



# **ENVIRONMENTAL ISSUES: ENERGY USE AND CONSERVATION** AUSTRALIA

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## INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Graeme Brown on Canberra (02) 6252 5920.

# NOTES

## ABOUT THIS PUBLICATION

This publication presents information on environmental behaviour and practices in Australian households for March 2008, for people aged 18 years and over.

The statistics in this publication were compiled from the Energy Use and Conservation survey, conducted in March 2008 as a supplement to the Australian Bureau of Statistics (ABS) monthly Labour Force Survey (LFS).

This survey provides information on household practices in relation to domestic energy use. It covers a range of issues including energy sources, appliances and energy saving measures used in households.

The title of this publication replaces *Environmental Issues: People's Views and Practices* (cat. no. 4602.0).

## NOTES ABOUT THE ESTIMATES

Household energy use and conservation data is collected every three years. Previous data were published in 2005, 2002, 1999 and 1994. Where applicable, those data have been included in this publication to enable comparisons.

New data items include type and number of televisions and solar hot water system or solar panels used to generate electricity. Existing data items have been modified in the 2008 survey to provide more detailed information on lighting, energy sources and household appliances.

Data items that referred to the amount people were willing to pay for electricity produced through the GreenPower scheme were not collected in the March 2008 survey.

## ROUNDING

Estimates have been rounded so discrepancies may occur between sums of the component items and totals. Published percentages are calculated prior to rounding of the figures and therefore some discrepancy may occur between these percentages and those that could be calculated from the rounded figures.

Brian Pink  
Australian Statistician

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## INTRODUCTION

This publication presents the results of an Energy Use and Conservation survey conducted in March 2008. The survey collected data on household energy sources and conservation measures, dwelling size and construction type, and the number of household appliances and white goods. All of these factors affect energy use, which in turn affects the production of greenhouse gas emissions. For example, as the size of dwellings increases there is generally a corresponding increase in the amount of energy required for heating and cooling, which in turn can result in more greenhouse gas emissions, depending on the energy source.

It is generally considered that increasing concentrations of greenhouse gases in the atmosphere contribute to climate change, including the likelihood of increased rainfall variability and increased temperatures (SoE 2006). Australia's per capita greenhouse gas emissions are the highest of any OECD country (Garnaut 2008).

The residential sector accounted for about 8% of Australia's total energy use in 2006–07 (ABARE 2008). Space heating/cooling and water heating together accounted for nearly two-thirds (63%) of household energy use (DEWHA 2008a).

Energy consumption by households is an important contributor to greenhouse gas emissions, particularly because of Australia's heavy reliance on fossil fuels (e.g. coal, oil and gas) for electricity generation. Australia's direct greenhouse gas emissions for the residential sector (including transport) were about 9% of total emissions, an increase of 25% since 1990 (DCC 2008).

One theme to emerge from this survey was that measures used to conserve energy in households, such as insulation, were adopted mostly for comfort and lifestyle reasons, rather than from a desire to save energy. An example of this is the increase in the number of households with coolers (airconditioners and evaporative coolers) over the years since 1994.

In contrast, water and energy efficiency were the main factors considered by Australian households when replacing or buying white goods.

## MAIN FINDINGS

- The majority of households (77%) resided in separate houses in 2008. Of these separate houses, 37% comprised four or more bedrooms.
- There has been an increase in the use of insulation in homes, up from 52% of dwellings in 1994 to 61% in 2008. The main reason for having insulation was to improve comfort (given by 83% of households installing insulation). Only a small proportion (4%) of households reported that they had installed insulation in order to save energy. The main reason for not installing insulation was that the household was not responsible for insulation (34%), i.e. that they were renting their dwelling.

## MAIN FINDINGS

*continued*

- Electricity was the main source of energy in 2008, used by nearly every household (99.9%). It was the main source for ovens (75%) and for cooktops (56%). Electricity was also the most commonly used energy source for hot water systems (46%) and space heating (35%).
- Solar energy use has increased from 5% in 2002 to 8% in 2008. It was used primarily for heating water. In the Northern Territory and Western Australia, 54% and 21% of households respectively, had solar hot water.
- The use of off-peak electricity in hot water systems increased from 30% in 2002 to 35% in 2008. Queensland recorded the highest proportion of households using off-peak electricity for hot water systems (49%) in 2008. Tasmania had the most substantial increase since 2002, from 8% up to 32% in 2008.
- In 2008, more than three-quarters of Australian households (77%) had a heater, two-thirds (67%) had a cooler, more than half (56%) had a clothes dryer and more than one-third (38%) had a laptop computer. Most Australian households (60%) had a desktop computer.
- There was a substantial increase in the number of households with coolers (air conditioners and evaporative coolers) from 32% of dwellings in 1994 to 67% in 2008. Reverse cycle/heat pump has been the most popular system of cooling since 1994.
- Over half of households with normal picture tube televisions had two or more of this type of television (57%). Almost one-fifth of households with LCD televisions (19%) had two or more LCD TVs.
- Water and energy efficiency were the main factors considered by Australian households when replacing or buying white good appliances. Energy star rating ranked first over cost when replacing/buying a refrigerator (50%), separate freezer (46%) and clothes dryer (45%). Energy star rating was ranked first over water efficiency rating for a dishwasher (48%), but water efficiency rating was ranked first over energy star rating for a washing machine (49%). Cost was considered most important when buying/replacing a heater (40%).
- Nearly three-quarters of Australian households used cold water (74%) rather than warm water (17%) in washing machines (the remainder used hot water or varied the temperature). This was an increase in cold water use from 61% in 1994.
- More than half of all households (52%) were aware of GreenPower in 2008 (including 5% already paying for GreenPower). This was a large increase compared with 2005 and 1999 when 29% and 19% respectively were aware of GreenPower. One-third (32%) of households that were aware of GreenPower were willing to support the scheme in 2008, up from 23% in 2005.

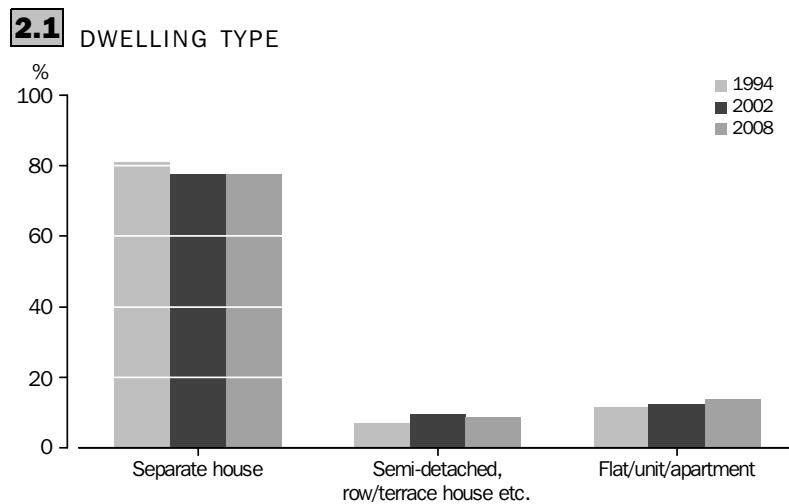


INTRODUCTION

The size and characteristics of dwellings have significant implications for household energy use and greenhouse gas emissions. For example, the amount of floor space affects the amount of energy needed to heat or cool a dwelling. Over a third of separate houses (37%) had four or more bedrooms in 2008 (table 2.8). Building materials used in the dwelling and the amount of insulation installed in roofs, walls and floors, also influence energy consumption. High thermal mass materials such as brick and stone are more energy efficient as they take longer to respond to temperature changes, compared to fibro cement and timber.

DWELLING TYPE

The majority of Australians live in separate houses. In March 2008, more than three-quarters of all households (77%) occupied separate houses, down from 81% in 1994 (graph 2.1 and table 2.7). Separate houses were more common outside of capital cities (85%) than within capital cities (73%). Of the states and territories, Tasmania had the highest proportion of separate dwellings (86%), whereas New South Wales and the Northern Territory had the highest proportion of flats or units (19%) (table 2.6).



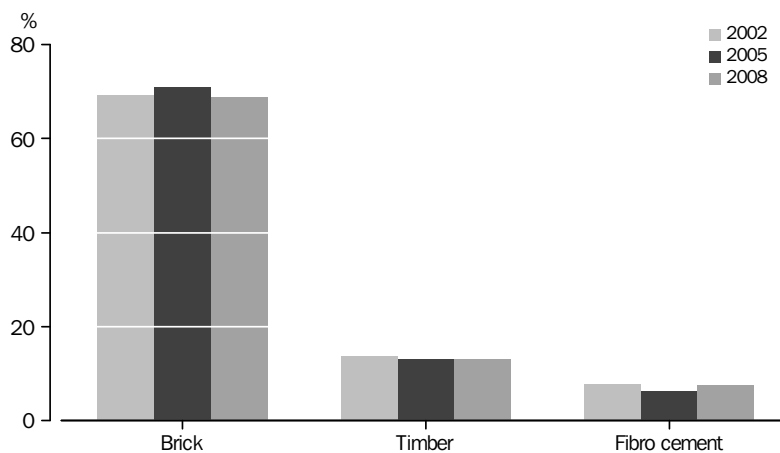
The majority (52%) of separate houses had three bedrooms while a further 37% had four or more bedrooms. In contrast, 45% of semi-detached, row/terrace houses and 86% of flats, units, apartments, and other types of dwellings had one or two bedrooms or were a bedsitter (table 2.8).

DWELLING MATERIAL -  
OUTSIDE WALLS

Brick (brick veneer 45%, and double brick 24%), timber (13%) and fibro cement (8%) were the most commonly used outside wall materials for dwellings in Australia in 2008 (graph 2.2).

DWELLING MATERIAL -  
OUTSIDE WALLS  
*continued*

**2.2** TOP THREE MAIN DWELLING MATERIALS, Outside walls



Brick veneer was more often used in the Australian Capital Territory (74%) and Victoria (61%).

The use of timber was most pronounced in the states of Tasmania (27%) and Queensland (23%). Use of timber by Tasmanian households for outside walls of dwellings has slightly decreased from 30% in 2005 to 27% in 2008. A slight increase in timber usage over the same period was noted in Queensland (22% to 24%).

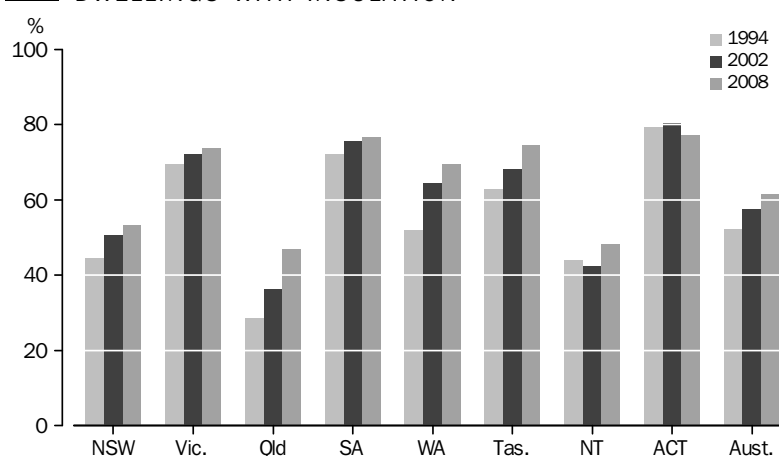
The use of fibro cement as the main material in outside walls remained fairly steady, at 8% in 2008. Use of fibro cement was highest in New South Wales (11%), followed by Queensland (9%) (table 2.9 and 2.10).

INSULATION

Comprehensive insulation - that is insulation in ceilings, walls and floors - will contribute to the comfort of a dwelling all year round, as well as a reduction in energy use for heating and cooling.

The proportion of insulated dwellings in Australia has substantially increased since 1994 (graph 2.3 and table 2.12). In 1994, more than half of Australian dwellings had insulation (52%), and this proportion had risen to 61% in 2008.

In 2008, nearly one-fifth (19%) of households did not know if their dwelling had insulation, up from 15% in 1994.

INSULATION *continued***2.3** DWELLINGS WITH INSULATION

Of those dwellings with insulation, 98% had it in the roof or ceiling (table 2.14). Most of the winter heat loss and summer heat gain occurs in the roof or ceiling. Roof and ceiling insulation can save up to 45% on energy consumption for heating and cooling (DEWHA 2008c).

Most Australian households insulated their homes to achieve comfort (83%) (table 2.18). Savings on energy bills and reductions in energy use were relatively minor factors (11% and 4%, respectively). Australian Capital Territory households were the most likely to nominate cost savings as the main reason for installing insulation (17% of households).

Of those households with no insulation, 'not home owner/not responsible' was reported as the main reason for not having insulation (34%), followed by 'cost' (17%) and 'have not considered it' (12%) (table 2.19).

## LIGHTING

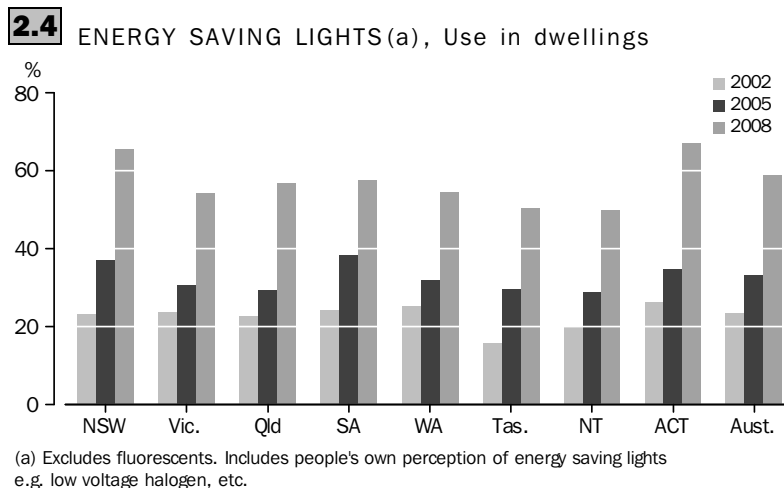
The type of lights chosen by a household affects the amount of electricity used. One means of conserving energy is through the use of fluorescent light bulbs and energy saving lights, including compact fluorescent light bulbs. A compact fluorescent light is based on the standard fluorescent lamp and is designed to fit into a conventional light socket. Fluorescent lights and compact fluorescent lights are considered the most energy efficient form of lighting, as they use less energy, are cheaper to operate and can last up to 10 times longer than conventional lights (DEUS 2008).

In 2008, more than half of dwellings (58%) in Australia used fluorescent lights or other energy saving lights (59%) in at least one room (table 2.20). In the Northern Territory, fluorescent lights were used in 82% of dwellings and in Queensland, 72% of dwellings. Use of fluorescent lights in homes was less common in capital cities (53%) than in the rest of Australia (67%), and use of other energy saving lights was slightly lower in capital cities (58%) than in other parts of the country (60%). Nationally, one in five dwellings (22%) had compact fluorescent lights in every room, while in the Australian Capital Territory it was one in three dwellings (32%) (table 2.22).

While the use of fluorescent lights remained fairly steady between 2005 and 2008 (table 2.21), there was a significant increase in use of other energy saving lights over the same

LIGHTING *continued*

period (from 33% to 59%), particularly in the Australian Capital Territory (from 35% to 67%), New South Wales (37% to 66%) and Victoria (31% to 54%) (graph 2.4).



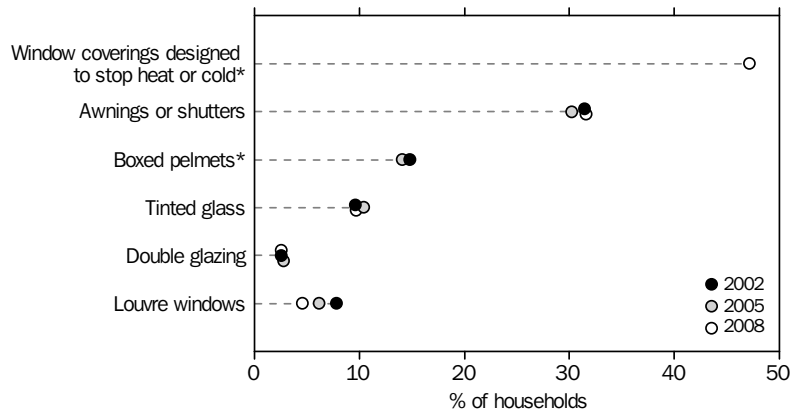
WINDOW  
TREATMENT/APPLICATION

Window protection and shading reduces the amount of heat lost or gained by a dwelling. As windows can be a source of up to 40–60% of heat loss from a house, window treatments can produce energy efficiencies for households (SEDO 2008). The amount of heat lost or gained through windows is relative to the location, size and to the nature and extent of applied window treatments.

More than one-third of Australian dwellings (35% in 2008) did not have any type of window treatments to reduce heat loss or gain. New South Wales had the highest proportion of dwellings (45%) with no window treatments. Table 2.24 indicates that window coverings designed to stop heat or cold were the principal form of window protection applied in 47% of dwellings in Australia (graph 2.5). This measure was most common in South Australia (62% of dwellings), the Australian Capital Territory (60% of dwellings) and Victoria (59% of dwellings). Outside awnings or shutters were the next most common form of window treatment with 32% of Australian dwellings reporting their use. Outside awnings or shutters were most common in South Australia (44% of dwellings) and Victoria (41% of dwellings). Double glazing was most frequently used in the cooler states and territories of Tasmania (6% of dwellings) and the Australian Capital Territory (5% of dwellings).

WINDOW  
TREATMENT/APPLICATION  
*continued*

**2.5** WINDOW TREATMENTS IN DWELLINGS



\* Included boxed pelmets in window coverings designed to stop heat or cold for 2008.

## 2.6 DWELLING STRUCTURE, Type of dwelling—2008

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
CAPITAL CITY									
<b>Number ('000)</b>									
Separate house	1 039.5	1 076.8	614.1	377.5	489.8	67.9	..	..	3 811.8
Semi-detached, row/terrace house etc.	194.4	142.5	44.1	40.3	82.5	*3.2	..	..	521.9
Flat/unit/apartment	407.9	236.2	83.6	60.9	52.1	13.2	..	..	881.8
Other types(b)	**0.9	**0.7	**0.8	**0.4	—	—	..	..	*3.0
<b>Total</b>	<b>1 642.7</b>	<b>1 456.2</b>	<b>742.5</b>	<b>479.1</b>	<b>624.3</b>	<b>84.3</b>	<b>..</b>	<b>..</b>	<b>5 218.5</b>
<b>Proportion (%)</b>									
Separate house	63.3	73.9	82.7	78.8	78.4	80.5	..	..	73.0
Semi-detached, row/terrace house etc.	11.8	9.8	5.9	8.4	13.2	*3.8	..	..	10.0
Flat/unit/apartment	24.8	16.2	11.3	12.7	8.3	15.7	..	..	16.9
Other types(b)	**0.1	—	**0.1	**0.1	—	—	..	..	*0.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>..</b>	<b>..</b>	<b>100.0</b>
BALANCE OF STATE/TERRITORY									
<b>Number ('000)</b>									
Separate house	897.5	538.7	693.9	150.4	182.1	106.0	..	..	2 568.7
Semi-detached, row/terrace house etc.	62.6	*24.3	74.9	10.2	15.0	*3.3	..	..	190.2
Flat/unit/apartment	104.1	34.9	103.1	*7.7	*4.2	8.0	..	..	262.0
Other types(b)	—	**2.4	*0.6	—	*1.2	—	..	..	**4.2
<b>Total</b>	<b>1 064.2</b>	<b>600.3</b>	<b>872.6</b>	<b>168.3</b>	<b>202.5</b>	<b>117.3</b>	<b>..</b>	<b>..</b>	<b>3 025.1</b>
<b>Proportion (%)</b>									
Separate house	84.3	89.7	79.5	89.4	89.9	90.4	..	..	84.9
Semi-detached, row/terrace house etc.	5.9	*4.0	8.6	6.0	7.4	*2.8	..	..	6.3
Flat/unit/apartment	9.8	5.8	11.8	*4.6	*2.1	6.8	..	..	8.7
Other types(b)	—	**0.4	*0.1	—	*0.6	—	..	..	*0.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>..</b>	<b>..</b>	<b>100.0</b>
TOTAL STATE/TERRITORY									
<b>Number ('000)</b>									
Separate house	1 937.0	1 615.5	1 308.0	527.9	671.9	173.9	42.9	103.3	6 380.5
Semi-detached, row/terrace house etc.	257.1	166.7	118.9	50.5	97.5	6.4	6.4	8.5	712.1
Flat/unit/apartment	511.9	271.1	186.7	68.6	56.3	21.2	11.4	16.5	1 143.8
Other types(b)	**0.9	**3.1	*1.4	*0.4	*1.2	—	**0.3	—	*7.2
<b>Total</b>	<b>2 706.9</b>	<b>2 056.5</b>	<b>1 615.1</b>	<b>647.4</b>	<b>826.8</b>	<b>201.6</b>	<b>61.0</b>	<b>128.4</b>	<b>8 243.6</b>
<b>Proportion (%)</b>									
Separate house	71.6	78.6	81.0	81.5	81.3	86.3	70.3	80.5	77.4
Semi-detached, row/terrace house etc.	9.5	8.1	7.4	7.8	11.8	3.2	10.5	6.6	8.6
Flat/unit/apartment	18.9	13.2	11.6	10.6	6.8	10.5	18.7	12.9	13.9
Other types(b)	—	**0.2	*0.1	*0.1	*0.1	—	**0.5	—	*0.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

.. not applicable

— nil or rounded to zero (including null cells)

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory notes.

(b) Refers to caravans, houseboats and other improvised homes.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

## 2.7 DWELLING STRUCTURE, Type of dwelling

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008									
Separate house	71.6	78.6	81.0	81.5	81.3	86.3	70.3	80.5	77.4
Semi-detached, row/terrace house etc.	9.5	8.1	7.4	7.8	11.8	3.2	10.5	6.6	8.6
Flat/unit/apartment	18.9	13.2	11.6	10.6	6.8	10.5	18.7	12.9	13.9
Other types(b)	—	**0.2	**0.1	**0.1	**0.1	—	**0.5	—	*0.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
Separate house	69.8	82.1	79.8	79.7	82.8	89.0	62.3	79.6	77.4
Semi-detached, row/terrace house etc.	10.9	9.9	9.6	16.1	11.6	6.6	20.6	13.4	10.9
Flat/unit/apartment	18.0	7.6	9.9	4.1	4.4	*4.1	17.2	6.9	10.9
Other types(b)	1.3	*0.4	*0.7	*0.2	*1.3	*0.3	—	*0.2	0.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
Separate house	70.7	81.9	80.1	79.6	81.9	86.9	73.9	75.5	77.6
Semi-detached, row/terrace house etc.	9.6	8.3	7.0	14.8	12.5	5.8	12.3	16.1	9.6
Flat/unit/apartment	18.8	9.5	11.9	5.2	5.5	6.9	12.2	8.1	12.2
Other types(b)	0.8	0.2	1.1	0.3	—	0.4	1.6	0.4	0.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
Separate house	74.0	82.7	82.2	77.2	78.4	88.9	72.6	77.4	78.8
Semi-detached, row/terrace house etc.	8.9	8.2	6.7	13.1	13.2	4.8	10.5	15.2	9.1
Flat/unit/apartment	15.9	8.6	9.9	9.2	8.3	5.6	15.3	7.5	11.3
Other types(b)	1.1	0.4	1.2	0.5	0.2	0.7	1.6	—	0.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
JUNE 1994									
Separate house	76.6	84.0	83.7	77.4	83.0	88.9	64.1	84.9	80.8
Semi-detached, row/terrace house etc.	7.1	4.9	5.0	13.1	11.1	5.0	4.2	10.3	7.1
Flat/unit/apartment	15.4	10.8	10.5	9.0	4.8	5.7	16.8	4.8	11.4
Other types(b)	0.8	0.3	0.9	0.5	1.1	0.4	14.9	—	0.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) Refers to caravans, houseboats and other improvised homes.

**2.8**

## DWELLING STRUCTURE, Number of bedrooms per type of dwelling—2008 .....

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
SEPARATE HOUSE									
One/none/bedsitter	1.0	*0.5	*1.3	**0.4	*0.5	*1.0	np	np	0.8
Two	11.9	10.1	8.4	9.2	7.0	12.6	np	np	9.8
Three	48.4	58.7	49.0	60.4	44.4	61.8	63.0	51.2	52.2
Four or more	38.7	30.6	41.4	30.0	48.1	24.5	28.2	45.7	37.1
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
SEMI-DETACHED, ROW/TERRACE HOUSE, ETC.									
One/none/bedsitter	*5.5	*5.5	**4.5	*4.9	*6.1	*19.5	np	np	5.6
Two	35.0	46.2	44.6	38.7	33.6	67.1	np	np	39.5
Three	53.9	40.6	np	np	54.5	np	np	np	49.2
Four or more	*5.7	7.7	np	np	*5.8	np	np	np	5.6
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
FLAT/UNIT/APARTMENT/OTHER TYPES (b)									
One/none/bedsitter	20.9	19.2	20.6	20.0	*20.6	*27.6	*28.2	*41.2	20.8
Two	67.5	63.2	63.8	72.5	52.1	62.8	50.8	54.5	64.9
Three	10.8	16.2	np	np	24.5	np	np	np	13.1
Four or more	*0.9	*1.4	np	np	**2.8	np	np	np	1.1
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
TOTAL									
One/none/bedsitter	5.2	3.4	3.8	2.8	2.5	4.4	7.6	*6.3	4.0
Two	24.6	20.1	17.5	18.3	13.3	19.7	19.2	11.1	20.1
Three	41.8	51.6	44.9	53.9	44.2	54.3	53.0	45.5	46.5
Four or more	28.4	24.9	33.8	25.0	40.0	21.6	20.2	37.2	29.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) 'Other types' refers to caravans, houseboats and other improvised homes.



## 2.9 DWELLING STRUCTURE, Main material of outside walls—2008

NSW Vic. Qld SA WA Tas. NT(a) ACT Aust.

### CAPITAL CITY

#### Number ('000)

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
Brick							..	..	
Brick veneer	693.4	957.6	361.8	207.3	31.0	41.8	..	..	2 399.4
Reverse brick veneer	np	—	—	np	np	—	..	..	np
Double brick	565.2	210.5	78.8	222.0	553.1	17.8	..	..	1 680.1
Stone	*6.2	*4.6	np	17.3	np	np	..	..	34.3
Timber	113.8	182.0	206.1	*5.0	9.1	19.4	..	..	538.0
Fibro cement	127.6	np	40.0	*9.1	*11.1	*1.4	..	..	215.2
Concrete/besser blocks	57.2	45.2	*18.5	*7.2	*2.6	*2.0	..	..	166.0
Steel/aluminium	28.9	*5.5	**8.7	**1.7	np	np	..	..	53.4
Aerated concrete	np	np	np	np	—	—	..	..	np
Other	20.0	*15.8	*13.8	*2.5	*2.2	np	..	..	55.4
Did not know	28.1	*11.0	13.5	np	np	np	..	..	69.7
Total	1 642.7	1 456.2	742.5	479.1	624.3	84.3	..	..	5 218.5

#### Proportion (%)

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
Brick							..	..	
Brick veneer	42.2	65.8	48.7	43.3	5.0	49.6	..	..	46.0
Reverse brick veneer	np	—	—	np	np	—	..	..	np
Double brick	34.4	14.5	10.6	46.3	88.6	21.1	..	..	32.2
Stone	*0.4	*0.3	np	3.6	np	np	..	..	0.7
Timber	6.9	12.5	27.8	*1.0	1.5	23.1	..	..	10.3
Fibro cement	7.8	np	5.4	*1.9	*1.8	*1.7	..	..	4.1
Concrete/besser blocks	3.5	3.1	*2.5	*1.5	*0.4	*2.3	..	..	3.2
Steel/aluminium	1.8	*0.4	**1.2	**0.3	np	np	..	..	1.0
Aerated concrete	np	np	np	np	—	—	..	..	np
Other	1.2	*1.1	*1.9	*0.5	*0.4	np	..	..	1.1
Did not know	1.7	0.8	1.8	np	np	np	..	..	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	..	..	100.0

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\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

.. not applicable

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Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

## 2.9 DWELLING STRUCTURE, Main material of outside walls—2008 *continued* .....

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
BALANCE OF STATE/TERRITORY									
<b>Number ('000)</b>									
Brick									
Brick veneer	501.4	299.8	330.7	49.8	31.8	56.0	..	..	1 269.5
Reverse brick veneer	—	—	np	—	—	—	..	..	np
Double brick	112.6	42.8	38.9	31.1	95.7	5.4	..	..	326.5
Stone	*4.7	*14.9	**2.0	45.9	np	np	..	..	69.8
Timber	173.8	141.6	172.7	*5.9	*11.4	35.2	..	..	540.6
Fibro cement	171.3	66.0	101.3	24.2	43.8	5.3	..	..	411.8
Concrete/besser blocks	*19.2	*6.3	184.0	*1.8	*4.0	*4.0	..	..	219.3
Steel/aluminium	44.1	*13.2	25.5	*4.4	*5.2	4.9	..	..	97.3
Aerated concrete	*5.9	—	np	np	—	—	..	..	np
Other	*23.9	*10.2	10.9	*4.2	*9.6	4.3	..	..	63.1
Did not know	*7.3	*5.5	*4.6	np	np	np	..	..	19.3
<i>Total</i>	1 064.2	600.3	872.6	168.3	202.5	117.3	..	..	3 025.1
<b>Proportion (%)</b>									
Brick									
Brick veneer	47.1	49.9	37.9	29.6	15.7	47.7	..	..	42.0
Reverse brick veneer	—	—	np	—	—	—	..	..	np
Double brick	10.6	7.1	4.5	18.5	47.2	4.6	..	..	10.8
Stone	*0.4	*2.5	**0.2	27.3	np	np	..	..	2.3
Timber	16.3	23.6	19.8	*3.5	*5.6	30.0	..	..	17.9
Fibro cement	16.1	11.0	11.6	14.4	21.6	4.5	..	..	13.6
Concrete/besser blocks	*1.8	*1.1	21.1	*1.1	*2.0	*3.4	..	..	7.2
Steel/aluminium	4.1	*2.2	2.9	*2.6	*2.6	4.2	..	..	3.2
Aerated concrete	*0.6	—	np	np	—	—	..	..	np
Other	*2.2	*1.7	1.2	*2.5	*4.7	3.7	..	..	2.1
Did not know	*0.7	*0.9	*0.5	np	np	np	..	..	0.6
<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	..	..	100.0

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.. not applicable

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Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

## 2.9 DWELLING STRUCTURE, Main material of outside walls—2008 *continued* .....

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
TOTAL STATE/TERRITORY									
<b>Number ('000)</b>									
Brick									
Brick veneer	1 194.8	1 257.4	692.4	257.0	62.8	97.7	11.2	95.4	3 668.8
Reverse brick veneer	np	—	np	np	np	—	—	—	**2.3
Double brick	677.8	253.3	117.7	253.1	648.7	23.2	9.4	23.3	2 006.5
Stone	*10.8	*19.5	np	63.2	*6.6	*1.8	np	—	104.0
Timber	287.7	323.6	378.8	10.9	20.5	54.6	**0.6	**1.9	1 078.6
Fibro cement	298.9	np	141.3	33.4	54.9	6.7	*3.0	np	627.0
Concrete/besser blocks	76.4	51.5	202.5	*9.1	*6.5	*6.0	27.8	*5.5	385.3
Steel/aluminium	73.0	18.7	34.1	*6.1	np	np	7.4	np	150.7
Aerated concrete	np	np	**2.6	np	—	—	np	np	12.7
Other	43.9	*26.0	24.7	*6.7	*11.7	np	np	np	118.4
Did not know	35.4	16.4	18.1	*6.8	8.6	*1.7	*1.0	**1.1	89.1
<b>Total</b>	<b>2 706.9</b>	<b>2 056.5</b>	<b>1 615.1</b>	<b>647.4</b>	<b>826.8</b>	<b>201.6</b>	<b>61.0</b>	<b>128.4</b>	<b>8 243.6</b>
<b>Proportion (%)</b>									
Brick									
Brick veneer	44.1	61.1	42.9	39.7	7.6	48.5	18.3	74.3	44.5
Reverse brick veneer	np	—	np	np	np	—	—	—	—
Double brick	25.0	12.3	7.3	39.1	78.5	11.5	15.4	18.1	24.3
Stone	0.4	*0.9	np	9.8	*0.8	*0.9	np	—	1.3
Timber	10.6	15.7	23.5	1.7	2.5	27.1	**1.0	**1.5	13.1
Fibro cement	11.0	np	8.7	5.2	6.6	3.3	*4.9	np	7.6
Concrete/besser blocks	2.8	2.5	12.5	*1.4	*0.8	*3.0	45.7	*4.3	4.7
Steel/aluminium	2.7	0.9	2.1	*0.9	np	np	12.2	np	1.8
Aerated concrete	np	np	**0.2	np	—	—	np	np	0.2
Other	1.6	*1.3	1.5	*1.0	*1.4	np	np	np	1.4
Did not know	1.3	0.8	1.1	*1.1	1.0	*0.8	*1.6	**0.8	1.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

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## 2.10 DWELLING STRUCTURE, Main material of outside walls .....

