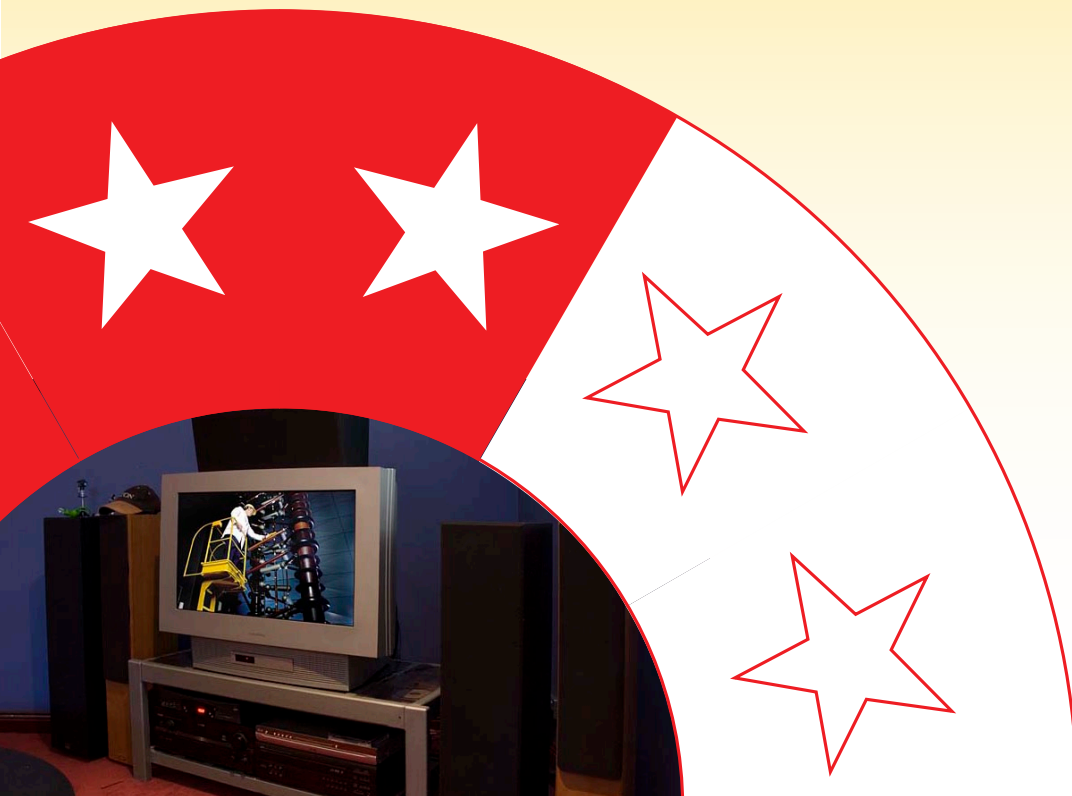


A Report on Inspections of 101 Retail Television Outlets in Australia

April 2011



A joint initiative of Australian, State and Territory and
New Zealand Governments



DISCLAIMER

Mark Ellis and Associates have made their best endeavours to ensure the accuracy and reliability of the data used herein, however make no warranties as to the accuracy of data herein nor accept any liability for any action taken or decision made based on the contents of this report.

This Report is available at
www.energyrating.gov.au

Prepared by Mark Ellis and Associates



PO Box 109 Wagstaffe NSW 2257
P: +61 (0) 2 4360 2931 M: +61 (0) 424 264 014
E: mark@energyellis.com

April 2011

Contents

Executive Summary	5
Introduction	6
Store Survey	7
Labelling Results – Australia	9
Incorrect Labelling	10
Registration Results - Australia	11
Labelling by Store Size	12
Labelling by Store Type	14
Labelling & Registration by Store Chains	15
Labelling & Registration by Brand	17
Appendices	19
Appendix 1 – Labelling and Registration Requirements	19
Appendix 2 – Survey Protocol	19

Figures

Figure 1:	Number of Stores and Televisions Surveyed by State and Territory	5
Figure 2:	Number of Large Stores and Televisions Surveyed by State and Territory	5
Figure 3:	Number of Medium Stores and Televisions Surveyed by State and Territory	6
Figure 4:	Number of Small Stores and Televisions Surveyed by State and Territory	6
Figure 5:	Distribution of Stores Surveyed by Type of Outlet	7
Figure 6:	Correctly Labelled Televisions in each State and Territory	7
Figure 7:	Sample of Obscured Energy Labels Observed	8
Figure 8:	Distribution of Types of Labelling Errors	9
Figure 9:	Rate of Compliance with Registration Requirements by State and Territory	9
Figure 10:	Correctly Labelled Televisions by Store Size	10
Figure 11:	Incorrectly Labelled Televisions by Jurisdiction and Store Size	11
Figure 12:	Store Compliance Rate vs Store Size	11
Figure 13:	Correctly Labelled Televisions by Store Type	12
Figure 14:	Correctly Labelled Televisions by Chain Size	12
Figure 15:	Breakdown of Labelling Errors by Chain	14
Figure 16:	Rate of Correctly Labelled Televisions by Number of Surveyed Products Per Brand	15
Figure 17:	Breakdown of Labelling Errors by Brand (Largest 21)	16

Tables

Table 1:	Distribution of Stores and Appliances Surveyed in each State and Territory	4
Table 2:	Distribution of Survey Sample Compared to National Households	5
Table 3:	Incorrectly Labelled Televisions by Store Size	10
Table 4:	Correctly Labelled Televisions by Store Type	12
Table 5:	Correctly Labelled Televisions by Chain Size	12
Table 6:	Compliance with Labelling and Registration across Mega chain category	13
Table 7:	Compliance with Labelling and Registration across Large Chain Category	13
Table 8:	Compliance with Labelling and Registration across Medium Chain Category	13
Table 9:	Incorrectly Labelled Televisions by Brand Size	14
Table 10:	Labelling and Registration Compliance of the Largest 21 Brands Surveyed	15

Executive Summary

All energy efficiency agencies operating under the National Framework for Energy Efficiency agreed to commission a national survey of stores displaying televisions for sale to assess compliance with mandatory registration and energy labelling requirements. The survey was project managed by staff within the Australian Government Department of Climate Change and Energy Efficiency and conducted by regional employees of the Australian Refrigeration Council Ltd (ARC)¹.

Energy efficiency programs have been in operation in some jurisdictions for more than 20 years. State and territory government legislation gives force to the energy performance and efficiency labelling requirements as set out in the relevant Australian Standards. These state and territory efforts became national applicable from 1992.

Televisions have been subject to mandatory minimum energy performance standards and mandatory energy labelling since 1 October 2009. Prior to the introduction of regulation, a voluntary energy labelling scheme operated as an interim measure from July 2008 until 1 August 2009.

This survey examined televisions displayed in 101 stores throughout Australia² and involved individual inspection of 5,140 products offered for sale in those stores between 7 December 2010 and 4 February 2011. It found that 93.2% of televisions were labelled correctly. Of the incorrectly labelled televisions, 73% did not display a label at all, and 22% were not compliant because the label was damaged or, more frequently, obscured.

These results indicate a substantial improvement compared to a preliminary study conducted twelve months earlier that suggested the average national labelling compliance rate could be as low as 76%. Furthermore, as the poorest performing 100 stores from the preliminary study were chosen for this survey, the current labelling compliance average in retail outlets in Australia may in fact exceed 93.2%.

