

Labelling for recyclability

Discussion paper

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and



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1 INTRODUCTION

The aim of this discussion paper is to review recycling labels on packaging in Australia and recommend strategies to improve both their legal compliance and their effectiveness in supporting recycling programs. The scope of the review is conventional material recycling – labelling for other forms of recovery, such as composting, is not considered.

Recycling claims and labels are intended to provide consumers with information that will help them to sort their packaging correctly after use, i.e. to put recyclable packaging in their recycling bin; to put non-recyclable packaging in their waste bin; and to correctly separate recyclable and non-recyclable components of a package if required to do so.

Recycling programs for packaging rely on the active participation of consumers, who are asked to sort their used packaging before disposal. Most local councils provide their residents with three bins:

- ‘Recyclable’ packaging and paper must be placed in the recycling bin, which normally has a yellow lid;
- Garden waste (and sometimes food waste) must be placed in the green waste bin, which normally has a green lid; and
- ‘Non-recyclable’ packaging and other wastes must be placed in the residual waste bin, which normally has a red lid.

Correct sorting by householders improves recycling performance by:

- Increasing the recovery of recyclable materials – the NSW government estimated that 23% of household waste in the residual bin is recyclable packaging and paper (NSW Government 2010, p. 3);
- Reducing the amount of ‘contamination’ in the recycling stream (i.e. non-recyclable materials), which reduces costs to recyclers and ratepayers – approximately 8% of material sent to a Materials Recovery Facility (MRF) is non-recyclable and sent to landfill (Kannar 2010, p.2); and
- Reducing waste to landfill and waste management costs by ensuring that all recyclable packaging is recovered.

In 2006-07 approximately 7.6 million tonnes of municipal waste were disposed to landfill in Australia (DEWHA and EPHC 2010, p. 27). Extrapolating the estimated proportion of recyclable material in household waste in NSW (23%) to municipal waste in Australia suggests that almost 2 million tonnes of material could have been diverted for recycling instead of going to landfill.

Increased diversion of packaging materials from landfill would have a number of environmental benefits (Carre, Jones et al. 2009). It would also have financial benefits. Sustainability Victoria (2010, p. 1) has reported that *‘the cost of providing a kerbside recyclables collection service at*

\$120 per tonne is still less expensive than the cost of providing a kerbside garbage collection and disposal service at \$142’.

Packaging labels are only one option for communicating recyclability to consumers. Local councils provide information on what can and can't be recycled using stickers on waste and recycling bins, pamphlets, fridge magnets, notices in the local paper, local events etc. Many state government agencies, schools, environmental organisations and recycling companies also have active recycling education programs.

Accurate, instructive and visible recycling labels support these educational efforts, particularly at the point of disposal in the home. However, current labeling practices are inadequate for a number of reasons:

- the different recycling labels currently on packaging has potential to confuse consumers, particularly when combined with other sustainability labels on products;
- many consumers do not understand the meaning of some labels, such as the plastics identification code, and confuse claims about recyclability and recycled content;
- many labels are misleading, for example when applied to non-recyclable packaging; and
- some forms of recyclable packaging are not labeled at all, missing an opportunity to encourage recycling.

This discussion paper is organised into eight sections. It starts by reviewing existing labelling standards and consumer understanding of recycling labels. It then provides an overview of existing labelling practices in Australia and identifies some of the main problems. New recycling labels in the United Kingdom and United States of America are then presented and discussed. Finally, a number of conclusions and recommendations are made.

2. STANDARDS AND GUIDELINES FOR RECYCLING LABELS

The most relevant guidelines and standards currently available for recycling labels in Australia are:

- The Sustainable Packaging Guidelines, which signatories to the Australian Packaging Covenant (APC) are required to use in the design of new packaging;
- The Australian Competition and Consumer Council (ACCC) guide: 'Green marketing and the Trade Practices Act' (ACCC 2008), which interprets the meaning of the Trade Practices Act for environmental labelling; and
- AS/NZS ISO 14021: Environmental labels and declarations—self-declared environmental claims (Standards Australia and Standards New Zealand 2000), which is a voluntary standard.

The Sustainable Packaging Guidelines include two relevant strategies: 'design for recovery' and 'provide consumer information on sustainability'. The latter strategy advises companies that *'Where possible, any environmental claims made about such things as recycled content of*

packaging, recyclability or degradability should be made clear to consumers of the packaging or packaged product through clear information or advice'(2010). It includes questions on the use of a recycling label such as the Mobius loop (referencing AS/NZS 14021) and marking plastic containers with the plastics identification code.