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
.....									
MARCH 2008									
Brick veneer	44.1	61.1	42.9	39.7	7.6	48.5	18.3	74.3	44.5
Reverse brick veneer	np	—	np	np	np	—	—	—	—
Double brick	25.0	12.3	7.3	39.1	78.5	11.5	15.4	18.1	24.3
Stone	np	*0.9	np	9.8	*0.8	*0.9	np	—	1.3
Timber	10.6	15.7	23.5	1.7	2.5	27.1	**1.0	**1.5	13.1
Fibro cement	11.0	np	8.7	5.2	6.6	3.3	*4.9	np	7.6
Concrete/besser blocks	2.8	2.5	12.5	*1.4	*0.8	*3.0	45.7	*4.3	4.7
Steel/aluminium	2.7	0.9	2.1	*0.9	np	2.5	12.2	np	1.8
Aerated concrete	*0.3	np	**0.2	np	—	—	np	np	0.2
Other	1.6	*1.3	1.5	*1.0	*1.4	2.4	np	np	1.4
Did not know	1.3	0.8	1.1	*1.1	1.0	*0.8	*1.6	**0.8	1.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
.....									
MARCH 2005									
Brick veneer	44.2	61.3	46.2	39.8	9.4	41.0	14.9	76.8	45.1
Double brick	28.8	11.0	9.0	40.3	75.9	13.8	27.5	18.3	25.7
Stone	*0.2	*0.5	*0.1	7.9	*0.7	*1.7	—	—	1.0
Timber	10.0	17.5	22.2	1.5	2.3	29.9	*2.0	*0.8	13.0
Fibro cement	8.9	3.5	7.3	5.5	6.8	2.2	*5.2	*0.5	6.4
Concrete/besser blocks	2.2	2.5	9.1	2.3	1.5	4.7	37.5	*2.1	3.9
Steel/aluminium	1.3	1.4	1.4	*0.2	*1.0	*1.8	*10.3	—	1.3
Aerated concrete	*0.1	*0.2	*0.3	*0.1	—	*0.3	—	—	*0.2
Other	3.2	1.7	3.7	1.3	1.4	4.6	*2.1	*0.7	2.6
Did not know	1.1	*0.4	0.8	*1.2	*1.0	—	*0.5	0.8	0.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
.....									
MARCH 2002									
Brick veneer	40.6	59.0	44.6	35.6	7.0	45.0	9.5	74.5	42.5
Double brick	29.6	11.8	6.8	43.7	79.4	15.5	30.1	19.2	26.5
Stone	*0.3	*0.3	—	6.4	*0.7	*1.1	—	—	0.8
Timber	9.5	18.3	25.5	1.9	2.8	26.2	*0.7	*2.1	13.7
Fibro cement	11.6	4.1	8.9	5.5	6.8	3.1	*7.5	*1.0	7.8
Concrete/besser blocks	2.1	3.2	8.7	2.4	*0.8	4.6	31.8	*1.2	3.8
Steel/aluminium	2.1	1.1	2.9	*0.5	*0.4	*1.7	16.7	—	1.8
Aerated concrete	*0.1	*0.1	*0.2	*0.2	—	*0.2	—	*0.2	*0.1
Other	3.4	1.8	2.2	2.7	1.3	2.6	*2.5	*0.9	2.4
Did not know	0.7	*0.4	*0.3	1.1	*0.7	—	*1.1	*0.9	0.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
.....									
MARCH 1999									
Brick veneer	38.2	58.3	41.0	33.3	8.8	38.7	*10.6	72.3	40.6
Double brick	30.7	13.3	7.3	44.9	75.6	17.6	24.9	21.1	27.2
Stone	*0.2	*0.2	*0.2	7.8	*0.5	*1.1	—	—	0.9
Timber	10.5	18.6	28.3	2.5	3.2	32.1	*0.7	*1.6	14.7
Fibro cement	13.0	3.5	9.5	4.2	8.6	*2.0	*8.4	*1.1	8.3
Concrete/besser blocks	1.1	2.0	7.7	4.1	*0.9	*3.9	40.0	*2.3	3.2
Steel/aluminium	2.8	1.3	2.5	*0.8	*0.4	*1.9	*12.4	*0.5	2.0
Aerated concrete	*0.1	*0.2	*0.3	—	*0.1	*0.1	*0.4	*0.2	0.2
Other	2.9	2.1	2.6	*1.5	1.7	*2.6	*1.8	*0.3	2.3
Did not know	*0.4	*0.5	*0.5	*0.8	*0.3	—	*0.7	*0.5	0.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

## 2.11 DWELLING CHARACTERISTICS, Whether has insulation—2008

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
CAPITAL CITY									
<b>Number ('000)</b>									
With insulation	798.9	1 060.8	347.4	367.6	438.6	59.6	..	..	3 201.5
Without insulation	467.1	117.3	218.2	38.8	98.2	10.2	..	..	968.7
Did not know	376.8	278.1	176.9	72.8	87.5	14.4	..	..	1 048.3
<b>Total</b>	<b>1 642.7</b>	<b>1 456.2</b>	<b>742.5</b>	<b>479.1</b>	<b>624.3</b>	<b>84.3</b>	<b>..</b>	<b>..</b>	<b>5 218.5</b>
<b>Proportion (%)</b>									
With insulation	48.6	72.8	46.8	76.7	70.3	70.7	..	..	61.3
Without insulation	28.4	8.1	29.4	8.1	15.7	12.1	..	..	18.6
Did not know	22.9	19.1	23.8	15.2	14.0	17.1	..	..	20.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>..</b>	<b>..</b>	<b>100.0</b>
BALANCE OF STATE/TERRITORY									
<b>Number ('000)</b>									
With insulation	645.7	457.2	409.8	128.5	135.3	90.7	..	..	1 867.1
Without insulation	227.5	56.9	266.4	17.2	36.1	11.7	..	..	615.8
Did not know	191.0	86.2	196.4	22.6	31.1	14.8	..	..	542.2
<b>Total</b>	<b>1 064.2</b>	<b>600.3</b>	<b>872.6</b>	<b>168.3</b>	<b>202.5</b>	<b>117.3</b>	<b>..</b>	<b>..</b>	<b>3 025.1</b>
<b>Proportion (%)</b>									
With insulation	60.7	76.2	47.0	76.4	66.8	77.4	..	..	61.7
Without insulation	21.4	9.5	30.5	10.2	17.8	10.0	..	..	20.4
Did not know	18.0	14.4	22.5	13.5	15.4	12.7	..	..	17.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>..</b>	<b>..</b>	<b>100.0</b>
TOTAL STATE/TERRITORY									
<b>Number ('000)</b>									
With insulation	1 444.5	1 517.9	757.2	496.1	573.9	150.4	29.5	99.2	5 068.6
Without insulation	694.6	174.3	484.6	56.0	134.3	21.9	12.9	5.9	1 584.5
Did not know	567.8	364.3	373.3	95.4	118.6	29.3	18.5	23.3	1 590.5
<b>Total</b>	<b>2 706.9</b>	<b>2 056.5</b>	<b>1 615.1</b>	<b>647.4</b>	<b>826.8</b>	<b>201.6</b>	<b>61.0</b>	<b>128.4</b>	<b>8 243.6</b>
<b>Proportion (%)</b>									
With insulation	53.4	73.8	46.9	76.6	69.4	74.6	48.4	77.3	61.5
Without insulation	25.7	8.5	30.0	8.6	16.2	10.9	21.2	4.6	19.2
Did not know	21.0	17.7	23.1	14.7	14.3	14.5	30.4	18.2	19.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

.. not applicable

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

## 2.12 DWELLING CHARACTERISTICS, Whether has insulation .....

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008									
With insulation	53.4	73.8	46.9	76.6	69.4	74.6	48.4	77.3	61.5
Without insulation	25.7	8.5	30.0	8.6	16.2	10.9	21.2	4.6	19.2
Did not know	21.0	17.7	23.1	14.7	14.3	14.5	30.4	18.2	19.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
With insulation	54.4	72.3	43.2	78.2	65.6	74.6	49.2	78.5	60.5
Without insulation	24.8	9.2	35.5	8.7	20.4	12.2	16.4	*3.6	20.6
Did not know	20.7	18.5	21.3	13.1	14.0	13.2	34.4	17.9	18.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
With insulation	50.5	72.1	36.2	75.7	64.5	68.2	42.3	80.4	57.5
Without insulation	28.0	12.1	44.8	12.8	22.9	21.2	27.4	7.9	25.0
Did not know	21.5	15.8	18.9	11.5	12.6	10.6	30.3	11.7	17.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
With insulation	47.6	71.3	33.0	70.8	57.3	64.1	44.8	75.8	54.5
Without insulation	31.6	12.4	48.6	12.5	29.0	22.3	31.6	9.4	27.6
Did not know	20.9	16.3	18.4	16.7	13.7	13.6	23.6	14.8	17.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
JUNE 1994									
With insulation	44.5	69.5	28.5	72.2	52.0	62.7	43.9	79.5	52.1
Without insulation	39.4	17.0	53.6	15.7	36.7	28.8	28.4	9.7	33.1
Did not know	16.1	13.5	17.9	12.0	11.3	8.5	27.6	10.8	14.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

**2.13**

## DWELLING CHARACTERISTICS, Whether has insulation—by type of dwelling . . . .

	<i>Separate house</i>	<i>Semi-detached, row/terrace house etc.</i>	<i>Flat/unit/ apartment</i>	<i>Other types(a)</i>	<i>All types</i>
	%	%	%	%	%
MARCH 2008					
With insulation	69.9	49.1	22.1	71.5	61.5
Without insulation	17.3	19.9	29.5	**18.8	19.2
Did not know	12.8	31.0	48.4	**9.8	19.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005					
With insulation	69.0	47.1	14.2	50.0	60.5
Without insulation	18.5	20.8	34.8	29.2	20.6
Did not know	12.5	32.1	51.0	20.8	18.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002					
With insulation	65.7	42.2	17.5	44.4	57.5
Without insulation	22.9	26.9	36.5	34.1	25.0
Did not know	11.3	30.9	45.9	*21.5	17.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999					
With insulation	62.3	37.4	14.8	37.6	54.5
Without insulation	26.1	28.5	36.1	41.0	27.6
Did not know	11.6	34.1	49.1	21.3	17.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
JUNE 1994					
With insulation	58.6	37.6	16.4	40.1	52.1
Without insulation	31.5	33.3	44.1	43.0	33.1
Did not know	10.0	29.1	39.5	16.9	14.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

(a) Refers to caravans, houseboats and other improvised homes.

## 2.14 DWELLINGS WITH INSULATION, Where insulation installed—2008

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
CAPITAL CITY									
<b>Number ('000)</b>									
Roof/ceiling	679.7	907.1	291.8	312.4	374.1	48.9	..	..	2 718.2
Walls	210.0	336.6	68.8	92.4	14.5	13.9	..	..	776.9
Floor	11.0	14.3	np	np	np	*1.5	..	..	33.4
Other/unsure	np	np	—	—	np	np	..	..	*5.4
<b>Total dwellings(b)</b>	<b>702.6</b>	<b>918.3</b>	<b>300.1</b>	<b>313.8</b>	<b>375.1</b>	<b>50.5</b>	..	..	<b>2 766.5</b>
<b>Proportion (%)</b>									
Roof/ceiling	96.7	98.8	97.2	99.6	99.7	97.0	..	..	98.3
Walls	29.9	36.7	22.9	29.4	3.9	27.6	..	..	28.1
Floor	1.6	1.6	np	np	np	*3.0	..	..	1.2
Other/unsure	np	np	—	—	np	np	..	..	*0.2
BALANCE OF STATE/TERRITORY									
<b>Number ('000)</b>									
Roof/ceiling	553.2	382.0	332.0	108.0	106.6	73.6	..	..	1 555.4
Walls	213.2	169.7	83.4	44.8	24.1	26.1	..	..	561.3
Floor	*8.0	**2.4	np	—	np	*4.7	..	..	16.4
Other/unsure	np	—	**2.2	—	—	np	..	..	**4.0
<b>Total dwellings(b)</b>	<b>565.2</b>	<b>387.5</b>	<b>350.1</b>	<b>109.3</b>	<b>108.9</b>	<b>74.8</b>	..	..	<b>1 595.7</b>
<b>Proportion (%)</b>									
Roof/ceiling	97.9	98.6	94.8	98.8	97.9	98.4	..	..	97.5
Walls	37.7	43.8	23.8	41.0	22.1	34.9	..	..	35.2
Floor	*1.4	**0.6	np	—	np	6.3	..	..	*1.0
Other/unsure	np	—	**0.6	—	—	np	..	..	**0.2
TOTAL STATE/TERRITORY									
<b>Number ('000)</b>									
Roof/ceiling	1 232.8	1 289.1	623.8	420.4	480.7	122.5	22.8	81.4	4 273.5
Walls	423.2	506.3	152.2	137.1	38.6	40.0	*4.4	36.3	1 338.2
Floor	19.0	16.7	*2.8	np	np	6.2	—	*3.6	49.7
Other/unsure	**3.7	np	**2.2	—	np	**0.6	np	**0.7	*9.4
<b>Total dwellings(b)</b>	<b>1 267.8</b>	<b>1 305.8</b>	<b>650.2</b>	<b>423.1</b>	<b>483.9</b>	<b>125.3</b>	<b>23.1</b>	<b>83.2</b>	<b>4 362.2</b>
<b>Proportion (%)</b>									
Roof/ceiling	97.2	98.7	95.9	99.4	99.3	97.8	98.6	97.9	98.0
Walls	33.4	38.8	23.4	32.4	8.0	32.0	19.2	43.7	30.7
Floor	1.5	1.3	*0.4	np	np	4.9	—	*4.3	1.1
Other/unsure	**0.3	np	**0.3	—	np	**0.5	np	**0.9	*0.2

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

.. not applicable

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) Totals do not equal the sum of items in each column as more than one location may be specified.



**2.15**

## DWELLINGS WITH INSULATION, Where insulation installed .....

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008									
Roof/ceiling	97.2	98.7	95.9	99.4	99.3	97.8	98.6	97.9	98.0
Walls	33.4	38.8	23.4	32.4	8.0	32.0	19.2	43.7	30.7
Floor	1.5	1.3	*0.4	np	np	4.9	—	*4.3	1.1
Other/unsure	**0.3	np	**0.3	—	np	**0.5	np	**0.9	*0.2
MARCH 2005									
Roof/ceiling	97.1	98.7	94.4	99.0	99.7	98.1	98.3	99.2	97.8
Walls	32.6	40.3	24.9	34.4	9.8	33.4	*14.7	43.9	31.7
Floor	*1.1	*0.9	*0.7	*0.7	*0.4	*3.4	—	*3.3	1.0
Other/unsure	*0.2	*0.4	—	—	*0.1	—	—	*0.5	*0.2
MARCH 2002									
Roof/ceiling	98.2	98.6	94.5	99.3	99.2	97.6	97.1	99.0	98.1
Walls	26.8	35.0	26.9	35.0	6.8	31.2	*26.7	40.1	28.4
Floor	*0.8	*0.7	*0.7	*0.3	*0.2	*1.4	—	*3.0	0.7
Other/unsure	*0.1	*0.3	—	—	0.1	—	—	*0.2	*0.1
MARCH 1999									
Roof/ceiling	97.4	98.7	93.3	98.4	99.3	97.2	98.3	98.8	97.7
Walls	24.0	31.5	26.1	27.3	7.7	26.6	16.1	39.8	25.7
Floor	0.6	0.4	1.0	0.2	0.2	1.7	0.9	1.2	0.6
Other/unsure	0.1	—	0.5	0.2	—	0.1	—	—	0.1
JUNE 1994									
Roof/ceiling	96.6	98.6	91.8	97.3	99.1	96.9	98.0	97.0	97.1
Walls	26.1	27.5	25.8	24.5	6.4	26.5	23.9	31.3	24.6
Floor	0.7	0.8	0.7	0.3	—	1.0	1.9	1.3	0.6
Other/unsure	0.3	0.1	0.4	0.4	0.6	0.3	—	0.4	0.3

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

Note: Totals do not equal the sum of items in each column as more than one location may be specified.

**2.16**

## DWELLINGS WITH INSULATION IN ROOF OR CEILING, Main type of insulation ..

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008									
Batts-fibreglass/wool/poly	74.3	64.0	57.9	70.2	52.5	69.7	58.6	79.0	65.8
Sisalation/reflective foil	5.4	2.8	12.1	2.1	5.5	2.5	22.1	**1.1	5.2
Loose fill - Cellulose fibre	5.0	5.5	8.7	4.6	19.5	9.3	**2.1	*4.4	7.4
Loose fill - Rock wool	*1.8	3.4	2.0	3.8	*1.8	4.1	np	np	2.6
Loose fill - Wool	*1.3	3.1	*1.4	*0.7	2.6	*1.5	—	*3.5	2.0
Loose fill - Other/Unknown	2.0	4.3	3.0	2.5	4.0	4.1	**2.0	*1.0	3.2
Foam/plastic	*0.7	0.9	*1.3	*0.5	*0.5	—	np	np	0.8
Polystyrene sheets	np	*0.2	**0.4	—	np	**0.5	—	—	*0.2
Insulated cladding	np	np	*0.8	np	np	—	—	—	*0.2
Other	*1.0	np	*1.9	np	*1.0	**0.6	—	—	0.8
Did not know	8.2	15.7	10.6	15.5	11.9	7.7	*13.3	6.2	11.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
Batts-fibreglass/wool/poly	72.0	62.8	55.5	71.3	51.2	69.4	48.5	79.6	64.6
Sisalation/reflective foil	7.2	2.5	16.2	2.0	5.8	*2.4	35.9	*1.0	6.2
Loose fill - Cellulose fibre	4.6	7.2	9.4	4.6	21.6	11.0	—	*3.1	8.1
Loose fill - Rock wool	2.9	7.8	2.8	5.7	3.8	4.8	—	7.5	4.9
Loose fill - Other/Unknown	2.7	5.2	3.0	*1.5	5.8	5.2	—	*0.8	3.7
Foam/plastic	*0.7	1.1	*1.3	*0.5	*0.5	*1.2	*2.0	*0.5	0.9
Polystyrene sheets	*0.1	*0.2	*0.4	—	*0.3	*0.5	—	—	*0.2
Insulated cladding	*0.2	*0.1	*0.2	*0.1	—	0.1	—	—	*0.1
Other	*0.8	*0.6	*0.8	*0.3	*0.6	*0.5	—	*0.3	0.6
Did not know	8.9	12.5	10.4	13.9	10.4	5.0	13.6	7.2	10.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
Batts-fibreglass/wool/poly	69.2	62.9	53.0	71.6	53.0	64.4	52.3	79.8	63.7
Sisalation/reflective foil	7.3	2.6	18.4	1.9	6.6	*1.9	38.3	*0.7	6.3
Loose fill - Cellulose fibre	7.4	7.1	8.6	5.4	20.7	13.3	—	*3.6	8.8
Loose fill - Rock wool	2.1	7.4	2.3	5.0	4.7	4.0	*1.6	6.3	4.5
Loose fill - Other/Unknown	2.1	5.3	4.0	3.5	4.5	6.9	—	*2.2	3.9
Foam/plastic	1.0	0.9	*1.6	*0.1	*0.5	*1.0	—	*0.2	0.9
Polystyrene sheets	*0.1	*0.1	*0.4	*0.1	*0.2	—	—	—	0.1
Insulated cladding	*0.1	—	*0.7	*0.1	*0.4	*0.4	*1.6	—	0.2
Other	*0.7	*0.7	*2.1	*0.3	*0.3	*0.7	—	—	0.8
Did not know	9.9	12.9	9.0	12.1	9.1	7.4	*6.2	7.2	10.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
Batts-fibreglass/wool/poly	69.8	60.8	53.6	65.6	48.6	63.2	45.5	70.3	62.1
Sisalation/reflective foil	6.6	2.1	19.5	*2.1	7.4	*3.4	*38.6	*1.7	6.1
Loose fill - Cellulose fibre	5.3	7.2	6.7	4.9	21.5	10.6	—	*4.8	7.9
Loose fill - Rock wool	2.9	7.1	*2.2	5.4	3.9	*6.8	*1.8	*7.6	4.8
Loose fill - Other/Unknown	2.9	5.6	3.4	*2.1	6.2	*3.8	—	*2.7	4.1
Foam/plastic	*0.3	0.9	*0.9	*0.4	*0.6	*0.3	*1.8	—	0.6
Polystyrene sheets	*0.3	—	*1.6	*0.3	*0.2	*0.2	*0.8	—	0.3
Insulated cladding	*0.3	—	*0.3	*0.1	—	—	*0.9	—	*0.1
Other	0.9	*0.7	*1.1	*0.5	*0.4	*0.5	*2.8	*1.0	0.7
Did not know	10.7	15.6	10.8	18.8	11.2	11.3	*7.8	11.8	13.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

**2.17**

## DWELLINGS WITH INSULATION IN WALLS, Main type of insulation .....

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008									
Batts-fibreglass/wool/poly	61.3	51.3	34.6	66.3	56.0	66.9	*25.6	57.7	54.8
Sisalation/reflective foil	20.0	23.6	37.1	9.6	24.3	14.5	68.0	*8.0	22.0
Loose fill - Cellulose fibre	2.8	**0.8	*2.4	*2.5	np	np	—	*6.0	2.0
Loose fill - Rock wool	*1.3	np	*2.2	*2.0	—	np	—	*9.4	1.4
Loose fill - Wool	np	*0.8	**1.4	—	—	np	—	np	*0.5
Loose fill - Other/Unknown	np	*1.3	np	**1.1	np	**1.5	np	*3.8	1.0
Foam/plastic	*2.0	*1.8	*1.9	np	np	np	np	np	1.7
Polystyrene sheets	**1.1	*1.8	*3.9	—	np	*3.3	—	np	1.7
Insulated cladding	*1.3	*1.7	**1.9	np	—	np	—	—	*1.3
Other	*0.9	np	np	—	—	np	—	—	*0.5
Did not know	9.0	15.9	13.4	17.7	11.5	*5.7	—	12.6	13.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
Batts-fibreglass/wool/poly	59.9	44.8	24.1	67.7	41.2	56.3	*51.2	59.3	50.3
Sisalation/reflective foil	20.8	36.2	51.7	10.2	37.0	28.4	*26.6	*8.0	29.2
Loose fill - Cellulose fibre	*1.0	*0.5	*2.6	—	*3.7	*0.5	—	*5.3	1.1
Loose fill - Rock wool	*2.4	*1.9	*1.1	*4.8	*0.9	*1.0	—	*9.1	2.4
Loose fill - Other/Unknown	*0.4	*1.7	*0.8	*1.0	*2.7	*3.1	—	*1.7	1.2
Foam/plastic	*1.9	*1.1	*2.9	*0.3	*1.8	—	*7.6	*2.0	1.5
Polystyrene sheets	*0.8	*0.8	*4.2	—	*3.6	*1.9	—	—	1.2
Insulated cladding	*1.4	*1.7	*0.9	*0.3	—	*2.0	—	—	1.3
Other	*1.3	*0.4	*0.4	—	—	*1.4	—	—	0.6
Did not know	10.2	11.0	11.4	15.9	*9.1	*5.2	*14.5	14.5	*11.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
Batts-fibreglass/wool/poly	53.7	39.6	22.0	66.4	50.4	55.5	39.3	58.5	46.3
Sisalation/reflective foil	23.4	42.2	53.7	11.2	29.0	32.9	55.0	13.1	32.9
Loose fill - Cellulose fibre	*1.2	*0.8	*2.2	*1.2	*2.6	1.0	—	*2.8	1.2
Loose fill - Rock wool	*2.7	*0.9	*1.3	*2.1	*1.4	*0.5	5.8	*3.0	1.7
Loose fill - Other/Unknown	—	*0.7	*1.4	*0.5	*1.1	—	—	—	*0.5
Foam/plastic	*1.8	*1.6	*2.8	*0.2	*1.4	*1.1	—	*1.6	1.6
Polystyrene sheets	*1.0	*1.4	*1.5	*0.2	*2.7	*1.1	—	3.3	1.2
Insulated cladding	*3.7	*0.4	*3.5	*0.6	—	*1.8	—	*0.6	1.7
Other	1.4	*1.1	*0.9	*0.8	*2.7	—	—	—	1.1
Did not know	11.1	11.2	10.8	16.7	*8.7	*6.2	—	17.0	11.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
Batts-fibreglass/wool/poly	52.2	36.6	23.6	63.5	32.6	41.7	*30.6	56.3	43.3
Sisalation/reflective foil	28.7	41.9	56.5	*7.9	38.0	41.0	*37.6	*10.2	34.7
Loose fill - Cellulose fibre	*0.3	*1.2	*0.4	*1.8	*2.6	*1.9	—	*1.1	1.0
Loose fill - Rock wool	*1.3	*2.0	*1.0	*3.5	—	*1.2	*5.6	*5.4	1.9
Loose fill - Other/Unknown	—	*1.1	—	*0.5	*3.8	—	—	*2.5	*0.7
Foam/plastic	*1.3	*1.6	*3.5	*0.9	*2.5	*0.6	*5.1	*1.8	1.7
Polystyrene sheets	*1.8	*0.4	*4.6	*1.5	*2.9	*1.2	—	*1.0	1.5
Insulated cladding	*2.2	*0.4	*1.9	*0.6	—	*1.3	—	*1.2	1.2
Other	*0.3	*0.1	*1.4	*0.3	—	*0.6	*5.1	*0.6	*0.4
Did not know	11.8	14.6	*7.1	19.5	*17.6	*10.6	*16.0	*20.0	13.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

## 2.18 HOUSEHOLDS WITH INSULATION(a), Main reason for installing in dwelling . . . .

	NSW	Vic.	Qld	SA	WA	Tas.	NT(b)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008									
Achieve comfort	84.1	79.2	85.4	83.2	84.7	81.1	78.3	74.0	82.6
Cost/save on energy bills	9.6	13.3	8.6	9.9	10.4	12.8	*14.8	17.4	10.8
Use less energy	np	4.8	3.2	4.6	*3.1	*4.5	**6.9	np	3.7
Rebate offered	np	—	—	—	—	—	—	—	np
Other	3.4	2.7	2.9	*2.3	*1.8	*1.6	—	np	np
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
Achieve comfort	83.8	77.7	90.2	83.3	87.0	82.2	*90.1	74.9	83.3
Cost/save on energy bills	8.0	14.0	4.7	11.8	8.4	10.4	—	16.2	9.7
Use less energy	3.9	4.0	*3.2	3.9	*1.8	*5.0	*3.1	*7.9	3.7
Other	4.3	4.2	*1.9	*1.1	*2.8	*2.3	*6.8	*1.0	3.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
Achieve comfort	86.4	75.1	90.0	87.1	90.8	80.2	92.0	76.6	83.8
Cost/save on energy bills	8.1	16.2	4.3	8.6	5.8	13.8	*8.0	16.9	10.1
Use less energy	*1.9	4.4	*2.0	*2.9	*1.3	*2.7	—	*6.0	2.8
Other	3.5	4.3	3.8	*1.3	*2.1	*3.4	—	*0.5	3.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
Achieve comfort	88.8	80.2	94.0	87.7	92.3	82.1	*66.5	77.6	86.5
Cost/save on energy bills	6.9	13.2	*3.4	8.6	*3.6	*11.8	*6.6	*14.2	8.5
Use less energy	1.8	3.0	*0.6	*2.3	*2.2	*3.8	—	*5.4	2.2
Other	2.6	3.6	*2.0	*1.3	*1.9	*2.4	*26.9	*2.7	2.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
JUNE 1994									
Achieve comfort	81.2	66.0	86.1	78.6	86.2	76.2	94.3	63.5	76.4
Cost/save on energy bills	12.2	25.6	4.5	16.2	10.3	17.1	3.0	21.6	16.3
Use less energy	4.1	6.7	3.8	4.1	1.6	5.9	—	12.9	4.9
Other	2.6	1.8	5.6	1.1	2.0	0.8	2.6	2.1	2.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Includes only households with some form of insulation and owner/occupants were responsible for its installation.

(b) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

## 2.19 HOUSEHOLDS WITHOUT INSULATION, Main reason for not installing in dwelling

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008									
Cost	15.5	16.7	19.4	16.4	16.4	18.2	np	np	16.9
Not interested	6.2	*5.3	7.6	np	*7.1	*6.8	**7.4	np	6.5
Not needed because of climate	9.4	*3.1	11.1	*6.8	*5.8	**4.4	*7.5	—	8.7
Haven't got around to it	6.6	10.8	11.7	12.6	11.7	11.1	*7.2	*15.1	9.4
Not possible due to dwelling structure	12.2	10.5	8.0	*12.5	*7.4	*10.0	*14.1	**15.2	10.3
Not home owner/not responsible	34.7	37.0	28.9	37.8	38.2	34.0	37.2	*43.2	33.6
Have not considered	13.6	14.1	11.1	*8.3	11.2	*11.8	*12.1	**15.5	12.4
Other	*1.8	*2.5	2.4	np	*2.2	*3.7	np	—	2.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
Cost	12.6	12.6	18.7	*12.1	20.2	21.3	*12.3	*18.2	15.5
Not interested	10.0	10.2	10.4	*11.4	*5.5	*9.9	*6.6	*8.9	9.8
Not needed because of climate	10.4	*5.6	8.9	*6.6	*4.3	*3.4	*17.6	*4.3	8.5
Haven't got around to it	10.1	13.5	13.3	*8.3	18.2	19.4	*3.3	—	12.4
Not possible due to dwelling structure	8.8	12.7	8.4	*6.7	7.2	*9.7	*7.3	*14.1	8.9
Not home owner/not responsible	37.2	31.7	29.7	39.0	33.8	30.8	*48.5	*41.0	33.8
Other	10.8	13.9	10.5	15.9	10.8	*5.6	*4.5	*13.5	11.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
Cost	20.5	19.4	28.3	19.8	34.0	20.4	*12.1	*20.1	24.4
Not interested	15.4	17.4	13.8	17.5	15.8	23.4	*9.7	*14.1	15.3
Not needed because of climate	14.8	8.4	19.0	19.3	4.6	8.0	*15.6	—	14.7
Haven't got around to it	19.5	22.6	16.3	15.2	20.0	24.8	*5.8	*16.2	18.6
Not possible due to dwelling structure	14.6	13.3	9.2	*7.7	6.6	*11.3	*11.6	*32.3	11.5
Not home owner/not responsible	*0.3	*0.5	*0.4	*1.6	—	*1.3	*3.9	*6.2	*0.4
Other	14.8	18.3	13.1	18.8	19.0	*10.8	*41.4	*11.2	15.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
Cost	23.9	24.1	31.0	*22.9	31.9	*29.0	*13.8	*32.4	27.2
Not interested	16.9	16.5	20.1	*19.9	14.8	*19.6	*21.2	*6.8	17.9
Not needed because of climate	19.9	*7.1	17.2	*11.3	11.5	*10.5	*33.3	—	16.3
Haven't got around to it	20.5	26.0	12.6	23.5	21.5	*27.3	*21.9	*23.5	18.6
Not possible due to dwelling structure	9.3	9.9	7.9	*8.0	8.9	*5.2	*5.4	*17.4	8.7
Not home owner/not responsible	*0.5	*0.5	*0.3	*1.6	—	—	—	—	*0.4
Other	9.1	15.9	11.0	*12.8	11.5	*8.4	*4.4	*19.9	10.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

## 2.20 DWELLING CHARACTERISTICS, Use of energy saving lights—2008

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
CAPITAL CITY									
<b>Number ('000)</b>									
Fluorescent lights	821.0	725.6	512.9	239.1	332.6	37.6	..	..	2 786.3
Energy saving lights(b)	1 049.4	783.3	443.2	275.5	340.3	38.4	..	..	3 046.9
<b>Total dwellings(c)(d)</b>	<b>1 642.7</b>	<b>1 456.2</b>	<b>742.5</b>	<b>479.1</b>	<b>624.3</b>	<b>84.3</b>	..	..	<b>5 218.5</b>
<b>Proportion (%)</b>									
Fluorescent lights	50.0	49.8	69.1	49.9	53.3	44.6	..	..	53.4
Energy saving lights(b)	63.9	53.8	59.7	57.5	54.5	45.6	..	..	58.4
BALANCE OF STATE/TERRITORY									
<b>Number ('000)</b>									
Fluorescent lights	699.4	373.0	644.2	104.0	138.2	54.2	..	..	2 013.2
Energy saving lights(b)	728.4	330.7	478.2	97.1	109.9	63.0	..	..	1 807.4
<b>Total dwellings(c)(d)</b>	<b>1 064.2</b>	<b>600.3</b>	<b>872.6</b>	<b>168.3</b>	<b>202.5</b>	<b>117.3</b>	..	..	<b>3 025.1</b>
<b>Proportion (%)</b>									
Fluorescent lights	65.7	62.1	73.8	61.8	68.3	46.2	..	..	66.5
Energy saving lights(b)	68.5	55.1	54.8	57.7	54.3	53.7	..	..	59.7
TOTAL STATE/TERRITORY									
<b>Number ('000)</b>									
Fluorescent lights	1 520.5	1 098.6	1 157.1	343.1	470.8	91.7	50.1	67.4	4 799.5
Energy saving lights(b)	1 777.8	1 114.0	921.4	372.6	450.3	101.4	30.4	86.3	4 854.3
<b>Total dwellings(c)(d)</b>	<b>2 706.9</b>	<b>2 056.5</b>	<b>1 615.1</b>	<b>647.4</b>	<b>826.8</b>	<b>201.6</b>	<b>61.0</b>	<b>128.4</b>	<b>8 243.6</b>
<b>Proportion (%)</b>									
Fluorescent lights	56.2	53.4	71.6	53.0	56.9	45.5	82.2	52.5	58.2
Energy saving lights(b)	65.7	54.2	57.0	57.6	54.5	50.3	49.9	67.3	58.9

.. not applicable

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) Excludes fluorescents. Includes people's own perception of energy saving lights e.g. low voltage halogen, etc.

(c) Includes people who did not know the type of lights in their dwelling.

(d) Totals do not equal the sum of items in each column as dwellings may have fluorescent and other energy saving lights.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

**2.21** DWELLING CHARACTERISTICS, Use of energy saving lights .....

	<i>NSW</i>	<i>Vic.</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas.</i>	<i>NT(a)</i>	<i>ACT</i>	<i>Aust.</i>
	%	%	%	%	%	%	%	%	%
.....									
MARCH 2008									
Fluorescent lights	56.2	53.4	71.6	53.0	56.9	45.5	82.2	52.5	58.2
Energy saving lights(b)	65.7	54.2	57.0	57.6	54.5	50.3	49.9	67.3	58.9
.....									
MARCH 2005									
Fluorescent lights	52.5	49.9	74.5	54.5	56.6	47.6	84.3	46.1	56.7
Energy saving lights(b)	37.2	30.7	29.3	38.2	32.0	29.7	28.8	34.9	33.3
.....									
MARCH 2002									
Fluorescent lights	55.2	54.1	75.2	51.7	58.9	42.3	86.1	47.9	58.6
Energy saving lights(b)	23.2	23.8	22.8	24.1	25.3	15.9	19.8	26.2	23.4
.....									
JUNE 1999 (c)									
Fluorescent lights	56.7	56.0	76.1	55.3	58.9	49.0	85.4	54.9	60.2
.....									

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) Excludes fluorescents. Includes people's own perception of energy saving lights e.g. low voltage halogen, etc.

(c) Information on other energy saving lights was not collected in 1999.