While the compliance rates for energy labelling in state and territory jurisdictions varied, the spread of results clustered around the national average. Results in three jurisdictions were better than the national average of 93.2% and they were:

- South Australia 99.0%
- Queensland 97.0%
- New South Wales 94.0%

The remaining four jurisdictions below the national average of 93.2% were:

- Western Australia 91.8%
- Victoria 90.1%
- ACT 90.0%
- Tasmania 78.4%

Although the distribution of samples surveyed was consistent with the distribution of households in Australia, the results for the ACT and Tasmania may be compromised by their relatively small sample sizes.

The national average compliance rate with mandatory energy labelling of televisions indicated by this survey (93.2%) is lower than for whitegoods³ (98.1%) but higher than for air conditioners⁴ (89.1%). Notably, whitegoods and air conditioners have been subject to mandatory labelling since 1992.

The compliance rate for televisions complying with state and territory legal requirements to register all models prior to being offered for sale was 98.2%. Though slightly less than the equivalent figures for whitegoods (99.4%) and air conditioners (98.9%), this result indicates that the registration requirements are well understood by the majority of television suppliers in Australia.

Given that mandatory regulations for televisions were introduced only 15 months prior to the survey (on 1 October 2009), the national level of labelling and registration compliance in televisions compares favourably with the whitegood and air conditioner survey results.

Compliance across brands and stores of different sizes is variable. The survey results suggest that medium-sized stores (displaying between 26 and 70 appliances) tend to have higher rates of labelling compliance compared to smaller and larger stores.

The results for individual television brands show substantial variability, but brands with smaller market share (and hence lower representation in this survey) are more likely to have labelling errors compared to more popular brands.

Survey results will be made available to state regulators and individual stores.

¹ 1 store in ACT, displaying 40 Televisions, was surveyed by a DCCEE staff member

² With the exception of the Northern Territories

³ See <http://www.energyrating.gov.au/library/details200910-labelling-compliance-survey.html>

⁴ See <http://www.energyrating.gov.au/library/details201101-aircon-labelling-survey.html>

Introduction

Energy efficiency programs are mandatory in Australia under State and Territory legislation and regulations giving force to the relevant Australian Standards. Regulations specify the general requirements for appliances, including offences and penalties if a party does not comply with the requirements. Technical requirements are set out in the relevant appliance standard, which is referred to in state and territory regulations.

The hierarchy of the energy efficiency regulatory scheme is as follows:

- The Ministerial Council on Energy (MCE) is represented by Energy Ministers from all jurisdictions and has primary responsibility for national consistency of energy efficiency measures.
- The Equipment Energy Efficiency (E3) Committee is tasked by MCE to investigate the rationale for, and to propose efficiency regulations. Commonwealth, State and Territory regulatory agencies together with New Zealand officials participate in developing and enforcing energy efficiency laws.

The E3 Committee works in partnership with stakeholder groups to introduce programs that encourage market transformation by promoting highly efficient equipment, banning from the market products that do not comply with minimum energy performance standards and identifying the energy efficiency of products through appliance labelling.

E3 has repeatedly demonstrated that energy efficient products and systems are both environmentally responsible and cost effective to purchase and install – not only because they consume less energy and thus decrease greenhouse gas emissions – but because in most cases they cost very little, if anything, more than equivalent inefficient appliances. As a result, consumers benefit from whole-of-life cost savings due to lower running costs.

In accordance with its mandate to monitor compliance with energy efficiency regulations, E3 has commissioned two appliance retail outlet surveys throughout Australia over the past two years. These include:

- A survey of 24,851 **whitegoods** (refrigerators, freezers, clothes washers, clothes dryers, and dishwashers) in 265 stores, undertaken in May and June 2009 and published in September 2009. The survey found the national compliance rate for energy labelling was 98.1% and the national compliance rate for meeting the legislative requirement to register products prior to offering them for sale was 99.4% for all inspected whitegoods⁵.
- A survey of 3,115 **air conditioners** in 321 stores, undertaken from May to September 2009 and published in January 2011. The survey found the national

compliance rate for energy labelling was 89.1% and the national compliance rate for meeting the legislative requirement to register products prior to offering them for sale was 98.9% for all inspected air conditioners⁶.

These surveys were undertaken on behalf of E3 by the Australian Refrigeration Council Ltd (ARC).

In July 2008, the television industry supported the introduction of a voluntary energy labelling scheme for televisions⁷ as an interim stage before the implementation of mandatory requirements. No new applications for voluntary participation were accepted after 1 August 2009.

Since 1 October 2009, all televisions have been required to meet energy efficiency regulations when offered for sale in Australia⁸. The major obligations include:

- The registration of all television models with an Australian regulator (available online at www.energyrating.gov.au).
- Meeting the appropriate minimum energy performance standards (MEPS) as specified in AS/NZS 62087.2.2.
- Displaying correctly the energy label as specified in AS/NZS 62087.2.2.

It should be noted that televisions included in the voluntary labelling scheme before its conclusion on 1 August 2009 were allowed to display the voluntary label until 1 February 2010, as long as they complied with the regulatory requirements and AS/NZS 62087.2.2.

In February 2010, four months after the introduction of mandatory energy labelling, ARC was commissioned by the Department of Climate Change and Energy Efficiency (DCCEE) to undertake a preliminary survey of television labelling. The survey aimed to provide on-the-job training for ARC surveyors and to determine which stores had transitioned successfully to meet their new responsibilities. It covered 167 individual stores and 5,089 televisions, and estimated that the proportion of televisions on display that did not meet the labelling requirements may be as large as 24%.

The regulators planned to resurvey those stores with the lowest compliance rates once a sufficient transition time had elapsed for stores to improve. Accordingly, ARC was commissioned by DCCEE in late 2010 to make a detailed investigation of compliance levels for television registration and energy labelling in Australia, with emphasis on those stores shown by the preliminary survey to have the lowest compliance rates. This second survey is the subject of this report.

⁵ See <http://www.energyrating.gov.au/library/details200910-labelling-compliance-survey.html>

⁶ See <http://www.energyrating.gov.au/library/details201101-aircon-labelling-survey.html>

⁷ Display devices designed for the primary purpose of showing TV pictures having a television tuner

⁸ See for further details: <http://www.energyrating.gov.au/tv1.html>

Store Survey

The survey, undertaken between 7 December 2010 and 4 February 2011, covered a total of 101 stores and 5,140 television models. The stores surveyed were divided into one of three categories based on the total number of televisions on public display:

- **Large** stores had more than 70 displayed televisions;
- **Medium** stores had between 26 and 70 displayed televisions; and
- **Small** stores had 25 or less displayed televisions.

Of the 101 stores surveyed, 32 were Large stores, 35 were Medium stores and the balance of 34 were Small stores.

The distribution of the surveyed outlets in each state and territory, together with number of appliances surveyed, is shown in Table 1 and Figure 1. It should be noted that no stores in the Northern Territory were included in this survey.

In undertaking the survey, efforts were made to ensure that the sample was representative. Table 2 indicates that the distribution of products sampled by jurisdiction is comparable to the share of households.

The number of stores and appliances within each size category surveyed in each state and territory are illustrated in the following Figures, 2, 3 and 4.

