



Communications, Marketing and Social Research Consultants

## Appliance Performance Labelling in Australia and New Zealand

The Findings and Outcomes of the 2005 Quantitative Survey  
of Consumer Awareness and Use of Appliance Labels

Conducted for



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**About Artcraft Research:**

Artcraft Research has been conducting market and social research since it was formed in 1981 by Les Winton, who has been in the field since 1971. He has been involved with appliance labelling since its inception in Australia and has researched and guided its development and re-design in many studies over that time.

# Introduction

Performance labels on appliances are used around the world to provide consumers with important comparative performance data at the point of sale. The use of appliance performance labels has been expanding in Australia and New Zealand and is likely to continue to do so.

The Equipment Energy Efficiency committee (E3) of the Ministerial Council on Energy, is responsible for Australia's mandatory energy rating labelling scheme, and for setting and enforcing Minimum Energy Performance Standards for a range of equipment and appliances.

To assist future strategy and planning E3 commissioned a nation-wide study into consumer awareness and use of the existing appliance performance labels. This document provides an overview of the findings and outcomes of that study undertaken by Artcraft Research in 2005. Details of the methodology, discussion of the findings, and extensive tabular results are to be found in the full report at [www.energyrating.gov.au](http://www.energyrating.gov.au).

## Background to the Use of Performance Labels in Australia

**Figure 1. The Four Appliance Labels (not to scale):**



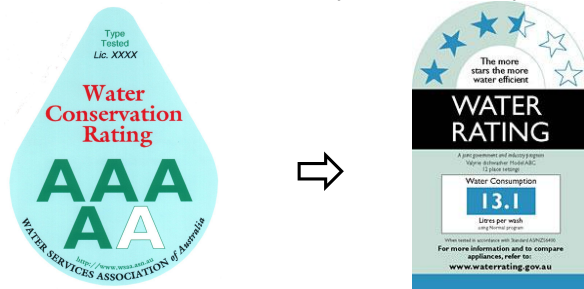
Energy rating and endorsement labels have been used by Governments to inform consumers in Australia since the mid 1980's. During the last decade the use of energy rating labels on electrical appliances has been considerably expanded with new appliances being subject to a mandatory national labelling regime, the label

being redesigned and the lowest allowable limits of energy performance being lifted across a number of appliances.

A voluntary scheme for labelling of gas appliances was also initiated in the mid 1980s but for various reasons has dwindled in extent and relevance. Recently work has commenced to revitalize that scheme, expand it and possibly make it mandatory for some gas appliances in the future.

Since the mid 1990s a voluntary water efficiency labelling program has been in existence. Recently that scheme has been vastly expanded and a national mandatory water labelling scheme was brought into force on July 1, 2006 using a label redesigned along the lines of the widespread energy rating label.

**Figure 2. Progression of the Water Label (not to scale):**  
The Water Conservation label examined in this study      The Water Rating label becoming mandatory from July 2006



The Government has taken over the running of the water efficiency labelling scheme, making it subject to legislation effective from 1 July 2005, with the new label becoming mandatory from 1 July 2006.

Although manufacturers could have introduced the new water label (which is modeled on the energy label) from 1 July 2005 on a voluntary basis, the drought has resulted in a number of jurisdictions undertaking significant promotion of, and providing government incentives for purchasing, water efficient showerheads and washing machines, resulting in the old water droplet-shaped water label (mentioned in these activities) being the only water label visible to consumers during the interviewing period for this study.

# The Findings

Artcraft research conducted more than 4,000 interviews over a short period in October 2005 to measure consumer's use, understanding and awareness of various appliance performance labels. The methodology employed used mostly phone interviews around a carefully designed questionnaire however the responses recorded were verified during hundreds of face to face interviews and group focus sessions. The following key findings have been extracted from the mass of responses collected on the basis of being the most important and statistically valid deductions from this study.

## 1. UTILITY

**Energy Rating Label is valuable for Appliance Buyers** who use every aspect of the label in purchasing decisions.

Nearly 9 in 10 (88%) of consumers use the information on the energy label when buying an appliance and 75% say that the energy rating label is very important in the appliance purchasing process.