## 2.22 DWELLINGS WITH COMPACT FLUORESCENT LIGHTS, Number of rooms mainly lit—2008

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
CAPITAL CITY									
<b>Number ('000)</b>									
One	np	69.8	np	25.4	33.8	*2.5	..	..	251.9
Two	105.8	104.0	61.3	37.4	40.9	3.7	..	..	364.5
Three	122.0	108.4	53.0	38.6	44.9	5.8	..	..	386.0
Four or more	287.1	189.2	149.5	78.7	85.2	6.0	..	..	826.7
Whole dwelling	217.3	86.8	83.3	28.4	42.2	4.6	..	..	488.4
None	np	*7.0	np	*3.1	**2.4	**0.6	..	..	22.5
<b>Total</b>	<b>815.1</b>	<b>565.3</b>	<b>385.8</b>	<b>211.5</b>	<b>249.4</b>	<b>23.3</b>	<b>..</b>	<b>..</b>	<b>2 340.1</b>
<b>Proportion (%)</b>									
One	np	12.4	np	12.0	13.6	*10.6	..	..	10.8
Two	13.0	18.4	15.9	17.7	16.4	16.0	..	..	15.6
Three	15.0	19.2	13.7	18.2	18.0	25.1	..	..	16.5
Four or more	35.2	33.5	38.8	37.2	34.2	25.7	..	..	35.3
Whole dwelling	26.7	15.4	21.6	13.4	16.9	19.9	..	..	20.9
None	np	*1.2	np	*1.5	**1.0	**2.7	..	..	1.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>..</b>	<b>..</b>	<b>100.0</b>
BALANCE OF STATE/TERRITORY									
<b>Number ('000)</b>									
One	np	25.9	np	*6.6	*8.0	5.6	..	..	132.1
Two	54.0	43.0	59.9	17.8	*11.5	11.4	..	..	197.6
Three	56.9	42.3	61.6	14.0	14.8	8.4	..	..	197.9
Four or more	218.1	92.6	130.9	28.5	26.2	15.0	..	..	511.1
Whole dwelling	173.1	47.1	81.9	18.6	12.5	10.1	..	..	343.2
None	np	**2.4	np	*1.8	**1.6	*1.5	..	..	15.6
<b>Total</b>	<b>542.0</b>	<b>253.3</b>	<b>388.5</b>	<b>87.3</b>	<b>74.5</b>	<b>51.9</b>	<b>..</b>	<b>..</b>	<b>1 397.5</b>
<b>Proportion (%)</b>									
One	np	10.2	np	*7.5	*10.7	10.8	..	..	9.5
Two	10.0	17.0	15.4	20.5	15.4	22.0	..	..	14.1
Three	10.5	16.7	15.8	16.0	19.9	16.2	..	..	14.2
Four or more	40.2	36.5	33.7	32.6	35.1	28.9	..	..	36.6
Whole dwelling	31.9	18.6	21.1	21.4	*16.8	19.4	..	..	24.6
None	np	**0.9	np	*2.0	**2.2	*2.8	..	..	1.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>..</b>	<b>..</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

.. not applicable

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.



**2.22****DWELLINGS WITH COMPACT FLUORESCENT LIGHTS, Number of rooms mainly lit—2008** *continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
TOTAL STATE/TERRITORY									
<b>Number ('000)</b>									
One	113.4	95.8	85.8	32.0	41.8	8.1	np	np	384.0
Two	159.7	147.0	121.2	55.2	52.3	15.1	*4.3	7.2	562.1
Three	178.8	150.7	114.6	52.6	59.7	14.2	4.3	9.0	583.9
Four or more	505.2	281.8	280.3	107.1	111.4	20.9	4.8	26.2	1 337.7
Whole dwelling	390.4	133.9	165.1	47.0	54.7	14.7	3.9	21.9	831.7
None	*9.6	*9.4	*7.2	*4.9	**4.0	*2.1	np	np	38.1
<b>Total</b>	<b>1 357.2</b>	<b>818.6</b>	<b>774.3</b>	<b>298.8</b>	<b>323.9</b>	<b>75.1</b>	<b>20.2</b>	<b>69.4</b>	<b>3 737.5</b>
<b>Proportion (%)</b>									
One	8.4	11.7	11.1	10.7	12.9	10.7	np	np	10.3
Two	11.8	18.0	15.7	18.5	16.2	20.1	21.3	10.4	15.0
Three	13.2	18.4	14.8	17.6	18.4	18.9	21.2	13.0	15.6
Four or more	37.2	34.4	36.2	35.9	34.4	27.9	23.8	37.7	35.8
Whole dwelling	28.8	16.4	21.3	15.7	16.9	19.5	19.3	31.5	22.3
None	*0.7	*1.1	*0.9	*1.6	**1.2	*2.8	np	np	1.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

**2.23****DWELLINGS WITH FLUORESCENT LIGHTS(a), Number of rooms mainly lit—2008**

	NSW	Vic.	Qld	SA	WA	Tas.	NT(b)	ACT	Aust.
CAPITAL CITY									
<b>Number ('000)</b>									
One	262.6	302.2	139.3	89.3	150.4	10.6	..	..	984.6
Two	175.1	163.0	135.6	56.8	75.7	11.8	..	..	639.1
Three	106.0	83.0	66.4	27.7	36.0	7.3	..	..	341.4
Four or more	96.7	81.8	82.4	31.5	30.5	3.8	..	..	347.1
Whole dwelling	57.8	25.7	23.1	*7.3	*11.0	*1.3	..	..	134.4
None	122.8	70.0	66.1	26.5	29.0	*2.7	..	..	339.7
<i>Total</i>	<i>821.0</i>	<i>725.6</i>	<i>512.9</i>	<i>239.1</i>	<i>332.6</i>	<i>37.6</i>	..	..	<i>2 786.3</i>
<b>Proportion (%)</b>									
One	32.0	41.6	27.2	37.4	45.2	28.1	..	..	35.3
Two	21.3	22.5	26.4	23.8	22.7	31.5	..	..	22.9
Three	12.9	11.4	12.9	11.6	10.8	19.4	..	..	12.3
Four or more	11.8	11.3	16.1	13.2	9.2	*10.2	..	..	12.5
Whole dwelling	7.0	3.5	4.5	*3.0	*3.3	*3.4	..	..	4.8
None	15.0	9.6	12.9	11.1	8.7	*7.3	..	..	12.2
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	..	..	<i>100.0</i>
BALANCE OF STATE/TERRITORY									
<b>Number ('000)</b>									
One	191.3	136.3	144.0	36.6	51.3	22.4	..	..	581.7
Two	183.5	108.0	167.7	24.9	28.1	14.5	..	..	526.7
Three	80.1	44.9	101.0	17.2	16.8	4.8	..	..	264.8
Four or more	82.4	33.0	133.7	12.4	23.9	5.4	..	..	290.8
Whole dwelling	37.1	13.3	36.4	**3.2	*6.3	*1.4	..	..	97.7
None	125.0	37.6	61.4	9.8	11.8	5.7	..	..	251.4
<i>Total</i>	<i>699.4</i>	<i>373.0</i>	<i>644.2</i>	<i>104.0</i>	<i>138.2</i>	<i>54.2</i>	..	..	<i>2 013.2</i>
<b>Proportion (%)</b>									
One	27.3	36.5	22.3	35.1	37.1	41.3	..	..	28.9
Two	26.2	28.9	26.0	23.9	20.3	26.7	..	..	26.2
Three	11.5	12.0	15.7	16.5	12.2	8.9	..	..	13.2
Four or more	11.8	8.8	20.8	12.0	17.3	10.0	..	..	14.4
Whole dwelling	5.3	3.6	5.7	**3.0	*4.6	*2.5	..	..	4.9
None	17.9	10.1	9.5	*9.4	8.6	10.6	..	..	12.5
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	..	..	<i>100.0</i>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

.. not applicable

(a) Excludes compact fluorescents.

(b) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

**2.23**

## DWELLINGS WITH FLUORESCENT LIGHTS(a), Number of rooms mainly lit—2008

*continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT(b)	ACT	Aust.
TOTAL STATE/TERRITORY									
<b>Number ('000)</b>									
One	453.9	438.4	283.3	125.9	201.7	33.0	12.8	17.3	1 566.3
Two	358.5	270.9	303.3	81.7	103.8	26.3	10.5	10.7	1 165.8
Three	186.1	127.9	167.3	44.9	52.8	12.1	8.1	6.9	606.2
Four or more	179.1	114.7	216.1	44.0	54.4	9.3	10.2	10.2	637.9
Whole dwelling	94.9	39.0	59.5	10.4	17.3	*2.7	4.0	*4.2	232.1
None	247.8	107.6	127.6	36.3	40.8	8.5	4.5	18.1	591.1
<b>Total</b>	<b>1 520.5</b>	<b>1 098.6</b>	<b>1 157.1</b>	<b>343.1</b>	<b>470.8</b>	<b>91.7</b>	<b>50.1</b>	<b>67.4</b>	<b>4 799.5</b>
<b>Proportion (%)</b>									
One	29.9	39.9	24.5	36.7	42.8	35.9	25.6	25.7	32.6
Two	23.6	24.7	26.2	23.8	22.0	28.6	20.9	15.9	24.3
Three	12.2	11.6	14.5	13.1	11.2	13.2	16.2	10.3	12.6
Four or more	11.8	10.4	18.7	12.8	11.5	10.1	20.3	15.1	13.3
Whole dwelling	6.2	3.6	5.1	3.0	3.7	*2.9	7.9	*6.3	4.8
None	16.3	9.8	11.0	10.6	8.7	9.2	9.0	26.8	12.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Excludes compact fluorescents.

(b) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

## 2.24 DWELLING CHARACTERISTICS, Window treatment/application

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008									
Window coverings designed to stop heat or cold(b)	38.3	59.0	41.4	61.7	43.1	56.4	28.9	59.9	47.1
Outside awnings or shutters	26.7	40.8	29.5	43.7	26.2	8.7	14.8	30.4	31.6
Tinted glass or solar guarding	6.8	4.9	19.0	9.0	14.3	8.5	13.3	6.0	9.7
Double glazing	2.3	4.0	1.5	2.4	1.4	5.8	*1.8	*5.1	2.6
Louvre windows	3.0	3.0	9.8	4.1	3.3	*1.5	25.9	*1.6	4.6
None of the above	44.7	24.5	34.5	20.7	37.7	35.1	41.6	31.2	34.6
MARCH 2005									
Outside awnings or shutters	27.7	37.7	28.2	42.8	21.0	7.8	*10.7	27.1	30.2
Boxed pelmets	9.7	22.7	9.3	16.6	14.2	20.1	*6.3	16.4	14.1
Tinted glass or solar guarding	7.3	4.4	21.1	8.3	17.0	7.0	14.3	6.4	10.4
Double glazing	3.0	3.8	1.8	2.4	1.6	4.3	*2.2	5.3	2.8
Louvre windows	3.9	5.4	12.1	6.4	4.3	3.4	25.9	*1.8	6.2
None of the above	60.4	45.1	47.4	42.1	54.8	65.2	58.8	55.4	52.1
MARCH 2002									
Outside awnings or shutters	27.9	39.0	31.8	42.0	22.6	8.7	12.8	29.8	31.4
Boxed pelmets	9.9	22.3	11.4	16.2	16.6	21.3	7.6	15.1	14.8
Tinted glass or solar guarding	8.0	3.8	17.7	9.3	15.1	5.4	10.1	5.5	9.6
Double glazing	2.9	3.4	1.7	2.1	1.8	3.8	*0.7	4.5	2.6
Louvre windows	3.9	7.8	15.7	7.1	4.4	5.0	49.9	*1.4	7.8
None of the above	59.2	44.2	45.5	43.7	55.1	65.8	34.7	56.2	51.1
MARCH 1999									
Outside awnings	27.4	39.8	30.4	39.9	24.1	7.7	*15.6	30.4	31.2
Boxed pelmets	22.7	33.0	24.7	26.2	23.8	28.2	*13.2	24.0	26.1
Tinted glass	6.3	3.5	15.2	8.8	15.8	*4.4	*15.7	*5.9	8.4
Double glazing	1.7	2.2	2.1	1.8	2.5	*3.3	*0.8	*3.8	2.1
None of the above	53.9	40.1	45.0	43.2	50.7	63.2	62.8	51.8	47.9
MARCH 1994									
Outside awnings	23.8	34.5	28.5	37.6	21.3	7.6	22.0	24.3	27.8
Boxed pelmets	17.0	26.9	13.2	21.6	17.6	25.3	10.8	20.7	19.5
Tinted glass	1.2	1.3	0.6	0.7	1.3	1.4	1.4	1.1	1.1
Double glazing	5.6	3.0	13.9	8.1	13.9	2.7	17.5	4.5	7.4
None of the above	61.0	48.3	54.4	46.2	56.8	67.1	57.6	58.7	55.0

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) Includes boxed pelmets that are used to stop heat loss or gain.

## INTRODUCTION

The type of energy used in the home has considerable implications for the environment. Energy consumption in the residential sector is a significant contributor to greenhouse gas emissions in Australia due to the heavy reliance on fossil fuels, especially coal, to produce electricity. The Australian trend has been toward increasing reliance on coal for electricity generation (Garnaut 2008).

Residential energy consumption rose from 377 petajoules in 1996–97 (ABARE 2000) to 440 petajoules in 2006–07 (ABARE 2008). Population increase, larger dwelling sizes and more appliances and IT equipment per household have contributed to this increase. However, average energy consumption per Australian household has remained relatively constant since 1990 (DEWHA 2008).

## ELECTRICITY

Practically all dwellings (99.9%) in Australia use electricity (table 3.4). In March 2008, electricity was the primary energy source throughout Australia for household cooking (75% for ovens and 56% for cooktops) and hot water systems (46%). This is a 5% fall in the use of electricity for hot water systems, from 51% of all households in 2005. This fall in the use of electricity for hot water was even more pronounced between 2002 and 2008 – from 61% to 46%.

The use of electricity for hot water systems was more pronounced outside capital cities (62% of households) than within capital cities (37%) (table 3.10).

Electricity was used by 79% of households to boost solar water heaters in Australia, falling from 90% in 2005. An increase in the use of mains gas to boost solar water heaters made up most of the fall, increasing from 3% of households in 2005 to 9% in 2008 (table 3.12).

Most households used electricity as their main source of energy for space heating (35%), followed by gas (31%, mains gas and LPG/bottled gas combined) and wood (10%) (table 3.8). Households relied most heavily on electricity for space heating in Tasmania (65%), South Australia (47%) and New South Wales (43%).

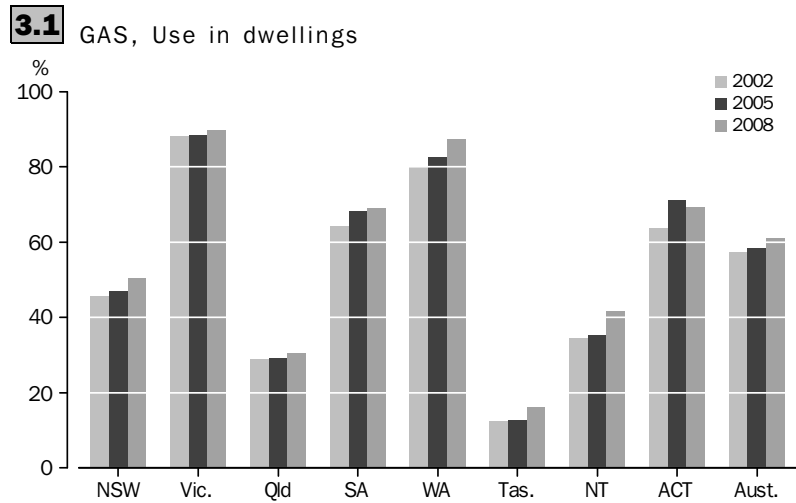
## GAS

Gas (mains gas and LPG/bottled gas) was the second most common source of energy, used by 61% of Australian households in 2008. However, in the primary gas-producing states of Victoria and Western Australia, gas was used in nine out of ten households (90% and 87% respectively) (table 3.4).

For one in three Australian households, gas (mains or LPG/bottled gas) was the main source of energy used for space heating (31%) while 37% used gas for heating water (tables 3.8 and 3.10). Except for Tasmania, gas usage was more prevalent in capital cities (compared to the rest of the state). In all states, gas as a household energy source increased from 2002 to 2005 and from 2005 to 2008.

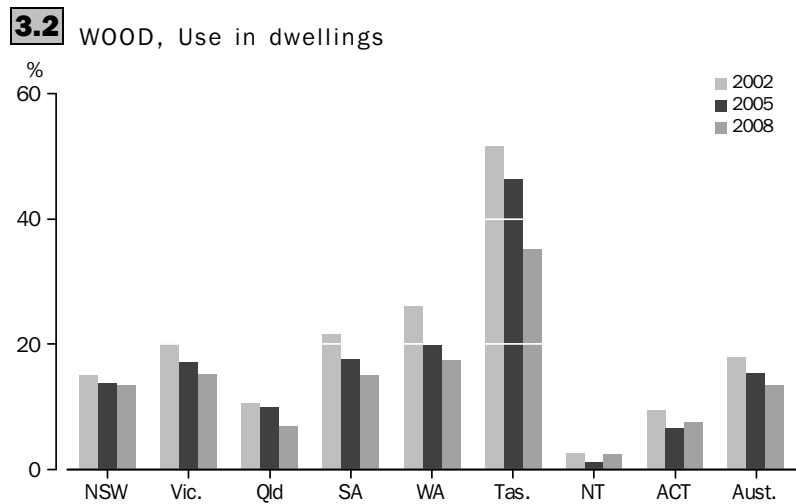
GAS *continued*

Tasmania had the lowest proportion of households using gas (16%).



WOOD

Across Australia, there has been a downward trend in the use of wood as a source of energy in dwellings, from 18% in 2002 to 13% in 2008. This trend has been apparent in every state and territory over this period (table 3.5). In 2008, one in ten households used wood as their main source of fuel for space heating (table 3.8).



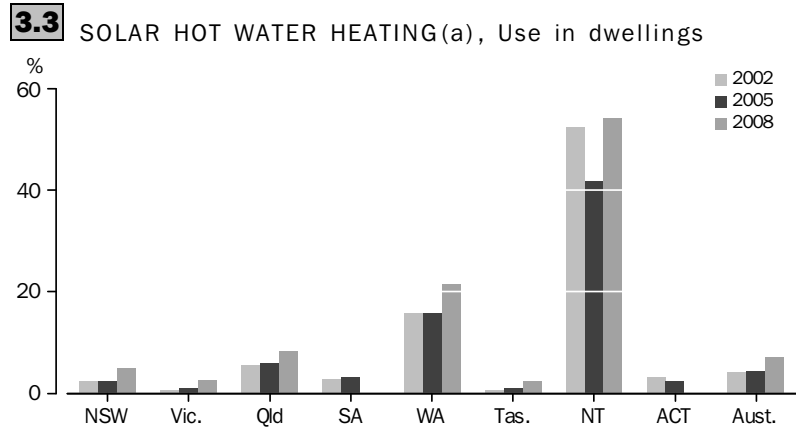
SOLAR ENERGY

Solar energy was used by 7% of Australian households for heating water in 2008. This was a 61% increase from 2005 when 4% of households used solar energy for hot water systems.

Households in all states and territories had a noticeable increase in the use of solar for water heating between 2005 and 2008. More than half the households in the Northern Territory (54% in 2008) used solar energy to heat water, up from 42% in 2005 (graph 3.3 and table 3.11). Households in Western Australia were also significant users of solar energy with more than one in five (21%) using solar for hot water systems, up from 16% in 2005. The use of solar for hot water systems doubled between 2005 and 2008 in New

SOLAR ENERGY  
*continued*

South Wales (2.5% in 2005 to 5% in 2008) and increased in Victoria (1% in 2005 to 3% in 2008), albeit from a small base (table 3.11).



(a) Solar hot water and solar-photovoltaic.

Note: 2008 figures for SA and ACT are not available for publication.

### 3.4 SOURCES OF ENERGY IN DWELLINGS—2008

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
CAPITAL CITY									
<b>Number ('000)</b>									
Mains electricity	1 642.7	1 455.4	742.5	479.1	624.3	84.3	..	..	5 217.7
Mains gas	751.0	1 345.7	157.5	345.3	503.7	*1.5	..	..	3 197.0
LPG/bottled gas	102.8	62.0	93.3	27.6	52.3	9.2	..	..	369.1
Wood	106.1	128.3	*27.5	37.5	68.5	20.5	..	..	399.8
Solar	72.8	39.4	63.1	29.8	115.4	*1.4	..	..	361.3
Oil	*9.9	np	**2.9	9.8	*5.4	np	..	..	33.2
Other	np	np	np	np	np	np	..	..	*5.3
<i>Total dwellings(b)</i>	<i>1 642.7</i>	<i>1 456.2</i>	<i>742.5</i>	<i>479.1</i>	<i>624.3</i>	<i>84.3</i>	..	..	<i>5 218.5</i>
<b>Proportion (%)</b>									
Mains electricity	100.0	99.9	100.0	100.0	100.0	100.0	..	..	100.0
Mains gas	45.7	92.4	21.2	72.1	80.7	*1.7	..	..	61.3
LPG/bottled gas	6.3	4.3	12.6	5.8	8.4	11.0	..	..	7.1
Wood	6.5	8.8	*3.7	7.8	11.0	24.3	..	..	7.7
Solar	4.4	2.7	8.5	6.2	18.5	*1.7	..	..	6.9
Oil	*0.6	np	**0.4	2.0	*0.9	np	..	..	0.6
Other	np	np	np	np	np	np	..	..	*0.1
BALANCE OF STATE/TERRITORY									
<b>Number ('000)</b>									
Mains electricity	1 058.0	598.8	872.6	166.5	202.5	115.4	..	..	3 013.8
Mains gas	265.1	321.6	45.1	*16.5	59.6	*4.2	..	..	712.1
LPG/bottled gas	250.8	116.0	198.9	57.6	105.2	17.8	..	..	746.2
Wood	256.1	183.3	83.8	60.0	75.7	50.2	..	..	709.2
Solar	80.8	22.6	79.5	15.0	65.0	*5.3	..	..	268.2
Oil	**6.2	np	**5.7	np	*1.7	np	..	..	22.3
Other	np	np	—	np	np	np	..	..	*10.3
<i>Total dwellings(b)</i>	<i>1 064.2</i>	<i>600.3</i>	<i>872.6</i>	<i>168.3</i>	<i>202.5</i>	<i>117.3</i>	..	..	<i>3 025.1</i>
<b>Proportion (%)</b>									
Mains electricity	99.4	99.7	100.0	98.9	100.0	98.4	..	..	99.6
Mains gas	24.9	53.6	5.2	*9.8	29.4	3.6	..	..	23.5
LPG/bottled gas	23.6	19.3	22.8	34.2	51.9	15.2	..	..	24.7
Wood	24.1	30.5	9.6	35.6	37.4	42.8	..	..	23.4
Solar	7.6	3.8	9.1	8.9	32.1	*4.5	..	..	8.9
Oil	**0.6	np	**0.7	np	*0.9	np	..	..	0.7
Other	np	np	—	np	np	np	..	..	*0.3

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

.. not applicable

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) Totals do not equal the sum of items in each column as more than one source of energy may be specified.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.



### 3.4 SOURCES OF ENERGY IN DWELLINGS—2008 *continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
TOTAL STATE/TERRITORY									
<b>Number ('000)</b>									
Mains electricity	2 700.7	2 054.2	1 615.1	645.6	826.8	199.7	61.0	128.4	8 231.5
Mains gas	1 016.1	1 667.2	202.5	361.8	563.3	5.6	*4.6	87.8	3 909.1
LPG/bottled gas	353.6	178.0	292.2	85.1	157.4	27.0	20.8	*1.1	1 115.3
Wood	362.2	311.6	111.3	97.5	144.2	70.7	*1.6	9.8	1 108.9
Solar	153.6	62.0	142.6	44.9	180.4	*6.7	33.5	5.9	629.5
Oil	*16.1	*5.5	*8.6	np	*7.1	4.4	np	*0.9	55.5
Other	**4.5	*3.9	np	*3.2	**2.0	*1.0	np	—	15.6
<b>Total dwellings(b)</b>	<b>2 706.9</b>	<b>2 056.5</b>	<b>1 615.1</b>	<b>647.4</b>	<b>826.8</b>	<b>201.6</b>	<b>61.0</b>	<b>128.4</b>	<b>8 243.6</b>
<b>Proportion (%)</b>									
Mains electricity	99.8	99.9	100.0	99.7	100.0	99.1	100.0	100.0	99.9
Mains gas	37.5	81.1	12.5	55.9	68.1	2.8	*7.6	68.4	47.4
LPG/bottled gas	13.1	8.7	18.1	13.2	19.0	13.4	34.1	*0.9	13.5
Wood	13.4	15.2	6.9	15.1	17.4	35.1	*2.6	7.6	13.5
Solar	5.7	3.0	8.8	6.9	21.8	*3.3	55.0	4.6	7.6
Oil	*0.6	*0.3	*0.5	np	*0.9	2.2	np	*0.7	0.7
Other	**0.2	*0.2	np	*0.5	**0.2	*0.5	np	—	0.2

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) Totals do not equal the sum of items in each column as more than one source of energy may be specified.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

**3.5**

## SOURCES OF ENERGY IN DWELLINGS

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008									
Mains electricity	99.8	99.9	100.0	99.7	100.0	99.1	100.0	100.0	99.9
Mains gas	37.5	81.1	12.5	55.9	68.1	2.8	*7.6	68.4	47.4
LPG/bottled gas	13.1	8.7	18.1	13.2	19.0	13.4	34.1	*0.9	13.5
Wood	13.4	15.2	6.9	15.1	17.4	35.1	*2.6	7.6	13.5
Solar	5.7	3.0	8.8	6.9	21.8	*3.3	55.0	4.6	7.6
Oil	*0.6	*0.3	*0.5	np	*0.9	2.2	np	*0.7	0.7
Other	**0.2	*0.2	np	*0.5	**0.2	*0.5	np	—	0.2
MARCH 2005									
Mains electricity	99.4	97.2	99.5	99.9	99.4	99.6	99.5	99.1	98.9
Mains gas	35.1	81.0	12.4	56.8	67.2	*0.7	*1.1	70.0	46.3
LPG/bottled gas	11.7	7.4	16.9	11.3	15.5	12.1	34.3	*1.1	12.0
Wood	13.8	17.1	9.9	17.6	19.8	46.3	*1.3	6.7	15.4
Solar	3.3	1.8	6.6	3.8	16.8	*1.6	44.3	*2.7	5.2
Oil	1.3	*0.3	*0.5	2.3	1.4	3.6	—	*1.1	1.0
Other	*0.2	*0.2	*0.3	*0.1	*0.3	*0.3	—	—	0.2
MARCH 2002									
Mains electricity	99.6	98.6	99.8	99.9	99.1	99.8	100.0	100.0	99.4
Gas(b)	45.7	88.0	28.9	64.4	79.9	12.5	34.4	63.8	57.3
Wood	15.1	20.2	10.7	21.6	26.1	51.6	*2.7	9.4	17.9
Coal/coke	*0.1	*0.1	—	*0.1	—	—	—	—	—
Solar	2.8	0.9	6.2	3.1	16.1	*0.9	52.5	4.1	4.7
Other	2.2	1.0	2.0	4.0	2.3	4.6	*0.7	*2.0	2.1

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\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) No breakdown between Mains gas and LPG/bottled gas.

### 3.6 MAIN SOURCE OF ENERGY USED FOR OVENS—2008

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
CAPITAL CITY									
<b>Number ('000)</b>									
Mains electricity	1 247.0	852.8	590.8	272.0	455.8	78.8	..	..	3 647.4
Mains gas	313.1	540.4	79.4	183.7	139.5	np	..	..	1 275.3
LPG/bottled gas	*13.7	np	26.5	np	np	np	..	..	66.6
Wood	—	np	*4.9	—	*3.1	—	..	..	*9.4
Solar-photovoltaic	—	—	—	np	np	—	..	..	**1.2
Other	—	—	—	—	—	—	..	..	—
<i>Total</i>	1 573.8	1 400.0	701.7	460.1	603.8	80.9	..	..	5 000.0
<b>Proportion (%)</b>									
Mains electricity	79.2	60.9	84.2	59.1	75.5	97.4	..	..	72.9
Mains gas	19.9	38.6	11.3	39.9	23.1	np	..	..	25.5
LPG/bottled gas	*0.9	np	3.8	np	np	np	..	..	1.3
Wood	—	np	*0.7	—	*0.5	—	..	..	*0.2
Solar-photovoltaic	—	—	—	np	np	—	..	..	—
Other	—	—	—	—	—	—	..	..	—
<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	..	..	100.0
BALANCE OF STATE/TERRITORY									
<b>Number ('000)</b>									
Mains electricity	831.3	381.8	741.9	133.0	109.9	104.8	..	..	2 302.6
Mains gas	96.7	143.7	*17.8	*9.4	23.8	*0.8	..	..	292.2
LPG/bottled gas	80.3	np	64.9	np	np	5.3	..	..	277.1
Wood	*7.0	*4.7	*3.7	np	np	*2.8	..	..	np
Solar-photovoltaic	—	—	—	—	—	—	..	..	—
Other	—	np	—	—	—	—	..	..	np
<i>Total</i>	1 015.3	579.4	828.3	162.6	193.2	113.7	..	..	2 892.5
<b>Proportion (%)</b>									
Mains electricity	81.9	65.9	89.6	81.8	56.9	92.2	..	..	79.6
Mains gas	9.5	24.8	*2.2	*5.8	12.3	*0.7	..	..	10.1
LPG/bottled gas	7.9	np	7.8	np	np	4.6	..	..	9.6
Wood	*0.7	*0.8	*0.4	np	np	*2.5	..	..	np
Solar-photovoltaic	—	—	—	—	—	—	..	..	—
Other	—	np	—	—	—	—	..	..	np
<i>Total</i>	100.0	100.0	100.0	100.0	100.0	100.0	..	..	100.0

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

.. not applicable

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

### 3.6 MAIN SOURCE OF ENERGY USED FOR OVENS—2008 *continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
TOTAL STATE/TERRITORY									
<b>Number ('000)</b>									
Mains electricity	2 078.3	1 234.6	1 332.7	405.0	565.7	183.6	42.7	107.5	5 950.0
Mains gas	409.7	684.2	97.3	193.0	163.3	np	np	17.0	1 567.5
LPG/bottled gas	94.0	54.5	91.3	23.0	63.9	np	9.9	np	343.7
Wood	*7.0	np	*8.7	np	np	*2.8	np	np	np
Solar-photovoltaic	—	—	—	np	np	—	—	—	**1.2
Other	—	np	—	—	—	—	—	—	np
<b>Total</b>	<b>2 589.1</b>	<b>1 979.5</b>	<b>1 529.9</b>	<b>622.7</b>	<b>797.0</b>	<b>194.6</b>	<b>54.8</b>	<b>124.9</b>	<b>7 892.4</b>
<b>Proportion (%)</b>									
Mains electricity	80.3	62.4	87.1	65.0	71.0	94.3	77.9	86.1	75.4
Mains gas	15.8	34.6	6.4	31.0	20.5	np	np	13.6	19.9
LPG/bottled gas	3.6	2.8	6.0	3.7	8.0	np	18.0	np	4.4
Wood	*0.3	np	*0.6	np	np	*1.5	np	np	np
Solar-photovoltaic	—	—	—	np	np	—	—	—	—
Other	—	np	—	—	—	—	—	—	np
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

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Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

### 3.7 MAIN SOURCE OF ENERGY USED FOR COOKTOPS—2008

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
CAPITAL CITY									
<b>Number ('000)</b>									
Mains electricity	993.8	368.2	550.9	195.5	219.0	77.5	..	..	2 522.4
Mains gas	592.4	1 060.0	116.0	271.1	381.1	**0.6	..	..	2 472.5
LPG/bottled gas	37.3	*14.4	63.6	*6.3	*14.8	5.6	..	..	159.0
Electricity and gas combined	*5.6	np	np	**1.2	*4.0	—	..	..	20.5
Wood	—	np	**2.1	np	**1.6	—	..	..	*4.9
Solar-photovoltaic	—	—	np	np	—	—	..	..	**2.1
<i>Total</i>	<i>1 629.1</i>	<i>1 449.1</i>	<i>736.7</i>	<i>474.9</i>	<i>620.4</i>	<i>83.7</i>	<i>..</i>	<i>..</i>	<i>5 181.4</i>
<b>Proportion (%)</b>									
Mains electricity	61.0	25.4	74.8	41.2	35.3	92.6	..	..	48.7
Mains gas	36.4	73.1	15.8	57.1	61.4	**0.8	..	..	47.7
LPG/bottled gas	2.3	*1.0	8.6	*1.3	*2.4	6.7	..	..	3.1
Electricity and gas combined	*0.3	np	np	**0.3	*0.6	—	..	..	0.4
Wood	—	np	**0.3	np	**0.3	—	..	..	*0.1
Solar-photovoltaic	—	—	np	np	—	—	..	..	—
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>..</i>	<i>..</i>	<i>100.0</i>
BALANCE OF STATE/TERRITORY									
<b>Number ('000)</b>									
Mains electricity	748.1	286.2	696.5	129.5	66.2	102.8	..	..	2 029.2
Mains gas	152.9	229.6	31.4	*9.8	49.1	*1.7	..	..	474.4
LPG/bottled gas	128.8	72.6	133.7	27.1	82.3	9.3	..	..	453.7
Electricity and gas combined	**3.6	np	np	—	—	np	..	..	*7.2
Wood	np	np	**2.1	np	np	np	..	..	*15.3
Solar-photovoltaic	np	—	np	np	np	—	..	..	**3.1
<i>Total</i>	<i>1 041.5</i>	<i>593.9</i>	<i>866.0</i>	<i>166.8</i>	<i>198.1</i>	<i>116.6</i>	<i>..</i>	<i>..</i>	<i>2 983.0</i>
<b>Proportion (%)</b>									
Mains electricity	71.8	48.2	80.4	77.6	33.4	88.2	..	..	68.0
Mains gas	14.7	38.7	3.6	*5.9	24.8	*1.5	..	..	15.9
LPG/bottled gas	12.4	12.2	15.4	16.2	41.5	8.0	..	..	15.2
Electricity and gas combined	**0.4	np	np	—	—	np	..	..	*0.2
Wood	np	np	**0.2	np	np	np	..	..	*0.5
Solar-photovoltaic	np	—	np	np	np	—	..	..	**0.1
<i>Total</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>..</i>	<i>..</i>	<i>100.0</i>
* estimate has a relative standard error of 25% to 50% and should be used with caution			np	not available for publication but included in totals where applicable, unless otherwise indicated					
** estimate has a relative standard error greater than 50% and is considered too unreliable for general use			(a)	Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.					
.. not applicable	Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.								
— nil or rounded to zero (including null cells)									

### 3.7 MAIN SOURCE OF ENERGY USED FOR COOKTOPS—2008 *continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
TOTAL STATE/TERRITORY									
<b>Number ('000)</b>									
Mains electricity	1 741.9	654.4	1 247.4	324.9	285.1	180.3	38.4	79.1	4 551.6
Mains gas	745.3	1 289.6	147.4	280.9	430.1	*2.3	*3.9	47.4	2 946.8
LPG/bottled gas	166.1	87.0	197.2	33.4	97.1	14.9	np	np	612.7
Electricity and gas combined	*9.3	*7.4	np	**1.2	*4.0	np	np	np	27.7
Wood	np	*4.7	*4.3	np	np	np	np	—	20.2
Solar-photovoltaic	np	—	np	np	np	—	—	—	*5.2
<b>Total</b>	<b>2 670.7</b>	<b>2 043.0</b>	<b>1 602.7</b>	<b>641.7</b>	<b>818.5</b>	<b>200.3</b>	<b>59.5</b>	<b>127.9</b>	<b>8 164.3</b>
<b>Proportion (%)</b>									
Mains electricity	65.2	32.0	77.8	50.6	34.8	90.0	64.6	61.8	55.8
Mains gas	27.9	63.1	9.2	43.8	52.5	*1.2	*6.5	37.0	36.1
LPG/bottled gas	6.2	4.3	12.3	5.2	11.9	7.4	np	np	7.5
Electricity and gas combined	*0.3	*0.4	np	**0.2	*0.5	np	np	np	0.3
Wood	np	*0.2	*0.3	np	np	np	np	—	0.2
Solar-photovoltaic	np	—	np	np	np	—	—	—	*0.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