Table 1: Distribution of Stores and Appliances Surveyed in each State and Territory

Jurisdictions	Appliance Sample Size	Stores			
		Total	Small	Medium	Large
NSW	1,673	33	9	13	11
VIC	1,427	27	9	7	11
QLD	761	16	6	4	6
SA	407	9	4	3	2
WA	758	12	2	6	4
TAS	74	3	2	1	0
ACT	40	1	0	1	0
NT	0	0	0	0	0
NATIONAL	5,140	101	32	35	34
Sample Size			431	1,712	2,997

Table 2: Distribution of Survey Sample Compared to National Households

	% National Households	% Survey Appliance Sample
NSW	33%	33%
VIC	25%	28%
QLD	20%	15%
SA	8%	8%
WA	10%	15%
TAS	3%	1%
ACT	2%	1%
NT	1%	0%

Figure 1: Number of Stores and Televisions Surveyed by State and Territory



Figure 2: Number of Large Stores and Televisions Surveyed by State and Territory

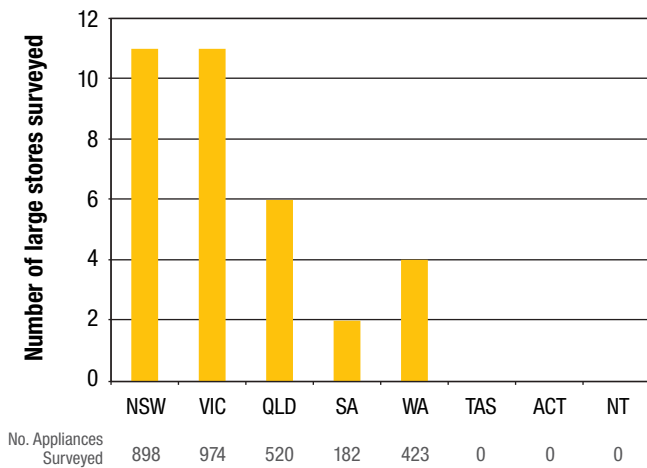


Figure 4: Number of Small Stores and Televisions Surveyed by State and Territory

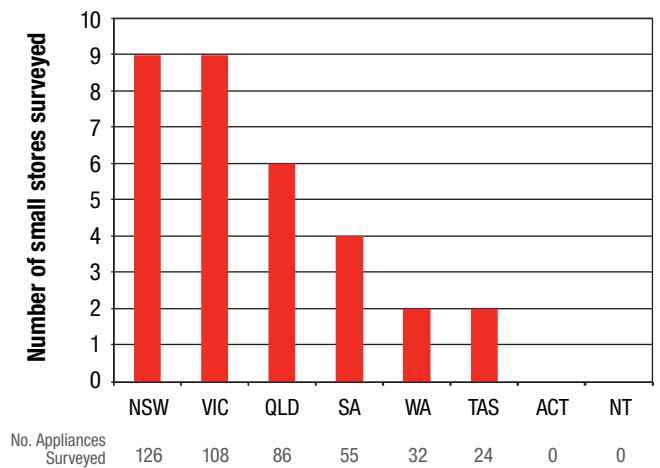
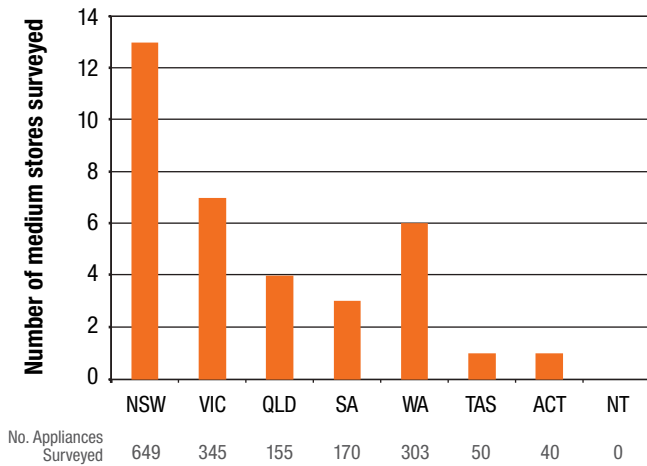
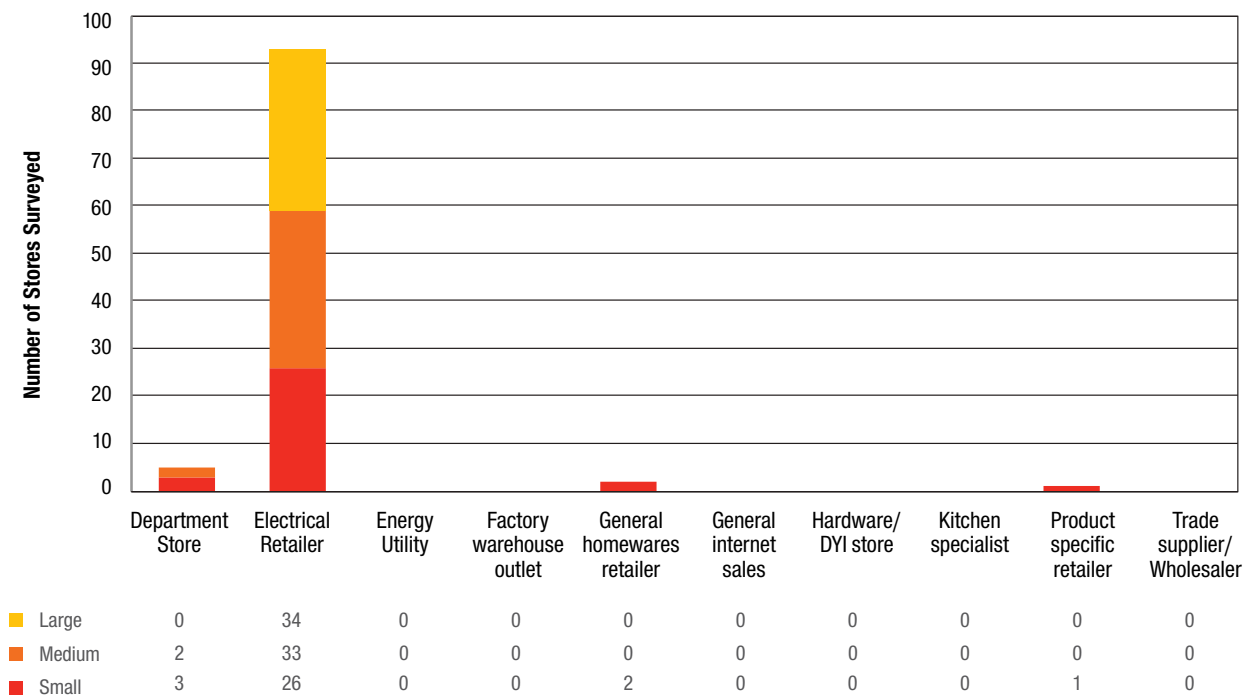


Figure 3: Number of Medium Stores and Televisions Surveyed by State and Territory



Of the 101 stores, 93 were classified as 'Electrical Retailers', as shown in Figure 5, and 96% of all televisions surveyed were found in this type of outlet.

Figure 5: Distribution of Stores Surveyed by Type of Outlet



Labelling Results – Australia

Of all the 5,140 televisions surveyed, 93.2% displayed the correct mandatory energy rating label. This is an improvement of at least 17% over results from the preliminary television survey undertaken in February 2010 that indicated up to 24% of televisions may have been incorrectly labelled. Since stores included in the most recent television survey were selected because they returned the lowest rates of compliance in the preliminary survey, the overall current compliance rate may exceed the latest survey results.

The labelling compliance rate in each state and territory varied between 99.0% and 78.4%, as indicated in Figure 6.