The ACCC guidelines and ISO 14021 include a number of key messages for companies wishing to use a recyclability claim or label:

- avoid false or misleading claims;
- claims about recyclability must be linked to the availability of services; and
- The 'Mobius loop' is the preferred recycling symbol.

False or misleading claims

According to the ACCC, *'businesses must not mislead or deceive consumers in any way, and [the Trade Practices Act] carries serious penalties for businesses that fail to meet these requirements'* (ACCC 2008, p.1). The Act applies to all forms of advertising, including environmental claims on packaging and labelling, such as the recyclability of the packaging.

The ACCC states that: *'claims can be potentially dangerous if the product is not recyclable, or if the facilities to recycle it are not available in Australia. Manufacturers and retailers should verify that their product can actually be recycled before using such claims'* (ACCC 2008', p.1).

Claims should be clear as to whether the environmental benefits refer to packaging or contents. This is particularly relevant where a non-recyclable product is packed in a recyclable package, or vice versa. The ACCC guidelines state that, *'You should ensure that your claims specifically explain this distinction to consumers—a simple 'packaged in recyclable material' could prevent you misleading your customers'*(ACCC 2008, p.11).

This is also relevant to multi-component packaging, such as a plastic bag in a cardboard carton, like many breakfast cereal packs. In cases such as this, a recyclability claim needs to be clear that it applies to one layer only (e.g. 'outer carton is recyclable'). Photo 1 shows a recycling label that addresses this issue by distinguishing between two different components.

Photo 1: Example of a label that provides instructions for different components



Definitions of 'recyclable' packaging

ISO 14021 (2000, p.13) defines the term recyclable as *'A characteristic of a product, packaging or associated component that can be diverted from the waste stream through available processes*

and programmes and can be collected, processed and returned to use in the form of raw materials or products’.

It goes on to say (p. 13) that “If collection or drop off facilities for the purpose of recycling the product or packaging are not conveniently available to a reasonable proportion of purchasers, potential purchasers and users of the product in the area where the product is sold, then the following shall apply:

- a qualified claim of recyclability shall be used
- the qualified claim shall adequately convey the limited availability of collection facilities
- generalised qualifications, such as ‘recyclable where facilities exist’ which do not convey the limited availability of collection facilities are not adequate”.

From a legal perspective, the important issue is whether or not a claim about recyclability is ‘likely to mislead or deceive’ – it does not matter whether a business intended to mislead or whether anyone was actually misled. ACCC advises that:

‘These claims can be potentially dangerous if the product is not recyclable, or if facilities to recycle it are not available in Australia. Manufacturers and retailers should verify that their product can actually be recycled before using such claims.

Consumers are likely to understand the term ‘recyclable’ or recycling symbols on products to mean that the product is likely to end up in a recycling facility. If there are very few facilities, such facilities do not exist at all or they exist only as pilot plants, then the use of the term or symbols may be misleading.’ (p. 13-14)

The Mobius loop

ISO 14021 states that when a recyclable claim is made, the use of a symbol is optional. However, it recommends the use of the Mobius loop (e.g. Photo 2) if a symbol is going to be used.

Photo 2: Mobius recycling loop (example only)



According to ISO 14021, ‘The Mobius loop may apply to the product or the packaging. If there is any potential for confusion about whether it applies to the product or the packaging, the symbol shall be accompanied by an explanatory statement.’ (p. 6)

3. RECYCLING AND DISPOSAL LABELS ON PACKAGING IN AUSTRALIA




There is no accepted standard for recycling logos in Australia, apart from the advice provided in ISO 14021. Some examples of logos currently used on packaging to inform consumers about recyclability, recycled content or to advise consumers about appropriate disposal of packaging are provided in Table 1. They include:

- the Mobius loop, used to indicate either recyclability or recycled content;
- other versions of the 'chasing arrow' symbol that are in widespread use;
- the 'Grüne Punkt' (Green Dot), which is specific to recycling programs in Europe;
- company-designed recycling symbols that try to give consumers more direct advice on disposal of different packaging components;
- the 'Australian Recycled Cartonboard' symbol, which indicates recycled content;
- the 'Tidyman' symbol, which is widely used to encourage responsible disposal (and avoid litter); and
- the plastics identification code (PIC), which is used to identify the type of plastic in packaging (PACIA 2003).

