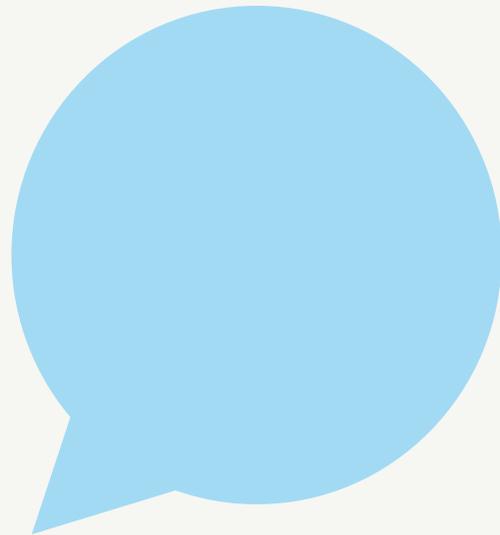


# The Climate Institute

Climate of the Nation 2012  
Australian Attitudes on Climate Change



This Spotlight Report provides an objective benchmark of attitudes to the issue of climate change in 2012 in Australia and a rigorous analysis, qualitative and quantitative, of the pros and cons of climate change and its solutions.

The lead authors for this report have been John Connor, CEO, and Kristina Stefanova, Communications Director of The Climate Institute, with contributions from other staff and using research from JWS Research and Ipsos Social Research Institute.

Key imagery in this report featured on the cover and in the Voice of the Street, Science, Energy and Business snapshot pages, has been photographed by Michael Hall.

*Climate of the Nation 2012* and associated video content can be accessed at [www.climateinstitute.org.au](http://www.climateinstitute.org.au)



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# Climate of the Nation

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## Climate of the Nation 2012 Australian Attitudes on Climate Change

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# It's About Us.

## FOREWORD

Over the past several decades, scientists have studied the climate of the world and how that is changing. These studies have built on the recognition, over 150 years ago, that certain gases in the atmosphere help determine global temperatures and climate.

This work has identified, with high probability, that the climate of the earth is changing and will continue to do so through this century in response to the emissions of greenhouse gases into the atmosphere that result, primarily, from human consumption of carbon-based fuels. It has also shown that there are potential impacts on virtually all sectors of the economy.

The climate change issue has been perceived by some as an "environmental" issue confined to climate science and potential impacts on human and natural systems. More recently it has broadened to include the economics and politics of how we source and use energy, manage the economy, build employment opportunities and well being, and make transformations that lower the emissions of greenhouse gases and adapt to the inevitability of some climate change. Indeed, the way we view the future of our society.

The involvement of the community thus far in this broader view of the climate change issue, has been marginal; a result of the technical and complex nature of the science, the remaining uncertainties, the interface of human and natural systems, and the array of options that exist for risk management. Yet, the climate change issue has resulted from the way we live, as well as our aspirations, our desires and vision for the future of our children and grandchildren. In turn, how we deal with the issue will depend on us, as individuals and as communities, and how we embrace these challenges, prepare for change and seize the opportunities that change can create. The climate change issue is about us.

But marginalisation can reflect fundamental characteristics of the human condition - our propensities to hold on to the systems of the past and the emotions that arise when threats of impacts and change are managed. We use coping mechanisms that are personal and different for each of us. We are challenged by the fact that our society is divided into sectors, in knowledge generation, in government and in business, each ideally contributing to the benefit of all. But the interests of one sector may not always be in the interest of the community as a whole, but nevertheless can drive strongly held views of how the issue is perceived or should be responded to.

We all construct views of the world that are largely based on myths that have been handed to us by our customs, parents, educators, friends and associates. Little of these constructed world-views is holistic in that they do not represent a balanced view of all aspects of the world, nor are they often underpinned by expert advice. In a busy and complex world a full, balanced and completely informed view is near impossible.

The real challenge of the climate change issue is not so much about the climate science, or the expert advice we might receive about how the economics may be affected or managed. It is more about how we each tackle the impost that the issue poses on our respective world-views that are themselves being impacted on a daily basis by the myths, beliefs and self interests of others in the community. As John F Kennedy said:

"The great enemy of the truth is very often not the lie - deliberate, contrived and dishonest, but the myth, persistent, persuasive, and unrealistic. Belief in myths allows the comfort of opinion without the discomfort of thought."

