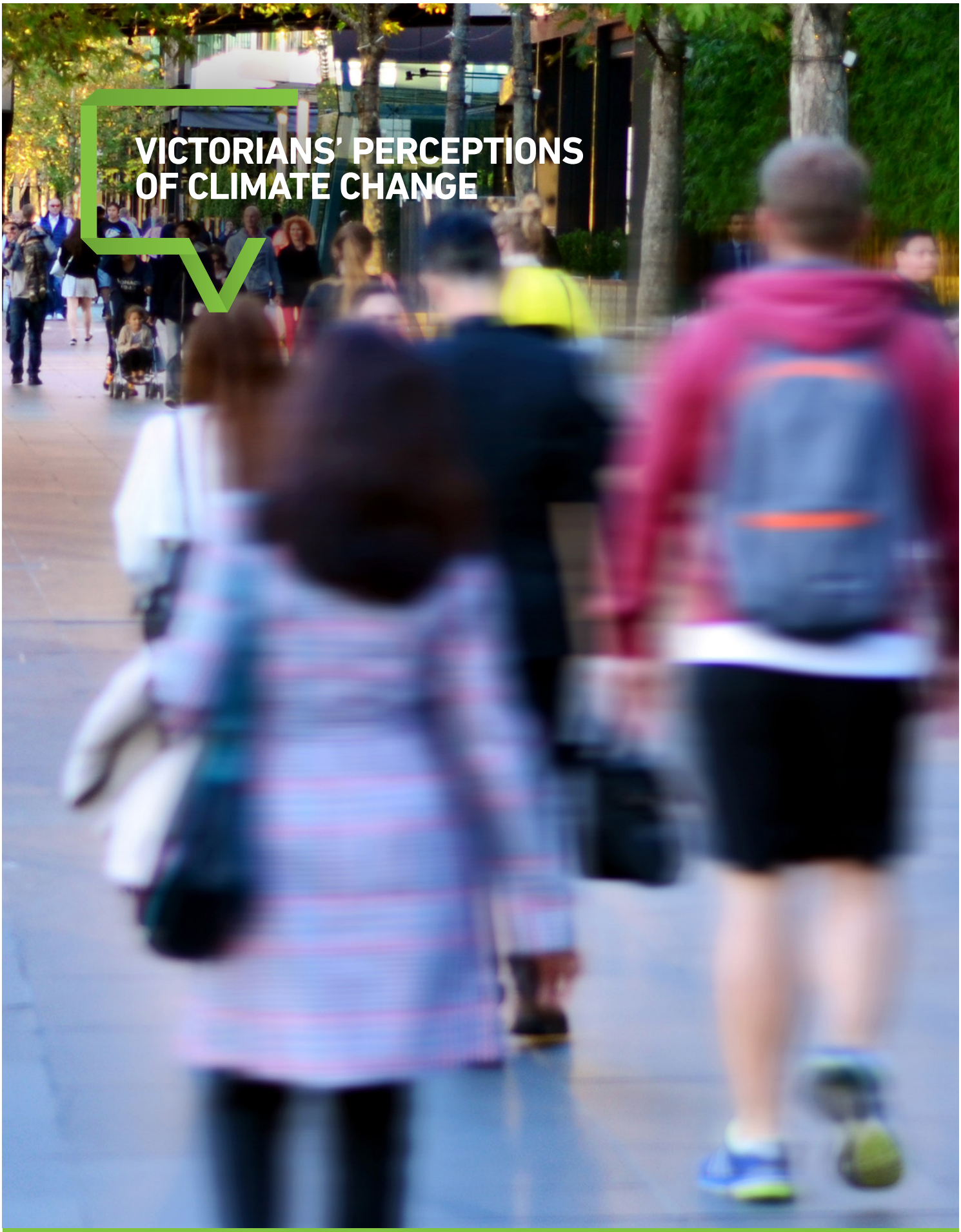
VICTORIANS' PERCEPTIONS OF CLIMATE CHANGE



KEY FINDINGS – SOCIAL RESEARCH ON CLIMATE CHANGE ATTITUDES AND BEHAVIOURS

Sustainability Victoria

Background & Methodology

Background & Aims

Sustainability Victoria (SV) engaged an external research provider, Wallis Market and Social Research (Wallis) to conduct a state wide survey, with the aim of gaining baseline quantitative data on Victorian residents' attitudes, beliefs and behaviours in relation to climate change. The results will be used by SV and other relevant Departments to inform program development and policy.

Methodology

The main survey was administered using a telephone interview methodology, with an online follow-up survey emailed to those respondents who agreed to take part in further research.

A total of 3,333 Victorians aged 15 years and over took part in the telephone survey; of these, 451 also completed the follow-up online survey.

Telephone interviews were conducted from 17 November to 14 December 2016, following a pilot test among a small sample of Victorians. The online survey was conducted from 19 December 2016 to 20 January 2017, during which two reminders were emailed to non-responders.

Sample Design

The sampling frames used for the telephone survey – randomly generated telephone numbers (probability sample) plus a list of existing phone numbers (regional booster sample) – ensured the widest possible coverage of the Victorian population. The survey sample was carefully designed and controlled to enable regional analysis while providing results that can be projected to the broader population with confidence.

As shown in Figure 1, the sample was designed to deliver a minimum of 200 interviews in each of nine regional groupings, which are taken from the Regional Development Victoria classification[1]. Weighting was applied to correct for the over-sampling of regional areas, as well as demographic differences between the probability sample and the regional booster sample, to ensure that the total sample is representative of the Victorian population.