The wide range of symbols on packaging that relate to recycling or disposal is probably contributing to consumers' confusion and misunderstanding of their meaning (see section 4).

Table 1: Recycling labels used in Australia

Label	Purpose and details	Further information
Mobius loop (examples only) 	<p>Purpose: To indicate that a product or package is recyclable</p> <p>Used: Worldwide</p> <p>Owned: Public domain</p> <p>Legal status: Voluntary</p> <p>Variations: Often accompanied by words, e.g. 'Please recycle' or 'Recyclable packaging'</p>	ISO 14021: 1999 ISO 7000, symbol no. 1135
Mobius loop with recycled content (examples only) 	<p>Purpose: To indicate the percentage of recycled content</p> <p>Used: Worldwide</p> <p>Owned: Public domain</p> <p>Legal status: Voluntary</p> <p>Variations: Information on pre-consumer or post-consumer content</p>	ISO 14021: 1999 ISO 7000, symbol no. 1135
Green Dot 	<p>Purpose: To indicate that the brand owner has paid a fee to a Producer Responsibility Organisation (PRO) to fund recycling of packaging</p> <p>Used: Mainly in European countries, but some of these products are also imported to Australia</p> <p>Owned: Duales System Deutschland (DSD), licensed to PRO EUROPE</p> <p>Legal status: Voluntary but indicates compliance with EPR regulations</p>	DSD www.gruener-punkt.de PRO EUROPE www.pro-e.org
Company logo (examples only) 	<p>Purpose: To indicate that the packaging is recyclable</p> <p>Used: Company-owned brands</p> <p>Owned: Company</p> <p>Legal status: Voluntary</p> <p>Variations: Different advice for other materials or formats</p>	
Company logo (example only) 	<p>Purpose: To indicate the packaging is recyclable</p> <p>Used: Company-owned brands</p> <p>Owned: Individual companies</p> <p>Legal status: Voluntary</p> <p>Variations: Different advice for other materials or formats</p>	
	<p>Purpose: To indicate the packaging is recyclable</p> <p>Used: Widely used</p> <p>Owned: Public domain – originally developed by the Victorian EPA</p> <p>Legal status: Voluntary</p> <p>Variations: Words such as 'recyclable packaging' or 'please recycle' etc.</p>	

	<p>Purpose: To indicate the packaging is made from recycled content</p> <p>Used: Predominately on Amcor packaged products</p> <p>Owned: Australian Recycled Cartonboard Incorporated</p> <p>Legal status: Label sub-licensed through Amcor</p>	<p>http://www.arc.org.au</p>
<p>Polymer Identification Code (PIC)</p> <ol style="list-style-type: none"> (1) Polyethylene terephthalate (PET) (2) High density polyethylene (HDPE) (3) Polyvinyl chloride (PVC) (4) Low density polyethylene (LDPE) (5) Polypropylene (PP) (6) Polystyrene (PS) (7) Other (other resins, mixed resins) 	<p>Purpose: To indicate the resin used to make plastic packaging</p> <p>Used: Worldwide</p> <p>Owned: Public domain – originally developed by the Society of the Plastics Industry (SPI) in the US in 1988.</p> <p>Legal status: Voluntary in Australia, regulated in some jurisdictions in the United States</p> <p>Variations: Numbers often used in combination with the Mobius loop or other recycling symbols</p>	<p>http://www.pacia.org.au/Content/PIC.aspx</p>
<p>Tidyman</p> 	<p>Purpose: To encourage the consumer to dispose of the packaging in a rubbish or litter bin</p> <p>Used: Variations on the symbol used worldwide.</p> <p>Owned: Public domain</p> <p>Legal status: Voluntary</p> <p>Variations: Different versions of the symbol. Often accompanied by words, e.g. 'Please dispose of thoughtfully'.</p>	<p>http://www.litter.vic.gov.au/www/html/1320-tidyman-logo.asp</p>

4. CONSUMER UNDERSTANDING OF RECYCLING LABELS

A number of market surveys have asked Australians about their attitudes, knowledge and behaviour in relation to packaging and recycling. Some have also investigated awareness and understanding of recycling logos and the plastics identification codes.

Australians are enthusiastic recyclers

A survey by the ABS (2006, p. 17) found that 99% of Australian households engaged in some form of reuse or recycling, compared to 91% in 1996. The ABS attributed this to the provision of new and improved kerbside collection services, extensive community education, higher landfill levies in many states and territories and the development of new and more stable markets for recycled materials.