The individual state and territory results which equalled or exceeded the national average of 93.2% were:

- South Australia 99.0%
- Queensland 97.0%
- New South Wales 94.0%

The individual state and territory results which were below the national average of 93.2% were:

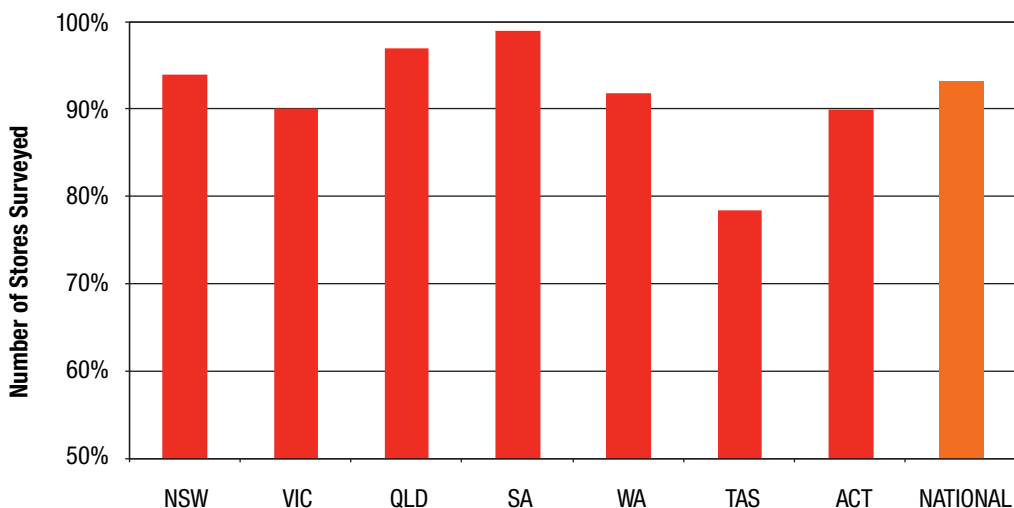
- Western Australia 91.8%
- Victoria 90.1%
- ACT 90.0%
- Tasmania 78.4%

Compared to the two recent surveys highlighted in the introduction, the national compliance rate for mandatory energy labelling of televisions in this survey is lower than for whitegoods (98.1%) but higher than for air conditioners (89.1%). Both whitegoods and air conditioners have been subject to mandatory labelling since 1992.

Given that mandatory regulations for televisions were only introduced 15 months prior to this survey (on 1 October 2009), the national level of labelling compliance in televisions compares favourably with these other survey results.

Nevertheless, there is still room for improvement especially in jurisdictions with compliance rates below the national average.

Figure 6: Correctly Labelled Televisions in each State and Territory



Incorrect Labelling

Of the 6.8% of incorrectly labelled televisions, 73% did not display a label at all, while 22% were not compliant because the label was damaged or, more frequently, obscured (see Figure 7).

In these cases, surveyors found that price tags, discount labels and promotional materials covered all or part of the energy label, which is an offence under the regulation.

A small number of televisions appeared to be wrongly labelled, with a mismatch between the actual label displayed and the registration details. Eight televisions were found to be still carrying the voluntary label only, which became redundant after 1 February 2010.

Figure 8: Distribution of Types of Labelling Errors

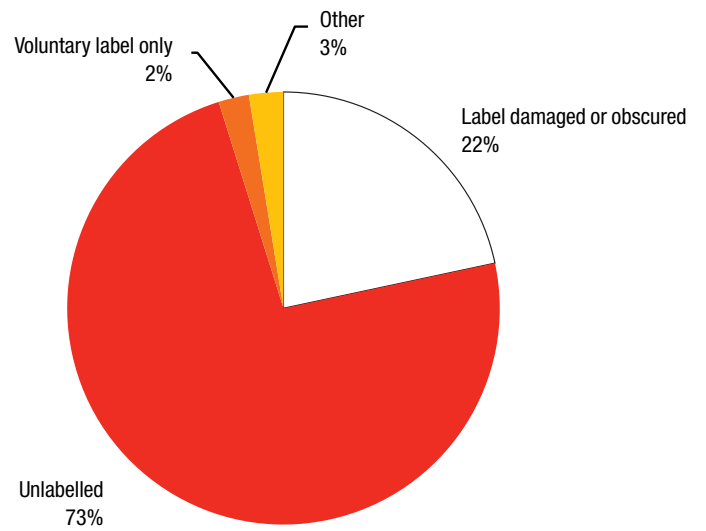


Figure 7: Sample of Obscured Energy Labels Observed



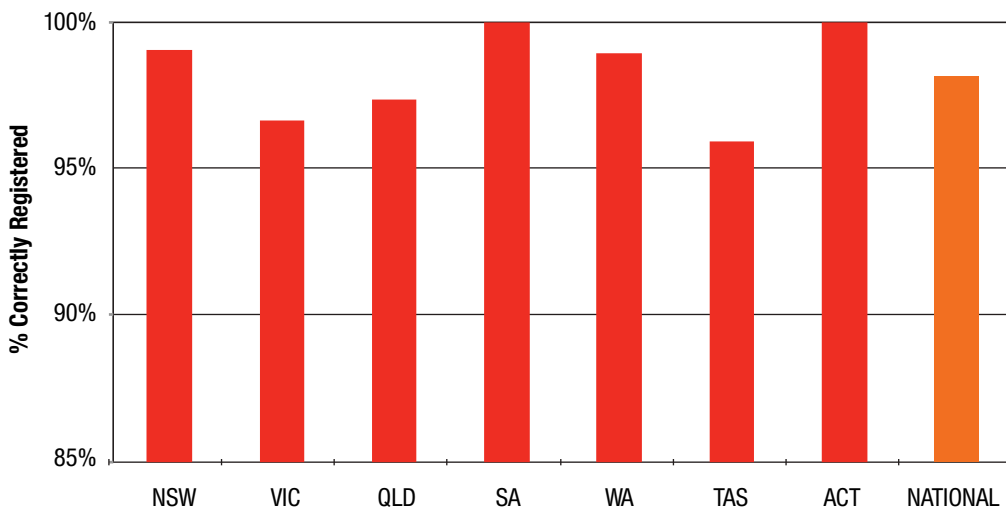
Registration Results - Australia

The average compliance rate with mandatory registration requirements amongst the 5,140 televisions surveyed was 98.2%.

Victoria, Queensland, and Tasmania had a lower percentage of registered televisions than the Australian average, although

the differences are small. All televisions surveyed in South Australia and the Australian Capital Territory were correctly registered. The actual compliance in each state and territory is indicated in Figure 9.

Figure 9: Rate of Compliance with Registration Requirements by State and Territory



Labelling by Store Size

Medium-sized stores were found to have the lowest share of incorrectly labelled televisions, while the non-compliance rates amongst Small and Large-sized stores were slightly higher (and of a similar magnitude), as shown in Table 3 and Figure 10.

Table 3: Incorrectly Labelled Televisions by Store Size

	Total Stores	Total Appliances	% Incorrectly labelled
Small	32	431	8.6%
Medium	35	1712	4.9%
Large	34	2997	7.7%

The rate of incorrectly labelled televisions was lowest in Medium-sized stores in all jurisdictions except Tasmania, which had the highest rate, as shown in Figure 11.

Figure 12 plots the compliance rate against store size for individual outlets, and while this confirms that the larger and smaller sized stores had lower compliance rates, there were stores of all sizes in with all televisions correctly labelled. This Figure suggests that there is not a strong correlation between store size and rates of labelling compliance.