Consumers engage in a two stage buying process for appliances. In the first stage they assess a number of aspects of an appliance such as will the appliance fit the available space, does it have sufficient capacity for the task, do they like the features, design, color etc. Having then identified the suitable options among possibly two or three appliances, then consumers tend to begin comparing value, performance, running costs etc.

The study found that forty four percent (44%) of consumers refer to the energy label in the first stage of this two stage appliance buying process and seventy five percent (75%) of consumers refer to the energy rating label during the second stage of that process as well.

In the process of buying appliances consumers are referring to all of the information aspects of the label with many consumers saying that they value the information provided by both the stars and the numbers displayed.

## 2. RECOGNITION

**The Energy Rating Label is a Big Star** enjoying very high levels of consumer recognition similar to top line brands.

The energy rating label is almost universally recognised with 94% of consumers Australia wide being able to recall it unaided, rising to 96% when prompted. Thus

the energy label enjoys a level of consumer awareness usually encountered only with the biggest market leading brands and very high profile celebrities.

The evidence indicates that this level of recognition has increased significantly over the last 15 years. A 1991 Victorian survey found prompted awareness of the energy label among the general public was 45% compared to 94% in Victoria in 2005;

### **3. VALUE**

**Energy Stars illuminate Cost Savings and Energy Savings** which is what people want.

Consumers put cost savings (39%) and energy savings (38%) ahead of helping the environment (13%) as the main reasons that they consulted the label. The information the label is designed to provide communicates directly to the interests and needs of appliance buyers.

### **4. SAVING WATER TOO**

**Water Label Rising Rapidly** as a highly recognizable brand.

Even though it has only been in widespread use in the last few years, the Water Label was recalled by 41% of people unaided, rising to 53% when prompted.

Since the water label moved from being solely industry sponsored and voluntary in recent years the regulation has been put in place by all governments to make the water label mandatory from July 1 2006. Having been redesigned and its messages improved to resemble the energy rating label, the prospects for the Water Label to become highly recognized and effectively used are very good.

### **5. GAS LABEL NEEDS SPARK**

**Gas Label Fails to Spark** any significant level of recognition.

Only fifteen percent (15%) of people were able to recall the voluntary industry sponsored Gas Label unprompted, rising to 20% when prompted even though the gas label has been in the market since the late 1980s.

Since Energy Ministers determined in 2004 that a national mandatory gas appliance labelling system is preferred, regulatory work with all jurisdictions has been underway to prepare for that eventuality.

# The Recommendations

A significant body of other research and qualitative studies conducted in Australia and overseas in the last 20 years was also referred to in the process of preparing the recommendations here. A complete list of other research referred to in the compilation of this report is provided in Annexure 4 of the final report.

## 1. Develop the Energy Rating Label as a Brand

The remarkable level of awareness of the energy rating label makes this device an incredibly valuable information asset. Built on nearly 20 years of promotional efforts by governments, appliance manufacturers and retailers, the energy rating label has both recognition and credibility. The label should be regarded and further developed as the important ‘brand’ that it already operates as in the market place – the Energy Efficiency Brand.

