

# Environmental awareness and action

In recent years environmental issues have attracted much interest at an international, national and local level. For example, in 2010, the Australian Government's Intergenerational Report identified climate change as one of the biggest challenges facing Australia, placing substantial pressures on Australia's economy, living standards and government finances over the next 40 years.<sup>1</sup>

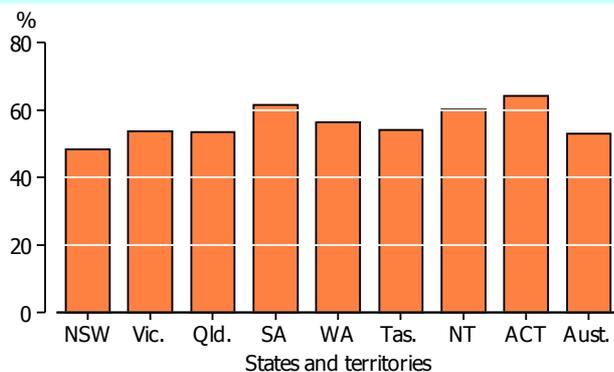
Public concern about environmental issues, such as drought, bushfires, water conservation and climate change, can influence actions taken to protect and restore the environment. These actions may be undertaken by individuals, governments, non-government organisations or industry, and may include the development of policy initiatives, public campaigning, petitions, membership of environmental groups, volunteering and donations. Individuals can also demonstrate concern for the environment by undertaking personal environment protection activities, such as recycling and reducing electricity and water consumption.

This article examines Australians' environmental concerns and their participation in environmental protection activities.

## Concern about the environment

In 2007–08, 82% of Australian adults (12.8 million people) reported that they were concerned about at least one environmental problem. However, only around a quarter (26%) reported that the condition of the natural environment was bad while almost two-fifths (39%) felt that it was neither good nor bad. Nevertheless, over half of adults (53%) said they thought the natural environment was declining.

### Proportion of adults who reported the natural environment was declining, by state and territory – 2007-08



Source: ABS 2007-08 Environmental Views and Behaviour Survey

### Data source

This article uses data from the ABS 2007–08 Environmental Views and Behaviour Survey collected in the ABS Multi-Purpose Household Survey (MPHS). The analysis is restricted to all adults aged 18 years and over unless otherwise stated.

Some of the data used in this analysis are derived from *attitudinal questions*. These questions attempt to measure a respondent's attitudes or feelings towards a particular topic, event, object or people. There are some constraints associated with attitudinal questions which should be considered when reading this analysis. Notably, a respondent's attitude does not necessarily correlate to their behaviour, and attitudes are subject to change over time. For example, a Newspoll survey found that the proportion of adults who believed that climate change was occurring fell from 84% in July 2008 to 73% in February 2010.<sup>2</sup>

Women (83%) were more likely to report being concerned about any environmental problems than men (80%). Younger adults (aged 18–24 years) and older adults (aged 65 years and over) were the least likely to be concerned about any environmental problems (74% and 77% respectively). And, while over half (55%) of all adults aged below 65 years reported that the natural environment was declining, less than half (44%) of those aged 65 years and over agreed.

Rates of concern about environmental problems were highest in the Australian Capital Territory (90%) and South Australia (86%); and the lowest in Tasmania (77%) and New South Wales (78%). New South Wales had amongst the lowest proportion of adults who felt the condition of the natural environment was bad (23%) or declining (48%) while South Australia and the Australian Capital Territory recorded some of the highest proportions (35% and 62% and, 33% and 64% respectively).

In part reflecting the age distribution of these groups, adults without a non-school qualification, such as a Bachelor Degree or Diploma, were less likely to report being concerned about the environment than those with a non-school qualification (76% compared with 87%). Similarly, under half (48%) of those without a non-school qualification thought the environment was declining compared with nearly three-fifths (57%) who had a non-school qualification.

In a similar pattern, those who were not employed were less likely to report being concerned about the environment than those who were employed (77% compared with 84%); and under half (47%) of those who were not

employed reported that the natural environment was declining compared with over a half (56%) who were employed.