Figure 10: Correctly Labelled Televisions by Store Size

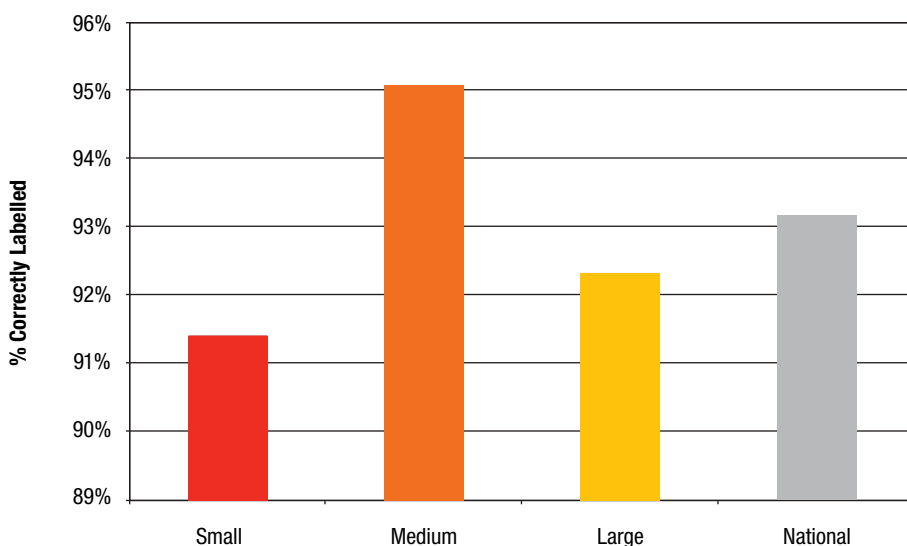


Figure 11: Incorrectly Labelled Televisions by Jurisdiction and Store Size

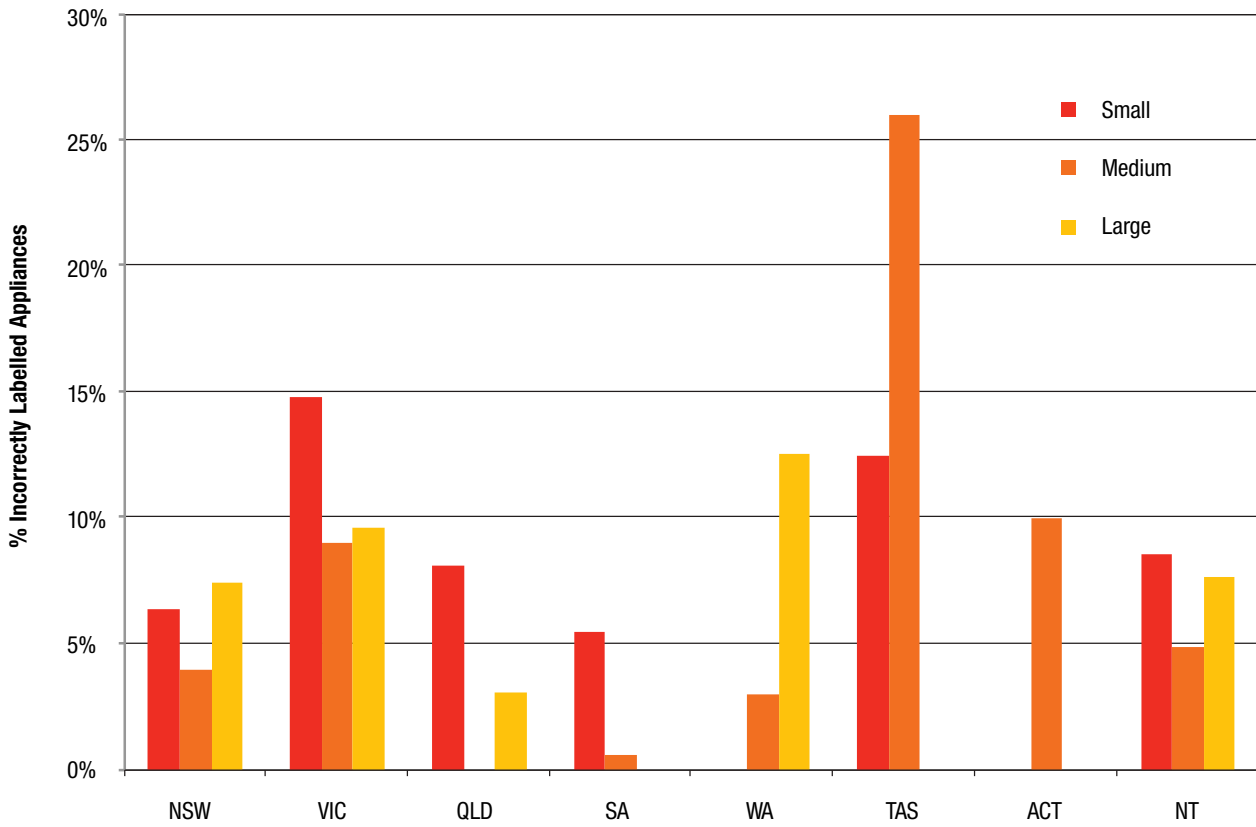
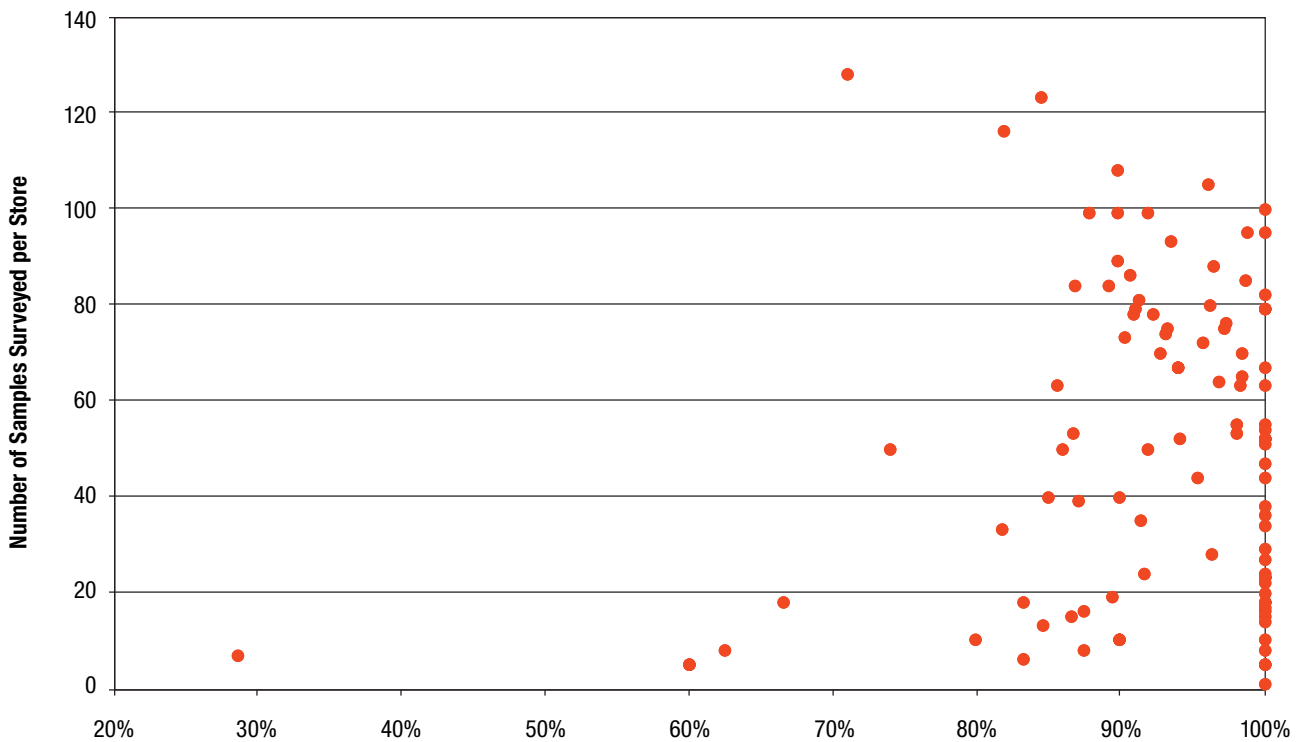