## 3.8

## MAIN SOURCE OF ENERGY USED IN SPACE HEATING—2008

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
CAPITAL CITY									
<b>Number ('000)</b>									
Electricity	788.5	252.8	299.7	225.1	192.8	62.3	..	..	1 869.5
Mains gas	274.0	1 090.7	*6.2	163.6	258.4	**0.6	..	..	1 867.9
LPG/bottled gas	33.2	np	np	*3.5	**2.0	*1.6	..	..	54.6
Wood	70.7	38.0	*22.7	25.0	46.3	12.1	..	..	220.8
Oil	*4.8	np	np	*6.5	*3.3	*1.8	..	..	19.9
Other(b)	16.6	23.7	*2.7	8.9	8.4	*1.2	..	..	63.1
No heater used	454.9	42.9	406.1	46.4	113.0	4.7	..	..	1 122.6
<b>Total</b>	<b>1 642.7</b>	<b>1 456.2</b>	<b>742.5</b>	<b>479.1</b>	<b>624.3</b>	<b>84.3</b>	..	..	<b>5 218.5</b>
<b>Proportion (%)</b>									
Electricity	48.0	17.4	40.4	47.0	30.9	73.9	..	..	35.8
Mains gas	16.7	74.9	*0.8	34.1	41.4	**0.7	..	..	35.8
LPG/bottled gas	2.0	np	np	*0.7	**0.3	*1.9	..	..	1.0
Wood	4.3	2.6	*3.1	5.2	7.4	14.3	..	..	4.2
Oil	*0.3	np	np	*1.4	*0.5	*2.2	..	..	0.4
Other(b)	1.0	1.6	*0.4	1.9	1.4	*1.4	..	..	1.2
No heater used	27.7	2.9	54.7	9.7	18.1	5.6	..	..	21.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	..	..	<b>100.0</b>
BALANCE OF STATE/TERRITORY									
<b>Number ('000)</b>									
Electricity	379.5	128.3	282.7	76.1	55.3	69.4	..	..	991.3
Mains gas	191.4	277.3	*9.8	*8.4	32.2	*2.1	..	..	521.2
LPG/bottled gas	74.1	np	np	17.2	np	*2.2	..	..	144.2
Wood	206.9	145.6	67.9	50.2	66.5	39.8	..	..	577.0
Oil	**3.7	np	np	**1.4	np	*0.8	..	..	*11.4
Other(b)	18.0	*12.4	*4.2	*4.2	**2.4	*1.9	..	..	43.1
No heater used	190.7	*9.6	488.5	*10.7	36.3	*1.1	..	..	736.8
<b>Total</b>	<b>1 064.2</b>	<b>600.3</b>	<b>872.6</b>	<b>168.3</b>	<b>202.5</b>	<b>117.3</b>	..	..	<b>3 025.1</b>
<b>Proportion (%)</b>									
Electricity	35.7	21.4	32.4	45.2	27.3	59.1	..	..	32.8
Mains gas	18.0	46.2	*1.1	*5.0	15.9	*1.8	..	..	17.2
LPG/bottled gas	7.0	np	np	10.2	np	*1.9	..	..	4.8
Wood	19.4	24.3	7.8	29.8	32.9	33.9	..	..	19.1
Oil	**0.3	np	np	**0.9	np	*0.6	..	..	*0.4
Other(b)	1.7	*2.1	*0.5	*2.5	**1.2	*1.6	..	..	1.4
No heater used	17.9	*1.6	56.0	*6.3	17.9	*0.9	..	..	24.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	..	..	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

.. not applicable

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) Includes 'Did not know/varies'.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

### 3.8 MAIN SOURCE OF ENERGY USED IN SPACE HEATING—2008 *continued* .....

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
TOTAL STATE/TERRITORY									
<b>Number ('000)</b>									
Electricity	1 168.0	381.2	582.5	301.2	248.2	131.6	*2.9	45.3	2 860.9
Mains gas	465.3	1 368.0	16.1	172.0	290.6	*2.7	**0.8	73.6	2 389.1
LPG/bottled gas	107.3	32.6	20.0	20.7	np	3.8	*3.3	np	198.8
Wood	277.6	183.6	90.7	75.2	112.8	51.9	*1.1	5.0	797.8
Oil	*8.5	**2.4	*4.4	*7.9	np	2.6	np	*0.9	31.4
Other(b)	34.6	36.2	*6.9	13.2	10.8	*3.1	np	np	106.2
No heater used	645.6	52.5	894.5	57.1	149.3	5.8	52.6	*2.0	1 859.5
<b>Total</b>	<b>2 706.9</b>	<b>2 056.5</b>	<b>1 615.1</b>	<b>647.4</b>	<b>826.8</b>	<b>201.6</b>	<b>61.0</b>	<b>128.4</b>	<b>8 243.6</b>
<b>Proportion (%)</b>									
Electricity	43.1	18.5	36.1	46.5	30.0	65.3	*4.8	35.3	34.7
Mains gas	17.2	66.5	1.0	26.6	35.1	*1.3	**1.3	57.3	29.0
LPG/bottled gas	4.0	1.6	1.2	3.2	np	1.9	*5.4	np	2.4
Wood	10.3	8.9	5.6	11.6	13.6	25.7	*1.8	3.9	9.7
Oil	*0.3	**0.1	*0.3	*1.2	np	1.3	np	*0.7	0.4
Other(b)	1.3	1.8	*0.4	2.0	1.3	*1.6	np	np	1.3
No heater used	23.9	2.6	55.4	8.8	18.1	2.9	86.3	*1.6	22.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) Includes 'Did not know/varies'.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.



**3.9****MAIN SOURCE OF ENERGY USED IN SPACE HEATING**

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008									
Electricity	43.1	18.5	36.1	46.5	30.0	65.3	*4.8	35.3	34.7
Mains gas	17.2	66.5	1.0	26.6	35.1	*1.3	**1.3	57.3	29.0
LPG/bottled gas	4.0	1.6	1.2	3.2	np	1.9	*5.4	np	2.4
Wood	10.3	8.9	5.6	11.6	13.6	25.7	*1.8	3.9	9.7
Oil	*0.3	**0.1	*0.3	*1.2	np	1.3	np	*0.7	0.4
Other(b)	1.3	1.8	*0.4	2.0	1.3	*1.6	np	np	1.3
No heater used	23.9	2.6	55.4	8.8	18.1	2.9	86.3	*1.6	22.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
Electricity	44.3	14.7	32.0	42.2	24.5	55.3	*4.3	34.0	32.3
Mains gas	16.1	69.1	1.2	29.3	39.6	*0.1	—	59.9	29.8
LPG/bottled gas	5.1	2.1	1.5	4.0	2.3	3.9	*5.4	—	3.2
Wood	10.9	11.2	7.8	14.1	15.7	37.5	*1.3	*2.9	11.6
Oil	0.8	*0.2	*0.4	1.8	*0.8	*1.7	—	*0.8	0.7
Other(b)	*0.3	0.9	*0.6	*0.6	*1.0	*0.3	—	*0.6	0.6
No heater used	22.5	1.9	56.5	7.9	16.0	*1.1	89.0	*1.7	21.8
<b>Total (c)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
Electricity	44.4	12.9	31.3	39.3	20.0	45.7	2.4	37.4	30.9
Gas(d)	23.7	72.7	3.0	32.7	41.0	5.3	3.2	56.3	34.2
Wood	11.8	12.4	9.7	17.4	22.1	45.2	2.2	4.3	13.7
Oil	1.6	*0.5	*0.7	2.7	1.3	2.7	*0.7	*1.7	1.2
Other(b)	*0.2	*0.4	0.9	*0.6	*0.5	*0.1	—	—	0.4
No heater used	18.2	1.0	54.4	7.3	15.1	1.0	91.6	0.3	19.5
<b>Total (c)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
Electricity	42.2	11.9	24.3	38.4	16.6	33.1	*3.8	38.5	28.0
Gas(d)	21.9	71.5	2.6	32.3	39.0	6.0	*3.4	50.7	32.9
Wood	14.7	13.8	9.7	17.7	24.7	56.2	*3.4	*5.7	15.7
Coal/coke	*0.1	—	—	*0.1	—	—	—	—	—
Oil	2.7	1.0	1.8	3.9	2.2	*3.3	—	*3.3	2.2
Other(b)	0.6	*0.5	1.5	*0.4	*0.7	*0.4	—	*0.7	0.7
No heater used	17.8	1.2	60.1	7.2	16.8	*1.1	89.5	*0.9	20.4
<b>Total (c)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

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(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) Includes Did not know/varies.

(c) Includes Solar.

(d) No breakdown between Mains gas and LPG/bottled gas.

### 3.10 SOURCES OF ENERGY USED IN HEATING WATER—2008

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
CAPITAL CITY									
<b>Number ('000)</b>									
Electricity									
Peak electricity	200.2	108.0	64.4	16.2	103.0	32.9	..	..	573.5
Off-peak electricity	643.0	165.4	341.3	120.4	*10.1	32.6	..	..	1 346.8
Total	843.2	273.4	405.7	136.5	113.1	65.5	..	..	1 920.3
Gas									
Mains gas	501.8	np	93.9	273.4	387.6	np	..	..	2 399.9
LPG/bottled gas	*7.1	np	34.6	*3.2	*8.2	np	..	..	63.7
Total	508.8	1 101.1	128.5	276.6	395.7	*2.5	..	..	2 463.6
Wood	—	np	—	np	**3.5	np	..	..	np
Solar	63.6	32.0	61.0	29.1	114.0	np	..	..	339.6
Oil	—	—	—	np	—	—	..	..	np
Other	—	—	—	—	—	—	..	..	—
Did not know	243.5	86.8	151.5	41.0	26.9	15.1	..	..	585.2
Total dwellings(b)	1 642.7	1 456.2	742.5	479.1	624.3	84.3	..	..	5 218.5
<b>Proportion (%)</b>									
Electricity									
Peak electricity	12.2	7.4	8.7	3.4	16.5	39.0	..	..	11.0
Off-peak electricity	39.1	11.4	46.0	25.1	*1.6	38.7	..	..	25.8
Total	51.3	18.8	54.6	28.5	18.1	77.7	..	..	36.8
Gas									
Mains gas	30.5	np	12.6	57.1	62.1	np	..	..	46.0
LPG/bottled gas	*0.4	np	4.7	*0.7	*1.3	np	..	..	1.2
Total	31.0	75.6	17.3	57.7	63.4	*2.9	..	..	47.2
Wood	—	np	—	np	**0.6	np	..	..	np
Solar	3.9	2.2	8.2	6.1	18.3	np	..	..	6.5
Oil	—	—	—	np	—	—	..	..	np
Other	—	—	—	—	—	—	..	..	—
Did not know	14.8	6.0	20.4	8.6	4.3	17.9	..	..	11.2

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\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

.. not applicable

— nil or rounded to zero (including null cells)

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(b) Totals do not equal the sum of items in each column as more than one source of energy may be specified.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

**3.10****SOURCES OF ENERGY USED IN HEATING WATER—2008** *continued*

NSW Vic. Qld SA WA Tas. NT(a) ACT Aust.

## BALANCE OF STATE/TERRITORY

**Number ('000)**

<b>Electricity</b>									
Peak electricity	95.5	21.0	106.0	*7.2	43.2	61.4	..	..	334.3
Off-peak electricity	632.8	292.8	454.4	120.0	*6.5	31.5	..	..	1 538.1
Total	728.4	313.8	560.4	127.2	49.7	92.9	..	..	1 872.4
<b>Gas</b>									
Mains gas	146.0	np	25.2	*9.9	45.1	np	..	..	453.8
LPG/bottled gas	*35.0	np	35.1	12.4	42.3	np	..	..	153.3
Total	181.0	249.9	60.3	22.3	87.4	*6.1	..	..	607.1
Wood	*7.4	**4.7	**2.0	np	**2.4	np	..	..	np
Solar	71.0	21.1	76.5	np	63.7	np	..	..	248.1
Oil	np	—	—	—	—	—	..	..	np
Other	np	np	—	np	—	—	..	..	**2.5
Did not know	83.6	23.9	179.6	8.0	*4.5	13.4	..	..	313.0
Total dwellings(b)	1 064.2	600.3	872.6	168.3	202.5	117.3	..	..	3 025.1

**Proportion (%)**

<b>Electricity</b>									
Peak electricity	9.0	3.5	12.1	*4.3	21.3	52.4	..	..	11.1
Off-peak electricity	59.5	48.8	52.1	71.3	*3.2	26.9	..	..	50.8
Total	68.4	52.3	64.2	75.6	24.5	79.3	..	..	61.9
<b>Gas</b>									
Mains gas	13.7	np	2.9	*5.9	22.3	np	..	..	15.0
LPG/bottled gas	*3.3	np	4.0	7.4	20.9	np	..	..	5.1
Total	17.0	41.6	6.9	13.3	43.2	*5.2	..	..	20.1
Wood	*0.7	**0.8	**0.2	np	**1.2	np	..	..	np
Solar	6.7	3.5	8.8	np	31.4	np	..	..	8.2
Oil	np	—	—	—	—	—	..	..	np
Other	np	np	—	np	—	—	..	..	**0.1
Did not know	7.9	4.0	20.6	4.8	*2.2	11.5	..	..	10.3

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(b) Totals do not equal the sum of items in each column as more than one source of energy may be specified.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

### 3.10 SOURCES OF ENERGY USED IN HEATING WATER—2008 *continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
TOTAL STATE/TERRITORY									
<b>Number ('000)</b>									
Electricity									
Peak electricity	295.7	129.0	170.4	23.4	146.2	94.3	20.9	28.0	907.8
Off-peak electricity	1 275.9	458.2	795.7	240.4	16.6	64.1	*1.6	32.4	2 884.8
Total	1 571.6	587.2	966.1	263.8	162.8	158.5	22.5	60.4	3 792.7
Gas									
Mains gas	647.8	1 320.7	119.1	283.3	432.7	np	**0.8	np	2 853.7
LPG/bottled gas	42.1	30.4	69.7	15.6	50.5	np	*2.8	np	217.0
Total	689.9	1 351.0	188.8	298.9	483.2	8.5	*3.6	46.8	3 070.7
Wood	*7.4	np	**2.0	**1.3	**5.9	np	—	—	np
Solar	134.6	53.1	137.5	np	177.6	5.1	33.1	np	587.8
Oil	np	—	—	np	—	—	—	—	np
Other	np	np	—	np	—	—	—	—	**2.5
Did not know	327.1	110.7	331.1	49.0	31.3	28.6	3.5	16.9	898.2
<b>Total dwellings<sup>(b)</sup></b>	<b>2 706.9</b>	<b>2 056.5</b>	<b>1 615.1</b>	<b>647.4</b>	<b>826.8</b>	<b>201.6</b>	<b>61.0</b>	<b>128.4</b>	<b>8 243.6</b>
<b>Proportion (%)</b>									
Electricity									
Peak electricity	10.9	6.3	10.6	3.6	17.7	46.8	34.3	21.8	11.0
Off-peak electricity	47.1	22.3	49.3	37.1	2.0	31.8	*2.6	25.2	35.0
Total	58.1	28.6	59.8	40.7	19.7	78.6	36.9	47.1	46.0
Gas									
Mains gas	23.9	64.2	7.4	43.8	52.3	np	**1.2	np	34.6
LPG/bottled gas	1.6	1.5	4.3	2.4	6.1	np	*4.6	np	2.6
Total	25.5	65.7	11.7	46.2	58.4	4.2	*5.9	36.4	37.2
Wood	*0.3	np	**0.1	**0.2	**0.7	np	—	—	np
Solar	5.0	2.6	8.5	np	21.5	2.5	54.3	np	7.1
Oil	np	—	—	np	—	—	—	—	np
Other	np	np	—	np	—	—	—	—	—
Did not know	12.1	5.4	20.5	7.6	3.8	14.2	5.7	13.1	10.9

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(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) Totals do not equal the sum of items in each column as more than one source of energy may be specified.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

### 3.11 SOURCES OF ENERGY USED IN HEATING WATER

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008									
Peak electricity	10.9	6.3	10.6	3.6	17.7	46.8	34.3	21.8	11.0
Off-peak electricity	47.1	22.3	49.3	37.1	2.0	31.8	*2.6	25.2	35.0
Mains gas	23.9	64.2	7.4	43.8	52.3	np	**1.2	np	34.6
LPG/bottled gas	1.6	1.5	4.3	2.4	6.1	np	*4.6	np	2.6
Wood	*0.3	np	**0.1	**0.2	**0.7	np	—	—	np
Solar	5.0	2.6	8.5	np	21.5	2.5	54.3	np	7.1
Oil	np	—	—	np	—	—	—	—	np
Other	np	np	—	np	—	—	—	—	—
Did not know	12.1	5.4	20.5	7.6	3.8	14.2	5.7	13.1	10.9
MARCH 2005									
Peak electricity	17.3	8.3	18.1	7.6	21.2	71.2	57.6	27.5	16.6
Off-peak electricity	46.5	20.2	50.3	35.9	1.9	19.0	*4.0	21.6	34.1
Mains gas	23.9	66.6	9.2	48.4	53.9	*0.1	*0.5	41.9	36.0
LPG/bottled gas	1.3	1.4	4.0	2.4	6.9	*1.3	*2.2	*0.2	2.5
Wood	0.6	*0.6	*0.3	*0.3	*1.2	2.5	—	*0.4	0.6
Solar	2.5	1.0	5.9	3.2	15.8	*1.1	41.9	*2.4	4.4
Oil	—	—	—	—	*0.1	—	—	—	—
Other	—	*0.1	—	—	—	*0.1	—	—	—
Did not know	8.6	3.1	14.3	3.7	3.5	6.4	*2.7	6.8	7.3
MARCH 2002									
Peak electricity	33.1	13.9	45.9	22.4	26.0	91.0	54.7	42.3	31.0
Off-peak electricity	45.9	20.2	37.3	29.3	*0.5	8.5	*0.7	25.1	30.4
Gas(b)	23.4	66.7	14.4	49.2	60.5	*1.1	*5.2	32.1	37.6
Wood	0.5	0.6	*0.4	*0.3	1.4	*1.7	*0.4	—	0.6
Solar	2.4	0.6	5.6	2.9	15.7	*0.6	52.5	3.3	4.3
Oil	—	—	—	*0.1	*0.1	—	—	—	—
Other	*0.2	*0.1	*0.4	*0.1	*0.1	*0.3	—	—	0.2
Did not know	2.2	1.1	2.1	*0.7	1.0	*0.2	*0.5	*1.2	1.6
MARCH 1999									
Electricity	75.9	34.1	80.6	50.8	24.7	96.5	55.5	69.4	59.6
Gas(b)	20.8	64.6	13.4	47.1	56.3	*1.4	*2.4	29.2	35.4
Wood	0.7	1.4	*0.6	*0.5	2.2	*2.3	—	—	1.0
Solar	2.7	0.9	6.0	2.5	19.6	*0.9	43.7	*3.4	4.8
Oil	*0.1	—	—	—	*0.1	—	—	—	—
Other	*0.1	*0.1	*0.4	*0.1	—	*0.2	*0.4	—	0.2
Did not know	0.8	*0.3	*0.4	*0.5	*0.5	*0.2	—	*0.1	0.5

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) No breakdown between Mains gas and LPG/bottled gas.

**3.12**

## SOLAR HOT WATER SYSTEM, Type of booster .....

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008									
Electric	77.0	39.1	90.3	79.4	81.9	79.5	89.9	79.4	79.1
Mains gas	*6.7	44.7	np	*6.1	7.1	np	—	*16.4	8.5
LPG/bottled gas	np	np	np	**3.2	*2.1	np	**1.4	—	*1.6
Wood	np	np	—	—	*4.1	np	—	—	*1.7
Not boosted(b)	*5.4	*6.1	*2.6	**5.4	*2.7	np	*4.5	np	3.9
Did not know	*8.1	**5.6	*5.7	**5.9	*2.2	np	*4.3	np	5.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

MARCH 2005									
Electric	93.9	65.4	91.9	92.8	92.1	*56.4	81.0	*66.7	89.7
Mains gas	—	*25.8	—	*3.4	*2.6	—	—	*13.4	*2.7
LPG/bottled gas	—	—	*2.2	—	*0.3	*9.6	—	—	*0.8
Wood	—	—	—	*1.9	*3.7	—	—	—	*1.4
Not boosted	*5.0	*8.8	*3.2	*1.9	*1.4	*17.6	*16.6	*13.2	4.2
Did not know	*1.1	—	*2.7	—	—	*16.4	*2.4	*6.7	*1.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

MARCH 2002									
Electric	95.1	69.9	94.7	92.5	95.0	68.0	86.4	100.0	93.1
Gas(c)	3.7	15.1	0.7	3.3	1.0	—	3.0	—	2.2
Did not know	1.2	15.0	4.6	4.2	4.0	32.0	10.6	—	4.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

MARCH 1999									
Electric	90.2	72.2	93.4	97.7	94.5	77.4	87.6	86.2	92.0
Gas(c)	1.0	19.8	1.2	—	2.0	—	0.9	3.7	2.3
Did not know	8.8	7.9	5.4	2.3	3.5	22.6	11.5	10.1	5.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) Includes systems which are heat pumps, e.g. Quantum systems, which are not boosted, but are still solar systems.

(c) No breakdown between Mains gas and LPG/bottled gas.

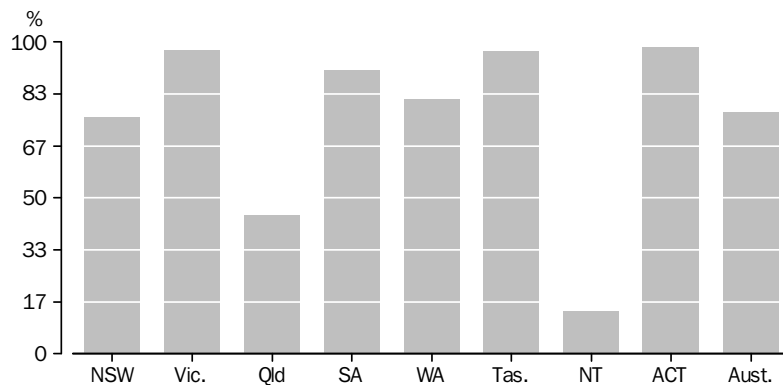
INTRODUCTION

This chapter describes the characteristics of heaters and coolers in Australian dwellings and their frequency of use. Heaters and coolers are major contributors to household energy use and costs. Together, they are reported to account for more than two-fifths (41%) of total household energy use and nearly one-fifth (19%) of the residential sector greenhouse gas emissions in 2005 (DCC 2008). However, less than 2% of Australian households chose their type of heating on the basis of environmental considerations (table 4.9).

HEATERS

Nearly eight in ten dwellings (77%) across Australia had a heater in 2008 (graph 4.1 and table 5.3). In the southern states of the Australian Capital Territory, Victoria, Tasmania and South Australia over 90% of dwellings had heaters.

**4.1** HEATERS IN DWELLINGS—2008

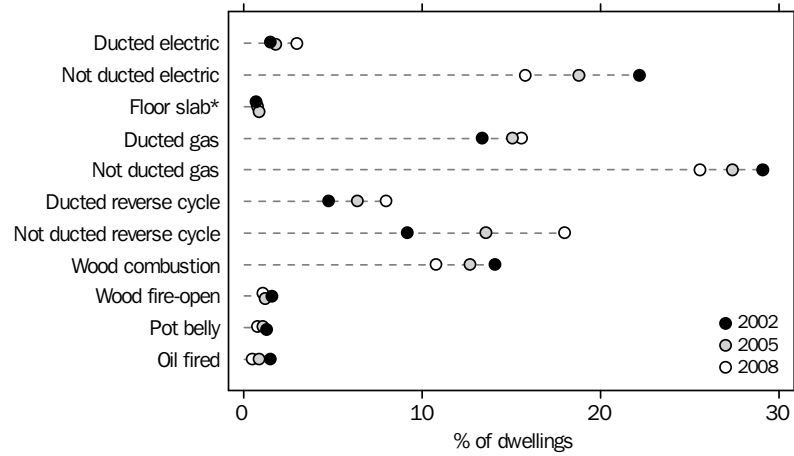


Nearly one-third (32%) of dwellings with heaters had two or more heaters in use in their homes – a slight increase from 30% in 2002 (table 4.7).

Gas, not ducted, was the most common type of main heating in Australian dwellings in 2008 (26% of dwellings), followed by reverse cycle air conditioners, not ducted (18%), and then electric, not ducted (16%), and ducted gas heaters (16%) (graph 4.2 and table 4.8). Wood combustion heaters were the main type of heating in 11% of households with heaters, falling from 14% in 2002. Wood combustion heaters were more commonly used in Tasmania (23%) than in the other states and territories.

HEATERS *continued*

**4.2** HEATERS IN DWELLINGS, Main type

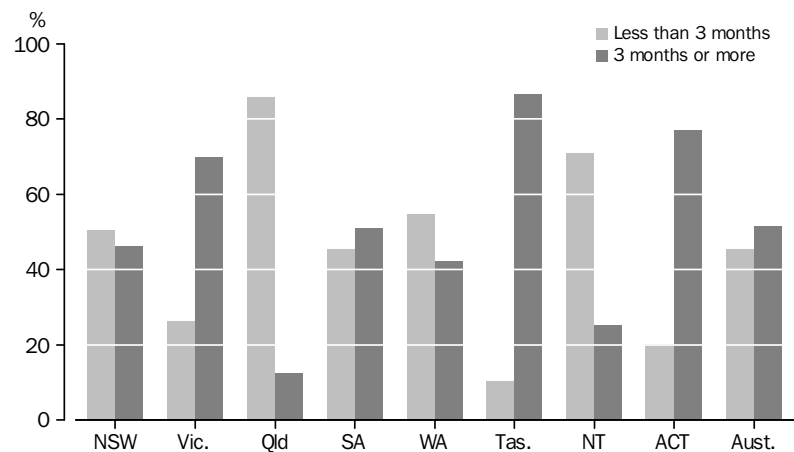


Over one-third of households (39%) nominated 'Comfort/convenience' as the main reason for their choice of heater (regardless of type). Less than 2% of Australian households chose their type of heating based on environmental considerations.

'Comfort/convenience' was cited by nearly half of households with ducted reverse cycle air conditioners (49%) and households with electric heaters (45%) (table 4.9).

The frequency of heater use differs across climatic zones. Households in the cooler and temperate climates of Tasmania, Victoria and the Australian Capital Territory used heaters more frequently than households in the warmer areas e.g. Northern Territory and Queensland (graph 4.3 and table 4.10).

**4.3** DWELLINGS WITH HEATER, Number of months used—2008



Between 2005 and 2008, the duration of use of heaters decreased for Australia as a whole, with the '6 months or more' category falling from 13% of households in 2005 to 7% in 2008. All states and territories reflected the national trend. In Victoria, 12% of households used heating for 6 months or more in 2008, down from 25% of households in 2005.

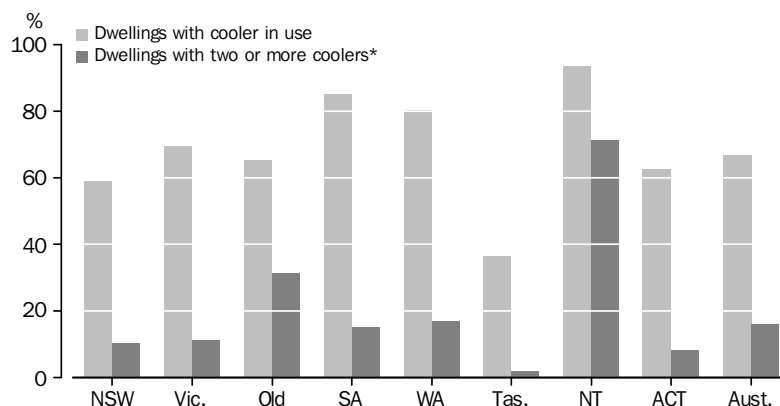


COOLERS

Despite its low contribution to total household energy consumption, cooling attracts considerable interest because energy consumption for cooling has grown rapidly and this is forecast to continue. Modelling shows a fourfold increase in energy consumption for electric space cooling, up from 3 petajoules in 1990 to 12.5 petajoules in 2008. All cooling uses electricity which has implications for greenhouse gas emissions and the demand on the electricity grid on peak summer days (DEWHA 2008b).

Two-thirds (66%) of dwellings in Australia used some form of cooling (i.e. air conditioner or evaporative cooler) in 2008, up from 59% in 2005 and 35% in 1999 (graph 4.4 and table 4.11). In the Northern Territory, more than nine in ten dwellings (93%) used a cooler in 2008.

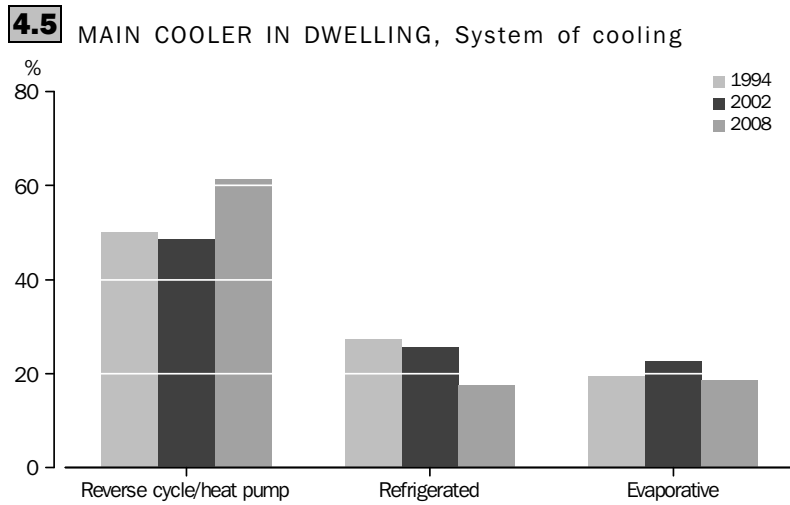
**4.4** DWELLINGS WITH COOLER, Number of units in use—2008



\* As a proportion of dwellings with coolers.

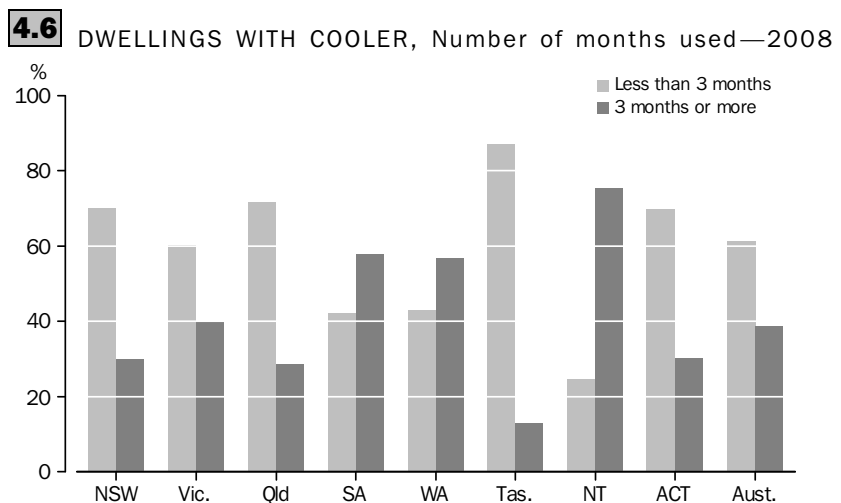
Since 1994, the most popular system of cooling in Australia has been reverse cycle/heat pump air conditioning (61% in 2008, up from 57% in 2005 and 50% in 1994) (graph 4.5 and table 4.12). In every state and territory except the Australian Capital Territory, the proportion of dwellings mainly using reverse cycle/heat pump cooling has increased by more than ten percentage points between 1999 and 2008. However, in the Northern Territory, the refrigerated system (59%) was the main system of cooling in 2008, although this has declined from 77% in 1999.

COOLERS *continued*



There was a substantial increase in the proportion of dwellings with split system coolers as their main cooling system, from 18% in 2002 to 30% in 2005 to 40% in 2008. Increases were seen in every state and territory, in particular in Queensland (from 47% in 2005 to 59% in 2008) and New South Wales (30% in 2005 to 40% in 2008) (table 4.13). Ducted coolers were more common in South Australia (45%), Western Australia (43%) and the Australian Capital Territory (39%).

Not surprisingly, the Northern Territory used coolers for a longer period compared with other regions of Australia (graph 4.6 and table 4.14). In the Northern Territory, more than a third (35%) of households used their coolers for 6 months or more in a year, whereas more than half the households in Tasmania (55%) used their coolers for less than one month in the year.



**4.7****DWELLINGS WITH HEATER(a), Number of units in use**

	NSW	Vic.	Qld	SA	WA	Tas.	NT(b)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008									
One	65.5	72.3	61.0	68.2	71.1	53.3	59.7	71.9	67.7
Two	24.5	20.8	23.6	24.4	22.5	29.2	*20.0	18.5	23.0
Three or more	9.8	6.8	13.5	7.0	5.9	np	np	9.6	8.8
None	*0.3	*0.2	1.9	*0.4	*0.5	np	np	—	0.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
One	60.0	72.4	67.7	68.1	69.8	42.5	*74.4	69.5	66.1
Two	28.0	20.5	21.1	24.2	23.5	31.7	*22.5	18.3	24.0
Three or more	10.3	6.5	8.3	6.4	5.2	25.4	—	11.9	8.5
None	1.6	*0.6	2.9	*1.4	*1.5	*0.3	*3.0	*0.4	1.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
One	66.0	73.8	72.3	69.3	73.5	51.3	82.1	58.6	69.5
Two	24.0	20.6	21.3	24.4	20.9	30.8	*4.3	26.0	22.7
Three or more	10.0	5.6	6.3	6.3	5.5	17.9	*13.7	15.4	7.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
One	66.8	71.8	72.7	62.3	76.5	52.0	66.7	54.0	68.7
Two	25.3	22.9	19.9	29.1	19.8	30.0	29.1	28.1	24.1
Three or more	7.9	5.3	7.4	8.6	3.7	18.0	4.2	17.9	7.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
JUNE 1994									
One	55.6	61.2	64.9	47.6	59.6	34.9	66.1	33.2	56.7
Two	29.6	26.4	24.3	31.4	29.2	31.2	26.9	26.6	28.3
Three or more	14.7	12.4	10.7	20.9	11.2	33.9	7.0	40.2	15.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Includes only dwellings with heater/s.