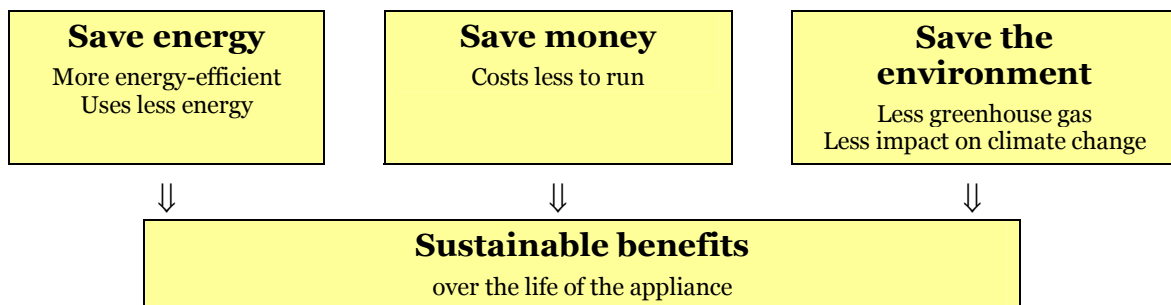
## 2. Build on Strength

As new types of appliances become subject to mandatory labelling and MEPS they provide opportunities to further strengthen the brand recognition and credibility the energy rating label enjoys. Whenever new products are introduced to a labelling regime the opportunity to promote that fact to the general public, and to retailers, must be exploited to continue the growth of the brand value and power.

## 3. Exploit Brand Power to Sell Long Terms Benefits

This existing brand strength means that there is great potential for the label, and its highly recognisable elements, such as the arch of stars, to be employed in a broader context, informing consumers about a range of verified sustainable products and practices.

While retaining the role of conveying energy efficiency information on appliances to the market place, the energy label could be developed to deliver four key messages – save energy, save money, save the environment, and sustain those values over the life of the appliance.



In some contexts the label may have to be adapted to provide different types of information, or information in different formats, however any use or adaptation of the label should only be done under the most rigorous standards, and rigorously researched, to ensure that the brand value is not eroded by overexposure or misuse.

#### **4. Enhance Brand Power**

While awareness is almost universal and perceived importance is very high, specific attention needs to be given in the two lagging jurisdictions (Tasmania and New Zealand) to raising community awareness of the energy label and enhancing understanding of the growing urgency of using energy efficiently in response to diminishing non-renewable resources and the increasing effects of climate change.

#### **5. Consolidate Market**

Given the relatively poor level of recognition of the existing Gas Label it is recommended that this label is replaced by a close adaptation of the Energy Rating Label with, for instance, a possible addition of one highly visible indicator to signify that the label is reporting the efficiency of gas use, not electricity use. It would be better to employ the same 'energy rating' heading for the gas label (ie, as is currently used for the label on electrical appliances) and also use the same well-recalled colours as the energy label, but *highlighting the word 'gas' when describing the consumption figure.*

#### **6. Avoid Brand Dilution**

The Energy Rating Label is based on a regime of standards and testing that can be audited and verified. The strength of its credibility is the detailed information on performance provided by both a star level and consumption numbers. This credibility is an extremely rare and difficult to obtain attribute of any brand in any market and must be diligently protected. As such it is recommended that the Energy Rating Label avoid being used alongside endorsement labels that are either voluntary, or based on far less rigorous performance and testing regimes. The value of the Energy Rating Label will not be improved by coincidental exposure with voluntary endorsement labels. Avoid brand dilution – maintain and improve credibility.

#### **7. Exploit Every Campaign Opportunity**

Any opportunity to use mainstream and specialised media to run stories about the use of labels should be exploited. For instance the planned transition of the water conservation label to a new design that is closer in look to the energy rating label should be used to prepare and distribute editorial material to targeted media.

## **8. Enlist Retailers to Help**

With appropriate training and motivation, retailers (and other market intermediaries, eg installers of water heaters and air-conditioners) can play a key role in delivering the energy efficiency/sustainability message. The 'Reach for the Stars' program should be revitalized and delivered on a national basis, so that retailers (and others) are better trained and motivated to assist consumers in making good energy efficiency decisions in their appliance purchases.

## **KEY FINDING Australia leads the world in awareness**

The energy rating label is almost universally recognised in Australia with 94% of consumers being able to recall it unaided, rising to 96% when prompted. Thus the energy label enjoys a level of consumer awareness overall, usually encountered only with the biggest market leading brands and very high profile celebrities. However, there is room for further improvement among some demographic groups and in several jurisdictions.