## Concerns about climate change

There is mounting scientific evidence to indicate that average temperatures are rising and these changes are very likely to be as a result of increasing greenhouse gas emissions and not the result of the natural variability of climate.<sup>3</sup> Australia's climate is already changing, and how adults and governments act now could have implications for the future sustainability of the environment. For more information see ABS [Australia's Environment. Issues and Trends, 2010](#) (cat. no. 4613.0).

In 2007–08 almost three-quarters (73%) of adults said they were concerned about climate change, although there was some variation across population groups. Adults aged 65 years and over were less likely to report being concerned about climate change (60%) than adults in other age groups.

Across the states and territories 69% of adults living in the Northern Territory reported that they were concerned about climate change compared with 81% of adults in the Australian Capital Territory.

Adults who were not employed were less likely to be concerned about climate change than those who were employed (68% compared with 76%); and those without a non-school qualification were less likely to be concerned than those with a non-school qualification (69% compared with 77%). Adults with a Bachelor degree or above were more likely to be concerned about climate change (83%) than those with a diploma (78%) and those with a certificate (73%).

## Personal environmental protection activities

### ...recycling

Recycling enables waste materials to be transformed into usable resources thereby reducing landfill and conserving resources.<sup>4</sup> In 2007–08, the vast majority (84%) of Australians sorted out recyclable from non-recyclable waste all or most of the time. In contrast, only one-third of adults reported composting or recycling food waste all or most of the time.

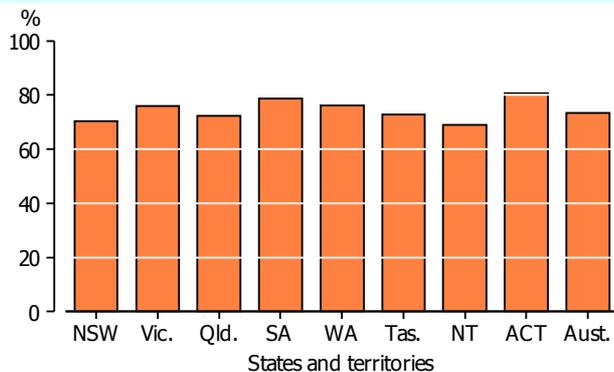
Overall, young adults (18–24 years) were the least likely to sort out recyclable waste (74%) compared with other age groups. The proportion of those who reported sorting out recyclable from non-recyclable waste varied across the states and territories. The Northern Territory and Western Australia had the lowest rates of recycling (64% and 69% respectively) compared with over nine-tenths (93%) in the Australian Capital Territory.

These differences were partially driven by differences in the availability of local waste collection services. In major cities, 97% of adults reported that they had recyclable waste collection services in their local area, compared with 65% in outer regional areas and 32% in remote areas.

Of those Australians who did grocery shopping, 43% reported using green or reusable shopping bags all or most of the time while around one-quarter (26%) reported rarely or never using them. Once again this varied with age, with 18–24 year olds being the least likely to use them all or most of the time (34%).

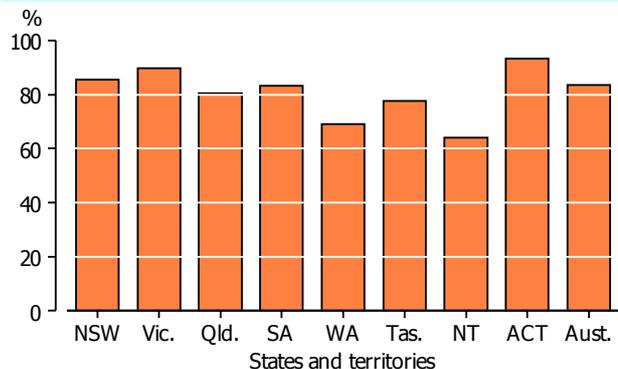
Adults in Queensland and the Northern Territory reported the lowest rates of use of green or reusable shopping bags (38%) compared with South Australia and the Australian Capital Territory who reported the highest rates (51% and 50% respectively).