(b) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

**4.8**

## HEATERS IN DWELLINGS(a), Main type

	NSW	Vic.	Qld	SA	WA	Tas.	NT(b)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008									
Electric									
Ducted	3.8	2.9	2.3	1.8	2.0	2.5	—	4.5	3.0
Not ducted	22.7	8.9	18.2	12.8	9.2	37.2	**6.9	16.1	15.8
Floor slab	*0.6	*1.4	np	*0.4	np	*1.9	—	*2.3	0.8
Gas									
Ducted	3.9	40.0	**0.6	4.2	4.4	*1.0	—	41.3	15.6
Not ducted	24.3	31.2	4.5	29.2	40.7	2.4	49.7	17.7	25.6
Reverse cycle									
Ducted	10.5	2.0	12.3	15.9	8.0	5.4	—	6.2	8.0
Not ducted	20.1	4.2	48.7	21.2	17.5	21.1	*28.2	7.1	18.0
Wood									
Combustion	12.1	8.5	9.1	10.9	13.3	22.8	**9.8	*3.8	10.8
Fire-open	1.2	*0.5	*1.9	*1.2	*1.3	*2.5	—	—	1.1
Pot-belly	*0.4	*0.3	1.8	*0.9	2.3	*1.6	np	np	0.8
Oil (oil-fired)	*0.4	**0.1	np	*1.4	*0.7	np	np	np	0.5
Other	—	—	—	**0.2	np	np	—	—	*—
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## MARCH 2005

Electric									
Ducted	2.2	1.7	*0.7	2.1	*1.1	*1.9	—	*3.3	1.8
Not ducted	26.9	8.6	27.0	14.5	13.0	37.2	*27.7	21.4	18.8
Floor slab	1.1	1.1	0.1	1.0	—	2.7	—	*1.5	0.9
Gas									
Ducted	3.4	40.1	*0.2	3.4	4.2	—	—	42.0	15.1
Not ducted	24.0	33.0	6.0	33.0	46.2	4.1	*49.1	19.3	27.4
Reverse cycle									
Ducted	10.7	*0.7	8.2	11.0	5.3	3.2	*3.1	3.7	6.4
Not ducted	16.2	3.0	38.3	17.6	10.0	10.9	*8.4	4.9	13.6
Wood									
Combustion	12.1	10.4	13.1	13.6	15.1	35.9	*6.7	*2.8	12.7
Fire-open	1.3	0.9	*2.0	*1.1	*0.9	*1.5	*4.9	*0.2	1.2
Pot-belly	*0.7	*0.3	3.0	*0.7	2.8	*0.5	—	—	1.1
Oil (oil-fired)	1.1	*0.2	*0.9	1.9	*1.0	*1.8	—	*0.8	0.9
Other	0.1	*0.1	*0.4	*0.1	*0.2	*0.3	—	—	*0.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Includes only dwellings with at least a heater in use and respondents were aware of its type.

(b) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

**4.9**

## HOUSEHOLDS RESPONSIBLE FOR INSTALLING MAIN HEATER, Main reason for choice of heater—2008

	ELECTRIC HEATER				GAS HEATER			REVERSE CYCLE		
	Ducted	Not ducted	Floor slab	Total	Ducted	Not ducted	Total	Ducted	Not ducted	Total
	%	%	%	%	%	%	%	%	%	%
Cost price	30.9	24.3	*8.1	24.7	15.0	24.3	21.1	17.7	18.2	18.0
Save on energy bills	11.4	5.5	np	np	13.8	23.5	20.1	8.5	8.5	8.5
Use less energy	9.4	4.2	*12.5	5.2	18.5	16.0	16.9	15.7	12.5	13.5
Comfort/convenience	40.9	45.0	51.7	44.7	44.0	25.0	31.6	49.0	45.9	46.8
Environmental considerations	np	*1.3	np	*1.2	*1.6	2.0	1.9	**0.3	*1.2	0.9
Appearance	—	**0.4	—	**0.4	np	np	*1.2	**0.8	*0.3	*0.5
Financial incentive/subsidy	—	**0.3	—	**0.2	np	np	*0.5	—	*0.4	*0.3
Recommended by friend/expert	np	*1.0	np	np	2.4	1.6	1.9	*2.1	3.0	2.8
Other	*4.0	18.0	*14.6	16.0	4.1	5.4	4.9	5.9	9.9	8.7

	WOOD HEATER				OIL HEATER	
	Combustion	Fire-open	Pot belly	Total	Oil-fired heater	All types
	%	%	%	%	%	%
Cost price	17.0	*14.1	*21.5	17.0	*21.3	20.5
Save on energy bills	23.7	*19.6	*26.1	23.6	np	14.0
Use less energy	11.0	*6.6	**6.2	10.5	*13.5	12.4
Comfort/convenience	29.2	*30.4	*26.2	29.1	*33.8	38.7
Environmental considerations	*2.5	—	—	*2.2	—	1.5
Appearance	4.2	*18.0	**6.7	5.2	—	1.3
Financial incentive/subsidy	**0.2	—	—	**0.2	—	0.3
Recommended by friend/expert	**0.7	—	—	**0.6	np	1.9
Other	11.5	*11.2	*13.2	11.6	*21.5	9.5

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

## 4.10 HOUSEHOLDS WITH AT LEAST ONE HEATER IN USE, Number of months used ...

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
MARCH 2008									
<b>Number ('000)</b>									
Less than 1 month	279.8	107.1	349.8	59.3	90.1	8.6	*1.3	5.9	901.9
1 month to less than 3 months	758.5	421.9	267.5	207.1	279.0	11.5	*4.4	19.6	1 969.6
3 months to less than 6 months	864.0	1 162.0	86.1	269.0	270.6	95.2	*2.3	78.5	2 827.6
6 months or more	86.2	238.7	*6.1	32.9	17.6	74.8	—	18.8	475.2
Did not know	72.7	74.3	11.1	22.0	20.2	5.7	**0.4	*3.5	209.8
<b>Total</b>	<b>2 061.3</b>	<b>2 004.0</b>	<b>720.6</b>	<b>590.3</b>	<b>677.6</b>	<b>195.8</b>	<b>*8.4</b>	<b>126.3</b>	<b>6 384.1</b>
<b>Proportion (%)</b>									
Less than 1 month	13.6	5.3	48.5	10.0	13.3	4.4	*15.4	4.7	14.1
1 month to less than 3 months	36.7	21.0	36.4	34.9	41.0	5.8	48.6	15.5	30.7
3 months to less than 6 months	41.8	57.9	11.7	45.4	39.7	48.6	25.1	62.1	44.1
6 months or more	4.2	11.9	*0.8	5.6	2.6	38.2	—	14.9	7.4
Did not know	3.5	3.7	1.5	3.7	3.0	2.9	*4.2	*2.8	3.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
<b>Proportion (%)</b>									
Less than 1 month	13.4	6.1	40.8	12.9	14.3	4.0	*41.4	4.3	13.8
1 month to less than 3 months	35.7	15.0	36.9	28.4	32.0	5.4	*36.4	5.9	26.8
3 months to less than 6 months	42.8	50.9	19.3	49.0	46.2	37.2	*20.7	65.0	44.0
6 months or more	5.0	25.0	1.4	6.6	4.0	51.8	—	22.1	12.6
Did not know	3.1	3.1	1.6	3.0	3.5	1.7	*1.5	*2.7	2.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
<b>Proportion (%)</b>									
Less than 1 month	11.5	6.4	35.1	12.1	12.9	4.4	*25.4	4.9	12.4
1 month to less than 3 months	35.4	18.3	42.7	30.0	34.8	6.5	*56.5	11.1	29.1
3 months to less than 6 months	44.7	48.5	16.8	45.1	43.7	43.0	*18.0	65.0	43.1
6 months or more	3.0	22.8	*0.5	8.9	4.5	42.1	—	14.6	10.9
Did not know	5.4	4.0	4.9	3.9	4.1	3.9	—	4.4	4.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

**4.11****DWELLINGS WITH COOLER(a), Number of units in use**

	NSW	Vic.	Qld	SA	WA	Tas.	NT(b)	ACT	Aust.
MARCH 2008									
Dwellings with cooler in use ('000)	1 579.0	1 428.3	1 043.4	550.2	661.9	71.5	56.6	80.0	5 470.9
Proportion of all dwellings (%)	58.3	69.5	64.6	85.0	80.0	35.5	92.9	62.3	66.4
MARCH 2005									
Dwellings with cooler in use ('000)	1 391.2	1 152.1	886.2	541.0	542.5	37.7	50.3	60.0	4 661.0
Proportion of all dwellings (%)	53.7	60.1	57.8	84.1	68.8	19.2	91.9	47.9	59.4
MARCH 2002									
Dwellings with cooler in use ('000)	1 074.7	972.4	551.1	487.9	444.4	19.5	48.8	35.7	3 634.6
Proportion of all dwellings (%)	43.5	52.9	38.5	79.6	59.0	10.3	89.3	28.9	48.6
MARCH 1999									
Dwellings with cooler in use ('000)	659.2	757.8	330.3	329.1	324.9	4.7	43.6	23.5	2 473.0
Proportion of all dwellings (%)	27.6	43.5	24.8	54.3	45.4	2.5	83.6	19.9	34.7
JUNE 1994									
Dwellings with cooler in use ('000)	664.7	593.5	201.2	349.1	217.0	4.3	35.3	17.3	2 082.4
Proportion of all dwellings (%)	30.8	36.9	17.6	61.5	35.5	2.4	76.4	16.7	32.5

(a) In this survey, a cooler refers to an air conditioner or evaporative cooler.

(b) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

## 4.12 MAIN COOLER IN DWELLING(a), System of cooling .....

	NSW	Vic.	Qld	SA	WA	Tas.	NT(b)	ACT	Aust.
MARCH 2008									
<b>Number ('000)</b>									
Reverse cycle/heat pump	1 227.5	598.1	732.5	326.9	344.0	68.7	12.1	45.0	3 354.9
Refrigerated	134.4	405.3	220.3	72.4	89.5	np	33.2	np	964.0
Evaporative	182.7	387.2	45.6	144.0	222.7	*2.0	*9.9	25.9	1 019.9
Did not know	34.4	37.7	45.0	7.0	*5.6	np	*1.4	np	132.1
<b>Total</b>	<b>1 579.0</b>	<b>1 428.3</b>	<b>1 043.4</b>	<b>550.2</b>	<b>661.9</b>	<b>71.5</b>	<b>56.6</b>	<b>80.0</b>	<b>5 470.9</b>
<b>Proportion (%)</b>									
Reverse cycle/heat pump	77.7	41.9	70.2	59.4	52.0	96.1	21.3	56.3	61.3
Refrigerated	8.5	28.4	21.1	13.2	13.5	np	58.7	np	17.6
Evaporative	11.6	27.1	4.4	26.2	33.6	*2.7	*17.5	32.3	18.6
Did not know	2.2	2.6	4.3	1.3	*0.9	np	*2.5	np	2.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
<b>Proportion (%)</b>									
Reverse cycle/heat pump	78.0	36.3	61.2	53.4	41.6	90.8	16.2	59.1	56.6
Refrigerated	7.6	29.4	26.6	16.5	17.8	*2.0	65.1	11.1	19.4
Evaporative	12.7	31.3	9.8	29.4	39.1	*6.7	17.1	28.7	22.0
Did not know	1.7	3.0	2.3	*0.8	*1.5	*0.4	*1.6	*1.0	2.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
<b>Proportion (%)</b>									
Reverse cycle/heat pump	71.4	30.3	47.7	50.5	35.6	93.6	*9.2	54.3	48.8
Refrigerated	12.5	35.7	37.7	19.8	23.7	—	70.8	15.9	25.6
Evaporative	12.6	29.7	11.8	29.2	39.1	*6.4	18.5	27.6	22.7
Did not know	3.5	4.3	2.9	*0.4	1.6	—	*1.5	*2.1	2.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
<b>Proportion (%)</b>									
Reverse cycle/heat pump	59.4	30.3	23.5	35.4	23.9	*53.7	*4.3	56.4	36.8
Refrigerated	16.6	40.8	49.7	27.6	27.2	*19.0	77.2	*12.2	32.3
Evaporative	20.8	24.3	20.5	36.0	47.8	*15.4	*17.6	*28.7	27.4
Did not know	3.1	4.6	6.2	*1.1	*1.2	*11.8	*0.9	*2.7	3.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
JUNE 1994									
<b>Proportion (%)</b>									
Reverse cycle/heat pump	67.5	41.6	36.6	52.9	33.2	51.5	15.0	50.7	50.0
Refrigerated	14.2	36.7	39.1	23.4	33.3	8.9	63.3	13.6	27.4
Evaporative	16.1	16.8	18.9	23.1	30.3	31.2	20.0	34.6	19.5
Did not know	2.2	4.8	5.4	0.6	3.1	8.4	1.7	1.1	3.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) In this survey, a cooler refers to an air conditioner or evaporative cooler.

(b) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

Note: Figures are as a proportion of households with at least one cooler in use in dwelling.



**4.13**

## DWELLINGS WITH COOLER(a), Type of main cooler .....

NSW Vic. Qld SA WA Tas. NT(b) ACT Aust.

## MARCH 2008

## Number ('000)

Split system	637.8	479.4	611.5	126.6	225.1	36.5	32.7	22.5	2 171.9
Set in wall/window	414.3	498.5	296.1	162.8	139.0	21.3	14.0	19.6	1 565.6
Ducted	468.5	386.0	111.8	248.7	283.9	11.5	*9.9	31.3	1 551.6
Portable	58.4	64.4	24.0	12.1	13.9	*2.3	—	6.6	181.8
<b>Total</b>	<b>1 579.0</b>	<b>1 428.3</b>	<b>1 043.4</b>	<b>550.2</b>	<b>661.9</b>	<b>71.5</b>	<b>56.6</b>	<b>80.0</b>	<b>5 470.9</b>

## Proportion (%)

Split system	40.4	33.6	58.6	23.0	34.0	51.0	57.8	28.1	39.7
Set in wall/window	26.2	34.9	28.4	29.6	21.0	29.7	24.7	24.5	28.6
Ducted	29.7	27.0	10.7	45.2	42.9	16.0	*17.5	39.2	28.4
Portable	3.7	4.5	2.3	2.2	2.1	*3.2	—	8.2	3.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## MARCH 2005

## Proportion (%)

Split system	29.6	23.4	47.2	16.1	26.7	43.1	47.9	30.8	29.8
Set in wall/window	34.6	43.5	37.2	37.8	25.1	32.3	36.8	20.1	36.4
Ducted	30.2	27.8	10.3	43.1	44.6	18.4	*14.8	33.9	28.8
Portable	5.5	5.3	5.3	3.1	3.6	*6.3	*0.5	15.1	5.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## MARCH 2002

## Proportion (%)

Split system	21.7	13.2	24.0	11.3	16.1	45.9	30.3	25.2	18.0
Set in wall/window	45.3	53.8	57.4	46.7	31.9	33.7	52.4	30.6	47.8
Ducted	29.0	28.7	12.8	39.6	49.0	*11.1	17.3	27.8	30.1
Portable	4.0	4.4	5.7	2.4	3.0	*9.4	—	16.4	4.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## MARCH 1999

## Proportion (%)

Set in wall/window	75.8	76.2	83.2	68.1	54.4	*68.1	71.3	64.1	73.0
Ducted	19.0	17.3	9.6	27.7	41.8	*8.6	27.7	*21.4	21.4
Portable	5.3	6.5	7.2	4.2	3.8	*23.4	*0.9	*14.5	5.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## JUNE 1994

## Proportion (%)

Set in wall/window	71.9	79.2	78.7	70.1	63.4	39.5	77.5	53.6	73.3
Ducted	20.3	12.5	6.6	25.3	30.0	21.0	21.4	17.2	18.6
Portable	7.8	8.3	14.6	4.5	6.5	39.5	1.1	29.2	8.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

— nil or rounded to zero (including null cells)

(a) In this survey, a cooler refers to an air conditioner or evaporative cooler.

(b) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

## 4.14 HOUSEHOLDS WITH AT LEAST ONE COOLER IN USE, Number of months used ..

NSW Vic. Qld SA WA Tas. NT(a) ACT Aust.

### MARCH 2008

#### Number ('000)

Less than 1 month	420.7	196.1	334.1	42.8	50.4	39.7	4.1	17.5	1 105.3
1 month to less than 3 months	657.4	647.8	401.4	183.3	231.6	21.1	9.5	36.9	2 189.1
3 months to less than 6 months	426.0	509.9	210.5	277.6	343.4	7.4	21.9	22.2	1 818.9
6 months or more	37.1	50.9	83.4	30.7	29.4	*1.7	19.9	*1.4	254.6
Did not know	37.8	23.5	14.0	15.9	*7.1	*1.6	*1.1	*2.0	103.0

**Total** **1 579.0** **1 428.3** **1 043.4** **550.2** **661.9** **71.5** **56.6** **80.0** **5 470.9**

#### Proportion (%)

Less than 1 month	26.6	13.7	32.0	7.8	7.6	55.5	7.2	21.8	20.2
1 month to less than 3 months	41.6	45.4	38.5	33.3	35.0	29.5	16.9	46.1	40.0
3 months to less than 6 months	27.0	35.7	20.2	50.4	51.9	10.3	38.7	27.8	33.2
6 months or more	2.3	3.6	8.0	5.6	4.4	*2.4	35.2	*1.8	4.7
Did not know	2.4	1.6	1.3	2.9	*1.1	*2.3	*1.9	*2.6	1.9

**Total** **100.0** **100.0** **100.0** **100.0** **100.0** **100.0** **100.0** **100.0** **100.0**

### MARCH 2005

#### Proportion (%)

Less than 1 month	21.4	40.8	18.2	31.1	15.9	69.5	*11.1	25.9	26.4
1 month to less than 3 months	36.8	41.0	31.7	38.8	31.7	21.3	15.0	43.7	36.2
3 months to less than 6 months	36.0	15.7	38.4	26.6	44.8	*3.5	28.3	27.3	30.9
6 months or more	4.1	0.9	10.5	2.0	6.2	*3.6	45.0	*1.0	4.9
Did not know	1.8	1.6	*1.2	*1.4	*1.5	*2.1	*0.5	*2.1	1.5

**Total** **100.0** **100.0** **100.0** **100.0** **100.0** **100.0** **100.0** **100.0** **100.0**

### MARCH 2002

#### Proportion (%)

Less than 1 month	20.6	59.1	13.6	48.7	18.5	59.8	9.2	41.7	33.6
1 month to less than 3 months	39.0	30.9	27.5	36.3	40.7	21.2	18.1	44.9	34.6
3 months to less than 6 months	34.7	8.3	44.1	12.5	35.2	13.1	31.7	12.8	25.8
6 months or more	3.2	0.2	12.7	0.9	4.3	2.9	37.9	—	4.1
Did not know	2.6	1.5	2.0	1.6	1.3	3.0	3.1	0.7	1.9

**Total** **100.0** **100.0** **100.0** **100.0** **100.0** **100.0** **100.0** **100.0** **100.0**

\* estimate has a relative standard error of 25% to 50% and should be used with caution

— nil or rounded to zero (including null cells)

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

Note: In this survey, a cooler refers to an air conditioner or evaporative cooler.

INTRODUCTION

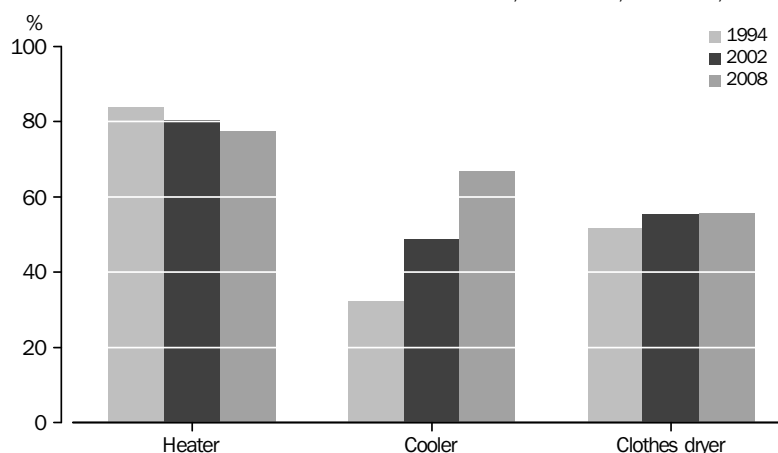
This chapter describes the type and number of appliances present in Australian households. While household appliances such as refrigerators, separate freezers, dishwashers etc. only account for about 30% of total energy consumption, they account for 53% of residential greenhouse gas emissions (DEWHA 2007).

WHITE GOODS

In 2008, almost every household in Australia had a refrigerator (99.8%) and a washing machine (97%). More than three-quarters (77%) of all households had a heater, over two-thirds (67%) had a cooler (i.e. air conditioner or evaporative cooler) and more than half (56%) had a clothes dryer. Nearly half of households had dishwashers (45%) and more than one-third had separate freezers (37%) (graphs 5.1 and 5.2). The presence of these appliances was similar for capital cities and the rest of Australia, except that separate freezers were more common in other parts of Australia (51%) than in capital cities (29%). Conversely, dishwashers were more common in capital cities (48%) than in other parts of Australia (39%) (table 5.3).

**5.1** HOUSEHOLDS WITH WHITE GOODS, Refrigerator, washing machine, separate freezer, dishwasher



WHITE GOODS *continued***5.2** HOUSEHOLDS WITH WHITE GOODS, Heater, cooler, clothes dryer

There has been a substantial increase in ownership of two types of white goods into Australian households between 1994 and 2008; the proportion of households with coolers (32% in 1994 to 67% in 2008) and dishwashers (25% in 1994 to 45% in 2008) (table 5.4).

Refrigerators and washing machines were the top two appliances replaced or bought by households in the year leading up to March 2008.

Three-quarters of Australian households had not replaced or bought any white goods in the previous year (table 5.5).

*Refrigerator*

Almost all households in Australia had a refrigerator, with one-third (34%) having two or more in use (tables 5.3 and 5.6). Northern Territory had the highest proportion of households (44%) with two or more refrigerators in use, followed by Queensland (42%) and Western Australia (41%). Close to six in ten households (57%) had refrigerators aged 5 years or more while 30% had refrigerators aged 10 years or older (table 5.7). For households with more than one refrigerator, the majority (51%) reported their secondary refrigerator was 10 years or older (table 5.8).

*Separate freezer*

Over one-third (37%) of households across Australia had at least one separate freezer. This proportion has declined from 45% in 1994 (table 5.4). In Tasmania, 53% of households had a separate freezer, the highest rate for all states and territories, and 6% had two or more in use (tables 5.3 and 5.9).

*Dishwasher*

Nearly half of all Australian households (45%) had a dishwasher in 2008. They were most common in the Australian Capital Territory (67% of households) and Victoria (52% of households). The proportion of households with dishwashers increased substantially between 1994 and 2008 (from 25% to 45%). The highest increases were noted in the Australian Capital Territory (from 38% to 67%) and in Western Australia (17% to 38%) (table 5.4).

Three-quarters of all households used their dishwasher at least once a week, including almost one-third (29%) using their dishwasher daily (table 5.10). About 13% of households used their dishwasher less often than once a week and about 12% had not

*Dishwasher continued*

used them at all in the 12 months prior to the survey. Households in the Northern Territory used their dishwasher more frequently than in other states or territories, with 41% using them on a daily basis (table 5.10).

The proportion of Australian households using dishwashers on a daily basis decreased substantially, from 37% in 2002 to 29% in 2008. The most substantial decrease in this period was in the Australian Capital Territory (45% to 28%), followed by Victoria (35% to 24%).

*Washing machine*

Almost all households in Australia had washing machines (97%) (table 5.3). The more energy efficient front loading washing machines were used by 22% of households. This proportion increased from 13% in 2005. The highest proportion of households with front loading washing machines were South Australia and the Australian Capital Territory (28%) (table 5.11).

Since 1994, Australians have used their washing machines less frequently. In 1994, 62% of households in Australia averaged 5 washing machine loads or less per week, and this proportion has increased to 75% in 2008. In the same period, the number of households loading 6 or more loads per week decreased from 38% in 1994 to 25% in 2008 (table 5.12).

The use of cold water in washing machines has been steadily increasing in Australian households, rising from 61% in 1994, to 74% in 2008 (table 5.13).

*Clothes dryer*

In 2008, 56% of households in Australia had clothes dryers, a slight increase from 52% in 1994 (table 5.4). Half of all households with a clothes dryer (50%) used it seasonally/depending on the weather. About one-fifth of households (21%) reported they used the clothes dryer at least once a week. A further 13% reported that they never used their clothes dryer (table 5.14).

**REPLACING/BUYING  
APPLIANCES**

Water efficiency rating, energy star rating and cost (price) were the three main factors considered by households across Australia when replacing or buying major white goods. Energy star rating ranked first when replacing a refrigerator (50%), separate freezer (46%) and clothes dryer (45%). Water efficiency rating ranked first when replacing/buying a washing machine (49%). However energy star rating was considered more important than water efficiency rating when replacing/buying a dishwasher (48%) (table 5.15). Cost was considered most important when replacing/buying a heater (40%).

**NON-WHITE GOODS**

Table 5.16 shows the types of non-white good appliances that occur in a typical Australian household. It shows that most households have a television (99%), a microwave (92%) and a DVD player/recorder (87%). Around 60% of households have a printer/scanner/fax machine and desktop computer and 59% have a stereo system.

*Televisions*

In 2008, while almost all households in Australia had a television, there is a trend in the type of television away from the normal picture tube television (CRT) toward those with LCD and Plasma screens. Over half of households with a normal picture tube television (CRT) (57%) had two or more of this type of television.

*Televisions continued*

Almost one-fifth of households with LCD televisions (19%) had two or more LCD TVs (table 5.19). Of households with Plasma televisions, around one in ten (11%) had two or more such televisions.

*Computers*

In 2008, six in ten households (60%) had a desktop computer and four in ten households (38%) in Australia had a laptop/notebook computer. In the Australian Capital Territory, almost seven in ten households (69%) had a desktop computer in 2008 and five in ten households (48%) had a laptop/notebook computer (table 5.16).

## STANDBY POWER

Standby power is the power used by electrical products while they are waiting to be fully activated. It is a feature on many appliances such as televisions, computers, videos and DVD players/recorders. Standby power consumption generally accounts for over 10 per cent of Australia's household electricity usage, generating more than 5 million tonnes of carbon dioxide emissions per annum (AGO 2002).

Table 5.18 illustrates common non-white goods in households and the number of units that were usually switched on and ready to use. Almost one-fifth of households with televisions (18%) had three or more switched on and ready to use.

## 5.3 HOUSEHOLDS WITH WHITE GOODS—2008

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
CAPITAL CITY									
<b>Number ('000)</b>									
Refrigerator	1 640.2	1 453.9	741.8	478.4	623.8	84.3	..	..	5 211.4
Washing machine	1 564.9	1 396.9	719.4	463.6	609.2	81.5	..	..	5 020.1
Heater	1 187.8	1 413.3	336.5	432.7	511.3	79.6	..	..	4 095.8
Cooler(b)	920.5	1 004.7	482.6	430.9	507.2	37.3	..	..	3 520.8
Clothes dryer	1 007.8	778.1	394.8	230.3	327.4	38.5	..	..	2 877.2
Dishwasher	794.8	798.0	354.4	193.8	245.7	35.7	..	..	2 529.0
Separate freezer	392.4	402.4	257.4	151.9	203.0	37.5	..	..	1 503.3
None of the above	—	np	np	np	—	—	..	..	**1.7
<i>Total households(c)</i>	<i>1 642.7</i>	<i>1 456.2</i>	<i>742.5</i>	<i>479.1</i>	<i>624.3</i>	<i>84.3</i>	..	..	<i>5 218.5</i>
<b>Proportion (%)</b>									
Refrigerator	99.8	99.8	99.9	99.9	99.9	100.0	..	..	99.9
Washing machine	95.3	95.9	96.9	96.7	97.6	96.6	..	..	96.2
Heater	72.3	97.1	45.3	90.3	81.9	94.4	..	..	78.5
Cooler(b)	56.0	69.0	65.0	89.9	81.2	44.3	..	..	67.5
Clothes dryer	61.3	53.4	53.2	48.1	52.4	45.7	..	..	55.1
Dishwasher	48.4	54.8	47.7	40.5	39.4	42.3	..	..	48.5
Separate freezer	23.9	27.6	34.7	31.7	32.5	44.5	..	..	28.8
None of the above	—	np	np	np	—	—	..	..	—
BALANCE OF STATE/TERRITORY									
<b>Number ('000)</b>									
Refrigerator	1 061.6	598.7	871.9	168.3	202.5	116.8	..	..	3 019.8
Washing machine	1 025.6	588.9	855.7	165.0	200.3	113.6	..	..	2 949.1
Heater	873.5	590.7	384.1	157.6	166.2	116.2	..	..	2 288.3
Cooler(b)	673.9	427.4	569.7	120.5	157.5	36.6	..	..	1 985.6
Clothes dryer	576.3	346.7	513.9	89.3	112.1	64.9	..	..	1 703.2
Dishwasher	412.5	264.9	362.8	50.9	65.0	35.2	..	..	1 191.3
Separate freezer	530.8	308.4	405.0	106.9	116.5	69.2	..	..	1 536.8
None of the above	np	np	—	—	—	—	..	..	np
<i>Total households(c)</i>	<i>1 064.2</i>	<i>600.3</i>	<i>872.6</i>	<i>168.3</i>	<i>202.5</i>	<i>117.3</i>	..	..	<i>3 025.1</i>
<b>Proportion (%)</b>									
Refrigerator	99.8	99.7	99.9	100.0	100.0	99.6	..	..	99.8
Washing machine	96.4	98.1	98.1	98.1	98.9	96.8	..	..	97.5
Heater	82.1	98.4	44.0	93.7	82.1	99.1	..	..	75.6
Cooler(b)	63.3	71.2	65.3	71.6	77.8	31.2	..	..	65.6
Clothes dryer	54.2	57.8	58.9	53.1	55.3	55.3	..	..	56.3
Dishwasher	38.8	44.1	41.6	30.3	32.1	30.0	..	..	39.4
Separate freezer	49.9	51.4	46.4	63.5	57.5	59.0	..	..	50.8
None of the above	np	np	—	—	—	—	..	..	np

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

.. not applicable

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 1.1 of the Explanatory Notes.

(b) In this survey, a cooler refers to an air conditioner or evaporative cooler.

(c) Totals do not equal the sum of items in each column as more than one appliance may be specified.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

### 5.3 HOUSEHOLDS WITH WHITE GOODS—2008 *continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
TOTAL STATE/TERRITORY									
<b>Number ('000)</b>									
Refrigerator	2 701.8	2 052.6	1 613.7	646.7	826.3	201.1	60.6	128.4	8 231.2
Washing machine	2 590.5	1 985.8	1 575.1	628.6	809.4	195.1	58.9	125.7	7 969.1
Heater	2 061.3	2 004.0	720.6	590.3	677.6	195.8	*8.4	126.3	6 384.1
Cooler(b)	1 594.5	1 432.1	1 052.3	551.4	664.7	73.9	57.0	80.4	5 506.4
Clothes dryer	1 584.1	1 124.9	908.7	319.6	439.4	103.3	21.4	78.9	4 580.4
Dishwasher	1 207.4	1 062.9	717.2	244.8	310.7	70.9	21.1	85.5	3 720.4
Separate freezer	923.2	710.8	662.4	258.8	319.6	106.7	23.5	35.2	3 040.1
None of the above	np	np	np	np	—	—	—	—	**3.7
<b>Total households(c)</b>	<b>2 706.9</b>	<b>2 056.5</b>	<b>1 615.1</b>	<b>647.4</b>	<b>826.8</b>	<b>201.6</b>	<b>61.0</b>	<b>128.4</b>	<b>8 243.6</b>
<b>Proportion (%)</b>									
Refrigerator	99.8	99.8	99.9	99.9	99.9	99.8	99.4	100.0	99.8
Washing machine	95.7	96.6	97.5	97.1	97.9	96.8	96.7	97.9	96.7
Heater	76.1	97.4	44.6	91.2	81.9	97.1	*13.7	98.4	77.4
Cooler(b)	58.9	69.6	65.2	85.2	80.4	36.7	93.6	62.7	66.8
Clothes dryer	58.5	54.7	56.3	49.4	53.1	51.3	35.1	61.5	55.6
Dishwasher	44.6	51.7	44.4	37.8	37.6	35.2	34.6	66.6	45.1
Separate freezer	34.1	34.6	41.0	40.0	38.7	52.9	38.5	27.4	36.9
None of the above	np	np	np	np	—	—	—	—	—

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 1.1 of the Explanatory Notes.

(b) In this survey, a cooler refers to an air conditioner or evaporative cooler.

(c) Totals do not equal the sum of items in each column as more than one appliance may be specified.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.