**Table 2.1.1 Awareness of the Energy Label:**

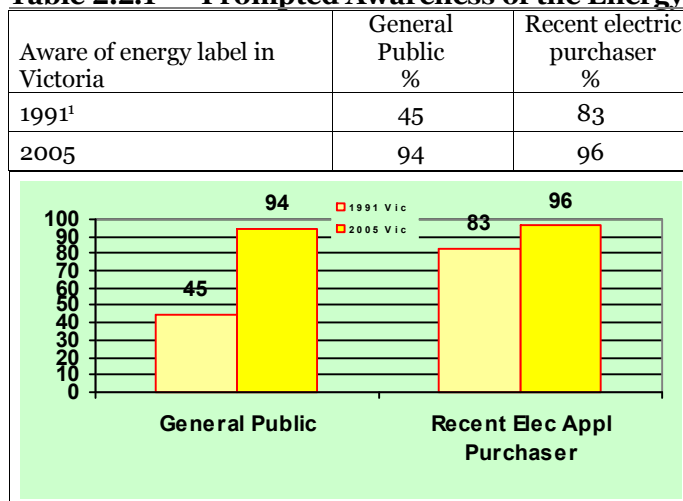
- Q. Are you aware of any electricity energy labels on appliances such as fridges, freezers, washing machines, dishwashers, clothes dryers and air-conditioners?
- Q. In fact, all of the appliances I mentioned have an energy label that has up to six stars in an arch at the top of the label, and a number indicating the amount of energy the appliance uses in a box in the body of the label. The bottom part of the label is yellow with black writing, with a green band at the bottom, and the arch at the top is red with the stars being white reversed out of the red. Do you recall seeing these labels?

Among the General Public:	Unaided awareness %	Prompted awareness %
<b>Yes</b>	<b>94</b>	<b>96</b>
No	5	4
Unsure	1	0

## **Improvement over Time**

Most research on the labels has been qualitative in nature, but a quantitative study was conducted in Victoria in 1991. When compared to findings of that study, prompted awareness of the energy label has doubled amongst the general public in Victoria (from 45% to 94%), and continued to increase amongst recent purchasers of electrical appliances (from 83% to 96%). [See Table 5].

**Table 2.2.1 Prompted Awareness of the Energy Label over time in Victoria**



<sup>1</sup> State Electricity Commission of Victoria (SECV), *An Evaluation of the Electricity Energy Labelling Scheme*, SECV, November 1991. (Report by GFCV, Survey by Quadrant Research).

## KEY FINDING Governments not content with the report card – going for 100%

### States and Territories

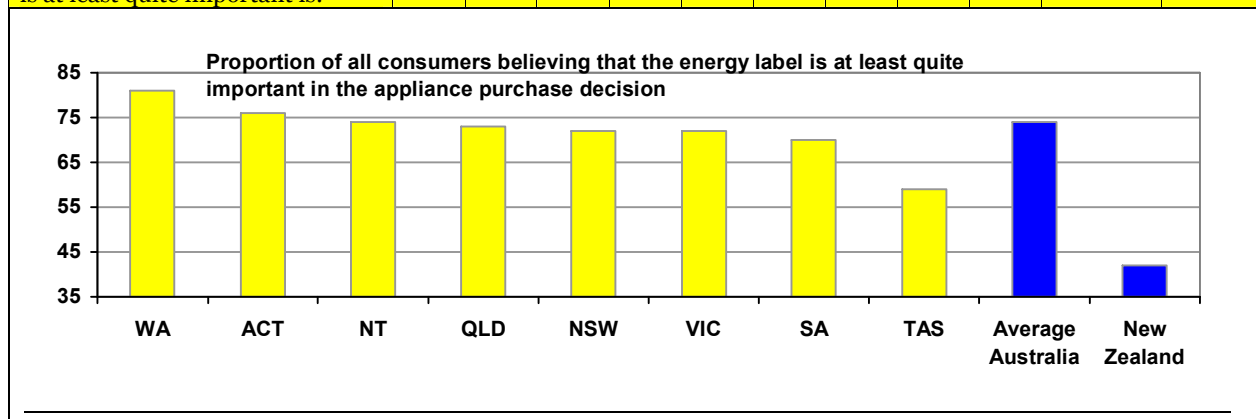
Although well over nine in ten people have prompted awareness of the energy label throughout mainland Australia, figures fall below nine in ten people in Tasmania (88%) and New Zealand (85%). And although more than seven in ten people on the mainland view the label as important in the appliance purchase decision, fewer of those aware of the label in Tasmania and New Zealand do so. As a result, although on average over seven in ten on the mainland are aware of the label and see it as important, this proportion falls to less than six in ten people in Tasmania (59%) and to only about four in ten people in New Zealand (42%).