1 Source: http://www.rdv.vic.gov.au/regional-partnerships

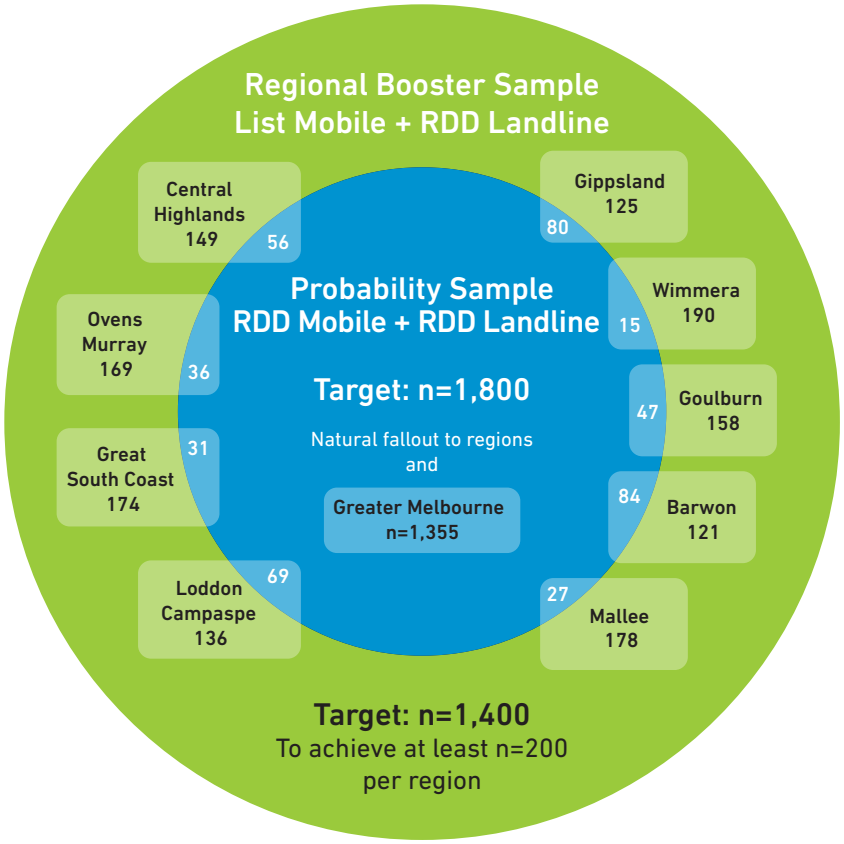


Figure 1. Sample Design

Questionnaire

The questionnaire was developed with input from a range of relevant experts including climate change psychologists and behaviour change academics; the questions to include were reviewed by Professor Joseph Reser, an Environmental and Social Psychologist in the School of Applied Psychology at the Griffith Climate Change Response Program at Griffith University. A broad summary of the topics covered in each survey is shown in Figure 2.

Telephone Survey Content	Online Survey Content
• General opinions, engagement and priority	• Knowledge questions
• Perceived impacts	• Leadership
• Behaviours (current and future)	• Home energy efficiency
• Responsibility for action	• Sustainable design
• Awareness of / support for government initiatives	• Trusted information sources
• Attitudinal statements	• Information channels

Figure 2. Overview of questionnaire topics

Respondent Profile

Figure 3 shows the broad demographic characteristics of the telephone survey respondents.

	Weighted *(n=3,333)* %
LOCATION	
Greater Melbourne	73
Regional	27
GENDER	
Male	48
Female	52
AGE	
15 - 24	16
25 - 39	28
40 - 49	14
50 - 64	25
65 and over	17
COUNTRY OF BIRTH	
Australia	73
Elsewhere	27

Figure 3. Sample characteristics

Key findings at a glance

Victorians take climate change seriously

91% accept some level of human causality for climate change

30% rate climate change in the top three issues facing the state

78% think climate change is an issue that requires urgent action now

73% prefer to buy from businesses that show they care about climate change

78%

are concerned about climate change and the impact on:

future generations (76%)

the state of the planet (48%)

health and quality of life (38%)

Victorians are ready for action on climate change

4 in 5 Victorians believe their actions can make a positive difference

4 in 5 are willing to take action to help tackle climate change

9 in 10 believe the State Government should be taking action on climate change

8 in 10 want to live in a state that is leading on climate change

Victorians want action on climate change from

93% Business & industry

87% Local Government

89% Environment groups

93% All individuals

Victorians are willing to take action themselves

80%
are willing to act on climate change

82%
believe their actions can make a difference

68%
are willing to pledge to TAKE2 (take2.vic.gov.au)

High proportions of Victorians are concerned about these environmental events affecting them in the forseeable future

51%
Coastal erosion & changes to sea level

67%
Heatwaves

65%
Severe storms & floods

71%
Crop failures or declines in agriculture

72%
Water shortages & drought

68%
Severe bushfires

68%
Air pollution

80%
say climate change is influencing the frequency of these events

Support for Victoria's emissions reduction and renewable energy targets is high

78%

support the 2050 zero emissions target

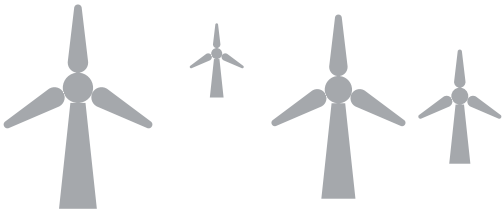
84%

support the State's renewable energy targets

79%

would be proud to live in a state leading the way on climate change

The Victorian community is very supportive of renewable energy



75% would support wind turbines in their area providing local renewable energy

9 in 10 would support solar panels in their area providing local renewable energy

76%

are interested in buying 100% renewable energy for their home

56% are interested in buying a more fuel efficient or electric car

Over 7 in 10 are interested in a solar energy battery storage system for their home

58%

are interested in volunteering in community renewable energy projects

Priority & Concern

One-third (30%) of the population place climate change among the top three important issues facing the state.