**5.4**

## HOUSEHOLDS WITH WHITE GOODS

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008									
Refrigerator	99.8	99.8	99.9	99.9	99.9	99.8	99.4	100.0	99.8
Washing machine	95.7	96.6	97.5	97.1	97.9	96.8	96.7	97.9	96.7
Heater	76.1	97.4	44.6	91.2	81.9	97.1	*13.7	98.4	77.4
Cooler(b)	58.9	69.6	65.2	85.2	80.4	36.7	93.6	62.7	66.8
Clothes dryer	58.5	54.7	56.3	49.4	53.1	51.3	35.1	61.5	55.6
Dishwasher	44.6	51.7	44.4	37.8	37.6	35.2	34.6	66.6	45.1
Separate freezer	34.1	34.6	41.0	40.0	38.7	52.9	38.5	27.4	36.9
MARCH 2005									
Refrigerator	99.9	99.8	100.0	99.8	99.9	99.9	100.0	99.8	99.9
Washing machine	95.6	95.8	97.4	97.2	96.7	97.9	96.7	98.3	96.4
Heater	77.5	98.1	43.5	92.1	84.0	98.9	11.0	98.3	78.2
Cooler(b)	54.1	60.5	58.2	85.0	69.6	19.8	91.9	48.1	59.9
Clothes dryer	59.1	54.0	54.8	51.5	48.3	55.9	35.9	58.9	55.1
Dishwasher	42.6	47.5	41.4	30.7	33.5	32.2	28.5	56.3	41.5
Separate freezer	33.9	34.9	38.2	40.7	41.8	57.4	35.1	32.6	36.9
MARCH 2002									
Refrigerator	99.8	99.8	100.0	99.9	100.0	99.8	100.0	99.8	99.9
Washing machine	94.4	95.1	95.8	95.5	95.8	97.3	94.9	96.9	95.2
Heater	81.8	99.0	45.6	92.7	84.9	99.0	8.4	99.7	80.5
Cooler(b)	43.5	52.9	38.5	79.6	59.0	10.3	89.3	28.9	48.6
Clothes dryer	60.4	55.1	52.7	51.5	48.4	54.8	36.6	61.4	55.4
Dishwasher	37.1	42.4	30.3	23.0	26.7	25.9	25.9	46.8	34.7
Separate freezer	36.0	36.2	39.1	43.6	38.4	59.6	37.9	28.2	38.0
MARCH 1999									
Refrigerator	99.6	99.8	99.7	99.9	99.7	99.4	100.0	99.8	99.7
Washing machine	93.7	95.3	95.9	94.7	93.8	97.2	95.0	95.7	94.7
Heater	82.2	98.8	39.9	92.8	83.2	98.9	10.5	99.1	79.6
Cooler(b)	27.6	43.5	24.8	54.3	45.4	*2.5	83.6	19.9	34.7
Clothes dryer	55.6	54.9	52.5	48.4	45.1	56.1	32.7	56.2	53.0
Dishwasher	31.2	37.4	28.6	20.2	20.0	24.1	20.0	46.0	30.1
Separate freezer	38.2	39.6	40.9	42.8	39.4	61.7	41.5	33.5	40.1
JUNE 1994									
Refrigerator	99.6	99.9	99.7	99.6	99.6	99.7	100.0	99.9	99.7
Washing machine	92.6	95.0	95.0	94.5	94.6	97.2	88.0	96.8	94.2
Heater	88.3	99.4	45.4	94.1	86.8	99.8	18.2	99.6	83.8
Cooler(b)	30.8	36.9	17.6	61.5	35.5	2.4	76.4	16.7	32.5
Clothes dryer	52.7	57.3	49.4	49.1	41.4	54.6	23.3	54.2	51.7
Dishwasher	24.5	31.9	24.7	18.6	16.6	19.4	14.5	38.0	25.1
Separate freezer	41.7	45.4	45.4	47.6	47.1	63.8	47.1	41.0	44.9

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) In this survey, a cooler refers to an air conditioner or evaporative cooler.

## 5.5 REPLACING/BUYING APPLIANCES, Items replaced or bought in the last 12 months

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
MARCH 2008									
<b>Number ('000)</b>									
Refrigerator	281.9	197.3	208.5	64.1	92.4	16.8	11.5	13.8	886.3
Washing machine	238.3	189.8	195.1	59.3	80.2	17.9	6.5	12.4	799.6
Heater	76.5	61.8	29.1	15.1	26.6	9.6	np	np	222.4
Clothes dryer	69.0	47.2	60.9	11.9	28.4	6.4	*2.4	*1.9	228.2
Dishwasher	78.5	72.2	77.9	24.3	35.1	7.0	2.4	7.2	304.6
Separate freezer	52.5	38.7	36.6	17.5	24.9	7.0	np	np	181.6
No/none	2 081.7	1 605.9	1 147.1	500.9	613.8	153.0	41.4	94.2	6 237.9

**Total households(b)** 2 706.9 2 056.5 1 615.1 647.4 826.8 201.6 61.0 128.4 8 243.6

<b>Proportion (%)</b>									
Refrigerator	10.4	9.6	12.9	9.9	11.2	8.3	18.8	10.8	10.8
Washing machine	8.8	9.2	12.1	9.2	9.7	8.9	10.7	9.7	9.7
Heater	2.8	3.0	1.8	2.3	3.2	4.8	np	np	2.7
Clothes dryer	2.6	2.3	3.8	1.8	3.4	3.2	*3.9	*1.5	2.8
Dishwasher	2.9	3.5	4.8	3.8	4.2	3.5	4.0	5.6	3.7
Separate freezer	1.9	1.9	2.3	2.7	3.0	3.5	np	np	2.2
No/none	76.9	78.1	71.0	77.4	74.2	75.9	67.9	73.4	75.7

### MARCH 2005

<b>Proportion (%)</b>									
Refrigerator	10.7	10.3	14.1	10.2	13.2	9.9	14.5	11.6	11.5
Washing machine	8.7	10.1	10.9	10.4	11.5	10.2	*11.2	8.7	9.9
Heater	4.5	3.9	3.5	3.1	4.2	7.4	—	4.5	4.0
Clothes dryer	2.9	3.1	3.2	2.6	3.0	3.7	*0.6	*3.1	3.0
Dishwasher	3.0	3.8	4.1	3.3	3.7	4.4	*3.5	5.0	3.5
Separate freezer	2.1	2.0	3.2	2.1	2.8	3.9	*3.1	*1.3	2.4
No/none	76.0	75.9	70.9	76.7	71.9	70.0	74.0	73.5	74.4

### MARCH 2002

<b>Proportion (%)</b>									
Refrigerator	9.4	8.7	11.6	8.3	8.6	9.0	12.7	9.4	9.5
Washing machine	8.6	8.5	10.5	10.4	10.5	7.7	10.8	9.4	9.3
Heater	3.7	1.9	3.0	2.6	3.0	4.9	—	*3.1	2.9
Clothes dryer	3.3	2.9	2.5	2.3	2.7	*1.8	*0.4	*2.0	2.8
Dishwasher	2.8	3.5	3.0	1.9	2.9	2.6	*1.6	4.1	3.0
Separate freezer	1.6	1.4	2.1	2.4	1.7	2.7	*2.4	*1.3	1.7
No/none	77.9	79.1	74.5	77.3	77.8	77.8	77.6	76.0	77.4

### MARCH 1999

<b>Proportion (%)</b>									
Refrigerator	6.3	5.7	6.8	6.3	7.3	5.2	12.5	8.9	6.4
Washing machine	5.0	5.1	5.6	5.1	4.9	6.3	2.3	4.6	5.2
Heater	6.0	4.9	3.3	5.5	6.4	7.5	0.8	7.6	5.2
Clothes dryer	—	—	—	—	—	—	—	—	—
Dishwasher	1.6	1.6	1.3	0.9	1.2	0.5	0.7	1.9	1.4
Separate freezer	0.6	1.0	1.2	0.9	1.4	1.6	1.2	0.6	1.0
No/none	76.6	77.3	77.5	77.1	73.7	78.5	67.0	72.5	76.6

\* estimate has a relative standard error of 25% to 50% and should be used with caution

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) Totals do not equal the sum of items in each column as more than one appliance may be specified.

**5.6**

## HOUSEHOLDS WITH REFRIGERATORS, Number in use

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
MARCH 2008									
<b>Number ('000)</b>									
One	1 780.3	1 482.9	927.7	450.9	483.7	147.7	33.8	84.0	5 390.9
Two	810.8	512.4	599.2	177.7	297.0	47.2	23.2	40.3	2 507.8
Three or more	110.7	57.4	86.8	18.1	45.6	6.2	3.6	4.0	332.5
None	**5.1	*3.9	**1.4	**0.7	**0.5	**0.5	**0.4	—	*12.4
<b>Total</b>	<b>2 706.9</b>	<b>2 056.5</b>	<b>1 615.1</b>	<b>647.4</b>	<b>826.8</b>	<b>201.6</b>	<b>61.0</b>	<b>128.4</b>	<b>8 243.6</b>
<b>Proportion (%)</b>									
One	65.8	72.1	57.4	69.7	58.5	73.2	55.4	65.4	65.4
Two	30.0	24.9	37.1	27.4	35.9	23.4	38.1	31.4	30.4
Three or more	4.1	2.8	5.4	2.8	5.5	3.1	5.9	3.1	4.0
None	**0.2	*0.2	**0.1	**0.1	**0.1	**0.2	**0.6	—	*0.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
<b>Proportion (%)</b>									
One	67.1	73.4	59.3	70.2	61.3	72.6	61.0	70.0	66.9
Two	28.9	24.0	36.2	26.5	34.2	24.3	35.9	26.6	29.4
Three or more	3.8	2.4	4.5	3.1	4.4	3.0	*3.1	*3.2	3.6
None	*0.1	*0.2	—	*0.2	*0.1	*0.1	—	*0.2	*0.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
<b>Proportion (%)</b>									
One	71.2	74.0	66.2	68.8	66.0	79.1	56.9	75.3	70.4
Two	25.6	23.9	30.2	27.7	29.8	19.4	39.2	21.2	26.5
Three or more	3.0	1.9	3.6	3.4	4.2	*1.3	*3.9	*3.3	*3.0
None	*0.2	*0.2	—	*0.1	—	*0.2	—	*0.2	0.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
<b>Proportion (%)</b>									
One	71.0	75.3	63.7	72.7	69.4	79.0	66.2	71.7	70.8
Two	25.5	22.6	32.5	24.6	27.1	18.7	27.4	26.4	26.0
Three or more	3.0	2.0	3.5	2.6	3.2	*1.7	*6.4	*1.7	2.8
None	0.4	*0.2	*0.3	*0.1	*0.3	*0.6	—	*0.2	0.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
JUNE 1994									
<b>Proportion (%)</b>									
One	77.1	79.0	68.4	76.7	73.8	82.3	67.7	79.5	75.8
Two	20.4	19.1	29.1	21.2	23.4	16.3	31.0	19.3	21.9
Three or more	2.1	1.9	2.2	1.7	2.4	1.0	1.3	1.1	2.0
None	0.4	0.1	0.3	0.4	0.4	0.3	—	0.1	0.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

## 5.7 HOUSEHOLDS WITH REFRIGERATORS, Age of main refrigerator

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
MARCH 2008									
<b>Number ('000)</b>									
Less than 1 year	173.0	124.1	135.4	41.8	51.4	10.7	6.8	10.7	553.9
1 year to less than 5 years	939.1	652.5	603.7	212.5	327.5	67.8	24.8	41.5	2 869.3
5 years to less than 10 years	765.0	537.1	443.4	166.6	216.1	49.3	16.0	34.8	2 228.4
10 or more years	778.8	708.6	401.2	215.5	219.4	68.8	10.5	39.0	2 441.8
Did not know	45.8	30.3	30.0	10.4	12.0	4.5	2.5	*2.4	137.8
<b>Total</b>	<b>2 701.8</b>	<b>2 052.6</b>	<b>1 613.7</b>	<b>646.7</b>	<b>826.3</b>	<b>201.1</b>	<b>60.6</b>	<b>128.4</b>	<b>8 231.2</b>
<b>Proportion (%)</b>									
Less than 1 year	6.4	6.0	8.4	6.5	6.2	5.3	11.3	8.4	6.7
1 year to less than 5 years	34.8	31.8	37.4	32.9	39.6	33.7	40.9	32.3	34.9
5 years to less than 10 years	28.3	26.2	27.5	25.8	26.2	24.5	26.4	27.1	27.1
10 or more years	28.8	34.5	24.9	33.3	26.5	34.2	17.3	30.4	29.7
Did not know	1.7	1.5	1.9	1.6	1.5	2.2	4.2	*1.8	1.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
<b>Proportion (%)</b>									
Less than 1 year	7.8	7.7	10.3	6.7	9.0	7.4	*11.1	9.4	8.3
1 year to less than 5 years	32.5	29.4	33.6	29.1	32.4	27.9	43.9	26.9	31.6
5 years to less than 10 years	27.4	25.1	25.9	25.0	26.3	28.1	31.0	27.2	26.3
10 or more years	30.6	36.2	28.6	37.2	30.0	33.0	*12.1	34.9	32.1
Did not know	1.7	1.6	1.7	1.9	2.2	3.6	*2.0	*1.6	1.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
<b>Proportion (%)</b>									
Less than 1 year	8.1	7.4	9.9	6.4	7.2	6.5	10.2	7.8	8.0
1 year to less than 5 years	32.9	28.1	33.0	26.4	28.6	28.0	39.4	29.3	30.6
5 years to less than 10 years	26.2	24.1	25.9	25.1	27.6	27.4	28.1	25.9	25.7
10 or more years	31.4	39.0	29.4	40.9	34.7	33.7	18.2	35.4	34.0
Did not know	1.4	1.4	1.8	1.1	1.9	4.4	*4.0	*1.6	1.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
<b>Proportion (%)</b>									
Less than 1 year	7.0	5.2	7.1	6.0	8.2	*5.1	*18.1	8.7	6.7
1 year to less than 5 years	27.5	22.6	30.0	21.8	27.4	24.1	39.4	23.0	26.2
5 years to less than 10 years	25.1	23.4	28.2	22.0	25.9	27.5	24.1	24.0	25.1
10 or more years	38.0	46.9	32.7	47.4	36.6	39.7	*17.1	41.9	39.8
Did not know	2.5	1.9	2.1	2.8	2.0	*3.6	*1.3	*2.3	2.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
JUNE 1994									
<b>Proportion (%)</b>									
Less than 1 year	7.1	6.4	7.2	5.4	6.9	7.2	8.4	9.1	6.8
1 year to less than 5 years	27.3	23.8	28.8	23.5	26.8	24.7	36.8	23.0	26.2
5 years to less than 10 years	30.2	27.1	30.6	27.0	33.4	30.4	31.9	30.0	29.5
10 or more years	34.2	42.0	31.3	43.0	30.6	36.3	20.1	36.3	36.1
Did not know	1.2	0.7	2.0	1.1	2.3	1.4	2.8	1.5	1.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

## 5.8 HOUSEHOLDS WITH AT LEAST TWO REFRIGERATORS, Age of secondary refrigerator

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
MARCH 2008									
<b>Number ('000)</b>									
Less than 1 year	23.0	*14.9	26.2	*5.8	13.3	*0.9	*0.7	*1.7	86.5
1 year to less than 5 years	160.7	102.3	163.6	37.6	76.6	9.7	6.0	8.1	564.6
5 years to less than 10 years	225.4	120.3	179.7	42.1	77.1	9.7	8.3	8.3	670.9
10 or more years	496.9	318.8	297.0	104.6	167.9	31.4	10.1	25.0	1 451.8
Did not know	*15.5	13.5	19.5	5.6	*7.8	*1.7	*1.7	**1.3	66.6
<b>Total</b>	<b>921.6</b>	<b>569.8</b>	<b>686.0</b>	<b>195.8</b>	<b>342.6</b>	<b>53.4</b>	<b>26.8</b>	<b>44.4</b>	<b>2 840.3</b>
<b>Proportion (%)</b>									
Less than 1 year	2.5	*2.6	3.8	*3.0	3.9	*1.6	*2.6	*3.9	3.0
1 year to less than 5 years	17.4	17.9	23.8	19.2	22.3	18.2	22.4	18.2	19.9
5 years to less than 10 years	24.5	21.1	26.2	21.5	22.5	18.2	31.1	18.6	23.6
10 or more years	53.9	56.0	43.3	53.4	49.0	58.8	37.7	56.4	51.1
Did not know	1.7	2.4	2.8	2.9	*2.3	*3.2	*6.2	**2.9	2.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
<b>Proportion (%)</b>									
Less than 1 year	3.6	3.1	4.5	2.6	4.5	*3.4	*10.5	*2.2	3.8
1 year to less than 5 years	18.6	15.3	18.2	12.4	16.6	14.1	*26.6	13.1	17.1
5 years to less than 10 years	20.5	18.2	20.5	20.8	22.2	19.5	*22.0	22.6	20.3
10 or more years	54.8	60.2	54.5	61.3	54.5	56.4	40.9	60.7	56.2
Did not know	2.4	3.1	*2.3	*2.9	*2.1	*6.6	—	*1.4	2.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002 (b)									
<b>Proportion (%)</b>									
1 year to less than 5 years	15.1	13.1	19.3	11.2	18.6	13.8	*18.1	16.3	15.7
5 years to less than 10 years	20.3	16.4	23.5	15.8	21.4	21.2	*21.4	17.5	19.9
10 or more years	62.2	68.0	54.3	70.7	57.7	60.7	53.3	64.2	61.9
Don't know	2.3	2.5	2.8	*2.3	2.3	*4.3	*7.1	*1.9	2.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

(b) No information collected on 'Less than 1 year'.

**5.9**

## HOUSEHOLDS WITH SEPARATE FREEZERS, Number in use .....

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
MARCH 2008									
<b>Number ('000)</b>									
One	842.3	651.6	578.4	234.0	291.8	93.7	21.6	33.7	2 747.1
Two	75.4	54.1	77.4	20.4	26.1	11.2	*1.9	*1.5	268.0
Three or more	*5.4	*5.1	*6.5	*4.4	**1.7	*1.8	—	—	25.0
None	1 783.7	1 345.7	952.7	388.6	507.3	94.9	37.5	93.2	5 203.5
<b>Total</b>	<b>2 706.9</b>	<b>2 056.5</b>	<b>1 615.1</b>	<b>647.4</b>	<b>826.8</b>	<b>201.6</b>	<b>61.0</b>	<b>128.4</b>	<b>8 243.6</b>
<b>Proportion (%)</b>									
One	31.1	31.7	35.8	36.1	35.3	46.5	35.5	26.2	33.3
Two	2.8	2.6	4.8	3.2	3.2	5.5	*3.1	*1.2	3.3
Three or more	*0.2	*0.2	*0.4	*0.7	**0.2	*0.9	—	—	0.3
None	65.9	65.4	59.0	60.0	61.3	47.1	61.5	72.6	63.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
<b>Proportion (%)</b>									
One	31.0	31.9	34.2	36.9	38.2	49.6	34.6	31.7	33.5
Two	2.7	2.7	3.4	3.5	3.2	6.6	*0.5	*1.0	3.0
Three or more	*0.2	*0.4	*0.6	*0.3	*0.4	*1.2	—	—	0.4
None	66.1	65.1	61.8	59.3	58.2	42.6	64.9	67.4	63.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
<b>Proportion (%)</b>									
One	33.8	34.3	35.3	39.3	35.5	53.4	34.9	27.4	35.3
Two	2.0	1.7	3.4	3.9	2.5	5.3	*3.0	*0.8	2.5
Three or more	*0.2	*0.2	*0.4	*0.3	*0.4	*0.9	—	—	0.3
None	64.0	63.8	60.9	56.4	61.6	40.4	62.1	71.8	62.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
<b>Proportion (%)</b>									
One	35.5	36.7	36.6	38.4	36.1	54.1	39.6	32.5	36.8
Two	2.4	2.8	4.2	4.0	3.0	7.2	*1.5	*0.7	3.1
Three or more	*0.3	*0.1	*0.2	*0.4	*0.3	*0.4	*0.4	*0.3	0.2
None	61.8	60.4	59.1	57.2	60.6	38.3	58.5	66.5	59.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
JUNE 1994									
<b>Proportion (%)</b>									
One	38.7	41.8	41.2	43.1	43.0	54.8	41.2	39.4	41.2
Two	2.6	3.2	3.7	3.9	3.9	8.0	5.5	1.6	3.4
Three or more	0.3	0.3	0.5	0.6	0.1	1.0	0.4	*—	0.4
None	58.3	54.6	54.6	52.4	52.9	36.2	52.9	59.0	55.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

**5.10**

## HOUSEHOLDS WITH DISHWASHERS, Frequency of use .....

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
MARCH 2008									
<b>Number ('000)</b>									
Daily	346.7	250.4	253.7	73.6	102.2	26.5	8.7	24.3	1 086.1
At least once a week	536.1	518.1	306.8	116.9	137.6	29.4	7.4	47.0	1 699.3
Less often than once a week	175.7	137.7	80.5	31.7	40.8	8.0	2.3	7.4	484.0
Never	148.8	156.7	76.2	22.6	30.1	7.0	2.6	6.8	450.9
<b>Total</b>	<b>1 207.4</b>	<b>1 062.9</b>	<b>717.2</b>	<b>244.8</b>	<b>310.7</b>	<b>70.9</b>	<b>21.1</b>	<b>85.5</b>	<b>3 720.4</b>
<b>Proportion (%)</b>									
Daily	28.7	23.6	35.4	30.1	32.9	37.3	41.3	28.4	29.2
At least once a week	44.4	48.7	42.8	47.8	44.3	41.5	35.3	55.0	45.7
Less often than once a week	14.6	13.0	11.2	12.9	13.1	11.2	11.1	8.7	13.0
Never	12.3	14.7	10.6	9.2	9.7	9.9	12.3	8.0	12.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
<b>Proportion (%)</b>									
Daily	32.7	34.0	39.4	35.7	38.8	45.8	*30.8	34.0	35.3
At least once a week	40.6	41.2	39.7	43.8	40.4	34.1	*35.3	52.7	40.9
Less often than once a week	17.1	15.8	11.3	13.1	13.6	9.7	27.2	7.5	14.8
Never	9.6	9.0	9.6	7.3	7.1	10.4	*6.6	*5.8	9.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
<b>Proportion (%)</b>									
Daily	36.7	34.7	42.1	30.2	32.5	44.8	47.1	45.4	36.7
At least once a week	39.2	41.0	33.8	47.8	42.0	34.2	*22.0	37.4	39.3
Less often than once a week	15.3	15.4	16.4	13.9	15.7	13.4	21.4	9.8	15.4
Never	8.8	8.9	7.7	8.2	9.7	*7.8	*9.5	7.4	8.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
<b>Proportion (%)</b>									
Daily	35.4	31.0	44.8	30.7	32.8	36.0	*46.6	38.6	35.4
At least once a week	40.1	41.6	34.6	45.8	39.2	40.5	*38.3	43.6	39.9
Less often than once a week	16.2	16.9	12.5	14.7	17.2	14.3	5.6	12.8	15.6
Never	8.3	10.5	8.1	8.8	10.8	*9.3	*9.5	*5.0	9.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
JUNE 1994									
<b>Proportion (%)</b>									
Daily	30.0	33.2	36.9	25.8	25.4	38.8	38.9	30.6	31.9
At least once a week	44.1	42.8	35.5	42.2	42.2	34.4	30.0	50.0	41.8
Less often than once a week	25.9	23.9	27.6	32.0	32.4	26.9	31.0	19.4	26.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

## 5.11 HOUSEHOLDS WITH WASHING MACHINES, Type of washing machine .....

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
MARCH 2008									
<b>Number ('000)</b>									
Top loading automatic	1 994.1	1 476.3	1 170.0	410.8	588.3	155.0	48.2	87.7	5 930.4
Front loading automatic	504.9	472.2	350.9	177.4	206.7	30.9	8.5	35.4	1 786.9
Total	2 499.0	1 948.5	1 520.9	588.2	795.0	185.9	56.7	123.1	7 717.3
Not automatic	91.5	37.3	54.3	40.4	14.5	9.1	*2.2	*2.6	251.9
<b>Total</b>	<b>2 590.5</b>	<b>1 985.8</b>	<b>1 575.1</b>	<b>628.6</b>	<b>809.4</b>	<b>195.1</b>	<b>58.9</b>	<b>125.7</b>	<b>7 969.1</b>
<b>Proportion (%)</b>									
Top loading automatic	77.0	74.3	74.3	65.3	72.7	79.5	81.8	69.8	74.4
Front loading automatic	19.5	23.8	22.3	28.2	25.5	15.8	14.4	28.1	22.4
Total	96.5	98.1	96.6	93.6	98.2	95.3	96.2	97.9	96.8
Not automatic	3.5	1.9	3.4	6.4	1.8	4.7	*3.8	*2.1	3.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
<b>Proportion (%)</b>									
Top loading automatic	85.5	83.2	85.7	74.4	80.3	84.7	86.0	79.5	83.4
Front loading automatic	11.4	14.2	10.3	17.2	16.2	9.0	*12.3	19.5	12.9
Total	96.8	97.5	96.0	91.6	96.5	93.7	98.2	99.0	96.3
Not automatic	3.2	2.5	4.0	8.4	3.5	6.3	*1.8	*1.0	3.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
<b>Proportion (%)</b>									
Top loading automatic	87.7	87.0	88.1	77.2	86.4	86.1	96.4	87.8	86.6
Front loading automatic	8.1	10.0	6.6	10.9	8.6	5.0	*2.4	10.5	8.5
Total	95.8	97.0	94.7	88.1	95.0	91.1	98.8	98.3	95.1
Not automatic	4.2	3.0	5.3	11.9	5.0	8.9	1.2	1.7	4.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
<b>Proportion (%)</b>									
Top loading automatic	88.5	88.6	87.2	75.0	85.1	85.8	94.9	88.6	86.8
Front loading automatic	6.1	7.4	5.3	8.3	6.7	*3.6	*2.9	10.1	6.5
Total	94.6	96.0	92.5	83.3	91.8	89.4	97.8	98.7	93.2
Not automatic	5.4	4.0	7.5	16.7	8.2	10.6	2.2	1.3	6.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
JUNE 1994									
<b>Proportion (%)</b>									
Top loading automatic	85.6	87.7	82.4	75.8	82.1	83.1	89.8	87.8	84.3
Front loading automatic	5.8	5.4	3.7	5.1	4.6	3.3	5.1	9.3	5.1
Total	91.4	93.1	86.1	80.9	86.7	86.4	94.9	97.1	89.5
Not automatic	8.6	6.9	13.9	19.1	13.3	13.6	5.1	2.9	10.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.



## 5.12 HOUSEHOLDS WITH WASHING MACHINES, Average number of loads of washing done per week

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
MARCH 2008									
<b>Number ('000)</b>									
Less than 3 loads per week	848.5	795.7	470.3	249.3	284.2	59.0	14.0	36.1	2 757.0
3 to 5 loads per week	1 059.9	749.6	667.0	247.5	317.7	71.3	24.6	57.9	3 195.4
6 to 10 loads per week	572.4	361.5	350.2	109.2	171.7	48.4	16.7	27.4	1 657.6
11 loads or more per week	109.7	79.0	87.7	22.6	35.8	16.4	3.7	4.4	359.2
<b>Total</b>	<b>2 590.5</b>	<b>1 985.8</b>	<b>1 575.1</b>	<b>628.6</b>	<b>809.4</b>	<b>195.1</b>	<b>58.9</b>	<b>125.7</b>	<b>7 969.1</b>
<b>Proportion (%)</b>									
Less than 3 loads per week	32.8	40.1	29.9	39.7	35.1	30.2	23.7	28.7	34.6
3 to 5 loads per week	40.9	37.7	42.3	39.4	39.2	36.5	41.7	46.0	40.1
6 to 10 loads per week	22.1	18.2	22.2	17.4	21.2	24.8	28.3	21.8	20.8
11 loads or more per week	4.2	4.0	5.6	3.6	4.4	8.4	6.2	3.5	4.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
<b>Proportion (%)</b>									
Less than 3 loads per week	29.8	32.6	24.6	36.9	29.6	23.2	24.6	31.5	29.9
3 to 5 loads per week	39.4	37.4	42.6	36.2	40.8	37.8	39.0	40.0	39.4
6 to 10 loads per week	24.1	22.8	25.0	22.3	24.1	27.7	29.0	24.0	23.9
11 loads or more per week	6.6	7.2	7.8	4.5	5.5	11.4	*7.4	4.5	6.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
<b>Proportion (%)</b>									
Less than 3 loads per week	28.5	28.6	25.0	32.1	31.3	26.8	23.7	29.0	28.4
3 to 5 loads per week	37.9	39.2	37.1	39.1	37.9	34.6	37.3	39.2	38.1
6 to 10 loads per week	25.2	24.8	29.7	22.5	24.6	25.6	28.8	27.4	25.8
11 loads or more per week	8.4	7.4	8.2	6.3	6.2	13.0	*10.2	4.4	7.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
<b>Proportion (%)</b>									
Less than 3 loads per week	27.5	27.1	23.8	31.2	30.2	23.5	*19.0	28.3	27.1
3 to 5 loads per week	36.4	37.2	34.9	36.0	36.2	33.1	35.8	37.6	36.2
6 to 10 loads per week	27.0	26.9	30.6	26.6	26.8	28.1	36.0	26.7	27.7
11 loads or more per week	9.1	8.8	10.6	6.2	6.8	15.3	*9.2	*7.4	9.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
JUNE 1994									
<b>Proportion (%)</b>									
Less than 3 loads per week	29.4	30.9	23.2	31.7	31.7	25.5	17.9	27.3	28.9
3 to 5 loads per week	32.1	32.1	33.0	36.3	35.3	32.6	37.6	36.9	33.1
6 to 10 loads per week	27.0	26.4	30.1	23.7	25.2	28.5	34.5	26.7	27.0
11 loads or more per week	11.5	10.5	13.7	8.3	7.9	13.4	10.0	9.1	11.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

## 5.13 HOUSEHOLDS WITH WASHING MACHINES, Temperature of water used .....

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
MARCH 2008									
<b>Number ('000)</b>									
Cold	1 998.1	1 325.0	1 282.0	438.5	549.4	143.0	48.4	88.5	5 872.8
Warm	375.7	412.7	191.3	126.0	187.6	39.6	7.5	28.0	1 368.6
Hot	44.8	54.8	23.2	15.3	22.8	*2.4	*1.2	*1.7	166.3
Varies	172.0	193.3	78.6	48.7	49.6	10.0	*1.8	7.4	561.5
<b>Total</b>	<b>2 590.5</b>	<b>1 985.8</b>	<b>1 575.1</b>	<b>628.6</b>	<b>809.4</b>	<b>195.1</b>	<b>58.9</b>	<b>125.7</b>	<b>7 969.1</b>
<b>Proportion (%)</b>									
Cold	77.1	66.7	81.4	69.8	67.9	73.3	82.1	70.4	73.7
Warm	14.5	20.8	12.1	20.1	23.2	20.3	12.8	22.3	17.2
Hot	1.7	2.8	1.5	2.4	2.8	*1.2	*2.0	*1.4	2.1
Varies	6.6	9.7	5.0	7.8	6.1	5.1	*3.1	5.9	7.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005									
<b>Proportion (%)</b>									
Cold	73.6	59.2	78.6	63.0	65.0	70.9	76.4	63.8	69.1
Warm	15.7	24.4	14.6	23.1	24.5	21.2	13.7	23.2	19.4
Hot	2.0	3.7	1.0	4.3	3.2	*2.1	*4.0	*1.7	2.5
Varies	8.7	12.7	5.8	9.6	7.4	5.8	*5.9	11.3	9.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002									
<b>Proportion (%)</b>									
Cold	71.9	58.8	77.1	62.2	63.1	66.3	76.8	65.6	67.8
Warm	19.1	27.9	16.0	24.5	27.2	24.9	15.5	24.4	22.1
Hot	2.1	4.2	2.1	5.7	3.4	3.3	*4.2	*1.6	3.1
Varies	6.9	9.2	4.8	7.6	6.2	5.4	*3.6	8.4	7.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999									
<b>Proportion (%)</b>									
Cold	70.6	53.6	73.9	53.2	61.0	63.7	75.7	64.2	64.4
Warm	20.5	31.6	19.2	31.3	26.8	26.0	*17.3	25.1	24.7
Hot	3.3	5.1	2.9	8.0	5.3	*3.9	*2.1	*3.5	4.3
Varies	5.6	9.6	4.0	7.4	6.9	6.4	*4.9	*7.2	6.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
JUNE 1994									
<b>Proportion (%)</b>									
Cold	69.4	47.5	73.0	48.1	59.1	58.6	70.3	61.1	61.2
Warm	21.8	38.2	20.3	37.0	27.8	32.4	21.5	30.5	28.0
Hot	4.4	7.0	3.0	8.7	7.6	4.8	3.8	2.5	5.5
Varies	4.4	7.3	3.7	6.2	5.4	4.2	4.4	5.8	5.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

**5.14****HOUSEHOLDS WITH CLOTHES DRYERS, Frequency of use**

NSW Vic. Qld SA WA Tas. NT(a) ACT Aust.