The *Climate of the Nation 2012* report is an important contribution to our understanding of the climate change issue at the grass roots; how people perceive the issue and construct views on how to deal with it. It may not provide the rationale for these views as those are personal, complex and often unconscious. But it clearly shows how the cacophony of all our lives culminates in positions on whether we accept broad implications of the science, understand the actions of our governments and private enterprises, or anticipate the future risk and opportunities.

*Climate of the Nation 2012* shows that these perceptions are a moving target. What we see in this study is not the same as what we saw in earlier studies. Our world-views are forever changing under the pressures of party-political gamesmanship, the power of vested interests and advertising, the internally perceived roles of the media, and our own concerns about our cost of living, employment, aspirations and wellbeing.

There are several key messages that it delivers. It shows that in mid-2012 many of us believe that our personal cost of living will be threatened by the placement of a price on carbon; that we have lost confidence in the advice provided by experts and governments; and that the media has failed to meet our expectations in its presentation of this issue.

These findings reflect the reality of how Australians feel about these issues and provide a strong and clear message about how as a community we are progressively coming to grips with climate change, but at the same time struggling to deal with it.

**Dr Graeme Pearman**

**Former head of CSIRO Division of Atmospheric Research + Board Member of The Climate Institute**

**July 2012**

# Convince Me.



## COMMENTARY

### WHY

Since 2007, we have published a number of *Climate of the Nation* reports and plan to publish annual mid-year reports to track evolving attitudes and actions. The aim is to benchmark attitudes to climate change and related policies.

This report is based on research carried out in late May, a time of highly politicised debate that preceded the start of the carbon laws. So it comes as no surprise that numbers for action on climate change, or support for carbon laws, is low. Like all significant economic and environmental reforms, the concerns of existing vested interests have been magnified and those of future beneficiaries muted.

This debate has been intensified by issues of honesty in politics and household expense fears. Those fears, smouldering from unconnected energy price rises, have been fanned by a relentless scare campaign.

The debate has been compounded by a global economic slowdown, incorrect perception of international climate inaction and the ending of the Millennium Drought.

In short, we always knew this was going to be a difficult chokepoint on attitudes towards climate change.

In mid-2012 Australians - sick of the politics and scared about rising costs of living - are uncertain about the science, unconvinced by carbon pricing solutions but remain 'up for grabs' on both.

Although the first two weeks of the carbon laws have seen plenty of political posturing, commentators have noted an uncanny silence in public comment.

With both major parties policies lacking credibility, people have tuned out on the carbon laws and dialled down climate concerns, but this research suggests these may have been parked rather than punted. Time will tell of course. What is clear is that there is overwhelming support for renewable energy and energy efficiency.

Climate change reform supporters look wistfully back to the 2007-09 highs in climate concern and bipartisan support for emissions trading. Opponents of climate action may draw some satisfaction from these trends.

But the majority of the public remain concerned about the impacts of climate change.

How these concerns mix with underlying values, views of prosperity and trust in messengers will determine the climate of the nation in coming months and years.



## AIM + APPROACH

### WHO

The Climate Institute engaged leading firms in quantitative and qualitative research to undertake the analysis that underpins this report. Results from the qualitative research can be identified throughout the report by reference to participants, rather than the respondents to the quantitative poll.

The Climate Institute is particularly grateful for the guidance and valuable insights of Dr Graeme Pearman, a Board Member of The Climate Institute, who worked closely with us in shaping this report and has provided a foreword.

The depth of experience of John Scales from JWS Research and Jen Brook of Ipsos Social Research Institute and their discipline in keeping us objective and forward-looking is also greatly appreciated.

This project would not be possible in particular without the support of Climate Partner Pacific Hydro.

The text contributions of NetBalance and GE are similarly appreciated.