Figure 12: Store Compliance Rate vs Store Size



Labelling by Store Type

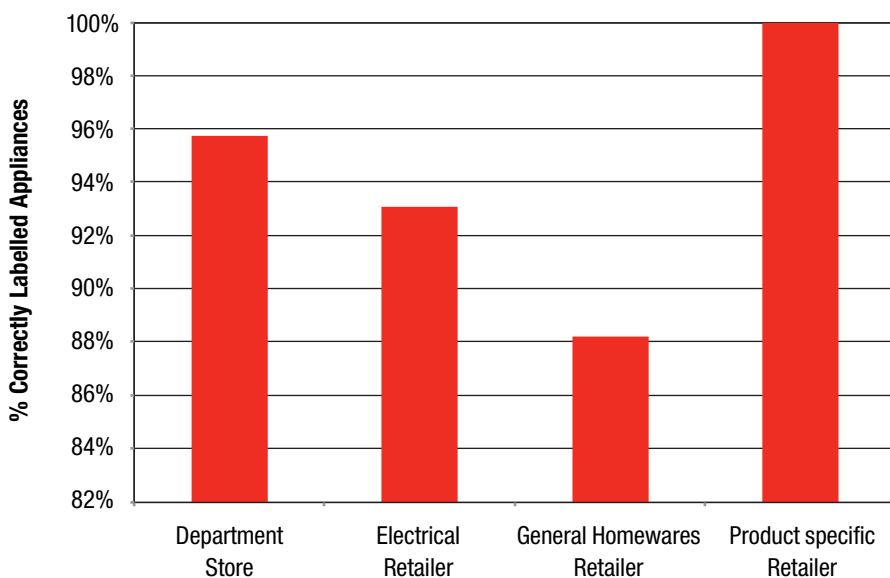
Since the vast majority of appliance surveyed were found in 'Electrical Retailers' stores, the compliance rate in this type of store dominate the national average. In the small number of 'Product Specific Retailers' and 'Department Stores' outlets

a higher rate of labelling compliance was found, as shown in Table 4 and Figure 13. The lowest compliance rates were found in 'General Home-ware Retailers' outlets, although this too was from a small sample size.

Table 4: Correctly Labelled Televisions by Store Type

	Appliance Sample Size	Rate Correctly Labelled
Department Store	142	95.8%
Electrical Retailer	4946	93.1%
General Home-wares Retailer	34	88.2%
Product specific retailer	18	100.0%

Figure 13: Correctly Labelled Televisions by Store Type



Labelling & Registration by Store Chains

Of all televisions surveyed, 96% were found in one of 19 chain stores (i.e. stores with multiple outlets). These chains have been disaggregated into three categories based on the observed number of televisions displayed:

- Mega Chain – with more than 400 appliances inspected
- Large Chain – with between 50 and 400 appliances inspected
- Medium Chain – with less than 50 appliances inspected

Over 70% of televisions surveyed were found in a Mega chain. As shown in Table 5 and Figure 14, there is a definite trend towards higher labelling compliance rates amongst Large chains compared to the other two categories.

Details of the labelling and registration compliance rates for individual chains in the Mega, Large and Medium categories are included in Table 6, Table 7 and Table 8.

Table 5: Correctly Labelled Televisions by Chain Size

	Number	Appliances Inspected	Incorrectly Labelled	% Correctly Labelled
Mega Chain	5	3652	266	92.7%
Large Chain	9	1094	32	97.1%
Medium Chain	5	182	15	91.8%
Total	19	4928	313	93.6%

Figure 14: Correctly Labelled Televisions by Chain Size

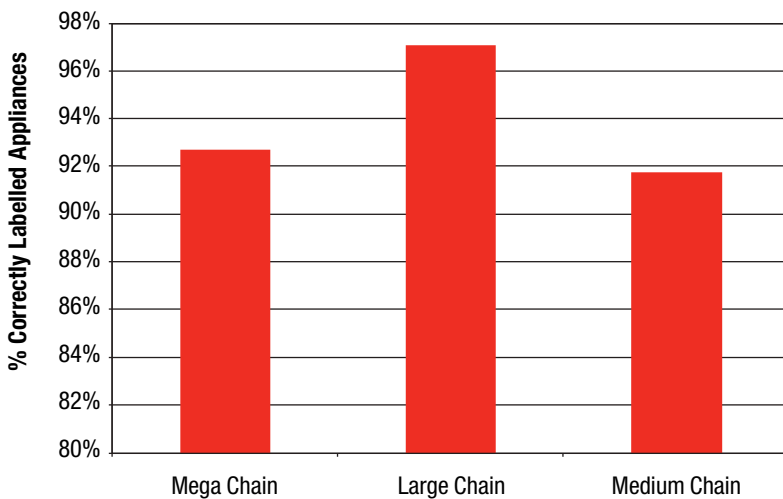


Table 6: Compliance with Labelling and Registration across Mega chain category

Mega Chain	Appliance Sample	% Correctly Labelled	% Correctly Registered
Harvey Norman	1428	89.9%	98.8%
The Good Guys	767	96.6%	99.3%
JB Hi Fi	555	92.4%	95.5%
Retravisio	487	92.4%	96.5%
BING LEE	415	95.9%	99.8%

Table 7: Compliance with Labelling and Registration across Large Chain Category

Large Chain	Appliance Sample	% Correctly Labelled	% Correctly Registered
Dick Smith	328	96.3%	100.0%
David Jones	173	99.4%	100.0%
MYER	122	100.0%	100.0%
CLIVE PEETERS	99	91.9%	99.0%
Radio Rentals	82	100.0%	100.0%
BETTA ELECTRICAL	82	97.6%	93.9%
CLIVE ANTHONY	78	91.0%	94.9%
Rick Hart	76	97.4%	98.7%
Warehouse Sales	54	100.0%	100.0%