## MARCH 2008

## Number ('000)

At least once a week	381.6	189.3	224.5	34.4	74.9	15.1	7.7	15.0	942.5
At least once a fortnight	64.0	38.8	31.0	*6.1	13.9	*3.0	*1.3	*3.6	161.8
At least once a month	87.1	44.2	30.8	7.5	10.3	*3.2	*0.8	5.5	189.3
Depends on weather/season	737.9	550.3	478.6	166.7	249.5	58.9	7.7	34.7	2 284.3
Occasionally/rarely	146.3	116.8	63.9	43.1	35.5	8.0	*2.0	9.9	425.6
Never	167.1	185.5	80.0	61.8	55.4	15.1	*1.7	10.1	576.8
<b>Total</b>	<b>1 584.1</b>	<b>1 124.9</b>	<b>908.7</b>	<b>319.6</b>	<b>439.4</b>	<b>103.3</b>	<b>21.4</b>	<b>78.9</b>	<b>4 580.4</b>

## Proportion (%)

At least once a week	24.1	16.8	24.7	10.8	17.0	14.7	36.2	19.1	20.6
At least once a fortnight	4.0	3.4	3.4	*1.9	3.2	*2.9	*6.1	*4.6	3.5
At least once a month	5.5	3.9	3.4	2.3	2.3	*3.1	*3.8	7.0	4.1
Depends on weather/season	46.6	48.9	52.7	52.2	56.8	57.0	36.3	43.9	49.9
Occasionally/rarely	9.2	10.4	7.0	13.5	8.1	7.8	*9.5	12.5	9.3
Never	10.6	16.5	8.8	19.3	12.6	14.6	*8.2	12.8	12.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## MARCH 2005

## Proportion (%)

At least once a week	21.2	24.9	23.1	17.5	15.4	18.3	*18.1	19.3	21.6
At least once a fortnight	3.5	4.1	3.5	2.7	*1.7	*1.7	*1.5	*4.5	3.4
At least once a month	4.3	5.1	4.1	2.9	*1.8	*3.2	*3.5	*5.0	4.1
Depends on weather/season	30.9	25.6	30.0	28.7	35.1	37.2	38.9	29.3	29.8
Occasionally/rarely	32.9	32.5	31.5	39.2	39.3	32.5	*19.8	33.6	33.5
Never	7.2	7.8	7.7	9.0	6.8	7.1	*18.3	8.3	7.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## MARCH 2002

## Proportion (%)

At least once a week	23.3	21.3	19.8	15.5	14.8	16.1	*20.3	15.9	20.5
At least once a fortnight	3.2	3.8	3.1	1.3	1.8	*2.7	*5.6	*3.0	3.0
At least once a month	4.6	3.8	3.8	2.4	*1.3	3.7	*1.2	*2.6	3.7
Depends on weather/season	36.9	29.3	32.3	30.7	38.7	33.0	36.3	41.6	33.9
Occasionally/rarely	26.5	33.6	35.1	39.5	35.6	38.2	*22.2	32.0	32.0
Never	5.4	8.2	5.9	10.6	7.8	6.3	*14.5	*4.8	6.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## MARCH 1999

## Proportion (%)

At least once a week	16.9	17.6	21.9	13.9	11.7	15.6	*17.8	*11.0	17.2
At least once a fortnight	3.7	3.0	3.4	*1.4	*2.5	*2.9	*5.0	*2.5	3.1
At least once a month	3.7	1.9	3.2	*2.2	*2.0	*2.3	*5.8	*4.1	2.9
Depends on weather/season	39.3	37.4	37.5	40.2	41.5	31.8	*42.1	45.1	38.7
Occasionally/rarely	32.0	32.5	29.8	35.6	37.6	41.0	*23.2	32.5	32.7
Never	4.4	7.6	4.2	6.7	4.6	*6.4	*6.1	*4.8	5.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## JUNE 1994

## Proportion (%)

At least once a fortnight	21.3	30.5	22.4	20.6	16.6	29.6	14.4	25.5	23.9
At least once a month	5.3	4.8	3.3	3.2	2.3	3.8	2.9	7.2	4.4
Depends on weather/season	38.1	30.0	39.7	39.2	39.1	27.3	43.0	32.2	35.9
Occasionally/rarely	35.3	34.7	34.7	37.0	42.1	39.3	39.7	35.1	35.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

**5.15**

## REPLACING/BUYING APPLIANCES(a), Factors considered

	Refrigerator	Separate freezer	Dishwasher	Heater	Washing machine	Clothes dryer
	%	%	%	%	%	%
.....						
MARCH 2008						
Cost price	40.7	40.7	35.5	40.0	35.2	44.3
Features	20.0	12.8	21.4	23.8	17.7	15.0
Energy star rating	50.3	46.2	47.7	34.7	45.7	45.4
Water efficiency rating(b)	—	—	42.0	—	49.0	—
Brand name	9.6	7.9	15.2	6.6	12.8	12.8
Appearance	11.1	*3.4	10.6	9.0	2.3	*2.4
Environmental considerations	2.6	*2.8	5.6	7.0	6.0	*4.1
Reliability	5.5	*3.5	8.5	12.7	7.3	6.9
Serviceability	2.7	*2.3	*4.3	*4.3	4.1	*4.4
Availability	2.9	*4.9	*3.9	6.2	3.1	5.0
Dimensions	33.0	30.3	14.0	9.7	9.6	11.4
Capacity	25.3	28.5	7.3	15.3	15.9	17.1
Other	2.4	*3.8	*4.0	8.3	5.1	*3.1
Recommended by friend/expert(c)	1.2	**1.0	*3.0	5.7	4.2	*1.8
No reason	1.8	**1.3	*2.5	*2.3	*1.2	*4.3
Did not know	2.4	*1.6	*1.9	np	*0.8	**0.5
.....						
MARCH 2005						
Cost price	38.9	37.7	38.0	42.3	38.1	40.4
Features	17.3	15.3	26.2	19.5	19.8	12.4
Energy star rating	41.2	28.8	50.3	30.8	43.5	39.8
Brand name	10.1	9.6	17.0	6.3	15.3	14.2
Appearance	12.6	*3.0	11.9	9.3	2.5	*3.5
Environmental considerations	2.0	*1.6	13.6	7.7	19.1	*4.6
Reliability	5.9	*4.1	10.5	10.2	9.7	7.5
Serviceability	2.6	*1.4	*4.4	*2.6	3.9	*2.5
Availability	2.1	*2.7	*2.7	*3.2	2.5	*2.6
Dimensions	30.3	29.3	12.2	6.7	12.1	10.2
Capacity	25.8	28.4	8.1	15.9	22.9	15.6
Other	4.1	*4.9	7.9	12.7	6.7	5.3
Recommended by friend/expert(c)	2.4	*1.1	5.8	9.0	4.1	*2.0
No reason	4.0	*2.8	*3.1	*0.8	2.2	6.2
Did not know	1.7	*1.5	*1.5	*1.4	*1.2	*1.1
.....						
MARCH 2002						
Cost price	51.1	46.5	48.9	55.5	50.3	50.4
Features	23.5	17.0	30.2	29.6	26.6	24.0
Energy star rating	46.1	39.4	53.0	31.5	39.0	49.1
Brand name	20.2	15.5	28.0	14.4	26.3	27.2
Appearance	13.7	8.6	15.4	13.1	6.5	6.6
Environmental considerations	4.5	4.9	10.5	10.9	10.2	8.1
Reliability	13.8	12.7	23.6	15.6	21.7	18.4
Serviceability	7.5	5.8	12.6	7.3	10.2	9.3
Availability	5.5	5.7	4.6	7.1	5.2	5.7
Dimensions	34.2	31.1	22.9	16.9	22.1	18.3
Capacity	34.6	39.4	20.8	18.7	31.7	24.5
Other	7.1	7.4	15.7	21.1	9.7	9.8
No reason	1.9	2.9	1.4	0.8	2.4	3.1
Did not know	1.2	1.0	1.2	0.8	0.7	1.3

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Asked of households that bought or replaced at least one appliance in the last 12 months prior to the survey.

(b) Not collected in 2002 or 2005.

(c) Not collected in 2002.

## 5.16 HOUSEHOLDS WITH NON-WHITE GOODS—2008

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
CAPITAL CITY									
Television	99.0	99.2	98.9	99.3	99.3	99.5	..	..	99.1
Microwave	91.3	91.0	91.6	91.5	93.9	92.5	..	..	91.6
DVD player/recorder	87.6	87.1	88.6	87.1	87.5	84.0	..	..	87.6
Printer/scanner/fax machine	61.9	61.0	64.5	61.5	66.9	59.7	..	..	62.7
Desktop computer	60.0	60.5	64.5	60.8	62.6	59.7	..	..	61.3
Stereo system	58.1	56.2	61.7	61.9	64.1	69.6	..	..	59.6
Video player/recorder	46.4	50.4	43.7	56.3	51.3	53.4	..	..	48.7
Ceiling fan	32.6	29.2	57.8	46.1	41.4	22.7	..	..	37.9
Laptop/notebook computer	43.3	41.7	42.7	38.2	42.5	36.6	..	..	42.3
Games console	29.2	25.6	35.2	31.6	31.8	23.7	..	..	29.6
Surround sound system for home theatre	25.1	23.3	25.1	27.0	28.8	17.9	..	..	25.3
None of the above	1.0	1.2	*0.5	*1.0	*1.0	*1.4	..	..	1.0
BALANCE OF STATE/TERRITORY									
Television	99.4	99.0	99.7	99.5	100.0	98.6	..	..	99.4
Microwave	90.9	93.3	92.4	90.0	94.0	88.9	..	..	91.9
DVD player/recorder	85.2	85.4	89.0	87.7	89.2	85.4	..	..	86.8
Printer/scanner/fax machine	55.0	55.3	65.3	61.1	67.5	58.3	..	..	59.3
Desktop computer	53.8	57.1	58.6	60.3	64.4	55.4	..	..	57.0
Stereo system	58.6	60.3	57.1	56.6	60.9	65.4	..	..	58.8
Video player/recorder	49.7	52.3	41.4	50.1	53.7	54.6	..	..	48.3
Ceiling fan	48.6	52.9	73.2	54.6	41.4	21.9	..	..	55.4
Laptop/notebook computer	28.2	28.7	36.1	27.2	33.6	31.0	..	..	31.0
Games console	28.5	26.3	29.6	28.4	30.1	28.0	..	..	28.5
Surround sound system for home theatre	24.1	23.6	23.5	22.5	27.7	21.8	..	..	23.9
None of the above	*1.0	*1.0	*0.4	*1.6	—	*1.9	..	..	0.8
TOTAL STATE/TERRITORY									
Television	99.2	99.1	99.4	99.3	99.5	99.0	98.9	99.8	99.2
Microwave	91.1	91.7	92.0	91.1	93.9	90.4	88.1	93.2	91.7
DVD player/recorder	86.7	86.6	88.9	87.2	87.9	84.8	87.9	90.0	87.3
Printer/scanner/fax machine	59.2	59.3	64.9	61.4	67.1	58.9	58.9	71.0	61.5
Desktop computer	57.5	59.6	61.3	60.7	63.0	57.2	55.1	69.1	59.7
Stereo system	58.3	57.4	59.2	60.5	63.3	67.2	60.3	66.4	59.3
Video player/recorder	47.7	50.9	42.5	54.7	51.9	54.1	36.1	49.6	48.6
Ceiling fan	38.9	36.1	66.1	48.3	41.4	22.2	86.3	28.8	44.3
Laptop/notebook computer	37.4	37.9	39.1	35.3	40.3	33.4	45.8	48.0	38.1
Games console	28.9	25.8	32.2	30.7	31.4	26.2	27.7	35.8	29.2
Surround sound system for home theatre	24.7	23.4	24.2	25.8	28.5	20.2	32.3	29.2	24.8
None of the above	1.0	1.2	*0.5	1.2	*0.8	1.7	*1.1	*1.1	0.9

\* estimate has a relative standard error of 25% to 50% and should be used with caution

.. not applicable

— nil or rounded to zero (including null cells)

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

Note: No regional split between capital city and balance of state/territory for NT and ACT as the sample does not support any breakdown beyond the whole territory.

## 5.17 HOUSEHOLDS WITH NON-WHITE GOODS

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
	%	%	%	%	%	%	%	%	%
MARCH 2008 (b)									
Television	99.2	99.1	99.4	99.3	99.5	99.0	98.9	99.8	99.2
Microwave	91.1	91.7	92.0	91.1	93.9	90.4	88.1	93.2	91.7
DVD player/recorder	86.7	86.6	88.9	87.2	87.9	84.8	87.9	90.0	87.3
Printer/scanner/fax machine	59.2	59.3	64.9	61.4	67.1	58.9	58.9	71.0	61.5
Desktop computer	57.5	59.6	61.3	60.7	63.0	57.2	55.1	69.1	59.7
Stereo system	58.3	57.4	59.2	60.5	63.3	67.2	60.3	66.4	59.3
Video player/recorder	47.7	50.9	42.5	54.7	51.9	54.1	36.1	49.6	48.6
Ceiling fan	38.9	36.1	66.1	48.3	41.4	22.2	86.3	28.8	44.3
Laptop/notebook computer(c)	37.4	37.9	39.1	35.3	40.3	33.4	45.8	48.0	38.1
Games console	28.9	25.8	32.2	30.7	31.4	26.2	27.7	35.8	29.2
Surround sound system for home theatre	24.7	23.4	24.2	25.8	28.5	20.2	32.3	29.2	24.8
None of the above	1.0	1.2	*0.5	1.2	*0.8	1.7	*1.1	*1.1	0.9

MARCH 2005									
Television	99.3	97.6	97.7	98.9	99.2	98.4	98.1	99.0	98.5
Microwave	91.8	89.0	89.9	89.3	92.8	91.8	85.7	93.7	90.6
DVD player/recorder	72.4	71.5	72.1	69.7	73.5	65.8	79.5	78.1	72.0
Desktop computer	67.9	66.1	69.0	65.3	69.9	64.2	69.0	79.2	67.8
Stereo system	77.1	75.4	78.8	78.2	82.5	80.3	79.6	82.6	77.8
Video player/recorder	84.9	83.1	81.9	85.1	83.9	85.2	69.2	86.8	83.7
Ceiling fan	38.7	37.4	62.6	50.1	40.7	28.2	88.6	27.2	44.1
Games console	31.0	29.9	31.7	29.3	31.4	30.2	35.7	32.0	30.8
Vacuum cleaner(b)	95.9	94.3	94.4	96.2	94.9	97.8	89.3	97.4	95.2
Portable fan(b)	67.5	58.6	73.3	59.0	62.7	45.7	47.7	62.3	64.5
Waterbed(b)	3.1	2.1	5.2	3.9	1.9	2.8	*4.7	6.0	3.3
None of the above	—	1.1	—	*0.1	—	*0.2	—	—	0.3

MARCH 2002									
Television	99.3	99.3	98.9	99.4	99.4	99.8	97.2	99.1	99.2
Microwave	88.7	86.6	86.3	85.5	87.4	85.0	83.2	92.0	87.3
Desktop computer	60.0	60.8	58.2	57.8	60.8	51.7	57.5	73.3	59.8
Stereo system	81.2	79.5	81.2	79.7	83.9	80.5	83.8	88.0	81.1
Video player/recorder	88.9	90.1	87.5	88.9	89.9	88.8	83.5	93.9	89.1
Ceiling fan	37.5	38.2	58.6	48.6	44.8	30.1	87.0	23.8	43.3
Vacuum cleaner(d)	95.3	96.9	93.8	95.5	95.3	97.6	85.7	98.4	95.5
Portable fan(d)	67.2	62.1	76.3	60.9	64.1	53.2	53.1	72.7	66.5
None of the above	*0.1	—	*0.2	*0.1	—	—	—	—	*0.1

MARCH 1999									
Television	98.9	99.2	98.6	99.6	98.1	98.9	96.9	98.5	98.9
Microwave	84.6	82.2	81.7	81.1	83.1	80.7	79.9	86.6	82.9
Desktop computer	44.1	46.6	43.3	42.9	46.5	34.5	45.3	61.9	44.8
Stereo system	77.9	76.9	78.1	75.5	80.2	77.1	86.2	85.9	77.9
Video player/recorder	86.9	87.2	85.7	86.6	87.8	85.5	89.6	88.7	86.8
Ceiling fan	34.7	34.7	57.2	45.3	41.8	23.8	91.3	22.6	40.4
Vacuum cleaner(d)	95.4	96.7	93.4	95.1	94.5	96.4	89.1	95.9	95.2
Portable fan(d)	69.7	69.3	78.8	67.4	71.5	50.9	54.2	73.2	70.7
None of the above	*0.1	*0.1	*0.1	—	—	—	—	—	*0.1

\* estimate has a relative standard error of 25% to 50% and should be used with caution

— nil or rounded to zero (including null cells)

(a) Refers to mainly urban areas. For more information see paragraph 1.1 of the Explanatory Notes.

(b) Information on vacuum cleaner, portable fan and waterbed not collected in 2008.

(c) Information on laptop/notebook computer not collected before 2008.

(d) Information on vacuum cleaner and portable fan not collected in 2008.

**5.18****HOUSEHOLDS WITH APPLIANCES, Number switched on and ready to use—2008**

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
TELEVISION									
<b>Number ('000)</b>									
One	1 110.7	802.4	622.4	257.6	324.5	75.7	26.6	43.5	3 263.4
Two	815.6	614.6	453.0	182.8	247.3	52.5	17.0	44.1	2 426.8
Three	295.9	243.3	181.9	84.7	104.0	21.1	5.2	19.0	955.0
Four	122.7	98.2	52.0	27.2	28.0	10.0	*2.5	6.5	347.2
Five or more	66.1	50.5	28.4	16.3	19.2	4.9	**1.0	*3.1	189.6
None	273.5	229.7	267.2	74.5	99.5	35.4	7.9	11.9	999.5
<b>Total</b>	<b>2 684.5</b>	<b>2 038.7</b>	<b>1 605.0</b>	<b>643.1</b>	<b>822.5</b>	<b>199.5</b>	<b>60.3</b>	<b>128.1</b>	<b>8 181.6</b>
<b>Proportion (%)</b>									
One	41.4	39.4	38.8	40.1	39.5	37.9	44.2	33.9	39.9
Two	30.4	30.1	28.2	28.4	30.1	26.3	28.2	34.4	29.7
Three	11.0	11.9	11.3	13.2	12.6	10.6	8.6	14.8	11.7
Four	4.6	4.8	3.2	4.2	3.4	5.0	*4.2	5.1	4.2
Five or more	2.5	2.5	1.8	2.5	2.3	2.5	**1.7	*2.4	2.3
None	10.2	11.3	16.6	11.6	12.1	17.7	13.1	9.3	12.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
VIDEO PLAYER/RECORDER									
<b>Number ('000)</b>									
One	846.6	680.1	408.4	227.0	278.6	65.0	13.3	44.0	2 563.1
Two	90.4	50.9	28.4	26.1	25.3	5.9	**0.7	*2.3	229.8
Three	*13.8	*5.3	*2.9	*1.5	np	np	np	np	27.7
Four	—	*3.7	—	**1.1	np	np	—	—	*5.7
Five or more	**4.3	*11.0	*5.1	*3.0	*5.5	*1.9	np	np	31.6
None	336.3	296.0	241.4	95.5	116.6	35.5	6.8	16.3	1 144.4
<b>Total</b>	<b>1 291.4</b>	<b>1 046.9</b>	<b>686.1</b>	<b>354.2</b>	<b>429.2</b>	<b>109.0</b>	<b>22.0</b>	<b>63.6</b>	<b>4 002.4</b>
<b>Proportion (%)</b>									
One	65.6	65.0	59.5	64.1	64.9	59.6	60.6	69.2	64.0
Two	7.0	4.9	4.1	7.4	5.9	5.4	*3.2	*3.7	5.7
Three	*1.1	*0.5	*0.4	*0.4	np	np	np	np	0.7
Four	—	*0.4	—	**0.3	np	np	—	—	*0.1
Five or more	**0.3	*1.0	*0.7	*0.8	*1.3	*1.7	np	np	0.8
None	26.0	28.3	35.2	27.0	27.2	32.5	31.1	25.7	28.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

## 5.18

 HOUSEHOLDS WITH APPLIANCES, Number switched on and ready to use—2008
*continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
DVD PLAYER/RECORDER									
<b>Number ('000)</b>									
One	1 511.3	1 167.5	896.4	357.9	462.0	109.2	37.3	76.7	4 618.3
Two	324.4	203.4	145.7	66.0	93.0	13.5	4.2	16.5	866.7
Three	78.8	51.4	35.8	18.8	22.6	3.5	*0.9	*3.4	215.1
Four	*18.9	*11.9	*7.4	*5.6	8.0	*1.0	np	np	54.3
Five or more	*15.8	14.4	13.7	*5.7	*9.1	*1.9	np	np	63.2
None	396.6	332.2	336.0	110.8	132.3	41.8	9.4	16.9	1 376.1
<b>Total</b>	<b>2 345.8</b>	<b>1 780.8</b>	<b>1 435.1</b>	<b>564.8</b>	<b>727.1</b>	<b>170.9</b>	<b>53.6</b>	<b>115.5</b>	<b>7 193.6</b>
<b>Proportion (%)</b>									
One	64.4	65.6	62.5	63.4	63.5	63.9	69.7	66.4	64.2
Two	13.8	11.4	10.2	11.7	12.8	7.9	7.8	14.3	12.0
Three	3.4	2.9	2.5	3.3	3.1	2.0	*1.6	*3.0	3.0
Four	*0.8	*0.7	*0.5	*1.0	1.1	*0.6	np	np	0.8
Five or more	*0.7	0.8	1.0	*1.0	*1.3	*1.1	np	np	0.9
None	16.9	18.7	23.4	19.6	18.2	24.4	17.6	14.7	19.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MICROWAVE									
<b>Number ('000)</b>									
One	2 177.6	1 605.4	1 237.2	498.6	690.4	152.4	45.9	107.9	6 515.4
Two	25.5	12.9	24.4	*6.1	*5.8	**1.4	**0.7	*1.7	78.4
Three	np	—	—	—	—	—	—	—	np
Four	—	—	—	—	—	—	—	—	—
Five or more	np	*9.9	*7.3	**1.7	*3.9	*2.4	np	np	np
None	251.6	258.0	217.4	83.4	76.2	26.0	np	np	928.3
<b>Total</b>	<b>2 466.9</b>	<b>1 886.1</b>	<b>1 486.3</b>	<b>589.8</b>	<b>776.3</b>	<b>182.2</b>	<b>53.7</b>	<b>119.6</b>	<b>7 560.9</b>
<b>Proportion (%)</b>									
One	88.3	85.1	83.2	84.5	88.9	83.6	85.4	90.2	86.2
Two	1.0	0.7	1.6	*1.0	*0.7	**0.7	**1.3	*1.4	1.0
Three	np	—	—	—	—	—	—	—	np
Four	—	—	—	—	—	—	—	—	—
Five or more	np	*0.5	*0.5	**0.3	*0.5	*1.3	np	np	np
None	10.2	13.7	14.6	14.1	9.8	14.3	np	np	12.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.



**5.18****HOUSEHOLDS WITH APPLIANCES, Number switched on and ready to use—2008***continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
STEREO SYSTEM									
<b>Number ('000)</b>									
One	1 047.1	747.2	569.0	232.0	332.9	81.4	22.3	61.7	3 093.5
Two	79.7	42.6	40.6	21.8	32.7	5.9	*1.4	4.5	229.2
Three	20.2	14.6	*11.7	*4.4	*6.5	np	**0.9	np	61.0
Four	*3.6	np	np	**1.1	*2.0	np	—	np	9.9
Five or more	*10.5	np	np	*7.1	*6.0	*3.8	*1.1	**0.7	50.7
None	416.9	361.7	325.3	125.7	143.6	42.7	11.1	16.5	1 443.4
<b>Total</b>	<b>1 578.0</b>	<b>1 180.1</b>	<b>956.6</b>	<b>392.0</b>	<b>523.6</b>	<b>135.4</b>	<b>36.7</b>	<b>85.3</b>	<b>4 887.6</b>
<b>Proportion (%)</b>									
One	66.4	63.3	59.5	59.2	63.6	60.1	60.6	72.4	63.3
Two	5.1	3.6	4.2	5.6	6.2	4.4	*3.8	5.3	4.7
Three	1.3	1.2	*1.2	*1.1	*1.2	np	**2.4	np	1.2
Four	*0.2	np	np	**0.3	*0.4	np	—	np	0.2
Five or more	*0.7	np	np	*1.8	*1.1	*2.8	*2.9	**0.8	1.0
None	26.4	30.7	34.0	32.1	27.4	31.5	30.2	19.3	29.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
SURROUND SOUND SYSTEM									
<b>Number ('000)</b>									
One	517.9	350.2	294.6	118.2	177.8	32.3	15.3	29.6	1 535.9
Two	27.3	12.3	*9.6	*6.3	7.8	**0.5	np	np	65.0
Three	**2.8	**2.5	np	np	np	—	—	—	np
Four	—	np	np	—	—	—	—	—	np
Five or more	*5.9	np	—	np	np	**0.6	np	np	13.4
None	114.3	112.6	85.9	40.0	48.6	7.3	4.1	6.5	419.3
<b>Total</b>	<b>668.4</b>	<b>481.3</b>	<b>391.5</b>	<b>167.2</b>	<b>235.8</b>	<b>40.7</b>	<b>19.7</b>	<b>37.4</b>	<b>2 042.1</b>
<b>Proportion (%)</b>									
One	77.5	72.8	75.3	70.7	75.4	79.3	77.5	78.9	75.2
Two	4.1	2.6	*2.4	*3.8	3.3	**1.3	np	np	3.2
Three	**0.4	**0.5	np	np	np	—	—	—	np
Four	—	np	np	—	—	—	—	—	np
Five or more	*0.9	np	—	np	np	**1.5	np	np	0.7
None	17.1	23.4	21.9	23.9	20.6	17.8	20.8	17.3	20.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

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## 5.18 HOUSEHOLDS WITH APPLIANCES, Number switched on and ready to use—2008

*continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
DESKTOP COMPUTER									
<b>Number ('000)</b>									
One	1 115.6	845.5	632.7	261.3	353.2	73.1	22.8	59.9	3 364.0
Two	95.9	69.7	56.9	25.5	33.1	4.5	*0.9	9.2	295.7
Three	24.5	19.2	18.1	*3.8	*6.7	*0.9	np	np	76.5
Four	**2.7	*7.1	**3.5	**1.2	**2.1	np	—	np	17.6
Five or more	*9.5	9.3	*6.7	*5.4	*5.8	np	np	np	42.3
None	309.5	273.9	272.3	95.6	120.3	32.6	8.3	15.7	1 128.1
<b>Total</b>	<b>1 557.7</b>	<b>1 224.7</b>	<b>990.3</b>	<b>392.8</b>	<b>521.1</b>	<b>115.3</b>	<b>33.6</b>	<b>88.7</b>	<b>4 924.2</b>
<b>Proportion (%)</b>									
One	71.6	69.0	63.9	66.5	67.8	63.4	67.9	67.5	68.3
Two	6.2	5.7	5.8	6.5	6.3	3.9	*2.6	10.4	6.0
Three	1.6	1.6	1.8	*1.0	*1.3	*0.8	np	np	1.6
Four	**0.2	*0.6	**0.4	**0.3	**0.4	np	—	np	0.4
Five or more	*0.6	0.8	*0.7	*1.4	*1.1	np	np	np	0.9
None	19.9	22.4	27.5	24.3	23.1	28.2	24.7	17.7	22.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
LAPTOP/NOTEBOOK COMPUTER									
<b>Number ('000)</b>									
One	388.7	270.0	237.4	73.6	123.9	28.7	11.5	25.6	1 159.2
Two	41.0	20.9	23.4	7.1	12.4	*1.4	*0.7	*3.0	109.8
Three	np	np	**2.8	*2.0	np	**0.6	—	np	19.1
Four	np	np	—	—	np	—	—	np	*4.0
Five or more	*13.4	*17.3	*7.0	*4.1	**4.2	*2.4	*1.1	*1.2	50.7
None	563.1	465.2	361.6	142.0	189.0	34.1	14.7	31.1	1 800.8
<b>Total</b>	<b>1 012.4</b>	<b>780.0</b>	<b>632.3</b>	<b>228.7</b>	<b>333.4</b>	<b>67.3</b>	<b>27.9</b>	<b>61.6</b>	<b>3 143.5</b>
<b>Proportion (%)</b>									
One	38.4	34.6	37.5	32.2	37.2	42.7	41.1	41.5	36.9
Two	4.0	2.7	3.7	3.1	3.7	*2.1	*2.4	4.9	3.5
Three	np	np	**0.4	*0.9	np	**0.9	—	np	0.6
Four	np	np	—	—	np	—	—	np	*0.1
Five or more	*1.3	*2.2	*1.1	*1.8	**1.3	*3.6	*3.9	*1.9	1.6
None	55.6	59.6	57.2	62.1	56.7	50.7	52.7	50.5	57.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

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**5.18**

## HOUSEHOLDS WITH APPLIANCES, Number switched on and ready to use—2008

*continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
PRINTER/SCANNER/FAX									
<b>Number ('000)</b>									
One	948.9	697.9	577.3	214.6	320.2	63.0	18.1	57.3	2 897.3
Two	91.7	61.0	46.7	20.3	28.5	*3.4	*1.0	7.5	260.0
Three	27.4	18.5	np	*3.1	np	np	np	**0.6	76.4
Four	*3.5	*3.0	np	—	np	—	—	np	*9.1
Five or more	*11.3	*14.0	*10.4	*7.5	*6.3	*4.3	np	np	56.1
None	519.7	425.9	398.1	151.9	189.4	45.7	15.0	24.8	1 770.3
<b>Total</b>	<b>1 602.5</b>	<b>1 220.2</b>	<b>1 048.8</b>	<b>397.4</b>	<b>554.6</b>	<b>118.7</b>	<b>35.9</b>	<b>91.1</b>	<b>5 069.2</b>
<b>Proportion (%)</b>									
One	59.2	57.2	55.0	54.0	57.7	53.1	50.6	62.9	57.2
Two	5.7	5.0	4.4	5.1	5.1	*2.8	*2.7	8.2	5.1
Three	1.7	1.5	np	*0.8	np	np	np	**0.7	1.5
Four	*0.2	*0.2	np	—	np	np	—	np	*0.2
Five or more	*0.7	*1.1	*1.0	*1.9	*1.1	*3.6	np	np	1.1
None	32.4	34.9	38.0	38.2	34.1	38.5	41.8	27.2	34.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
GAMES CONSOLE									
<b>Number ('000)</b>									
One	363.8	214.3	208.0	73.0	105.0	20.1	5.3	19.5	1 009.1
Two	33.4	28.6	25.7	9.3	11.3	*1.7	*1.4	*3.1	114.5
Three	*5.3	*7.6	*4.7	**1.9	np	np	np	np	24.1
Four	**2.2	**2.2	—	—	np	np	np	np	*5.8
Five or more	*6.3	*8.2	**4.0	**4.2	*6.1	*1.1	*0.7	**0.9	31.5
None	371.7	268.8	277.5	110.7	133.1	29.2	9.0	21.6	1 221.5
<b>Total</b>	<b>782.7</b>	<b>529.7</b>	<b>519.9</b>	<b>199.0</b>	<b>259.6</b>	<b>52.8</b>	<b>16.9</b>	<b>46.0</b>	<b>2 406.6</b>
<b>Proportion (%)</b>									
One	46.5	40.5	40.0	36.7	40.5	38.1	31.5	42.4	41.9
Two	4.3	5.4	4.9	4.7	4.3	*3.3	*8.3	*6.7	4.8
Three	*0.7	*1.4	*0.9	**0.9	np	np	np	np	1.0
Four	**0.3	**0.4	—	—	np	np	np	np	*0.2
Five or more	*0.8	*1.6	**0.8	**2.1	*2.4	*2.1	*3.9	**1.9	1.3
None	47.5	50.7	53.4	55.6	51.3	55.3	53.1	47.0	50.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

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## 5.19 HOUSEHOLDS WITH TELEVISIONS, Number and type—2008

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
NORMAL PICTURE TUBE TV (CRT)									
<b>Number ('000)</b>									
One	1 061.4	789.9	622.1	219.2	321.0	73.0	26.5	45.1	3 158.3
Two	822.3	630.4	510.3	221.5	260.1	59.8	16.6	43.9	2 565.0
Three or more	498.3	415.0	291.9	137.3	148.6	44.2	9.4	22.5	1 567.1
<b>Total</b>	<b>2 382.0</b>	<b>1 835.3</b>	<b>1 424.4</b>	<b>578.1</b>	<b>729.8</b>	<b>177.0</b>	<b>52.5</b>	<b>111.5</b>	<b>7 290.5</b>
<b>Proportion (%)</b>									
One	44.6	43.0	43.7	37.9	44.0	41.3	50.5	40.4	43.3
Two	34.5	34.3	35.8	38.3	35.6	33.8	31.6	39.4	35.2
Three or more	20.9	22.6	20.5	23.8	20.4	25.0	17.9	20.2	21.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
LCD									
<b>Number ('000)</b>									
One	444.3	319.2	252.1	96.4	151.9	31.4	8.7	28.4	1 332.5
Two	97.7	49.7	53.8	19.6	19.4	6.9	np	np	253.5
Three or more	21.3	*10.1	*8.2	*5.3	*4.6	*1.6	np	np	52.5
<b>Total</b>	<b>563.3</b>	<b>379.0</b>	<b>314.1</b>	<b>121.4</b>	<b>175.9</b>	<b>39.9</b>	<b>11.4</b>	<b>33.3</b>	<b>1 638.5</b>
<b>Proportion (%)</b>									
One	78.9	84.2	80.3	79.4	86.3	78.7	76.5	85.2	81.3
Two	17.3	13.1	17.1	16.2	11.1	17.2	np	np	15.5
Three or more	3.8	*2.7	*2.6	*4.4	*2.6	*4.1	np	np	3.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
PLASMA									
<b>Number ('000)</b>									
One	290.0	257.8	200.8	81.6	107.1	19.3	6.4	17.6	980.6
Two	29.8	18.5	18.7	8.0	12.8	*2.1	**0.6	*1.1	91.7
Three or more	9.3	*6.6	*7.6	*2.8	**2.3	—	—	*1.1	29.8
<b>Total</b>	<b>329.1</b>	<b>282.9</b>	<b>227.1</b>	<b>92.5</b>	<b>122.2</b>	<b>21.4</b>	<b>7.0</b>	<b>19.8</b>	<b>1 102.1</b>
<b>Proportion (%)</b>									
One	88.1	91.1	88.4	88.3	87.6	90.3	91.0	88.7	89.0
Two	9.1	6.5	8.2	8.7	10.5	*9.7	*9.0	*5.7	8.3
Three or more	2.8	*2.3	*3.4	*3.0	**1.9	—	—	*5.6	2.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

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**5.19****HOUSEHOLDS WITH TELEVISIONS, Number and type—2008** *continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
EITHER LCD OR PLASMA (UNSURE)									
<b>Number ('000)</b>									
One	*14.2	18.4	12.1	*2.0	*5.8	*1.9	np	np	55.8
Two	np	np	np	np	*2.5	np	np	np	12.6
Three or more	np	np	np	np	**1.6	np	—	np	*7.9
<b>Total</b>	<b>21.2</b>	<b>23.0</b>	<b>14.9</b>	<b>*2.5</b>	<b>*9.8</b>	<b>*3.0</b>	<b>**0.9</b>	<b>*1.1</b>	<b>76.3</b>
<b>Proportion (%)</b>									
One	67.2	80.1	80.7	81.4	59.0	65.4	np	np	73.1
Two	np	np	np	np	*25.1	np	np	np	16.5
Three or more	np	np	np	np	**15.9	np	—	np	*10.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
PROJECTOR									
<b>Number ('000)</b>									
One	57.5	31.1	31.9	8.9	23.5	*2.5	**0.6	*3.2	159.2
Two	np	*3.8	np	np	np	—	—	np	10.0
Three or more	np	**2.4	np	np	np	—	—	np	*4.3
<b>Total</b>	<b>61.5</b>	<b>37.2</b>	<b>33.9</b>	<b>9.8</b>	<b>24.6</b>	<b>*2.5</b>	<b>**0.6</b>	<b>3.4</b>	<b>173.5</b>
<b>Proportion (%)</b>									
One	93.4	83.5	94.1	90.4	95.9	100.0	100.0	93.3	91.7
Two	np	*10.1	np	np	np	—	—	np	5.8
Three or more	np	**6.4	np	np	np	—	—	np	*2.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
OTHER/ DID NOT KNOW									
<b>Number ('000)</b>									
One	*5.7	*5.5	*5.2	**2.4	*3.3	**0.6	np	np	23.5
Two	np	*3.2	np	**1.2	np	np	np	np	*8.3
Three or more	np	**2.3	np	—	np	np	—	—	*6.2
<b>Total</b>	<b>*7.3</b>	<b>*11.1</b>	<b>*8.7</b>	<b>*3.6</b>	<b>*4.8</b>	<b>*1.4</b>	np	np	<b>38.0</b>
<b>Proportion (%)</b>									
One	77.7	*50.1	60.0	66.1	69.1	*45.7	np	np	61.9
Two	np	*28.9	np	*33.9	np	np	np	np	*21.8
Three or more	np	**21.0	np	—	np	np	—	—	*16.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	np	np	<b>100.0</b>

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## 5.20 HOUSEHOLDS WITH TELEVISIONS, Number switched on and ready to use—2008

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
NORMAL PICTURE TUBE TV (CRT)									
<b>Number ('000)</b>									
One	1 126.4	846.6	632.5	261.2	340.3	74.5	26.0	47.9	3 355.3
Two	635.8	491.2	351.1	153.0	189.6	40.9	13.0	35.6	1 910.2
Three or more	307.5	248.7	155.6	77.2	85.6	23.8	5.8	14.4	918.5
<b>Total</b>	<b>2 069.7</b>	<b>1 586.4</b>	<b>1 139.2</b>	<b>491.4</b>	<b>615.5</b>	<b>139.2</b>	<b>44.8</b>	<b>97.8</b>	<b>6 184.0</b>
<b>Proportion (%)</b>									
One	54.4	53.4	55.5	53.2	55.3	53.5	58.0	48.9	54.3
Two	30.7	31.0	30.8	31.1	30.8	29.4	29.0	36.4	30.9
Three or more	14.9	15.7	13.7	15.7	13.9	17.1	13.0	14.7	14.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
LCD									
<b>Number ('000)</b>									
One	411.7	271.0	214.1	87.1	123.8	27.5	8.0	26.6	1 169.8
Two	72.8	41.3	35.4	14.8	17.7	np	np	*2.9	191.6
Three or more	*13.8	*7.9	*5.6	*3.9	*3.6	np	np	**0.6	36.6
<b>Total</b>	<b>498.3</b>	<b>320.2</b>	<b>255.1</b>	<b>105.8</b>	<b>145.1</b>	<b>33.6</b>	<b>9.8</b>	<b>30.1</b>	<b>1 398.0</b>
<b>Proportion (%)</b>									
One	82.6	84.6	83.9	82.4	85.3	81.7	81.6	88.2	83.7
Two	14.6	12.9	13.9	14.0	12.2	np	np	*9.6	13.7
Three or more	*2.8	*2.5	*2.2	*3.7	*2.5	np	np	**2.1	2.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
PLASMA									
<b>Number ('000)</b>									
One	261.0	230.5	174.7	75.0	89.8	16.3	6.1	15.6	869.0
Two	23.2	15.5	13.9	*5.9	10.7	*1.6	**0.4	*1.2	72.3
Three or more	*7.7	*4.4	**2.7	**1.6	**1.8	—	—	**0.9	19.1
<b>Total</b>	<b>291.9</b>	<b>250.3</b>	<b>191.2</b>	<b>82.5</b>	<b>102.3</b>	<b>17.9</b>	<b>6.5</b>	<b>17.7</b>	<b>960.4</b>
<b>Proportion (%)</b>									
One	89.4	92.1	91.4	90.9	87.8	90.9	93.5	88.4	90.5
Two	7.9	6.2	*7.2	*7.1	10.5	*9.1	**6.5	*6.7	7.5
Three or more	*2.6	*1.7	**1.4	**2.0	**1.8	—	—	**4.8	2.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

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**5.20**HOUSEHOLDS WITH TELEVISIONS, Number switched on and ready to use—2008 *continued*

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
EITHER LCD OR PLASMA (UNSURE)									
<b>Number ('000)</b>									
One	17.9	14.6	11.4	*2.1	np	*1.8	**0.5	np	54.7
Two	*3.2	np	np	—	*2.5	np	—	—	9.4
Three or more	—	np	np	—	np	np	—	np	*3.9
<b>Total</b>	<b>21.2</b>	<b>17.7</b>	<b>13.5</b>	<b>*2.1</b>	<b>*9.4</b>	<b>*2.6</b>	<b>**0.5</b>	<b>*0.9</b>	<b>67.9</b>
<b>Proportion (%)</b>									
One	84.7	82.6	83.9	100.0	np	68.5	100.0	np	80.5
Two	*15.3	np	np	—	*26.5	np	—	—	13.8
Three or more	—	np	np	—	np	np	—	np	*5.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
PROJECTOR									
<b>Number ('000)</b>									
One	51.7	28.7	23.5	8.5	19.6	*2.1	**0.6	*3.2	137.8
Two	np	np	np	np	—	—	—	np	*6.7
Three or more	np	np	np	np	—	—	—	np	*2.6
<b>Total</b>	<b>53.2</b>	<b>33.9</b>	<b>25.5</b>	<b>8.9</b>	<b>19.6</b>	<b>*2.1</b>	<b>**0.6</b>	<b>3.4</b>	<b>147.2</b>
<b>Proportion (%)</b>									
One	97.2	84.7	92.1	94.7	100.0	100.0	100.0	93.3	93.6
Two	np	np	np	np	—	—	—	np	*4.6
Three or more	np	np	np	np	—	—	—	np	*1.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
OTHER/DID NOT KNOW									
<b>Number ('000)</b>									
One	*4.7	*6.5	*5.2	np	*2.3	**0.6	—	np	22.6
Two	—	np	np	np	np	np	—	np	*4.7
Three or more	—	np	np	—	np	np	—	—	*3.9
<b>Total</b>	<b>*4.7</b>	<b>*10.3</b>	<b>*7.3</b>	<b>**3.2</b>	<b>*3.8</b>	<b>*1.2</b>	—	<b>**0.7</b>	<b>31.2</b>
<b>Proportion (%)</b>									
One	100.0	62.7	70.8	np	*61.4	*53.5	—	np	72.4
Two	—	np	np	np	np	np	—	np	*15.0
Three or more	—	np	np	—	np	np	—	—	*12.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	—	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

\*\* estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Refers to mainly urban areas. For more information see paragraph 11 of the Explanatory Notes.