The characteristics of those who included climate change in the top three important issues facing Victorians were as follows:

- They tend to be younger (44% of those aged 15-24), tertiary educated (40% of those with a University degree), and living in greater Melbourne (32% mentioned climate change in the top three, compared to 23% of those living in regional Victoria);
- They are more likely to say they have observed extreme weather/environmental events, and are more likely to say they are 'very concerned' about these impacts of climate change directly affecting them in the future.

In order to avoid influencing the way this first question was answered, the survey topic was introduced as "an important issue facing Victorians" and did not mention that climate change was the focus of the survey until after this question. In other national and international surveys on this topic, climate change consistently ranks below the more day to day and 'hip pocket' issues such as healthcare and the cost of living. However, the results throughout this report show, climate change is recognised as a serious issue that requires action now from all sectors including government, business and individuals.

Concern about climate change is high.

78% of Victorians are concerned about climate change. As shown in Figure 4, concern about climate change decreases with age. Concern also tends to be higher among females compared to males, and among those living in greater Melbourne compared to regional Victoria.

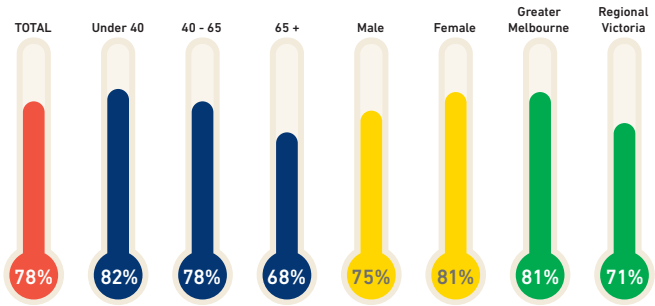


Figure 4. Concern about climate change

Those concerned about climate change are primarily concerned about:

- The impact on future generations (76%),
- The state of the planet (48%), and/or
- The impact on their health and/or quality of life (38%).

Victorians accept that human activity contributes to climate change.

91% accept that climate change is happening and that human activity is contributing to it at some level. Scepticism is low with just 7% saying it is entirely natural or not happening, which is consistent with findings in other national and international studies; however this increases to 14% in the 65 years and older age group.

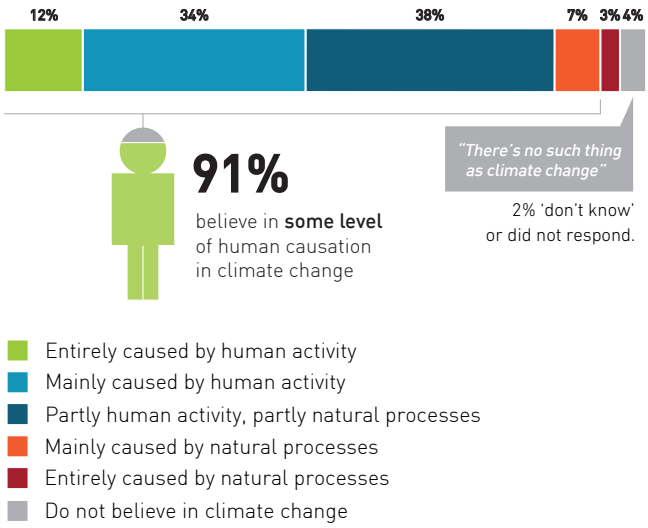


Figure 5. Perceptions of climate change causality

When asked to state what their opinion about climate change causality is based on, just over half of Victorians (51%) mentioned "scientific research". Those who stated that climate change is mainly or entirely caused by natural processes were less likely to say their opinion is based on scientific research (24%).

High trust in scientific research as a source of information.

In the follow-up online survey, respondents were presented with a variety of potential sources of information, and asked to state the extent to which they would trust each one for information about climate change. Overall, as shown in Figure 6 the most confidence (high trust and low uncertainty of response) was shown for "scientific research". This was followed by "university academics" and "environmental groups".

	Trust (net)	Distrust (net)	Don't know
Scientific research	77%	7%	15%
University academics	61%	12%	27%
Environmental groups	48%	22%	30%
Australian Government	30%	35%	34%
Victorian Government	37%	23%	39%
Journalists	10%	45%	45%
Local Councils	29%	25%	46%
Info via schools to students/parents	28%	15%	56%
Family and/or friends	20%	7%	72%

Figure 6. Trusted sources of information

With the exception of the top two responses, results indicate a level of uncertainty in terms of trustworthy sources of information about climate change. This indicates that some people are wary of the agenda of the person or organisation presenting the information, and/or how much that information is "cherry picked" to support it.

78% believe that climate change is an issue that requires urgent action now.

Younger respondents were more likely to say that climate change requires urgent action, particularly among those aged 15-17 where agreement was at 97%. Level of education was also a factor; agreement was at 86% among those educated to University level, compared to 70% among those who did not finish high school.