Most people recycle because they believe it helps the environment, although they may not be able to identify specific benefits. A survey by the Victorian Government (Ipsos Australia 2005, p. 18) found strong support for recycling, for example 81% agreed with the statement that 'I'm very conscious of the need/importance of recycling'. The main reasons given for recycling were 'helping the environment' (65%) and 'being socially responsible' (26%); although 'habit' (14%) and 'availability of kerbside recycling services' (14%) were also important (Ipsos Australia 2005, p 34). When survey respondents in Western Australia (WA) were asked a similar question, 59% said that recycling would reduce waste going to landfill and 44% said that it was 'good for the environment' (Synovate 2007, p. 59).

Perceptions about the recyclability of packaging influence purchasing behaviour

In a recent survey of shoppers for the Australian Food and Grocery Council (NetBalance 2010):

- most consumers say they are concerned about the impact of their purchasing decisions on the world (84%); and
- consumers identified the most important environmental attribute as 'being recyclable' (78%).

These results need to be treated with some caution because market surveys consistently identify a gap between attitudes and behaviour. In this case, only 13% of those surveyed outside a supermarket had purchased a product 'just now' because of its environmental features (p. 8).

Consumers are confused about the recyclability of some packaging types

One of the barriers to increased recycling of packaging is confusion about which materials can be recycled. Residents in South Australia were asked to identify any barriers that prevent them recycling (McGregor Tan Research 2008, pp. 13-4). While 44% could not identify any barriers, 4% said they did not know enough about recycling correctly and another 4% cited lack of information, education and awareness. Other barriers included recycling services in the area being limited or not available (14%), bins too small, not supplied or not appropriate (6%) and lack of time (5%).

Residents in WA were asked to identify any items that they were unsure whether they could recycle through their household recycling service or a drop-off service (Synovate 2007, p. 29). The products they identified included plastic bags (4%), plastic lids (4%) and plastic bottles/cartons/containers (3%). When asked what they would do with an item if they were not sure if it could be recycled, 52% said they would put it in the rubbish bin, 25% would check with a recycling authority then dispose of it, and 20% said they would put it in the recycling bin (p. 30).

On-pack labels help consumers to sort their used packaging

The WA survey also asked people what would encourage them to recycle more (**Table 2**). The majority of respondents would like non-recyclable products to be clearly labelled and clearer information on product packaging with disposal instructions (Synovate 2007).

Table 2: Which of these would encourage you to recycle more than you currently do?

	Percent of respondents (%)
Non-recyclable products to be clearly labelled	91
Having bin stickers explaining what products can or can't be disposed of in them	83
Clearer information on product packaging with disposal instructions	79
Knowing more about what happens to recyclables after they are collected, i.e. how they are reused	74
Your local council providing you with more information about recycling	71
Your local councils providing a better recycling collection service	68
Having a separate bin inside your home for recycling	60
Source: (Synovate 2007, p. 61)	

In 2009 Melbourne householders were asked, on a scale from 1 (not at all) to 5 (a great deal), how much they believed on-package labels help them to sort their waste. Results were evenly spread, with only 13% not finding them at all helpful (Buelow, Lewis et al. 2010, p. 208). Consumers were asked what they would do with a package when they saw a particular label (these were illustrated on the survey form). The options given were 'rubbish', 'recycling', 'neither' or 'don't know', and the answers provided by consumers were compared to actual recycling services in their local area. The labels that were found to be most easily understood were those that were action-oriented, i.e. they told consumers what to do. The Woolworths' 'Remove cap and recycle' label attracted the highest percentage of respondents with the correct

answer (81%). Respondents were more confused about vague labels such as ‘please dispose of this packaging thoughtfully’ (p. 204).

The majority of respondents to the AFGC survey (80%) said that they were concerned about the lack of environmental labelling or logos. The most trusted source of information on green claims is a recognised environmental logo (87%) (NetBalance 2010).

Many consumers think that the plastics identification code indicates recyclability

A questionnaire survey and interviews with shoppers in Melbourne also found that most consumers didn’t understand the plastics identification code (Buelow, Lewis et al. 2010). The majority of survey respondents said that based solely on the code, they would put the packaging in their recycling bin. Only one of the interviewees correctly stated that the PIC does not mean the same thing as the Mobius loop.

This is supported by earlier research, including a survey of supermarket shoppers in Sydney (Taverner Research Company 2004). The plastics identification code was recognised by a high proportion of respondents (58%) but only 1% correctly identified its meaning as ‘plastic/PET’ (the symbol for PET was shown). The majority (89%) thought that it meant the packaging was recyclable or recycled (**Table 3**).