It is interesting to note that both New Zealand and Tasmania have historically derived the bulk of their electricity from renewable sources (hydro) whereas all other jurisdictions have derived the bulk of their electricity from non-renewable sources (coal).

Western Australia stands out as the jurisdiction with the highest proportion of people (over 8 in 10) who view the energy label as important in the appliance purchase situation.

**Table 2.3.1 Prompted Awareness and importance of the Energy Label, by Jurisdiction:**

	Total ANZ %	NSW %	VIC %	QLD %	SA %	WA %	TAS %	NT %	ACT %	Australia Average %	NZ %
Proportion aware of energy label when prompted with description is:	96	97	94	98	94	98	88	98	99	97	85
Of whom the percentage regarding the label as at least quite important on the purchase decision is:	75	74	77	74	74	83	67	75	77	76	49
So the proportion of all consumers believing that the label is at least quite important is:	<b>72</b>	<b>72</b>	<b>72</b>	<b>73</b>	<b>70</b>	<b>81</b>	<b>59</b>	<b>74</b>	<b>76</b>	<b>74</b>	<b>42</b>

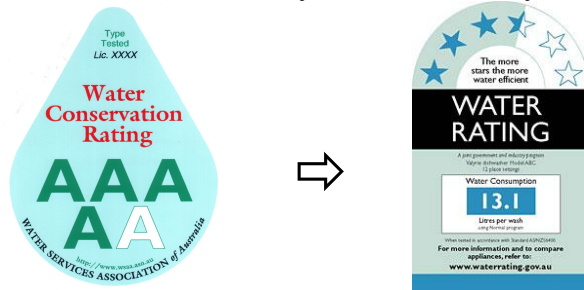


## **KEY FINDING Water label floods consumer awareness**

### **Progression of the Water Label (not to scale):**

**The Water Conservation label examined in this study**

**The Water Rating label to become mandatory from July 2006**



Consumer research was conducted in 2003 and 2004 to establish future directions for the water labelling program (Artcraft Research, 2003 and 2004). This research concluded in part that the voluntary label had low awareness, its shape and relevance was little understood, and the rating scale was confusing. The absence of a water consumption figure was a drawback for those consumers to whom this level of detail was important.

In fact, once informed of the purpose of the water label, consumers suggested strongly that the new water label should be similar to the energy label, which they already knew, understood and could interpret, and which contained the information that they were looking for, that is, a familiar star-based rating scale plus a consumption figure.

The research showed clearly that the best way of ensuring that water efficiency could be seen to be of similar importance and urgency as energy efficiency, but at the same time, a different issue, was to have two separate labels on an appliance (as was already the case on those few appliances displaying the voluntary water label), but for the two labels to be comparable in 'look' and information.

In response to manufacturers' concerns about the amount of space that two separate and labels would take require it was agreed the water label could be made much shorter by retaining its important visual features (star rating arch, water consumption information) but by not having to repeat information already on the energy label.

The (tear-drop) water label presently enjoys only 53% prompted awareness, with only half of those aware of it also regarding it as important. This means that only around one-quarter of all consumers are taking the water label into account. The one exception is in Western Australia where the water authorities have been promoting the water label heavily for some years and providing significant

rebates for purchasing high rating washing machines. Consequently in Western Australia the water label enjoys 68% prompted awareness with three-quarters of these people regarding it as important in their purchase decisions, representing around 50% of all Western Australians.

With the new water label now being mandatory, immediately recognisable and easy to interpret it is expected to perform well and awareness of its message should grow rapidly.

