out doesn't work. It is better not to get involved in that business to transport provider contract link (see Figure



1). Additionally different geographical areas business within a Council may have varying needs and issues. It is recommended that a program covers a larger area rather than a specific area.

Beware of labeling any programs as 'trials' and 'pilot programs', businesses don't sign up for services, they tend to sit back and wait to see what happens.

Price sensitivity or issues were not canvassed in the Geelong survey. However it will be important to confirm that the Geelong service providers are committed to provide a viably priced (for them and their customers) recycling option in addition to their waste services. Price issues, price is an issue that comes up in surveys of business waste and recycling. This includes service providers undercutting to get business and waste contractors actively discouraging businesses taking up recycling<sup>6</sup>. As Geelong service providers mentioned pricing of landfilling options may be cheaper than recycling. If there is not reasonably priced recycling and service provision options for smaller businesses it may not be possible to encourage recycling to this sector.

For viable recycling it is important to consider both requirements of collector and recycling processor, if they are different. The transport leg can be costly, need to ensure viable processing and good markets for materials.

When considering encouraging businesses to recycle it is important to understand how they chose these services: '[for] garbage service: convenience was the dominant reason for all industry groups. The survey found that many businesses do not actually choose their garbage service, they either inherit it from previous owners or the service is organized by someone else, eg building management. When businesses were forced to choose a collection service, price was more likely to be given as a reason for selecting the provider, 'high level of service' was given as a reason by 16%'.<sup>7</sup>

For recycling: 'from the survey and discussions with traders, there is a high level of support for recycling services for businesses but confusion and a lack of understanding about how to start a recycling collection service. 42% of traders said that if recycling services were provided they would use them.'<sup>8</sup>

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<sup>6</sup> This is a theme in the Casey report.

<sup>7</sup> Business waste survey Sydney Metropolitan area, 2004, page II

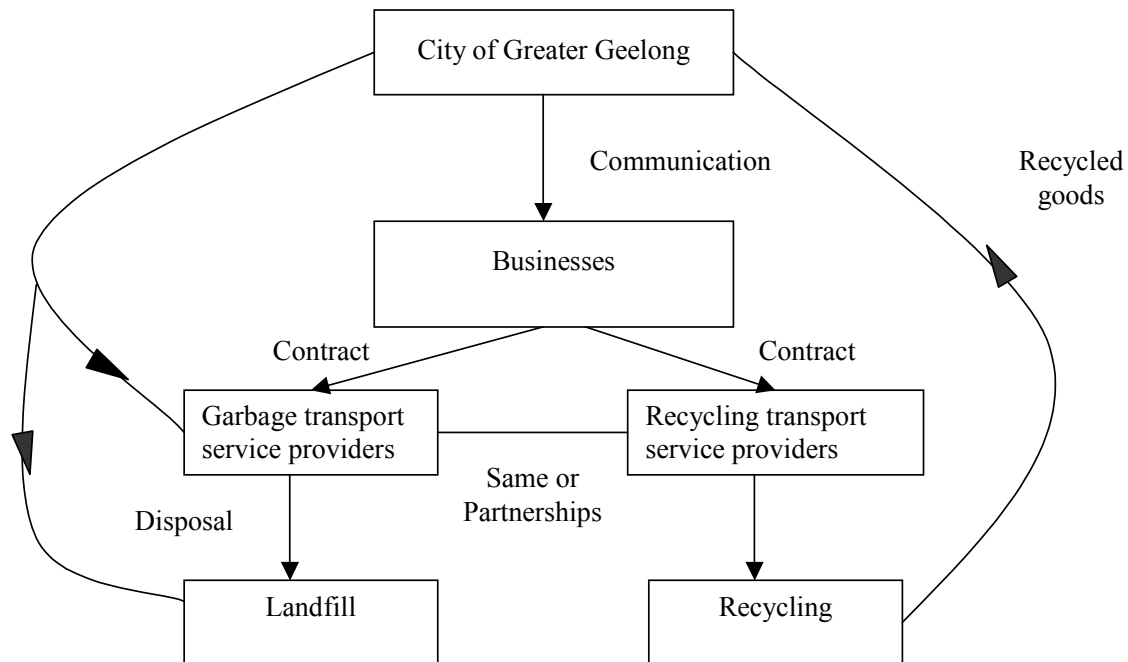
<sup>8</sup> Commercial Waste Strategy for Shopping Centres, 2004 page 15.



## 5. The cycle of Geelong business recycling

An overview of the Geelong business recycling cycle is illustrated in Figure 1.

**Figure 1 The cycle of Geelong business recycling**



## 6. Recommendations

Considering impact, on going program benefits and using modest resources the best option would be to focus on communicating with businesses to tell them about existing viable recycling service providers.

And then letting the businesses link with the service providers to sort out their unique requirements and issues. Help only those businesses that specifically ask for help with Waste Wise.