Table 3: Perceived meaning of the plastics identification code

	Percentage of respondents
Packaging can be recycled	60
Recycling / recycling logo	20
Recycling category/grade	4
Plastic/PET	1
Other	2
Don't know	8
Source: (Taverner Research Company 2004, p. 30)	

Research on consumer understanding of plastics recycling was also undertaken in 2001 as part of an industry review of the identification codes. Only 8% of respondents to this survey correctly stated that the code indicates the type of plastic, with one third (30%) having no awareness of the symbol and almost half (46%) stating that it meant recycling or the pack can be recycled (PACIA 2001, pp. 10-11).

5. PROBLEMS WITH CURRENT LABELLING PRACTICES

A review by the authors of packaging in supermarkets identified a number of common problems with labelling practices. These include:

- use of recycling labels on non-recyclable packaging;
- ambiguous recycling claims and labels;
- hidden recycling claims or labels;
- no recycling claims or labels on recyclable packaging;
- no disposal advice on packaging of hazardous products;
- misleading use of the plastics identification code; and
- ambiguous anti-litter labels.

Use of recycling labels on non-recyclable plastic films

The use of the Mobius loop on flexible film packaging (e.g., Photo 3) is a common practice and according to ACCC guidelines and ISO 14021, is likely to be misleading. Plastic films and bags for consumer products are not currently recyclable in Australia, i.e. while they may be technically recyclable, they are not collected and reprocessed in Australia at present¹.

Photo 3 Use of the Mobius loop on flexible film packaging (rice noodle packet)



The label in Photo 4 is probably only intended to inform the consumer about recycled content, but most consumers would interpret this as meaning that the package is recyclable. Composite cans are not currently recyclable because of the different materials used in their construction.

Photo 4: Use of Mobius loop on composite can (aluminium/board/ steel)



Ambiguous recycling claims and labels

Recycling labels can also be ambiguous, for example:

¹¹ The exception is plastic shopping bags, which are collected by the major supermarket chains for reprocessing.

- when used on multi-component packaging; and
- when used on packaging that is only recyclable in some geographic areas.

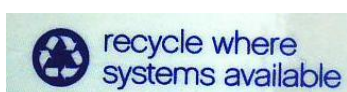
The use of the Mobius loop and other forms of the chasing arrow on multi-component packaging can be misleading if it implies that the whole pack is recyclable when this is not the case. In the example shown in Photo 5, the label on a cereal carton includes the chasing arrow and a statement on recycled content. According to ISO 14021, it should be made clear that the label applies to the outer pack only, and not to the plastic liner bag.

Photo 5: Chasing arrow and statement on recycled content on outer packaging (muesli)



Recycling claims are also often used in combination with a qualifying statement, such as 'Please recycle where possible', particularly if the material or format is not collected by all councils. The claim shown in Photo 6 is not acceptable under ISO 14021.

Photo 6: An ambiguous recycling statement on a drink carton (soy milk)



Hidden recycling claims or labels

When labels are too small to view or are obscured by fold lines, the message is unlikely to reach the average consumer. Photo 7 illustrates the use of 'Do The Right Thing' anti-litter logo on a confectionery packaging, which is obscured by the fold of the plastic film.

Photo 7: Hidden on the pack - don't litter logo (confectionery)



No recycling label on recyclable packaging

Some recyclable packaging is not labelled at all. Examples include:

- Polypropylene (PP) packaging - until recently this material was not widely collected through kerbside systems in Australia so consumers may not be aware that PP tubs, jars and takeaway food containers are recyclable; and
- PET clamshells, trays etc – consumers are aware that soft drink bottles are recyclable but may not be aware that other forms of PET packaging are also recyclable.

Lack of information on disposal of hazardous product packaging

Some packaging is made from a recyclable material but the contents make it non-recyclable. Some of these are not accepted by recyclers because product residue left behind in the container is hazardous, for example:

- plastic containers used for household chemicals such as pesticides and herbicides; and
- plastic engine oil bottles.

Aerosol cans are not always acceptable to recyclers because any liquid residue in the containers is potentially explosive in an aluminium smelter.

These containers should be labelled with instructions for safe disposal rather than recycling.