### HOW

#### Qualitative

The qualitative research element was carried out by JWS Research, who ran mixed focus groups between the end of April and the beginning of May in Sydney, Newcastle, Brisbane, Ballarat and Perth. Locations were chosen on the basis of recruiting participants from a spread of areas ranging from inner metropolitan and regional areas and coal and resource dependent areas.

#### Quantitative

The quantitative research element was carried out by Ipsos Social Research Institute, who administered an online survey of 1,131 Australians. Respondents were drawn from the I-view online panel. The survey was in field from 23-30 May. The data collected was then weighted according to the ABS 2006 Census data for location, gender and age.

#### Other

We also conducted three case study interviews with research participants from Sydney and Newcastle, and filmed 'word on the street' segments in Sydney. These interviews were conducted to get a fuller picture of how climate change is interpreted and addressed in daily lives.

They are available online at [www.climateinstitute.org.au](http://www.climateinstitute.org.au)

# On The Ground.

## EXECUTIVE SUMMARY

Since 2007, The Climate Institute has conducted comprehensive on ground research into Australian attitudes to climate change and related policies. We have published a number of *Climate of the Nation* reports and aim to publish annual mid-year reports to track evolving attitudes and actions.

Attitudes will develop against a backdrop of volatile climate politics, economic uncertainties, carbon pricing realities, low-carbon technological advances, global developments and shifting perceptions of prosperity and quality of life.

In 2012, Australians are uncertain about the science, as yet unconvinced by the carbon laws but are open to be convinced on both.

Majority concern about climate change is moderate, but greater concern regarding associated impacts and minimal support for inaction suggests a deeper level of worry. This disparity may be due to climate change, once considered a scientific and ecological issue, becoming a highly politicised discourse being played out in the media.

The high level of concern for the impacts of climate change on society and the environment, coupled with a large degree of scepticism, suggests that there is a large segment of the population with a latent concern for climate change and its associated implications that are not quite yet convinced of a need for action. This segment is likely to be available to be 'won' by any side of the debate.

Australians are prepared to do their bit so long as government and business shoulder responsibility and perform better. Business performance gets a far stronger net performance disapproval rating than the Federal Government. Only the media's performance is rated worse than business.

Attitudes have, however, been overwhelmingly impacted by the bitterly partisan public policy debates and eroding trust in political parties and institutions.

Twice as many Australians agree that Labor has a more effective emissions reduction plan than support the Coalition's, but both need to convince a third to half of Australians to get majority support. Less than half of Australians think that the Coalition will repeal the carbon laws.

**IN 2012, AUSTRALIANS ARE UNCERTAIN ABOUT THE SCIENCE, AS YET UNCONVINCED BY THE CARBON LAWS BUT ARE OPEN TO BE CONVINCED ON BOTH.**

Household cost of living concerns also dominate attitudes in 2012. Here and abroad understandings of climate issues are affected by a complex array of social, psychological and economic filters. Trust in the science is impacted by both opposing voices and the personal experiences of changing seasons and weather extremes.

The carbon pricing laws are unpopular, but support grows when the laws are explained. This suggests that a significant proportion of Australians who are uncertain about the laws are open to be convinced.

What is clear is that Australians overwhelmingly support renewable energy, particularly solar power, and greater energy efficiency for industry and households. Coal trails nuclear in the preferred energy mix, which is dominated by renewables: solar, wind and hydro.

Majority support for Australian leadership on climate solutions is there, but this is down from the bipartisan highs of February 2009.

Australians have a growing literacy on energy and carbon issues that is layering on experiences in waste and recycling as well as on water conservation. Greater energy conservation policies and practices appear to have contributed to a drop in overall energy demand in Australia in recent years.

Environmental and economic reforms often come with exaggerated perceptions of their cost, perhaps none more than with these recent reforms. Whether Australians follow past practice here and overseas and grow to accept these reforms will depend on a number of factors. These range from perceptions of personal cost to the effectiveness of reforms in changing business behaviour and pollution reduction.

Narrow interpretations of limited poll questions can lead to analysis pleasing to all parts of the spectrum on this debate.

The collapse of bipartisan support for carbon pricing, cost of living concerns and contradictory scientific opinions have had an impact on climate change concern and support for solutions.