Victorians agree that climate change requires urgent action

While 78% of Victorians are concerned about climate change, only 48% believe that their friends and family think climate change is an important issue. These findings indicate that while most people are concerned about climate change, they tend to underestimate other people's level of concern.

Impacts of Climate Change

Climate change is seen as a significant causal factor in the increasing occurrence of extreme weather/ environmental events.

As shown in Figure 8, around three in five respondents say they have noticed a change in each event; the majority of this group saying that there has been an *increase* in these events.

Among those who have noticed an increase in these extreme weather and/or environmental events, the vast majority linked these events to climate change.

Noticed any change in the occurence of:		Climate change influencing increase in occurence of:	
Severe bushfires	61%	Heatwaves	90%
Severe storms & floods	58%	Coastal erosion & changes to sea levels	89%
Air pollution	55%	Water shortage & drought	84%
Coastal erosion & changes to sea levels	52%	Severe storms & floods	83%
Crop failures or declining agriculture	50%	Crop failures or declining agriculture	82%
Heatwaves	49%	Severe bushfires	71%
Water shortages & drought	47%		

Figure 8. Observed events and links to climate change

Concern about the impacts of climate change.

There are high levels of concern among Victorians that the impacts of climate change – those experienced and those not yet directly experienced – will directly affect them or their local area in the foreseeable future.

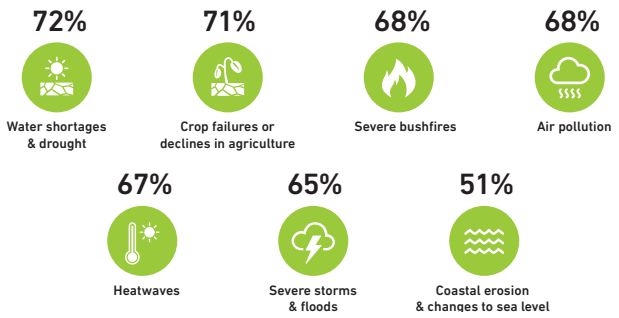
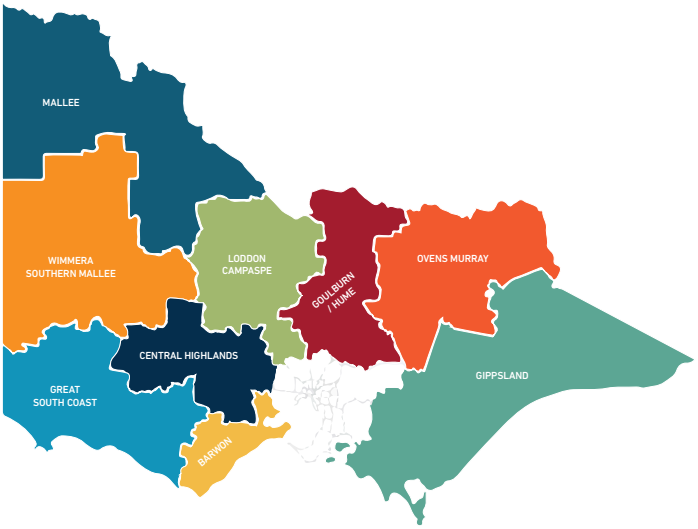


Figure 9. Concern about the impacts of climate change

Regional variations in concern about the impacts.

Levels of concern about each of the extreme weather and/or environmental events varied among the regional divisions.

Figure 10 highlights regions where concern for each extreme weather and/or environmental event is particularly high compared to the State average.



BARWON
Coastal erosion, 69% (highest in the State)

CENTRAL HIGHLANDS
Crop failure / declines in agriculture, 85%
Severe bushfires, 86%
Drought / water shortages, 85%

GIPPSLAND
Severe bushfires, 82%

GOULBURN / HUME
Severe bushfires, 85%

GREAT SOUTH COAST
Coastal erosion, 63% (second highest in the State)

LODDON CAMPASPE
Severe bushfires, 90% (second highest in the state)
Drought / water shortages, 85%
Crop failure / declines in agriculture, 81%

MALLEE
Crop failure / declines in agriculture, 86% (highest in the State)
Drought / water shortages, 85%

OVENS MURRAY
Severe bushfires, 98% (highest in the State)
Crop failure / declines in agriculture, 85%

WIMMERA SOUTHERN MALLEE
Severe bushfires, 84% (highest in the State)

Figure 10. Regional variation in concern about environmental events

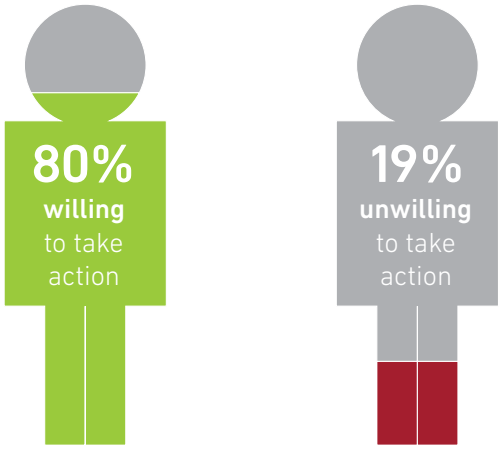
The Propensity for Action is High

Most Victorians believe that their actions can make a positive difference.

More than eight in ten (82%) agreed that 'there are meaningful things I can do to reduce the impact of climate change'.