Misleading use of the plastics identification code

The plastics identification code (PIC) is a voluntary, industry-managed code to identify the type of plastic used to make the packaging (Table 1). Within Australia it is governed by the Plastics and Chemicals Industries Association (PACIA). In 2003, PACIA updated their guidelines on use of the codes (PACIA 2003).

Market research suggests that a high proportion of Australians believe that the PIC means the package is recyclable. The code was originally introduced to support recycling programs by helping consumers and recyclers to sort plastic packaging by resin type. It is now widely used in consumer education on recyclability, e.g. by local councils, which is contributing to the confusion over its meaning.

PACIA guidelines allow the use of the PIC on flexible packaging, but its high visibility on a range of consumer packaging (bags, tubes and film) has potential to mislead consumers by implying recyclability (e.g. Photo 8). These packaging formats are currently not recycled in Australia, with the exception of plastic shopping bags through retail outlets.

Photo 8: PIC on thin film packaging (sponge pack) next to the Green Dot recycling symbol



The codes are often used on recyclable plastic packaging in combination with the Mobius loop or another recycling symbol (e.g. Photo 9), which is adding to confusion about their meaning.

Photo 9: PIC number 7 ('other resin') combined with a recycling logo on thin film packaging (rice)



In many cases the codes are placed in prominent locations on bottle labels, in contravention of the PACIA guidelines that state:

'Do ensure that the code is on the bottom of the container or as close as is practicable – preferably on the heel as the next best option' (PACIA 2003, p. 6).

Ambiguous anti-litter symbols

The 'Tidyman' symbol is a voluntary symbol used to encourage responsible disposal instead of littering. It is often combined with the words 'Please dispose of packaging thoughtfully', which is ambiguous if it doesn't tell the consumer exactly what to do. If the package is non-recyclable, more direct advice could be provided, such as 'Please dispose of in a rubbish bin'.

In some cases the symbol is combined with a recycling symbol, which is a mixed message (Photo 10). In this example the packaging is recyclable. A clearer message is provided in Photo 11, i.e. 'Don't litter'.

Photo 10: Tidyman and responsible disposal message combined with a recycling logo



Photo 11: Tidyman symbol combined with a recycling logo (ice cream packaging)



6. RECYCLING LABELS USED IN OTHER COUNTRIES

6.1 BRITISH RECYCLING CONSORTIUM (UK)

“The On-Pack Recycling Label scheme aims to deliver a simpler, UK-wide, consistent, recycling message on both retailer private label and brand-owner packaging to help consumers recycle more material, more often.” (www.onpackrecyclinglabel.org.uk)

The British Recycling Consortium (BRC) launched the On Pack Recycling Label (OPRL) in April 2009, after several years of development by the BRC and WRAP (Waste & Resources Action Programme). The aim of the labelling scheme is to reduce consumer confusion by providing more specific information on recyclability.

The program is funded through an annual registration fee of £700 for large businesses or £275 for charity or small, independent businesses with an annual turnover of less than £1million. Once registered, the company is sent a password for access to the ‘Members only’ area of the OPRL website. The OPRL is currently managed by two full time employees. The information on recyclability in the members’ area is updated annually by BRC by surveying local authorities and recycling depots. The survey is used to identify which packaging types are currently recycled in which council areas (the current matrix of OPRL’s packaging types is presented in the Appendix). The members’ area instructs the packaging designer on appropriate use of the OPRL, advising which labels to use on the various packaging and polymer types.

The British Retail Consortium established a not for profit company (On Pack Recycling Label) to govern the scheme. The Directors include two from the BRC and several others from participating brand owners. WRAP is represented on the Board as an observer and technical advisor. They have a monitoring role with the scheme to ensure that the labels are used appropriately and only by members.

The service is also supported by the site www.recyclenow.com, which allows consumers to search for recyclable materials by entering their post code.

Photo 12 UK labels indicating three levels of recyclability



The three levels of recyclability communicated by the labels are:

- ‘Widely recycled’: the packaging is recycled in over 65% of locations (changing to 75% later in the year);
- ‘Check Local Recycling’: between 15% and 65% of the locations recycle the material (changing to 25% - 75%); and
- ‘Not currently recycled’: the packaging is recycled in less than 15% of locations (changing to 25%).

No formal evaluation of the program has been undertaken to date, although retailers report that the scheme has been well received by consumers and that inquiries about the recyclability of packaging have decreased. Recycling rates in the UK have continued to increase as a result of better service provision and increased consumer awareness of recycling (partly attributed to the OPRL). In the British Retail Consortium’s initial field trials of the OPRL, one out of six consumers stated that they learnt something new. According to the Consortium, *‘The scheme is now used by more than 100 retailers and manufacturers (on over 60,000 product lines) and is rapidly becoming the industry standard’* (BRC 2009, p.1).