INTRODUCTION

This chapter looks at household awareness of GreenPower renewable energy. GreenPower is a national accreditation program for electricity retailers' renewable energy products. It was first established in New South Wales in 1997, extending nationally since 2000. GreenPower products enable electricity consumers to pay a premium for electricity generated from renewable sources (such as solar, wind, biomass, wave and tidal power, hydro-electricity and geothermal) that is fed into the national power grid.

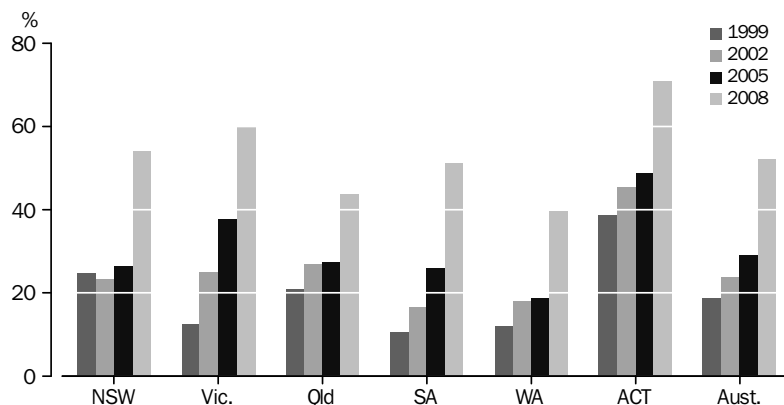
At 30 June 2008, there were approximately 748,000 residential customers of GreenPower in Australia, a substantial increase from 132,300 residential customers in March 2005 (Sustainability Victoria 2008).

Data was not collected for Tasmania and the Northern Territory.

GREENPOWER SCHEME AWARENESS

More than half of all households (52%) were aware of GreenPower in 2008 (including 5% already paying for GreenPower). This was a large increase compared with 2005 and 1999 when 29% and 19% respectively were aware of GreenPower (table 6.4). In 2008, household awareness of GreenPower was highest in the Australian Capital Territory (71%). Western Australia had the lowest level of awareness (39%). Awareness of the scheme by New South Wales households increased from 26% in 2005 to 54% in 2008. In South Australia, awareness of the scheme increased from 26% to 51% over the same period (graph 6.1 and table 6.4).

**6.1** GREENPOWER SCHEME, Awareness



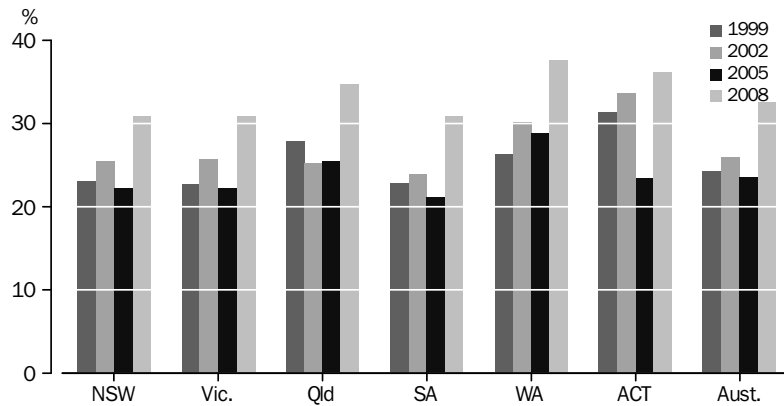
Note: Data was not collected for Tas. and NT.



## LEVEL OF SUPPORT

Around one-third of Australian households (32%) were willing to support GreenPower by paying extra for electricity generated from renewable energy. This was an increase from 2005 (23%) (graph 6.2 and table 6.6). Households in Western Australia expressed the highest support (38%), followed by the Australian Capital Territory (36%). Capital cities showed greater willingness to pay more for GreenPower renewable energy (35%) compared with other parts of the country (29%) (table 6.5).

**6.2** GREENPOWER SCHEME, Willingness to pay extra



Note: Data was not collected for Tas. and NT.

### 6.3 AWARENESS OF GREENPOWER SCHEME—2008

	NSW	Vic.	Qld	SA	WA	ACT(a)	Aust.
CAPITAL CITY							
<b>Number ('000)</b>							
Already paying for GreenPower	82.9	111.7	46.0	33.0	*7.9	..	287.8
Aware of GreenPower scheme	766.4	756.2	321.8	216.0	246.9	..	2 391.9
Not aware of GreenPower scheme	730.7	533.6	354.2	211.8	356.1	..	2 220.3
Did not know	62.7	54.7	20.5	18.3	13.3	..	173.2
<b>Total</b>	<b>1 642.7</b>	<b>1 456.2</b>	<b>742.5</b>	<b>479.1</b>	<b>624.3</b>	<b>..</b>	<b>5 073.3</b>

<b>Proportion (%)</b>							
Already paying for GreenPower	5.0	7.7	6.2	6.9	*1.3	..	5.7
Aware of GreenPower scheme	46.7	51.9	43.3	45.1	39.6	..	47.1
Not aware of GreenPower scheme	44.5	36.6	47.7	44.2	57.0	..	43.8
Did not know	3.8	3.8	2.8	3.8	2.1	..	3.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>..</b>	<b>100.0</b>

#### BALANCE OF STATE/TERRITORY

<b>Number ('000)</b>							
Already paying for GreenPower	53.6	35.1	39.9	*4.7	—	..	133.2
Aware of GreenPower scheme	557.3	331.0	297.9	77.4	70.7	..	1 334.3
Not aware of GreenPower scheme	410.9	198.0	502.9	81.9	131.8	..	1 325.6
Did not know	42.4	36.2	31.8	*4.2	—	..	114.7
<b>Total</b>	<b>1 064.2</b>	<b>600.3</b>	<b>872.6</b>	<b>168.3</b>	<b>202.5</b>	<b>..</b>	<b>2 907.8</b>

<b>Proportion (%)</b>							
Already paying for GreenPower	5.0	5.8	4.6	*2.8	—	..	4.6
Aware of GreenPower scheme	52.4	55.1	34.1	46.0	34.9	..	45.9
Not aware of GreenPower scheme	38.6	33.0	57.6	48.7	65.1	..	45.6
Did not know	4.0	6.0	3.6	*2.5	—	..	3.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>..</b>	<b>100.0</b>

#### TOTAL STATE/TERRITORY

<b>Number ('000)</b>							
Already paying for GreenPower	136.5	146.7	85.9	37.7	*7.9	6.3	421.1
Aware of GreenPower scheme	1 323.7	1 087.2	619.7	293.4	317.6	84.6	3 726.2
Not aware of GreenPower scheme	1 141.6	731.6	857.2	293.8	487.9	33.8	3 545.8
Did not know	105.1	90.9	52.3	22.6	13.3	*3.7	288.0
<b>Total</b>	<b>2 706.9</b>	<b>2 056.5</b>	<b>1 615.1</b>	<b>647.4</b>	<b>826.8</b>	<b>128.4</b>	<b>7 981.1</b>

<b>Proportion (%)</b>							
Already paying for GreenPower	5.0	7.1	5.3	5.8	*1.0	4.9	5.3
Aware of GreenPower scheme	48.9	52.9	38.4	45.3	38.4	65.9	46.7
Not aware of GreenPower scheme	42.2	35.6	53.1	45.4	59.0	26.3	44.4
Did not know	3.9	4.4	3.2	3.5	1.6	*2.9	3.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

.. not applicable

— nil or rounded to zero (including null cells)

(a) No regional split between capital city and balance of state/territory for ACT as the sample does not support any breakdown beyond the whole territory.

Note: Data covers only states and territories that are participating in the *National GreenPower Accreditation Program*.

**6.4**

## AWARENESS OF GREENPOWER SCHEME

	NSW	Vic.	Qld	SA	WA	ACT	Aust.
	%	%	%	%	%	%	%
MARCH 2008							
Already paying for GreenPower	5.0	7.1	5.3	5.8	*1.0	4.9	5.3
Aware of GreenPower scheme	48.9	52.9	38.4	45.3	38.4	65.9	46.7
Not aware of GreenPower scheme	42.2	35.6	53.1	45.4	59.0	26.3	44.4
Did not know	3.9	4.4	3.2	3.5	1.6	*2.9	3.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005							
Aware of GreenPower scheme	26.4	37.6	27.2	25.9	18.7	48.7	28.9
Not aware of GreenPower scheme	70.7	59.6	71.3	72.9	80.2	50.5	68.9
Did not know	2.9	2.8	1.4	*1.2	*1.0	*0.8	2.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002							
Aware of GreenPower scheme	23.1	24.9	26.7	16.5	18.0	45.2	23.6
Not aware of GreenPower scheme	67.3	66.0	67.3	78.7	76.7	47.7	68.6
Did not know	9.6	9.0	6.0	4.9	5.3	7.1	7.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999							
Aware of GreenPower scheme	24.5	12.4	21.0	10.6	12.0	38.6	18.5
Not aware of GreenPower scheme	62.9	78.4	68.4	81.8	81.7	55.7	71.3
Did not know	12.6	9.2	10.6	7.6	6.4	5.7	10.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

Note: Data covers only states and territories that are participating in the *National GreenPower Accreditation Program*.

## 6.5 WILLINGNESS TO PAY EXTRA PER ANNUM ON GREENPOWER ELECTRICITY—2008

	NSW	Vic.	Qld	SA	WA	ACT(a)	Aust.
CAPITAL CITY							
<b>Number ('000)</b>							
Willing to pay extra	512.9	434.0	253.0	136.4	242.3	..	1 622.3
Not willing to pay extra	847.9	717.3	323.4	236.7	312.6	..	2 503.2
Did not know	167.8	171.3	99.4	57.0	55.6	..	563.1
<b>Total</b>	<b>1 528.6</b>	<b>1 322.5</b>	<b>675.8</b>	<b>430.1</b>	<b>610.5</b>	<b>..</b>	<b>4 688.6</b>
<b>Proportion (%)</b>							
Willing to pay extra	33.6	32.8	37.4	31.7	39.7	..	34.6
Not willing to pay extra	55.5	54.2	47.9	55.0	51.2	..	53.4
Did not know	11.0	13.0	14.7	13.2	9.1	..	12.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>..</b>	<b>100.0</b>
BALANCE OF STATE/TERRITORY							
<b>Number ('000)</b>							
Willing to pay extra	263.4	140.6	262.2	45.8	63.2	..	775.1
Not willing to pay extra	602.6	325.0	455.9	89.4	118.5	..	1 591.3
Did not know	118.0	72.8	95.0	24.6	20.3	..	330.8
<b>Total</b>	<b>984.0</b>	<b>538.4</b>	<b>813.0</b>	<b>159.8</b>	<b>202.0</b>	<b>..</b>	<b>2 697.2</b>
<b>Proportion (%)</b>							
Willing to pay extra	26.8	26.1	32.2	28.6	31.3	..	28.7
Not willing to pay extra	61.2	60.4	56.1	55.9	58.7	..	59.0
Did not know	12.0	13.5	11.7	15.4	10.1	..	12.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>..</b>	<b>100.0</b>
TOTAL STATE/TERRITORY							
<b>Number ('000)</b>							
Willing to pay extra	776.3	574.6	515.2	182.2	305.5	43.7	2 397.4
Not willing to pay extra	1 450.5	1 042.3	779.3	326.1	431.1	65.3	4 094.6
Did not know	285.9	244.1	194.4	81.6	75.9	12.0	893.9
<b>Total</b>	<b>2 512.7</b>	<b>1 861.0</b>	<b>1 488.8</b>	<b>590.0</b>	<b>812.5</b>	<b>120.9</b>	<b>7 385.8</b>
<b>Proportion (%)</b>							
Willing to pay extra	30.9	30.9	34.6	30.9	37.6	36.1	32.5
Not willing to pay extra	57.7	56.0	52.3	55.3	53.1	54.0	55.4
Did not know	11.4	13.1	13.1	13.8	9.3	9.9	12.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

.. not applicable

(a) No regional split between capital city and balance of state/territory for ACT as the sample does not support any breakdown beyond the whole territory.

Note: Data covers only states and territories that are participating in the *National GreenPower Accreditation Program*.

**6.6****WILLINGNESS TO PAY EXTRA PER ANNUM ON GREENPOWER ELECTRICITY .....**

	NSW	Vic.	Qld	SA	WA	ACT	Aust.
	%	%	%	%	%	%	%
MARCH 2008							
Willing to pay extra	30.9	30.9	34.6	30.9	37.6	36.1	32.5
Not willing to pay extra	57.7	56.0	52.3	55.3	53.1	54.0	55.4
Did not know	11.4	13.1	13.1	13.8	9.3	9.9	12.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2005							
Willing to pay extra	22.2	22.2	25.4	21.1	28.8	23.4	23.5
Not willing to pay extra	66.0	64.6	62.8	67.9	59.4	64.1	64.5
Did not know	11.7	13.2	11.8	11.0	11.8	12.5	12.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 2002							
Willing to pay extra	25.4	25.6	25.2	23.9	30.1	33.6	25.9
Not willing to pay extra	60.6	63.3	65.6	62.3	59.3	59.7	62.3
Did not know	14.0	11.1	9.3	13.8	10.6	6.7	11.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
MARCH 1999							
Willing to pay extra	23.0	22.6	27.8	22.8	26.3	31.3	24.3
Not willing to pay extra	56.9	56.7	53.1	55.2	55.7	55.7	55.8
Should not pay extra to green power(a)	5.3	4.2	5.2	4.2	3.1	*2.4	4.6
Did not know	14.8	16.4	13.8	17.9	14.8	10.6	15.2
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Not an option in 2002, 2005 and 2008.

Note: Data covers only states and territories that are participating in the *National GreenPower Accreditation Program*.

## EXPLANATORY NOTES .....

### INTRODUCTION

**1** The statistics in this publication were compiled from data collected in the Energy Use and Conservation Survey that was conducted throughout Australia in March 2008 as a supplement to the Australian Bureau of Statistics (ABS) monthly Labour Force Survey (LFS). The major aim of the survey was to collect data on how households use and conserve energy. It is a continuation of a series of surveys on this topic conducted since June 1994. The previous survey was conducted in March 2005.

**2** The publication *Labour Force, Australia* (cat. no. 6202.0) contains information about survey design, sample redesign, scope, coverage and population benchmarks relevant to the monthly LFS, which also applies to supplementary surveys. It also contains definitions of demographic and labour force characteristics, and information about telephone interviewing.

### METHODOLOGY

#### *Survey Vehicle*

**3** The Labour Force Survey is based on a multi-stage area sample of private dwellings (houses, flats, etc.) and a list sample of non-private dwellings (hotels, motels, etc.). The sample for a Labour Force survey is approximately 34,000 dwellings but only half of these were included in the March supplementary topic. For the March 2008 survey, there were 12,965 fully responding households.

#### *Data collection*

**4** Information was collected through interviews conducted over a two-week period during March 2008.

**5** Information was collected from any responsible adult in the household who was asked to respond on behalf of the household.

#### *Estimation*

**6** The estimation process for this survey ensures that estimates calibrate exactly to independently produced population totals at broad levels. The known population totals, commonly referred to as 'benchmarks', are produced according to the scope of the survey. The same is true for estimates of households produced in this survey. However, in these cases the household benchmarks are actually estimates themselves and not strictly known population totals.

**7** Since this survey was last conducted, the process for producing household benchmarks has been refined. Whilst this process is still under review, it represents a significant improvement to the previous method and household benchmarks produced using the new method are considered to be of sufficient quality for use in household survey estimation. In addition, measures of the variability in household benchmarks have been incorporated into household estimates for the first time. These changes may result in unexpected movements in total households (at some broad levels) due to revised benchmark methodology.

**8** A paper describing these issues in detail is currently being developed and will be released on the ABS website with catalogue number 3107.0.55.007.

### SCOPE

**9** The scope of this supplementary survey is restricted to people aged 18 years and over who were usual residents of private dwellings and excludes the following:

- members of the Australian permanent defence forces
- certain diplomatic personnel of overseas governments, customarily excluded from censuses and surveys
- overseas residents in Australia

SCOPE <i>continued</i>	<ul style="list-style-type: none"> <li>■ members of non-Australian defence forces (and their dependents)</li> <li>■ residents of other non-private dwellings such as hospitals, hotels and motels</li> <li>■ people living in very remote areas.</li> </ul> <p><b>10</b> Students at boarding schools, patients in hospitals, residents of homes (e.g. retirement homes, homes for people with disabilities) and inmates of prisons are excluded from all supplementary surveys.</p> <p><b>11</b> The exclusion of people living in very remote areas will have only a minor impact on any aggregate estimates that are produced for individual states and territories, with the exception of the Northern Territory where such persons account for over 23% of the population.</p>
COVERAGE	<p><b>12</b> The estimates in this publication relate to households covered by the survey in March 2008. In the LFS, coverage rules are applied to ensure that each person is associated with only one dwelling, and hence has only one chance of selection in the survey. See <i>Labour Force, Australia</i> (cat. no. 6202.0) for more details.</p>
DATA COMPARABILITY	<p><b>13</b> Prior to 2008, the annual publication <i>Environmental Issues: People's Views and Practices</i> (cat. no. 4602.0) focussed on one of three rotating topics each year: Energy Use and Conservation, Waste Management and Transport Use and Water Use and Conservation.</p> <p><b>14</b> For 2008 this publication has been renamed <i>Environmental Issues: Energy Use and Conservation</i> (cat. no. 4602.0.55.001).</p> <p><b>15</b> An important point to note is that the environment topics were surveyed using a 'personal interview' methodology before 1997. From 1997 onwards the 'any responsible adult' methodology has been applied. When comparing post-1997 and pre-1997 data readers should be aware that some differences in the data may be explained by the change in methodology rather than representing real changes over time.</p>
RELIABILITY OF THE ESTIMATES	<p><b>16</b> Estimates in this publication are subject to sampling and non-sampling errors:</p> <ul style="list-style-type: none"> <li>■ Sampling error is the difference between the published estimate and the value that would have been produced if all dwellings had been included in the survey. For further information refer to the Technical Note.</li> <li>■ Non-sampling errors are inaccuracies that occur because of imperfections in reporting by respondents and interviewers, and errors made in coding and processing data. These inaccuracies may occur in any enumeration, whether in a full count or a sample survey. Every effort is made to reduce the non-sampling error to a minimum by the careful design of questionnaires, intensive training and supervision of interviewers and efficient data processing procedures.</li> </ul>
ACKNOWLEDGEMENTS	<p><b>17</b> ABS surveys draw extensively on information provided by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated; without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the <i>Census and Statistics ACT 1905</i>.</p>
NEXT SURVEY	<p><b>18</b> The ABS plans to conduct this survey again in March 2011.</p>
RELATED PUBLICATIONS	<p><b>19</b> Users may also wish to refer to the following ABS publications:</p> <p><i>Environmental Issues: People's Views and Practices</i> (cat. no. 4602.0) – 1994 to 2007 issues.</p> <p><i>Energy and Greenhouse Gas Emission Accounts</i> (cat. no. 4604.0) - 2001 issue</p> <p><i>Detailed Energy Statistics, Australia</i> (cat. no. 4648.0.55.001) - 2004 issue</p>
KEY REFERENCES	<p><b>20</b> Further key references on environmental concerns, energy use and conservation</p>

can be found through the following websites:

Australian Bureau of Agricultural and Resource Economics  
(<http://www.abareconomics.com>)

Australian Government Department of Climate Change  
(<http://www.climatechange.gov.au>)

National GreenPower Accreditation Program (<http://www.greenpower.gov.au>)

**21** Current publications and other products released by the ABS are available from the Statistics page on the ABS website. The ABS also issues a daily *Release Advice* on the website which details products to be released in the week ahead.

## ABBREVIATIONS

ABARE	Australian Bureau of Agricultural and Resource Economics
ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AGO	Australian Greenhouse Office
Aust.	Australia
DCC	Australian Government Department of Climate Change
DEUS	New South Wales Government Department of Energy, Utilities and Sustainability
DEWHA	Australian Government Department of the Environment, Water, Heritage and the Arts
LFS	Labour Force Survey
LPG	liquefied petroleum gas
NGPAP	National Green Power Accreditation Program
NSW	New South Wales
NT	Northern Territory
Qld	Queensland
RSE	relative standard error
SA	South Australia
SE	standard error
Tas.	Tasmania
Vic.	Victoria
WA	Western Australia



RELIABILITY OF THE ESTIMATES

**1** Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings, they are subject to sampling variability. That is, they may differ from those estimates that would have been produced if all occupants of all dwellings had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of dwellings (or occupants) was included. There are about two chances in three (67%) that a sample estimate will differ by less than one SE from the number that would have been obtained if all dwellings had been included, and about 19 chances in 20 (95%) that the difference will be less than two SEs.

**2** Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate:

$$RSE\% = \left( \frac{SE}{estimate} \right) \times 100$$

**3** RSEs for estimates from *Environmental Issues: Energy Use and Conservation 2008* are published for the first time in 'direct' form. Previously a statistical model was produced that related the size of estimates to their corresponding RSEs, and this information was displayed via a 'SE table'. From now on, RSEs for *Environmental Issues: Energy Use and Conservation* estimates will be calculated for each separate estimate and published individually. The Jackknife method of variance estimation is used for this process, which involves the calculation of 30 'replicate' estimates based on 30 different subsamples of the original sample. The variability of estimates obtained from these subsamples is used to estimate the sample variability surrounding the main estimate.

**4** Limited publication space does not allow for the separate indication of the SEs and/or RSEs of all the estimates in this publication. However, RSEs for all these estimates will be available free-of-charge on the ABS website <[www.abs.gov.au](http://www.abs.gov.au)>.

**5** In the tables in this publication, only estimates (numbers and proportions) with RSEs less than 25% are considered sufficiently reliable for most purposes. However, estimates with larger RSEs have been included and are preceded by an asterisk (e.g. \*3.4) to indicate they are subject to high SEs and should be used with caution. Estimates with RSEs greater than 50% are preceded by a double asterisk (e.g. \*\*2.1) to indicate that they are considered too unreliable for general use.

PROPORTIONS AND PERCENTAGES

**6** Proportions formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSE of a proportion is given below. This formula is only valid when x is a subset of y.

$$RSE\left(\frac{x}{y}\right) = \sqrt{[RSE(x)^2] - [RSE(y)^2]}$$

DIFFERENCES

**7** Published estimates may also be used to calculate the difference between two survey estimates (of numbers or percentages). Such an estimate is subject to sampling error. The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x-y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

**8** While this formula will only be exact for differences between separate and uncorrelated characteristics or subpopulations, it is expected to provide a good approximation for all differences likely to be of interest in this publication.

SIGNIFICANCE TESTING

**9** The statistical significance test for any of the comparisons between estimates can be performed to determine whether it is likely that there is a difference between the corresponding population characteristics. The standard error of the difference between two corresponding estimates (x and y) can be calculated using the formula in paragraph 7. This standard error is then used to calculate the following test statistics:

$$\frac{[x-y]}{SE(x-y)}$$

**10** If the value of this test statistic is greater than 1.96 then we may say there is good evidence of a real difference (at the 95% confidence interval level) in the two populations with respect to that characteristic. Otherwise, it cannot be stated with this level of confidence that there is a real difference between the populations.

**11** The imprecision due to sampling variability, which is measured by the SE, should not be confused with inaccuracies that may occur because of imperfections in reporting by respondents and recording by interviewers, and errors made in coding and processing data. Inaccuracies of this kind are referred to as non-sampling error, and they occur in any enumeration, whether it be a full count or sample. Every effort is made to reduce non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers, and efficient operating procedures.

## GLOSSARY

<b>Aerated concrete</b>	A low density concrete made of portland cement, cement-silica, cement-pozzolan, lime-pozzolan, lime-silica paste or a combination of these materials. The concrete has a homogeneous cell structure, visible to the eye. Also called cellular concrete. Not to be confused with air-entrained concrete, in which air bubbles are microscopic in size.
<b>Air conditioner</b>	An apparatus for controlling the temperature of an enclosed space. It can be portable or fixed into the structure of the dwelling, usually in the wall or ceiling.
<b>Any responsible adult</b>	Any person 15 years or over, a usual resident of the dwelling and whose next birthday was closest to the date of the interview responding on behalf of the selected person or household.
<b>Bottled gas</b>	Gas provided in a large bottle or canister which is located near the house. A gas retailer may remove empty canisters and replace them with new ones.
<b>Brick Veneer</b>	Brick veneer walls consist of a single external layer of brickwork, with a lined stud frame inside.
<b>Compact Fluorescent Lights/Lamps (CFL)</b>	Compact fluorescent lights/lamps (CFLs) are fluorescent tubes shaped to fit an ordinary light fitting. They save energy by reducing the wattage needed in a light fitting while producing the same amount of light. They use a gas discharge process, rather than the heating of a filament; this reduces energy lost by heat. CFLs contain a small amount of mercury, which poses an environmental hazard when released by crushing or breaking the light bulb. A lack of special disposal facilities for CFLs could see them end up in large numbers in landfills, releasing mercury into the environment.
<b>Double brick</b>	An inner and outer wall constructed of brick which are separated by a small air cavity. Double brick walls heat up/cool down slowly and stay warm/cool for long periods.
<b>Double glazing</b>	Two panes of glass in a window with air space between the panes.
<b>Ducted air conditioner</b>	A ducted air conditioner is one where air is piped from a single source through the dwelling to more than one outlet.
<b>Dwelling</b>	A suite of rooms contained within a building which are self-contained and intended for long-term residential use. To be self-contained, the suite of rooms must possess cooking and bathing facilities as building fixtures. Examples of types of dwelling include: separate house; semi-detached, row or terrace house or townhouse; flat, unit or apartment; and other dwellings, including caravan, cabin, houseboat, and house or flat attached to a shop.
<b>Evaporative air conditioner</b>	An air conditioner that draws outdoor air through a water filtration system whereby some heat from the air is absorbed through water evaporation. The air is cooled and filtered as it passes through moistened pads.
<b>Fibro Cement</b>	Building material made of compressed fibres cemented into rigid sheets.
<b>Flat, unit or apartment</b>	All dwellings in blocks of flats, units or apartments. These dwellings usually share a common entrance foyer or stairwell. This category also includes flats attached to houses such as granny flats, and houses converted into two or more flats.
<b>Gas ducted system</b>	Ducted systems consist of heat piped through the dwelling to more than one outlet from a single heat source (e.g. a gas furnace).
<b>Gas heater</b>	Includes heaters that use gas for heating, but may need electricity to ignite or start the appliance.

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<b>GreenPower</b>	GreenPower is a national accreditation program for renewable electricity products sourced from solar, wind or hydro power.
<b>Greenhouse gas emissions</b>	Greenhouse gases are gaseous compounds in the atmosphere, such as carbon dioxide and methane, which heat the earth by trapping heat from the sun in the atmosphere through the “greenhouse effect.” Emissions are the release of greenhouse gases into the atmosphere.
<b>Halogen</b>	Halogen lamps are an improved form of incandescent lamp. Halogen lamps tend to focus the light and are best used in task lighting, such as over a cooking area. The light bulb uses a halogen gas, usually iodine or bromine, that causes the evaporating tungsten to be redeposited on the filament, thus prolonging its life.
<b>Insulated cladding</b>	Cladding which is a protective, insulated or aesthetic fixed layer added to the exterior walls of a building.
<b>LCD</b>	LCD (Liquid Crystal Display) is display technology that uses rod-shaped molecules (liquid crystals) that flow like liquid and bend light.
<b>LED</b>	LED (Light Emitting Diode) is a semiconductor light source that emits visible light or invisible infrared radiation.
<b>LPG</b>	LPG (Liquefied petroleum gas) (also called LP Gas, or autogas) is the generic name for mixtures of hydrocarbon (mainly propane and butane). It is used as a fuel in heating appliances and vehicles, and increasingly replacing chlorofluorocarbons as an aerosol propellant and a refrigerant to reduce damage to the ozone layer.
<b>Mains gas</b>	Gas connected to the household by underground pipes and provided on a continuous basis by an energy company.
<b>Off-peak electricity</b>	Supply of electricity at periods of time of less activity than at peak times. Hot water systems that use off-peak electricity are set to operate only during an off-peak period, normally during the night.
<b>Particleboard</b>	A structural material often used for sub flooring. It is made from wood fragments that are mechanically pressed into a sheet and bonded with resin.
<b>Plasma television</b>	Flat-panel display technology that ignites small pockets of gas to light phosphors.
<b>Portable air conditioner</b>	A portable air conditioner is one which may be moved around the dwelling.
<b>Private dwelling</b>	A dwelling that is intended to have people live in it (e.g. house, flat, unit, caravan, houseboat, tent, etc.).
<b>Projector</b>	A device that projects images onto a screen.
<b>Reverse brick veneer</b>	Puts the brickwork on the inside and timber framing on the outside in order to capture heat from the sun during the day, which is released at night to warm the dwelling.
<b>Reverse cycle air conditioner</b>	A reverse cycle air conditioner may also be used as a heater. The temperature is able to be varied between warm and cool settings.
<b>Solar hot water system</b>	Includes solar hot water systems that have boosters to heat water during periods of rain or overcast conditions, and when heavy demand exhausts the hot water supply before it can be reheated by the sun.
<b>Solar - Photovoltaic</b>	Photovoltaics, or PV for short, is a technology that uses solar cells to convert sunlight directly into electricity. Photovoltaic systems are different to solar hot water systems, which absorb sunlight directly into the water-carrying tubes contained in the panel.
<b>Special dwelling</b>	An establishment that provides predominantly short-term accommodation for communal or group living and often provides common eating facilities (e.g. hotels, motels, hospitals, prisons, short-stay caravan parks, etc.). Persons living in special dwellings were excluded from the scope of this survey.

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<b>Split system air conditioner</b>	A split system air conditioner is separated (but still connected by pipes or ducts) into a main unit that houses the compressor, and one or more outlets. The main unit is usually located outside the dwelling.
<b>Storage hot water system</b>	A storage/tank hot water system heats water and stores it in a tank until it is needed.
<b>Surround sound system for home theatre</b>	A sound system designed to place the listener in the centre of the sound.
<b>Usual residents</b>	Persons who usually live in a particular private dwelling and regard it as their own or main home. Excludes usual residents who were away from the dwelling for more than six weeks altogether and visitors to the dwelling who do not usually live there, do not regard it as their own or main home, but are temporarily staying there.

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