The clear majority of Victorians are motivated to act on climate change.

Four in five Victorians (80%) say they are willing to take action on climate change.



Reasons for willingness	Reasons for unwillingness
To take care of the environment for the future	Climate change is naturally occuring / not man-made
It is an important issue / something needs to be done	We can't stop it / human action won't change things
For the health of the planet / environmental effects	There is nothing that I can do about it personally
I feel I should do my part / we all need to act	I'm not sure what I can do / what needs to be done
	Because I don't want to pay more

Figure 11. Willingness to take action

Direct quotes from respondents explaining why they are willing to take action on climate change:

> ***I have a nephew, and my friends, they have children too. And I would like them to have a healthier and happier future.***

> ***In my generation we are already seeing the changes so it is an urgent matter.***

> ***Because if it proves to be an empty threat, taking unnecessary action will not cause significant harm, whereas if it proves to be the imminent disaster that it appears, then taking the action required to ensure the survival of the species should be a given.***

Direct quotes from respondents explaining why they are unwilling to act on climate change:

> ***Because any action I take will have no effect, even if it did exist. We wouldn't even make 1% difference as a nation.***

> ***I don't know what you can do about it for a start.***

> ***Because I'm not convinced that the case has been made that humans are causing it.***

Willingness to act on climate change showed a very similar pattern to concern about climate change in terms of demographic variations.

As shown in Figure 12, willingness to act is higher among younger age groups, higher among females and higher among those living in the Greater Melbourne area.

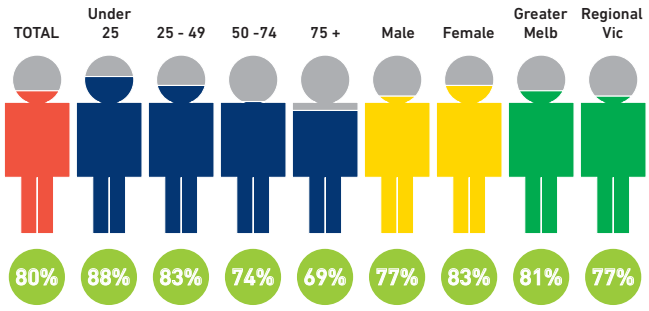


Figure 12. Willingness to act: By key demographics

Taking Positive Action

Purchasing preferences.

More than seven in ten Victorians (73%) agreed that they prefer to buy goods and services from businesses that show they care about climate change. Melburnians were more likely to say this (77%) compared to those in regional Victoria (64%).

Other behaviours.

Other behaviours measured in the survey are divided into:

- Everyday actions that people can do now but may need some encouragement to do, and
- Advanced actions - These were framed as actions for implementing in the next 5 or so years and were actions that required a level of planning and / or investment.

Figure 13 shows the current frequency of everyday actions.

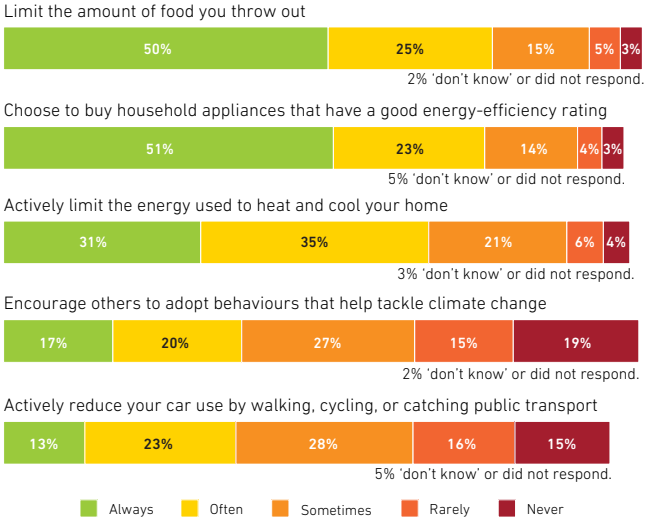


Figure 13. Everyday actions

As shown in Figure 13, Victorians are performing reasonably strongly on:

Limiting the amount of food thrown out; the motivations for this behaviour mostly relate to feeling uncomfortable about wasting food, and/or the waste of money that goes with it.

Buying household appliances that have a good energy rating; the motivation mostly relates to cheaper running costs of energy efficient appliances.

Actively reducing the energy used for heating and cooling; the key motivation for this behaviour mostly relates to cost-saving, although some comments related to helping the environment, and a few specifically mentioned the aim to help tackle climate change.

Victorians are performing less strongly on:

Encouraging others to adopt behaviours that help tackle climate change; the key barrier was the desire to avoid telling other people what to do, but many other comments were that it just doesn't come up in conversation or that they just don't think about it.

Reducing car use; the key barrier for reducing car use was a lack of viable public transport options and/or that using the car is simply more convenient.

The motivators to undertake the everyday, basic behaviours most commonly related to cost, convenience or comfort, more than concern for the environment or climate change. However, concern for the environment was still a reasonably strong motivator.

Advanced actions - interest in utilising renewable energy is high.