However, the evidence suggests deeper levels of concern and potential for rebound as the reality of carbon price impacts emerge and with early evidence that the carbon price is changing business behaviour. Personal experiences and understanding of seasonal changes and extreme weather events will also be influential.

How these mix with underlying values, views of prosperity and trust in messengers will determine the climate of the nation in coming months and years.

# 64

per cent of people agreed that climate change is occurring

# 54

per cent of people are still concerned about climate change

# 69

per cent of people say climate change is due at least in part to human causes

# 10

per cent of people see no need for action on climate change

# 66

per cent of people thought there were too many conflicting opinions for the public to be sure about climate change

# 47

per cent of people support the carbon price when it is correctly explained to them

# 81

per cent of people placed solar energy within their top three preferred energy options

# 52

per cent of people think that Australia should be a leader in finding solutions to climate change

# In The Air.

## KEY FINDINGS

- + Almost two-thirds (64 per cent) agreed that climate change is occurring. Seventeen per cent said that they did not believe that climate change is occurring; almost a fifth (19 per cent) were unsure. A fifth agreed that humans are the main cause, with 49 per cent saying it was due to a mixture of human causes and natural cycles.
- + Most Australians (54 per cent) are still concerned about climate change. This has dropped in terms of breadth and intensity over time but there is still only around 10 per cent who see no need for action.
- + Highest climate impacts of concern were: A more polluted planet (80 per cent), a more polluted Australia and destruction of the Great Barrier Reef (79 per cent each), more droughts affecting crop production and food supply (78 per cent), and animal and plant species becoming extinct (75 per cent). Water shortages in Australian cities continues to be a concern, with 71 per cent of respondents identifying it as an issue this year, down from more than 90 per cent in 2008 and 2010.
- + Almost two-thirds (66 per cent) thought there are too many conflicting opinions for the public to be sure about the claims made around climate change.
- + Australians don't think business and the media are doing a good job at addressing climate change. They get net disapproval negative ratings of 21 and 22 respectively, a rate far worse than the Federal Government's at minus 6.
- + Support for the carbon pricing laws of 28 per cent (52 per cent opposition) rises to 47 per cent (29 per cent opposition) when it is correctly explained that all the revenue raised goes to support households, business and clean, renewable energy.
- + Increasing the proportion of energy from renewables and greater energy efficiency from industry were perceived as the most effective emissions reduction policies (with 43 per cent of respondents giving these a 9 or 10 ranking in a scale where 10 meant 'most effective').
- + Eighty one per cent placed solar energy within their top three preferred energy options. Wind was the second most preferred option with 59 per cent. Two-thirds placed coal in their least preferred three options, slightly more than nuclear at 64 per cent.
- + Gender and age were significant indicators with males and those over 55 less concerned about climate change and less supportive of actions.
- + Less than half of respondents (44 per cent) thought the Coalition would repeal the carbon laws.
- + Twice as many respondents agreed that Labor has an effective plan to reduce emissions (28 per cent agreed) compared to the Coalition (14 per cent).
- + More than half (52 per cent) think that Australia should be a leader in finding solutions to climate change with only 23 per cent disagreeing. This is little changed from April 2010 polling when 55 per cent of respondents agreed, down from 69 per cent in February 2009.
- + A minority (37 per cent) agree that Australia shouldn't act until major emitters like China and the United States do. Twenty eight per cent agreed with this proposition in February 2009.

# Diving Into Climate Change



## Attitudes.

WHAT ARE WE THINKING + FEELING ABOUT CLIMATE CHANGE?

Almost two-thirds of Australians (64 per cent) think that climate change is real, with 69 per cent agreeing that humans are partly or entirely causing it, as found by *Climate of the Nation 2012*.

Past research for The Climate Institute and others, including CSIRO<sup>1</sup> and Newspoll point to a decline in agreement about human responsibility, especially since the collapse of bipartisan support for emissions trading. In mid-2012, a significant proportion of Australians are unsure whether climate change is occurring (19 per cent) and neither trusting nor distrusting the science that it is occurring (30 per cent).