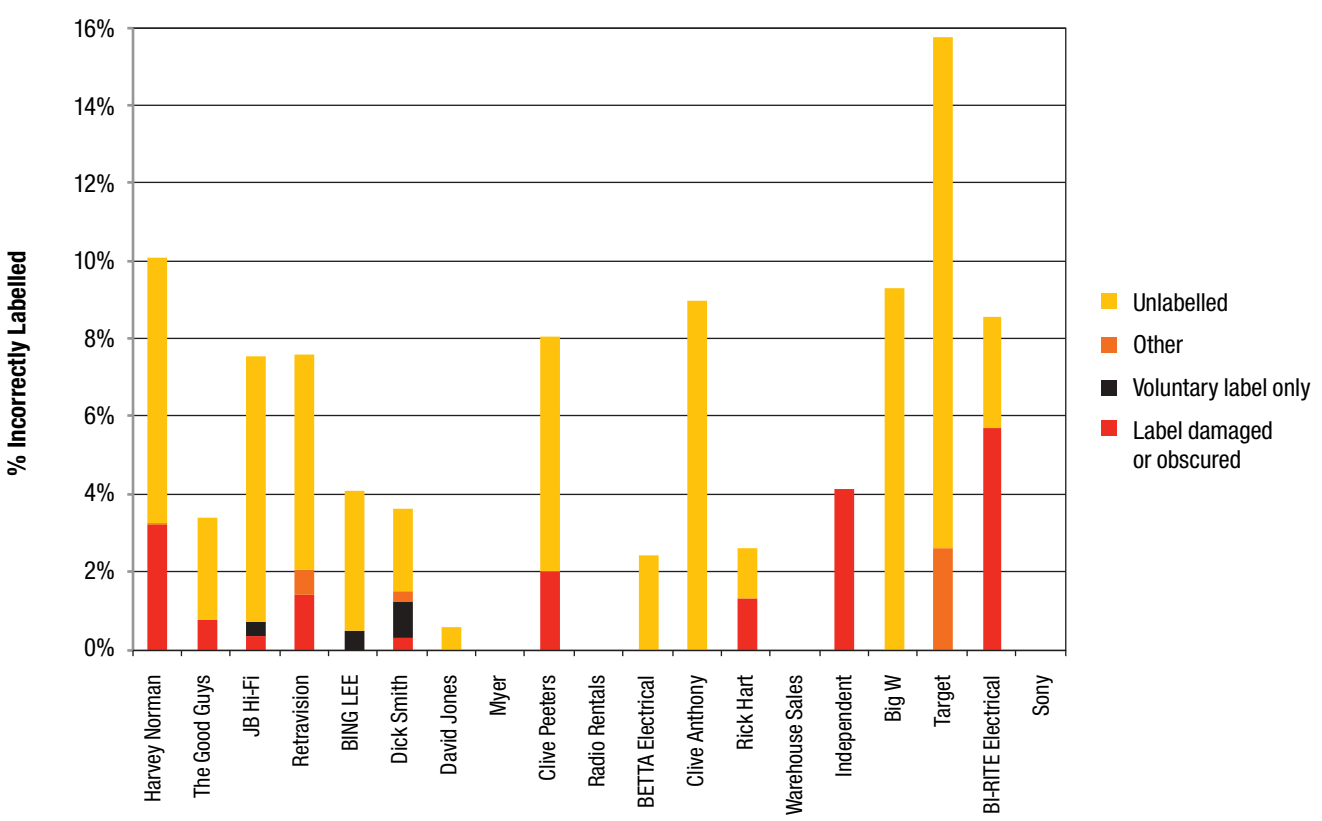
Table 8: Compliance with Labelling and Registration across Medium Chain Category

Medium Chain	Appliance Sample	% Correctly Labelled	% Correctly Registered
Independent	48	95.8%	100.0%
BIG W	43	90.7%	97.7%
Target	38	84.2%	71.1%
BI-RITE ELECTRICAL	35	91.4%	100.0%
Sony	18	100.0%	100.0%

As noted previously, the majority of labelling errors relate to the absence of labels, however as shown in Figure 15, some

chains were found to have an above average proportion of cases where the label had been either damaged or obscured.

Figure 15: Breakdown of Labelling Errors by Chain



Labelling & Registration by Brand

The 5,140 appliances inspected were represented by 44 brands. The brands are disaggregated as:

- Small Brands: less than 10 appliances inspected
- Medium Brands: between 10 and 100 appliances inspected
- Large Brands: more than 100 appliances inspected

The distribution of appliances across the brands and their labelling compliance rates are set out in Table 9. This suggests that brands with larger representation in the survey tend to have higher compliance rates compared to the smaller, less well-known brands.

Table 9: Incorrectly Labelled Televisions by Brand Size

Brand Size	Number	Appliance Sample	% Correctly Labelled
Small	9	66	71.2%
Medium	12	659	88.0%
Large	23	4415	94.3%

Analysis of labelling compliance rates by brand size confirm that, while brands supplying only a small number of surveyed televisions showed varying compliance, more popular brands were more likely to be correctly labelled, as shown in Figure 16.

The labelling and registration compliance rate for each of the 21 brands with more than ten samples included in the survey are set out in Table 10. The results for the 23 brands with fewer than ten surveyed samples were inconclusive due to the small sample size.

Figure 16: Rate of Correctly Labelled Televisions by Number of Surveyed Products Per Brand