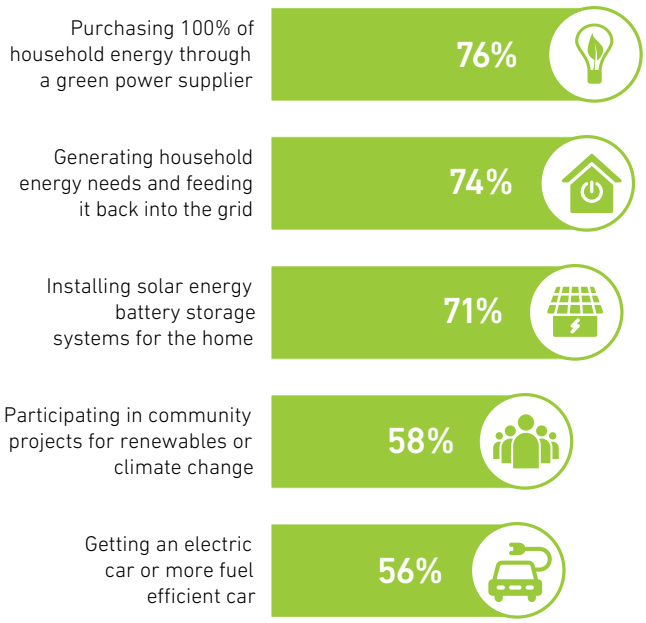


Figure 14. Advanced actions

Responsibility for Taking Action

The community believes that government, individuals, and business and industry should all be taking action on climate change.

Figure 15 shows, for each entity, the proportion of people who believe they should "lead action" or "contribute to action" on climate change; **93% of Victorians believe the State Government should be acting on climate change** – either in a leadership role or as a contributor.

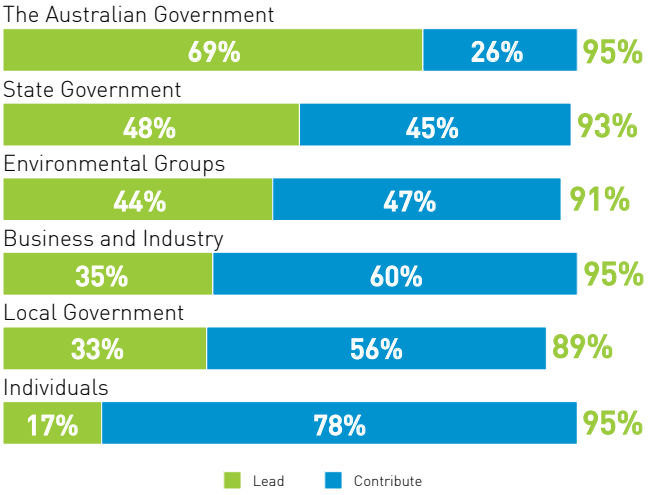


Figure 15. Leadership on climate change

The majority of Victorians believe the State government should be doing more to tackle climate change.

As shown in Figure 16, 22% think the Victorian government is doing 'the right amount" but the majority (61%) think the State government should be doing more.

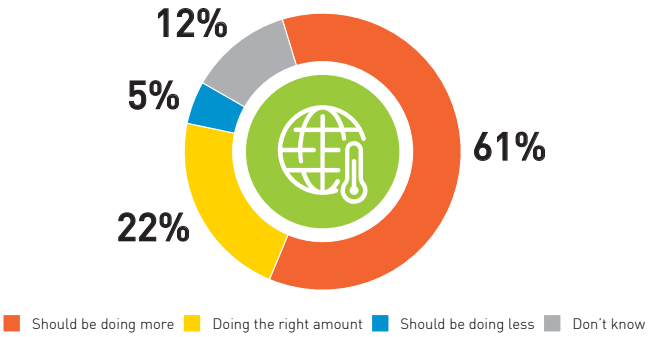


Figure 16. State government action on change

When asked to comment on what they think the State government could or should do to support individual action on climate change, the majority of comments focussed on:

- Education - providing information on what people can do to tackle climate change;
- Incentives and/or subsidising solar and other renewable energy sources;
- Funding for community programs.

How can the government help you take action against climate change?

> *"Help smaller communities to develop community energy programs. More localised energy generation rather than upgrades to power lines."*

> *"The rebates are a big plus; make it more affordable for lower income families to be able to do it."*

> *"We would take action if it helps with our everyday expenses and convenience as well. For example, public transport is not effective in this country and so I have to use my car. I would use public transport if it was effective, but it's not reliable."*

> *"Make renewable energy cheaper, its 75 dollars more a quarter for renewable energy."*

> *"Having short, medium and long-term incentives; a lot of them are long-term and people don't get on board. Today's society is very much a NOW society, they want to see something NOW, though that builds the future."*

The majority of Victorians (71%) say they would feel positive about being part of a community-wide movement to help tackle climate change.

Agreement with this statement steadily decreases as age increases; from 83% among those aged under 25, to 77% among those aged 25-49, 61% among those aged 50-74, and 56% among those aged 75 or over.

Support for Government Action & Renewables

Support for Victoria's emissions reduction and renewable energy targets is high.

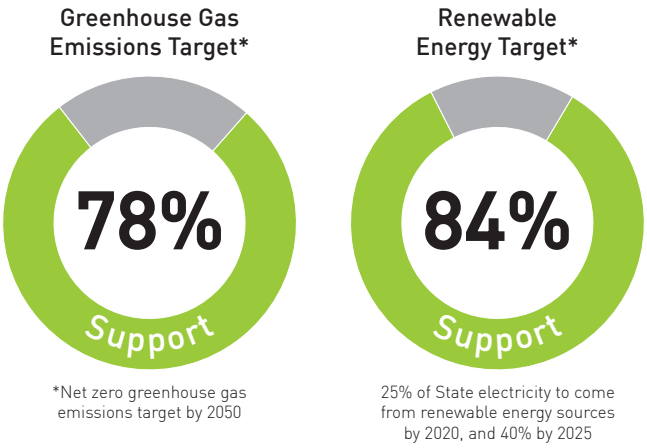


Figure 17. Support for State government targets

Support for the targets is stronger among younger Victorians (aged 25-49) — 88% support the emissions target and 93% support the renewable energy target.