These views on the science and solutions to climate change are heavily influenced by political and other perspectives. Analysis from discussion groups held around the country reveals that understanding of the concept of climate change is disparate and fragmented.

Participants were asked to write down their 'top of mind' associations with climate change, prior to any discussion on the subject (see Figure 1). These 'top of mind' associations are important to understand as they reveal the swirling array of thoughts people have about the issue.

There is confusion between causes and effects from an environmental perspective as well as the political contextualisation of the issue through the contemporary 'carbon tax' debate.

There was a cocktail of opinions across all locations visited – with a mix of acknowledgment, outright rejection and sceptical questioning in all locations.

Whether it is a coping mechanism to delay action or a matter of fact, two-thirds of Australians agree that there are too many conflicting opinions for the public to be sure about the claims made around climate change. People's trust in the science has suffered accordingly with 46 per cent agreeing that they trust the science and 25 per cent in disagreement.

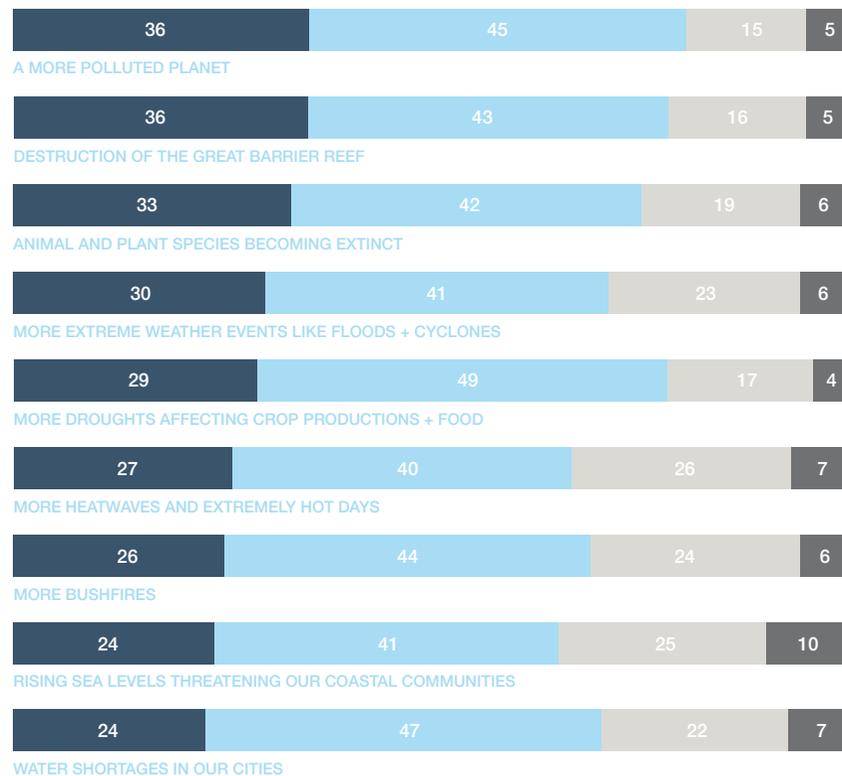
There is an interesting split between those who agree that the seriousness of climate change is exaggerated (42 per cent, opposed to 33 per cent who disagree) and the strong majority who agree that climate change poses a serious threat to our way of life over the coming decades (58 per cent, opposed to 18 per cent who disagree).



# Concerns.

WHAT WORRIES + CONCERNS US ABOUT CLIMATE CHANGE?

FIGURE 2



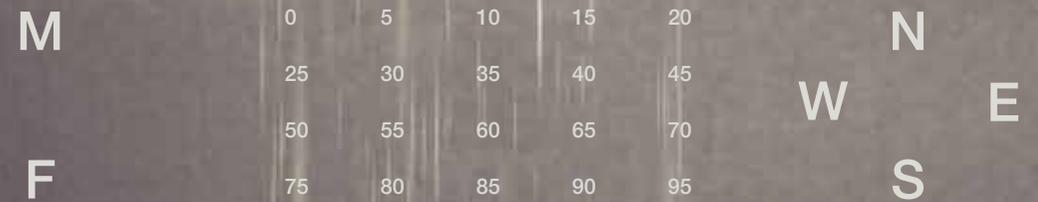
People's understanding that "the weather and seasons aren't what they used to be" form their primary perception of climate change.