The scheme has helped to expand the infrastructure for recycling because industry associations have sought to have packaging types certified as ‘widely recycled’. For example the aluminum association invested in infrastructure in the UK so that thin aluminium film could qualify as ‘widely recycled’. Tetrapak worked with the British Retail Consortium to increase the infrastructure for recycling their packaging, and now has a unique label for Tetrapak explaining where they can be recycled.

Initial talks are underway to license OPRL to other parts of Europe; however the discussions are preliminary at this stage.

6.2 SUSTAINABLE PACKAGING COALITION (USA)

The Sustainable Packaging Coalition (SPC) in the United States is developing and trialling a similar labelling scheme to OPRL. SPC is an industry-funded working group managed by sustainability non-profit GreenBlue.

There is a lot of confusion within industry and the general public about the recyclability of packaging. SPC members would like to improve communication with consumers by providing a more consistent and factual labelling system and access to recycling (“reach”) data.

The major visual difference between the UK and the proposed US label is the use of the traditional Mobius loop instead of the U.K.-based Recycle Now circular recycling symbol (the “swoosh”). SPC believes that the familiarity of the Mobius loop to consumers makes it more appropriate than the circular ‘Recycle Now’ symbol which is used in the UK. The proposed label also has fewer words, relying more heavily on visual iconography.

The proposed thresholds for the different levels of recyclability have been determined with input from the Federal Trade Commission. They are:

- ‘Widely recycled’: 60% or more of the population has access to recycling the package;
- ‘Check local recycling’: between 20% and 60% of the population has access to recycling the package; and
- ‘Not currently recycled’: Less than 20% of the population has access to recycling the package.

Consumer testing of the label through focus groups, the internet and face to face surveys in shopping centres has found the label is well understood, although consumers don’t always know where to ‘check local recycling’. One of the questions asked was whether non-recyclability would stop consumers buying certain products. All things being equal, consumers said they would buy products in recyclable packaging, but the label ‘not currently recycled’ would not necessarily stop them from buying a product.

The long-term business model for the labelling scheme is still in development, including the level of resourcing required for management and administration. There are also some challenges involved in collecting uniform national data on recyclability in a cost-effective way and this is still under discussion with trade associations and other stakeholders.

A ‘soft launch’ or pilot for SPC’s scheme is expected to commence mid-2011 and run through mid-2012. Several brand owners and retailers have agreed to participate by putting the new labels on selected products and more are expected to join. The aim is to test the label in a range of sectors and across a range of pack types, and to undertake research on consumer understanding and behaviour. Local governments also will be involved, by helping to provide information on the labelling system as well as consumer feedback. Please check www.sustainablepackaging.org for updates.

7. CONCLUSIONS

There is a strong support in the community for recycling. This is demonstrated by:

- high levels of participation in kerbside and other recycling programs; and
- market surveys that consistently reveal support for recycling because this is considered ‘the right thing to do’ for environmental reasons.

While they want to do the right thing, consumers are confused about the recyclability of some packaging materials or formats.

Brand owners in Australia are increasingly adding recycling claims and labels to their packaging, in response to consumer interest in recycling and their involvement in the Australian Packaging Covenant. However, marketers are also confused about the recyclability of some packaging materials or formats, as demonstrated by numerous examples of false or misleading labels.

Both brand owners and consumers are looking for accurate and consistent information on the recyclability of packaging. Some potential solutions are suggested in the next section.

8. RECOMMENDATIONS

Recommendations to improve labelling for recyclability include:

- Education for industry on appropriate and legally compliant labelling;
- Optional certification of recycling claims;
- Review of and industry education on appropriate use of the plastics identification codes;
- Development of a new recycling labelling system based on the proposed US scheme.

Recommendation 1: Education for industry on appropriate and legally compliant labelling

The many examples of inaccurate, misleading and potentially illegal recycling labels that were identified, including those described in section 5, suggest that there is an urgent need for an education program for brand owners on correct labelling. This is particularly important given that 'design for recovery' and 'provide consumer information on sustainability' are two of the strategies that must be considered by signatories to the Australian Packaging Covenant.

Options include:

- Guidelines on correct labelling practices; and
- A 'one stop' resource on recyclable packaging.