Communicate with all businesses<sup>9</sup>

- Tell them about Waste Wise
- Tell them about the recycling services on offer in the region
- Allow the businesses to form a relationship with their waste and recycling contractor

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<sup>9</sup> Could be included in general business communications, not specifically about waste



Communicate with all service providers:

- Ensure that contractors willing to supply cost viable recycling services to SMEs as well as larger businesses
- Tell them that their business will be promoted regionally
- Ask them to provide contact details, offer of their services
- Help them with any assistance, education etc
- Ask them to promote and encourage recycling
- Form partnerships between waste and recycling contractors
- Keep in contact with them on a regular basis
- Look to assist them with major concerns that Council/Region can help with

Measure:

- resurvey businesses in the future just ask a few questions, this could be included in other business surveys
- Track the result from this survey as a measure to judge improvement
- As a measure use the figure for % of businesses recycling some material<sup>10</sup>.

Other options that may be considered:

- Only if there is not a viable commercial recycling option Geelong and other councils could focus on extending domestic recycling in a concentrated effort to increase SME recycling (see 7.5)
- Work with existing programs (eg Victoria 1000, see 7.5)
- Obtain funding for future hands on work with businesses (eg Sustainability Fund, see 7.5)
- Pricing of landfill to encourage recycling by offering financial incentive to recycling.
- Organics recycling requires viable processing options (cost and environmental) to be developed.

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<sup>10</sup> Note this information will need to be determined from raw survey data, the figure used in Section 3.3 is an estimate only.



## **7. Appendix 1: Programs and references**

### **7.1. City of Casey: Commercial Waste Strategy for Shopping Centres**

The report was prepared in response to Council's commitment to foster and promote best practice in waste minimisation in the commercial sector. This strategy is specifically aimed at facilitating waste and recycling services to strip shopping centres within the City of Casey.

It includes results of consultation with traders and service providers and provides recommendations on how the Council should proceed, dated November 2004.

<http://www.casey.vic.gov.au/waste/article.asp?Item=5768>

### **7.2. Department of Environment and Conservation, NSW**

Report: Business waste survey Sydney Metropolitan area, April/May 2004. 4,131 surveys completed of 20,000 mail out.

<http://www.resource.nsw.gov.au/data/2004SydneyBusinessWasteSurveyFinalRpt%20ST%20260804F.pdf>

### **7.3. Melbourne City Council: organic recycling**

Details on how Melbourne CBD businesses can have their organics recycled. Includes listing service providers and businesses that have taken up organics recycling:

<http://www.melbourne.vic.gov.au/rsrc/PDFs/Waste/Cookingconscience.pdf>

<http://www.melbourne.vic.gov.au/info.cfm?top=63&pa=774&pg=775>

<http://www.melbourne.vic.gov.au/info.cfm?top=63&pg=774>

### **7.4. Sustainability Fund**

List of all grant recipients:

[http://www.sustainability.vic.gov.au/resources/documents/MR\\_sustainability\\_fund.pdf](http://www.sustainability.vic.gov.au/resources/documents/MR_sustainability_fund.pdf)

While the first round was through the EPA, this will now be administered through Sustainability Victoria.

Some grants specifically to work with businesses:

**City of Greater Dandenong: Business Environmental Program:**

\$157,500 grant

Over three years work with approximately 30 businesses to reduce waste (water, energy, solid waste). Businesses have been sourced through Economic Development Unit, are not required to be any



particular type or size and each has to provide \$1,500 contributing funding.

**Village Green Environmental Solutions Pty Ltd: Victoria 1000,**  
\$900,000 grant

Over three years work with 1,000 SMEs in 5 regions in Victoria to reduce waste (water, energy, solid waste: program aim 15% landfill reduction). The regions have not yet been decided and require Council co funding.

### ***7.5. Sustainability Victoria (previous EcoRecycle Victoria)***

Funding to Councils to provide the same domestic recycling service and contractor to SMEs. One off funding of \$8/business, this program is in their current business plan. Only a few councils have taken this up, these include Bayside, Boorondarra. David said that discussions with Steve Adams indicated that Council was only supplying about 40-50 businesses with the kerbside recycling service. The survey results indicate that there are many existing service providers providing a recycling service.

Contact person: David Ravlic 03 9639 3322

## **8. Appendix 2: Issues raised by service providers in first meeting**

### **Challenges with the WWGN program - Issues with recycling and waste collection in business**

A number of issues were identified that limited business from recycling and/or investing in waste & recycling service providers. The main issues were:

- Pricing
- Collection locations
- Storage and access
- Worksafe issues
- Source separation
- Availability of space/ lack of
- Co-op sharing problems
- In some circumstances it is cheaper to take the waste to landfill

Methods to overcome these barriers need to be investigated and highlighted in the communications.



## **Advantages of the WWGN**

The following benefits of adopting waste wise principles and becoming accredited were identified:

- Long term financial savings
- Triple bottom line reporting
- Social responsibility
- Networking opportunities
- Environmental benefits
- Strategic business opportunities
- Corporate citizenship

These benefits need to be communicated to promote the adoption of the program.

## **Business Opportunities**

1. Hard Waste - There hasn't been any major focus on hard waste. This was seen as a potential business opportunity for SP's to investigate. It could also add value to the WWGN project.
2. Organics - This is not being addressed and people don't know what to do with it. This is another opportunity for one of the service providers to take up. There was suggestion of working with some of the big supermarkets to get it going and make it financially viable. There are also issues with keeping the organics 'clean'.

## **Miscellaneous**

The project should investigate getting large shopping centres on board the program. This would make it easier to adopt, reduce financial burden etc.

Assumption that because people pay rates the service should be provided for free