**Proportion of adults who were concerned about climate change, by state or territory – 2007-08**



Source: ABS 2007-08 Environmental Views and Behaviour Survey

**Proportion of adults who sorted out recyclable waste all or most of the time, by state or territory – 2007-08**



Source: ABS 2007-08 Environmental Views and Behaviour Survey

## ...water use and conservation

Australia's urban water supply faces major challenges due to climate change and drought. At the same time, demand for water is increasing due to population growth and this in turn places pressure on our water storage capacity. In 2009, the Australian Government invested \$12.9 billion into *Water for the Future* – a 10 year initiative to prepare Australia for a future with less water. At a household level, governments have imposed water restrictions in most states and territories since 2002.<sup>5</sup>

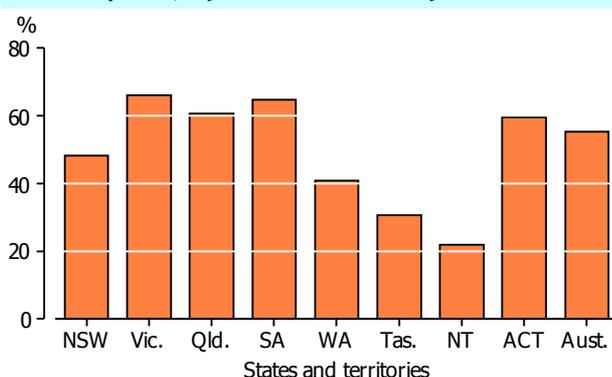
In 2007–08, over half (55%) of adults reported that their water consumption had decreased and 40% reported that it had remained the same (in the 12 months prior to interview). Of the 12.9 million adults who reported that they were concerned with the environment, nearly three-fifths (59%) reported that their water consumption had decreased, compared with two-fifths of those who were not concerned.

Of the 8.7 million Australians who reported that their water consumption had decreased, over three-quarters (76%) said it was because they were trying to conserve water at home and over two-fifths (42%) attributed it to water restrictions being imposed or increased. Moreover, from 1994 to 2007, the proportion of households with water conservation devices (such as a water-efficient shower head or a dual flush toilet) more than doubled.<sup>5</sup>

Victoria and South Australia had the highest proportions of adults who reported their water consumption had decreased (66% and 65% respectively) compared with the Northern Territory and Tasmania which had the lowest (22% and 31% respectively).

There were variations in the proportion of adults who reported that their water consumption had decreased, depending on the area of remoteness in which they lived. Almost three-fifths (59%) of adults living in major cities reported a decrease in their water consumption compared with under two-fifths (39%) in remote Australia.

**Proportion of adults who decreased their water consumption, by state or territory – 2007-08**



Source: ABS 2007-08 Environmental Views and Behaviour Survey

## Actual water consumption

The most recent comprehensive data available for Australia-wide water consumption is the ABS *Water Account, Australia, 2004–05* (cat. no. 4610.0).

Between 2000–01 and 2004–05, total water consumption in Australia decreased by 14%. In 2004–05, the agricultural industry accounted for the highest water consumption (65%) and recorded a 19% decrease from 2000–01. In 2004–05, the household sector accounted for 11% of water consumption and recorded an 8% decrease from 2000–01.

New South Wales and the Australian Capital Territory combined showed the largest fall in water consumption (32%) between 2000–01 and 2004–05. This is mostly because of a 39% decrease in the consumption of water by the agriculture industry in these jurisdictions in this period.

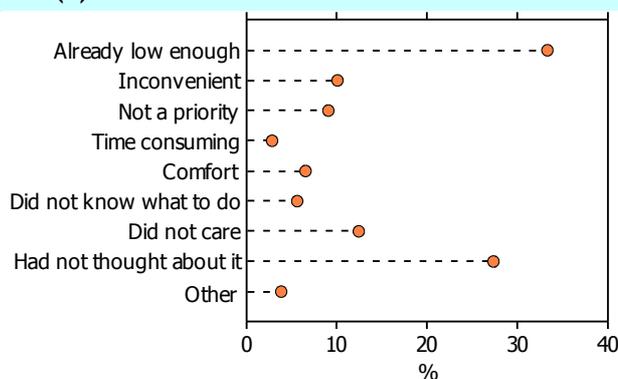
The next ABS water account will be released in December 2010.