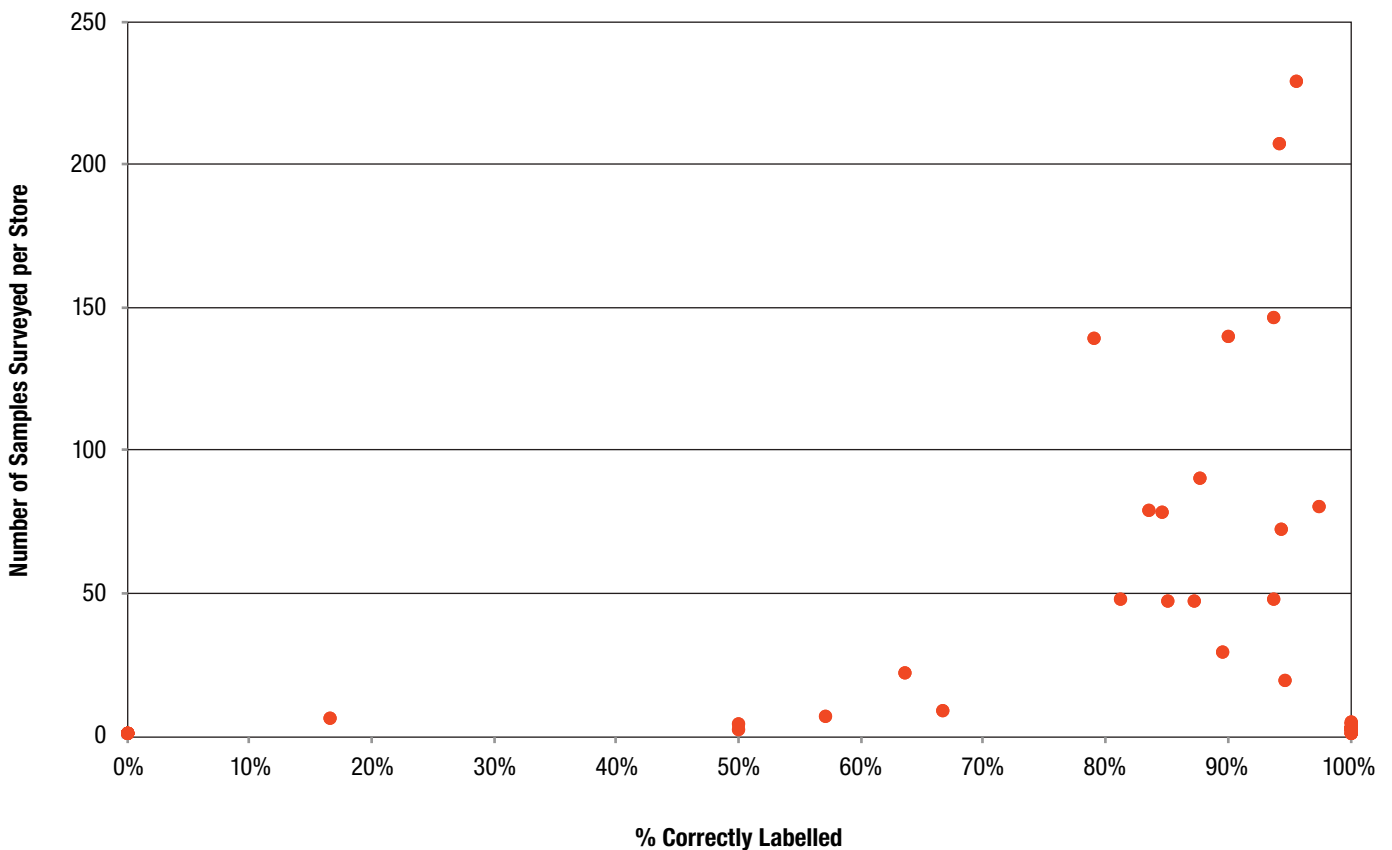
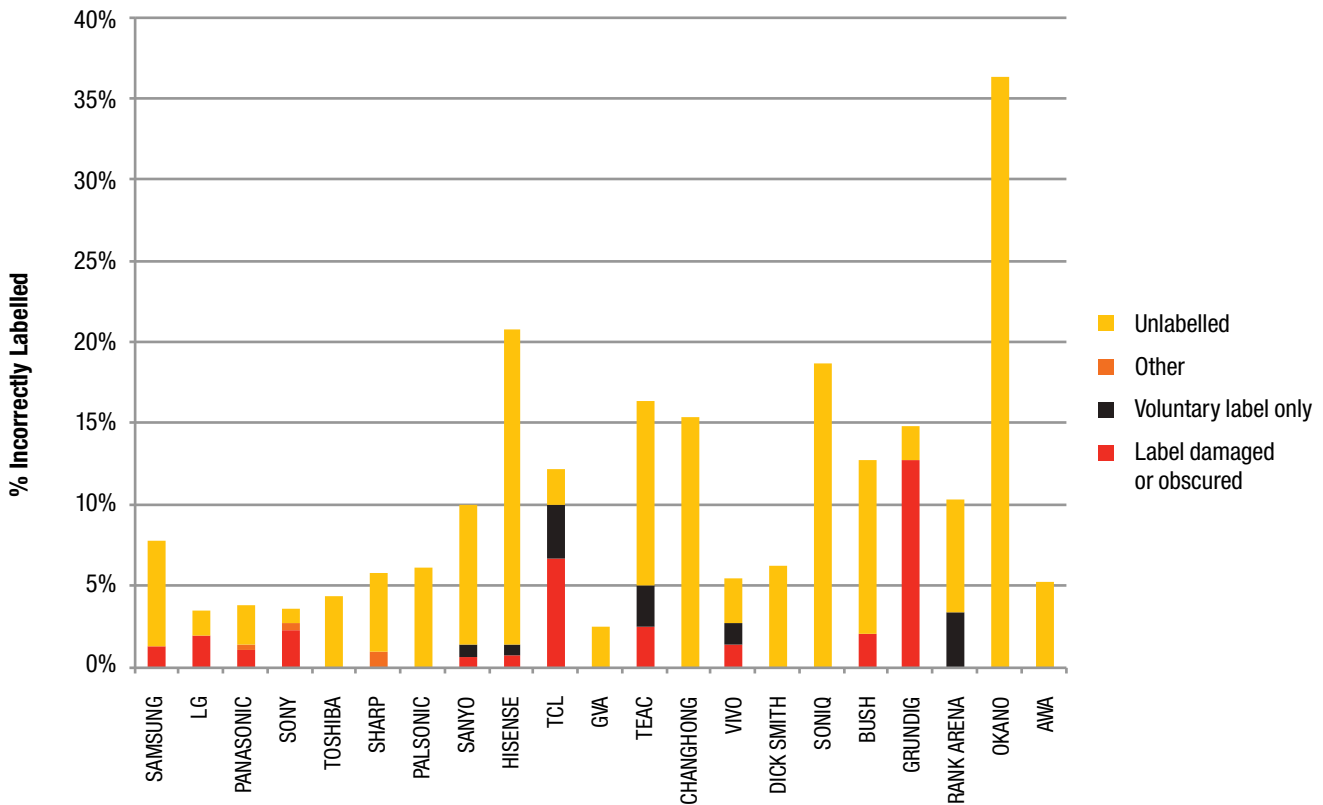


Table 10: Labelling and Registration Compliance of the Largest 21 Brands Surveyed

	Appliance Sample	% Correctly Labelled	% Registered
SAMSUNG	1179	92.2%	100.0%
LG	909	96.5%	100.0%
PANASONIC	810	96.2%	100.0%
SONY	656	96.3%	100.0%
TOSHIBA	229	95.6%	100.0%
SHARP	207	94.2%	100.0%
PALSONIC	146	93.8%	92.5%
SANYO	140	90.0%	99.3%
HISENSE	139	79.1%	99.3%
TCL	90	87.8%	98.9%
GVA	80	97.5%	100.0%
TEAC	79	83.5%	62.0%
CHANGHONG	78	84.6%	100.0%
VIVO	72	94.4%	100.0%
Dick Smith	48	93.8%	100.0%
SONIQ	48	81.3%	87.5%
BUSH	47	87.2%	87.2%
GRUNDIG	47	85.1%	100.0%
RANK ARENA	29	89.7%	62.1%
OKANO	22	63.6%	50.0%
AWA	19	94.7%	100.0%

Figure 17 shows the breakdown of the types of labelling errors by brand.

Figure 17: Breakdown of Labelling Errors by Brand (Largest 21)



Appendix 1 – Labelling and Registration Requirements

Regulations specify the general requirements for the energy labelling of appliances, including offences and penalties if a party does not comply with the requirements. Technical requirements for energy labelling are set out in the relevant appliance standard, which is referenced in state and territory regulations.

All products within the scope of energy labelling must be registered and all energy labels must be approved by a regulatory authority. Applications for registration and labelling compliance are to include:

- Test reports or data to the relevant standard (the number of units to be tested varies);
- Demonstration that the relevant performance requirements have been met by the model in addition to the measurement of energy consumption;
- A sample label (where applicable);
- Evidence that the product meets the energy efficiency requirements (where applicable); and
- The prescribed fee.

The offences typically contained in regulations include:

- Person must not offer to supply (e.g. sell or advertise) a “specified” article which is not registered for energy labelling or where the registration has been cancelled;
- Energy label must not be obscured;
- Other information must not be shown near the label that conflicts with data on the energy label; and
- Making a false or misleading declaration.

For the purposes of this survey the primary functions for which ARC has been contracted are:

- Labelling – checking the accuracy of a mandatory label against the registration database. The energy label provides buyers with consistent and reliable information so they can take running costs into account when they purchase new appliances; and
- Registration – checking the status of products offered for sale against the registration database.

Appendix 2 – Survey Protocol

Given that the survey was undertaken without a regulatory emphasis, strict protocols needed to be in place to ensure that all went smoothly and in partnership with the retailers.

ARC operatives:

- Effectively operated as members of the public;
- Provided a letter of introduction from the Australian Government.
- The following approach was undertaken by survey staff:
- On entry collect relevant brochures;
- Do a walk through the relevant sections;
- Observe the labelling compliance rates;
- Approach the floor staff, and explain your visit;
- Ask if photographs of the products are permitted;
- Request business cards from the floor staff;
- If asked to leave, immediately report eviction to ARC head office and await instruction.

It is important to note that very little concern was expressed by retailers – usually they welcomed the ARC survey staff.

The ARC survey staff reported non-compliance on a mobile device which was linked to the Energy Rating database.