For those who oppose the targets, comments related to concerns about job losses or concerns that the targets are not realistic.

would feel proud if the Victorian Government was leading the rest of Australia in taking action on climate change

The majority of Victorians are particularly supportive of renewable energy.

As shown in Figure 18 below, 89% would support solar panels in their local area, and **75% would support wind turbines in their area**, providing access to renewable energy.

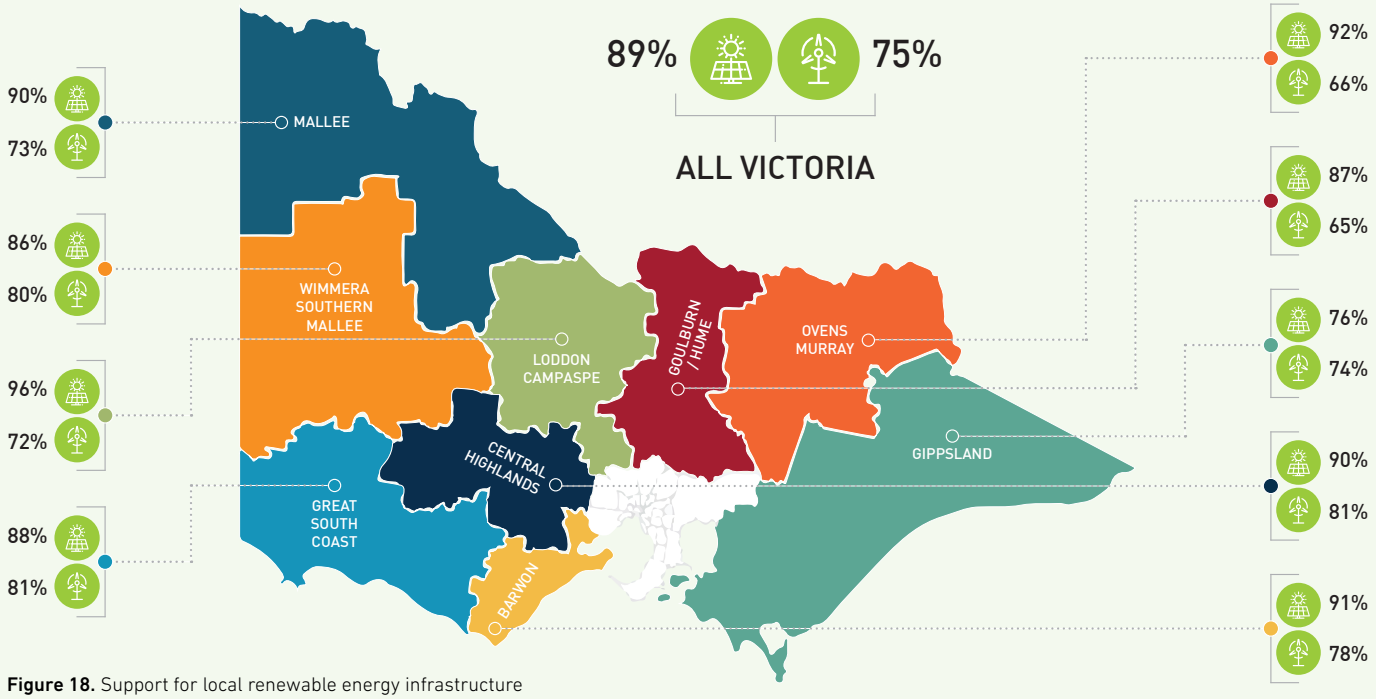


Figure 18. Support for local renewable energy infrastructure

Household Energy Efficiency

Results indicate that much can still be achieved in terms of maximising energy efficiency in Victoria's households.

Six in ten (62%) say they are currently doing things to reduce energy use but believe that there is more they can do.

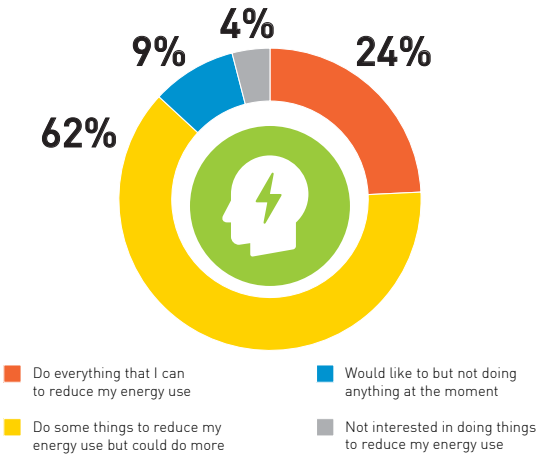


Figure 20. Action on household energy efficiency

The biggest energy efficiency gaps include:

- Draft seals on doors/windows – 28% did not have this or intend to get it
- Double glazing or thick curtains – 32% did not have this or intend to get it
- Environmentally friendly water heaters – 30% did not have this or intend to get it
- High energy efficient heating and cooling – 19% did not have this or intend to get it

In terms of household modifications, the most in demand in the near future includes:

- Solar panels, 25%
- An energy efficient water heater, 15%
- High energy efficient heating and cooling, 15%

A follow-up question on **what would motivate people to do more** found that cost-saving was a dominant motivator, but this was closely followed by having reassurance that their actions will make a real difference in securing the environment for future generations.