The poll revealed a range of concerns about other impacts that were somehow intermeshed with climate change, including pollution, natural resources and food security, environment and extreme weather events

Understandably, concerns vary in response to natural events over time. For instance, in 2007 and 2008 it was water shortages that ranked highest in the list of concerns.

Research from the United States shows that concern about climate change varies with the level of extreme events: concern has risen over the last 12 months as the United States experienced record temperatures, tornados and other extreme weather events.<sup>2</sup>

■ VERY CONCERNED  
■ FAIRLY CONCERNED  
■ NOT VERY CONCERNED  
■ NOT AT ALL CONCERNED



+ Australian women are more concerned about climate change than men, feel more strongly about actions, whether individual or at government and industry action level, and have higher ambitions for Australia to tackle its emissions.

+ Females were more likely to say that they think climate change is occurring (69 per cent), compared to males (59 per cent). They rank significantly higher on concern for climate change, with 62 per cent of females being fairly concerned or very concerned compared with 45 per cent of males. Males are also more likely to say that they were not at all concerned (23 per cent vs. 8 per cent of females).

+ Men appear more sceptical of the threat of climate change than women, with more of them saying that the seriousness of climate change is exaggerated (48 per cent compared with 37 per cent of females).

+ Women appear to have a much stronger commitment to action. Twenty three per cent of men do not think that the actions they take on a daily basis can help to address climate change, compared to 9 per cent of women.

+ Older Australians are more sceptical about climate change and less likely to support action.

+ Almost two-thirds (64 per cent) of 18-34 year olds said that they were concerned about climate change, compared with 54 per cent of those aged 35-54 and 46 per cent of those aged 55 and older.

+ Belief in climate change also drops with age. Seventy one per cent of 18-34 year olds indicated that climate change is occurring, slipping to 66 per cent among those aged 35-54 and 57 per cent of those aged 55 and older.

+ Younger Australians are also more likely to agree that Australia should be a world leader in finding solutions to climate change and that it can be influential in encouraging other countries to tackle climate change.

+ Younger people are more likely to attribute climate change to human activity. They are also more concerned about 'a polluted Australia' and about heatwaves, extreme weather events and the impact of rising sea levels to coastal communities.

+ Concern for the impacts of climate change is higher among Victorians and Western Australians than in other parts of the country.

+ Three in five (60 per cent) Victorians and 66 per cent of WA residents said that they were concerned, compared to a national average of 54 per cent. NSW residents are the least concerned, with 50 per cent saying they were not very or not at all concerned.

+ WA residents highlighted worries around rising sea levels and changes to the seasons. They were also more likely to be concerned (89 per cent were fairly or very concerned) about more droughts affecting crop production and food supply (compared with an average of 77 per cent) and about animal and plant species becoming extinct (83 per cent were fairly or very concerned compared to the average of 73 per cent) and more heatwaves and extremely hot days (80 per cent were fairly or very concerned compared to the average of 65 per cent).

# Science

## Understanding Climate Science

This break-out section contains a review of the latest findings of climate science from Australia and around the world.

SEASONS JUST AREN'T  
WHAT THEY USED TO BE.

### IS IT REAL?



#### WET

Australians may be in two minds about the driving causes behind climate change, but the majority don't appear to question whether climate change is real or not, as this report finds.

"Seasons just aren't what they used to be," is the sentiment repeated most often.

Indeed they are not in the warmest La Niña years in history.

Parts of Australia saw back-to-back wet years in 2010 and 2011—Australia's wettest two-year period on record. But it wasn't soggy everywhere: while the north copped heavy and widespread flooding, Western Australia's rainfall in April was nearly 60 per cent below average. This was the lowest since 2001. In fact, most of Australia saw drier-than-average conditions in 2011, according to CSIRO<sup>3</sup>. This follows the warmest decade since records began.<sup>4</sup>

### WHY IS IT HAPPENING?



#### DRY

A number of major scientific reports over the last year point to climate change as the culprit for what people perceive as 'changing seasons.'