## ...electricity use

Electricity consumption in the residential sector is a significant contributor to greenhouse gas emissions in Australia due to its reliance on fossil fuels (notably coal) to produce it.<sup>6</sup> In 2007–08, most Australians (88%) reported that they had taken steps to limit their personal electricity use. Of those who reported that they were concerned with climate change, a majority (92%) said that they had taken steps to limit personal electricity use. However, a large proportion of those not concerned with climate change (78%) had also taken steps to limit their electricity use.

Young adults (aged 18–24 years) were the least likely (74%) to report that they had taken steps to limit their personal electricity use, while around 90% of those aged 25 years and over reported they had. Of those who did not take steps to limit their electricity use, young adults were also the most likely to report they did not care how much electricity they used (19%) compared with around one-tenth for the age groups 25 years and over.

**Reasons did not take steps to limit electricity use(a) – 2007-08**



(a) As a proportion of all adults aged 18 years and over who did not reduce their electricity use.

Source: ABS 2007-08 Environmental Views and Behaviour Survey

The main reasons that adults gave for not taking steps to limit their electricity use was that their electricity consumption was already low enough (33%) or they had not thought about saving electricity (27%).

## Household energy use

Energy consumption by households is an important contributor to greenhouse gas emissions. In 2007, Australia's residential sector accounted for around 9% of total greenhouse gas emissions, an increase of 25% in emissions since 1990.<sup>7</sup>

The ABS 2008 Energy Use and Conservation survey collected data on household energy sources and conservation measures.<sup>8</sup> Virtually every household in Australia (99.9%) used electricity as their main source of energy. In comparison to electricity, gas produces much lower carbon dioxide emissions and it was the second most common source of energy used in Australian households (61%). Use of solar energy increased from 5% in 2002 to 8% in 2008, but it was still the least common source of energy used by households.<sup>6</sup>

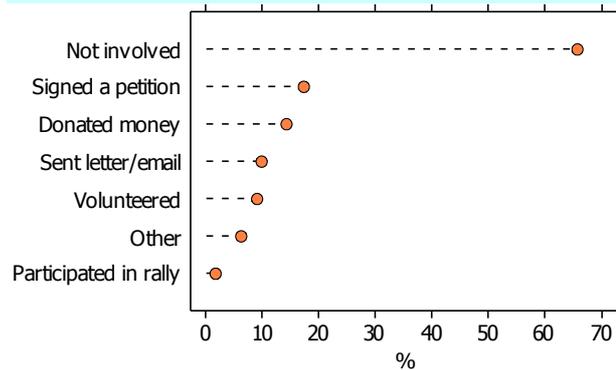
In 2006–07, heating and cooling accounted for the greatest proportion of energy consumed in households (almost 40%). This was followed by water heating (25%), household appliances, (19%), lighting (6%), and cooking (6%). Of household appliances, refrigerators and freezers were the largest contributors to household energy use, consuming 34% of all energy used by household appliances.<sup>9</sup>

In recent years, there has been an increase in the number of adults who reported that they were influenced by environmental factors when considering their household energy. For example, in 2008, energy efficiency was the most common factor considered by Australian households when replacing or buying most white good appliances compared with 2002, when the most common factor considered was cost. Nearly three-quarters (74%) of Australian households used cold water rather than warm water in washing machines, up from 61% in 1994. And, between 2005 and 2008, the proportion of households who used energy saving lights increased from 33% to 59%. However, there was also a substantial increase in the number of households who had coolers (air conditioners and evaporative coolers), more than doubling from 32% in 1994 to 67% in 2008.