1A - Labelling guidelines

A brief set of guidelines could be developed and published on the APC website on the recommended use of recycling symbols (based on the Mobius loop), the plastics identification code and the Tidyman symbol. For example, the plastics identification code and the Mobius loop should not be used on thin film packaging. Labels should include specific instructions, e.g. 'put used packaging in a waste bin', as opposed to 'please dispose of empty package thoughtfully'.

1B – Consolidated information on recyclable packaging

Brand owners looking for information on which packaging materials and formats are recyclable are often frustrated by the lack of a single source of reliable information. Companies can find useful information by going to one or more of the following sources, but may have difficulty obtaining a single answer:

- Recycling companies such as Visy Recycling, Amcor etc;
- The Australian Council of Recycling (ACOR) (www.acor.org.au) has developed a series of ‘Manufacturers’ Recycling Guides’ for specific materials (see www.acor.org.au/materials.html). Guides are currently available for steel, aluminium, High density polyethylene (HDPE) and Polyethylene terephthalate (PET). They also publish recyclers’ specifications for a wider range of materials. Not all materials are covered and the generic guidelines may not indicate whether a particular format is recyclable or not.
- Planet Ark has a website called ‘Recycling Near You’ (<http://recyclingnearyou.com.au>) which contains information on the materials and products collected by individual local councils through a search engine using a town’s postcode.
- A number of state government agencies have recycling statistics and other recycling information on their web sites;
- The APC web site provides information on national recycling rates for each of the main packaging materials; and
- There are a number of publications available on the internet that are useful as a general guide to design for recycling, e.g. ‘Recyclability By Design’ in the UK (Recoup 2009).

A single source of information on recyclability would make it easier for packaging technologists, designers and marketers to find out whether their packaging is collected for recycling and whether there are any design changes that would make it more recyclable. For example, a ‘one stop’ web site could provide links to the resources listed above as well as other sources of information.

Recommendation 2: Optional certification of recycling claims

The Australian Council of Recycling (ACOR) is investigating the feasibility of a certification scheme for recyclable products and packaging, i.e. designed according to specifications similar to their Recycling Guides for Manufacturers and Recycling Materials Specifications for specific materials. If introduced the scheme would provide additional certainty for both brand owners and consumers about packaging recyclability.

Recommendation 3: Review of the plastics identification code guidelines and industry education

The codes are widely used and misused in the packaging industry. A review by the Trade Practices Commission (now ACCC) in 1995 concluded that the codes could continue to be used but within strict guidelines, including not using the code in prominent locations on packaging:

“The symbols have considerable potential to mislead because of the similarity to the widely accepted symbol used to denote recyclability ... where the identification code is used on the base of the container it is unlikely to mislead consumers. However it should not be placed in a position or presented in such a way which gives the impression that the plastic can be recycled if this is not the case.” (cited in PACIA 2001, p. 13)

In the United Kingdom the continued need for plastic codes has also been questioned - ‘*With the increasing use of automated sorting for household waste, the recycler’s need for material identification is becoming much less important*’ (Melchior, Armstrong et al. 2009). A similar shift from manual to automated sorting is evident in Australia. The question for PACIA and organisations involved in the recovery of packaging (local government and recyclers), is whether or not the codes are still useful to support source separation of packaging by households.

Recommendations to address misuse of the plastics identification code include:

- a review by PACIA of their guidelines, in particular the statement that the code can be used on flexible plastic packaging (p. 4);
- an education campaign to inform packaging companies and brand owners about the risk of non-compliance with the Trade Practices Act, and to promote PACIA’s guidelines on how the code can and cannot be used (with the exception of use on flexible films);
- monitor the development of the ISO standard on the plastics identification code, which is being driven by industry in the US (ASTM 2008), which may make the PACIA guidelines redundant.

Recommendation 4: Feasibility study of a new recycling label based on the UK/US schemes

It is recommended that the Australian Packaging Covenant and AFGC monitor industry and consumer responses to the pilot of the US labelling scheme, with a view to adopting it in Australia if it proves to be acceptable to industry and consumers and effective in changing recycling practices. It makes sense for Australia to adopt the same or similar labelling scheme, rather than developing its own, to ensure consistency with the US and UK and to avoid unnecessary duplication of effort.

If there is enough support for this type of labelling system in Australia, work could commence on a business plan, including:

- design of the label;

- governance;
- funding;
- management and resourcing; and
- research on recyclability of packaging materials / formats (proportion of councils collecting each type) – responsibility and funding.

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