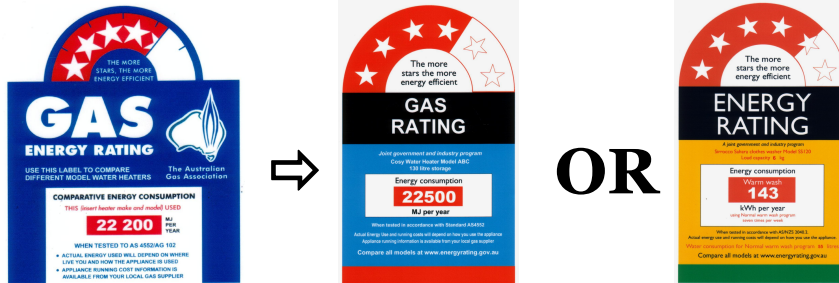
# KEY FINDING Gas label fails to spark consumer awareness

## Possible Progression of the Gas Label (not to scale):

The Gas Label examined in this study

A possible alternative based on the original and tested in earlier research

The alternative proposed by the current research (but with consumption figure being clearly marked as being gas)

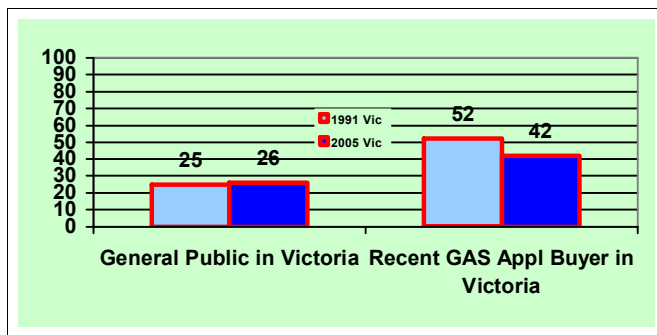


The AGA gas energy rating label is a voluntary label appearing on some gas-fired space and water heaters since the late 1980s. Australian Governments have now agreed to take over the running of the gas efficiency labelling scheme, and will be making it a mandatory scheme as soon as relevant uniform regulation can be introduced across all jurisdictions. Work has been undertaken to develop a possible new gas label. A suitable modification of the widely known energy label has the potential for being more readily and instantly recognised and understood by consumers buying gas appliances.

The current study shows that only fifteen percent (15%) of people are able to recall the AGA Gas Label unprompted, rising to only 20% when prompted. Even in Victoria, where gas usage is far more prevalent than in other cities, prompted awareness of the gas label only reaches 26%, a level it appears to have already reached by 1991 – indeed, prompted awareness among recent gas appliance purchasers in Victoria at 42% is now lower than it was in 1991 (52%).

**Table 2.4.2.1.3 Prompted Awareness of the Gas Label over Time, in Victoria:**

Aware of gas label in Victoria	General Public %	Recent gas purchaser %
1991	25	52
2005	26	42



## How to use the label

The Energy Rating label enables consumers to compare the energy efficiency of domestic appliances on a fair and equitable basis. It also provides incentive for manufacturers to improve the energy performance of appliances.

The Energy Rating Label was first introduced in 1986 in NSW and Victoria. It is now mandatory in all states and territories for refrigerators, freezer, clothes washers, clothes dryers, dishwashers and air-conditioners (single phase only) to carry the label when they are offered for sale. Three phase air-conditioners may carry an energy label if the suppliers chooses to apply for one.

The Energy Rating Label has two main features:

- The star rating gives a quick comparative assessment of the model's energy efficiency against other models in its category.
- The comparative energy consumption (usually kilowatt hours/year) provides an estimate of the annual energy consumption of the appliance based on the tested energy consumption and information about the typical use of the appliance in the home. Air-conditioners show the power consumption of the appliance (kW or kWh/hour).

The Star Rating of an appliance is determined from the energy consumption and size of the product. These values are measured under Australian Standards which define test procedures for measuring energy consumption and minimum energy performance criteria. Appliances must meet these criteria before they can be granted an Energy Rating Label.