- Interestingly, females in the sample showed stronger motivation by evidence – 71% said they would do more if they had proof that their actions will make a difference (compared to 46% among males).
- Females were also more likely to be motivated by the "feel good" factor compared to males, with 51% of female respondents saying that just doing their part for an overall reduction in household energy consumption is a motivator (compared to 28% among males).

When asked to state the extent to which they agree there is a real link between household energy use and climate change, the majority (63%) agreed that they believe there is a link, although one in ten (13%) disagreed with the statement, and one in five (19%) were unsure.

9 in 10 who are building or renovating their home are interested in sustainable design and increasing energy efficiency.

However, knowing where to go for this information was an issue:

- For home owners, when asked where they would source information or advice on sustainable design and home energy efficiency, almost 4 in 10 (37%) said they were not sure where to find this information.
- For apartment dwellers, the majority (75%) said they wouldn't know where to look for information on sustainable apartment living.

Results also indicate support for regulations to ensure higher standards of home energy efficiency and sustainability.

- 90% agree (57% strongly) that "new apartments and housing developments should have to be built to stricter energy efficiency and sustainability standards".

There is also strong support for energy efficient programs targeting low income households.

- 91% agree (57% strongly) that "there should be government programs offering advice and incentives to help people on low income make their homes more energy efficient."

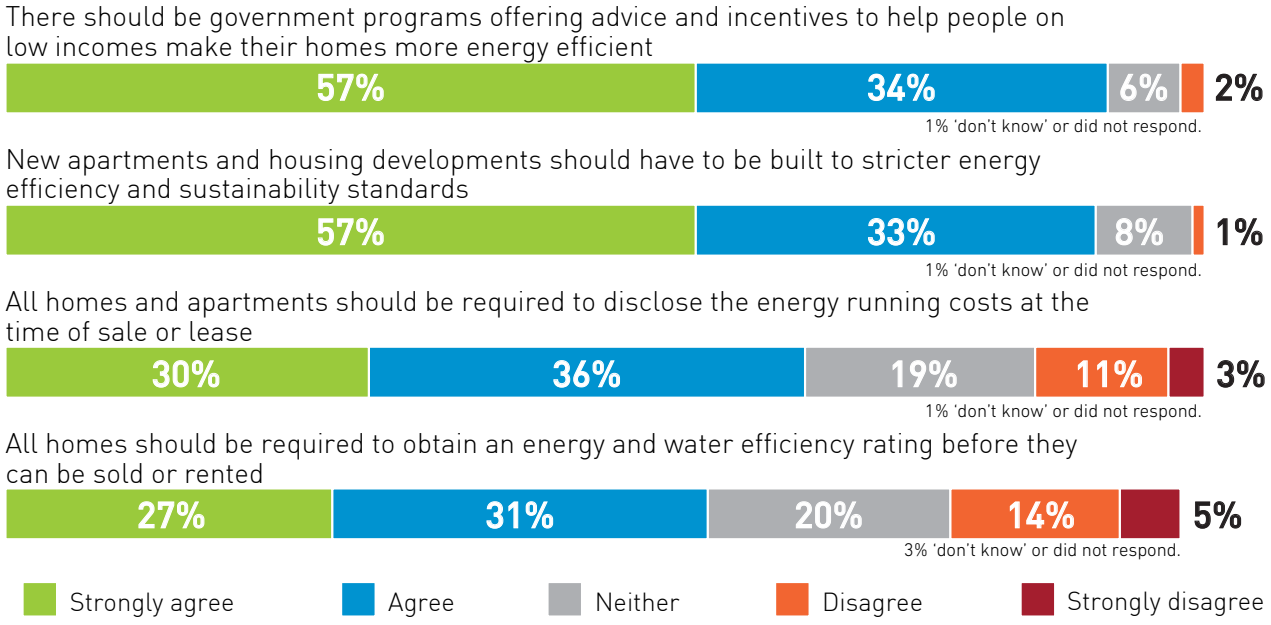


Figure 21. Regulating household energy efficiency

Conclusion

- The survey results clearly show that Victorians are concerned about climate change and believe that human activity is having an impact. The level of community concern, however, is generally underestimated as climate change isn't a topic that people commonly discuss with friends and family.
- The Victorian population is aware of the impacts climate change is having across their state, and have high levels of concern that these impacts will spread and worsen in the foreseeable future.
- Victorians clearly want action on climate change and believe all sectors – including government at all levels, business and industry – should be contributing and playing their part. They too, as individuals, are willing to take action on climate change.
- This readiness for action is reflected in solid support for recent state government targets and the consistently strong support shown for renewable energy across the state, irrespective of personal concern about climate change.
- Positively, the clear majority agree that actions can make a difference and many are willing to pledge to TAKE2, the Victorian Government's Climate Change Pledge Program (www.take2.vic.gov.au). The majority also declare that they would feel proud to live in a state that was leading the way on climate change.

Sustainability Victoria
Level 28, Urban Workshop,
50 Lonsdale Street, Melbourne VIC 3000
Phone (03) 8626 8700
sustainability.vic.gov.au

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