## Environmental involvement

Environmental involvement includes signing a petition, making a donation and taking part in a demonstration or rally. This participation may influence government behaviour and strengthen support for environmentally concerned organisations.

### Environmental activities involved in during last 12 months(a) – 2007-08



(a) As a proportion of all adults aged 18 years and over.  
Source: ABS 2007-08 Environmental Views and Behaviour Survey

While 12.8 million Australian adults reported that they were concerned about any environmental problems, only 5.4 million (34%) had been involved in some form of environmental activity in the 12 months prior to interview.<sup>10</sup>

The most common activity undertaken was signing a petition relating to environmental issues (17%), followed by donating money to protect the environment (14%), and expressing concern through a letter, email or talking to responsible authorities (10%). The least common environmental activity undertaken was participating in a demonstration or rally on environmental issues (2%).

Young adults (18–24 years) and those aged 65 years and over were the least likely to be involved in environmental activities (31% and 26% respectively). However, despite the disparities in concern about environmental problems between different states and territories, there was relatively little difference in the proportions of adults who were involved in environmental activities – levelling at around 33% to 38% across all the states and territories.

Adults with a non-school qualification were more likely to have participated in environmental activities than adults with no non-school qualification (41% compared with 27%); and those who were employed were more likely to have been involved in environmental activities than those who were not employed (38% compared with 28%).

## Looking ahead

The Australian Government's climate change strategy aims to reduce Australia's emissions, adapt to climate change impacts we cannot avoid, and help shape a global solution.<sup>11</sup> This includes helping Australians change the way they act to help reduce carbon emissions, including encouraging the choice of energy efficient appliances, homes, and buildings. In addition, the *Environment Protection and Biodiversity Conservation Act 1999* enables the Australian Government to join with the states and territories in providing a national scheme of environmental protection and conservation.<sup>12</sup>

## Endnotes

- 1 The Treasury, 2010, *The Intergenerational Report 2010, Australia to 2050: future challenges*, Commonwealth of Australia, Canberra, p. vii, <[www.treasury.gov.au](http://www.treasury.gov.au)>.
- 2 Newspoll, 16 February 2010, *Climate Change*, Newspoll, <[www.newspoll.com.au](http://www.newspoll.com.au)>.
- 3 Intergovernmental Panel on Climate Change (IPCC), 2007, *Climate Change 2007: Synthesis Report: Summary for Policymakers*, IPCC, p. 5, <[www.ipcc.ch](http://www.ipcc.ch)>.
- 4 Clean up, *Recycling*, viewed 10 March 2010, <[www.cleanup.org.au](http://www.cleanup.org.au)>.
- 5 Australian Bureau Statistics, 2010, *Australia's Environment: Issues and Trends, 2010*, cat. no. 4613.0, ABS, Canberra, p. 23.
- 6 Australian Bureau Statistics, 2010, *Australia's Environment Issues and Trends, 2010*, cat. no. 4613.0, ABS, Canberra, p. 17.
- 7 Department of Climate Change, 2009, *National Inventory by Economic Sector, 2007*, Commonwealth of Australia, Canberra, p. 1, <[www.climatechange.gov.au](http://www.climatechange.gov.au)>.
- 8 Analysis on household energy use only includes the five most common energy sources: mains electricity, mains gas, LPG/bottled gas, wood and solar.
- 9 Sandu, S. and Petchey, R., 2009, *End use energy intensity in the Australian economy*, ABARE research report 09.17, Canberra, pp 39–41, <[abare.gov.au](http://abare.gov.au)>.
- 10 In this analysis environmental protection activities include: donated money to protect the environment, volunteered or became involved in environmentally related programs, signed a petition on environmental issues, expressed concern about environmental issues through letter, email or talking to responsible authorities, participated in a demonstration or rally on environmental issues and other.
- 11 Department of Climate Change and Energy Efficiency, viewed 31st May 2010, <[www.climatechange.com.au](http://www.climatechange.com.au)>.
- 12 Department of Environment, Water, Heritage and the Arts, viewed 31st May 2010, <[www.environment.gov.au](http://www.environment.gov.au)>.