There have been more hot days, with temperatures passing 40°C. In fact, extremely hot days now outnumber extremely cold days by more than two to one, according to CSIRO and the Bureau of Meteorology.

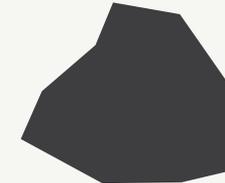
On top of this, the south of the continent—where most of us live and most of our food is produced—has seen a significant decline in average annual rainfall.<sup>5</sup> In southeastern Australia, high fire danger conditions showed a rapid increase in the 1990s and early 2000s,<sup>6</sup> during the Millennium Drought of the last, long El Niño episode.<sup>7</sup>

### HOW CAN WE TELL?



Other signs point to global warming, namely the changing impacts to glaciers and snow cover, polar ice sheets, rainfall patterns, wildlife migrations, sea levels, plant flowering times, temperatures in different parts of the atmosphere and in the oceans, and more.

### RISING



**RECENT RESEARCH AT THE UNIVERSITY OF MELBOURNE SUGGESTS THAT THE DRY CONDITIONS SEEN IN MUCH OF AUSTRALIA LAST DECADE WERE UNUSUAL, NOT JUST SINCE RECORDS BEGAN IN THE LATE NINETEENTH CENTURY, BUT FOR THE LAST THOUSAND YEARS.<sup>8</sup>**

And the warming and sea-level rise have not stopped. In fact, as greenhouse gases continue to accumulate in the atmosphere, each decade since the 1970s has been warmer than the last.<sup>9</sup>

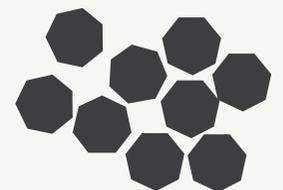
**IN MAY 2012 ATMOSPHERIC CONCENTRATIONS OF CO<sub>2</sub> REACHED 40% ABOVE PRE-INDUSTRIAL LEVELS<sup>10</sup> - HIGHER THAN ANY TIME IN THE LAST 800,000 YEARS.<sup>11</sup> GLOBAL AVERAGE TEMPERATURES HAVE RISEN 0.7°C. HUMAN ACTIVITY IS RESPONSIBLE FOR ALMOST ALL OF THIS.<sup>12</sup>**

### HOT

+ °C

CSIRO and the Bureau of Meteorology have found that Australia's average daily maximum temperatures have warmed by about 0.75 °C since 1910. Of course, Australia's climate is naturally variable, but the land of droughts and flooding rains is witnessing hotter droughts and heavier downpours.

### HUMAN INDUCED



Although many believe climate science is contested and confused, scientists have been putting the puzzle together for over 150 years. Year on year the evidence has been piling up, so that by 2007 the Intergovernmental Panel of Climate Change (IPCC) concluded that global warming was no longer in any doubt. Human activity, they said, is 'very likely' the main driver.<sup>13</sup> Today, the vast majority of climate experts—more than 95 per cent—agree that humans are changing the climate.<sup>14</sup>

## Voice Of The Street

In mid-June, some 40 people around Sydney's CBD and Inner West were randomly asked whether they thought that humans were contributing to climate change. These were their responses.



These responses and others that are not included in this report are available online in a series of videos at [www.climateinstitute.org.au](http://www.climateinstitute.org.au)

# Solutions.

WHAT DO WE THINK ABOUT SOLUTIONS TO CLIMATE CHANGE?

Australians are yet to be convinced by the carbon laws and the application of a carbon price.

The carbon pricing legislation, or 'the carbon tax' as it is colloquially (and incorrectly) described, is not popular. Support for carbon pricing, however, increases significantly when the elements of the legislation, particularly revenues directed to investment in renewable energy, are explained.

When people envisage a low-carbon future they see solar and wind as Australia's main energy sources. People express a strong preference for government support for renewable energy and energy efficiency policies.

Overall Australians consider a low-carbon future to be somewhat uncertain in economic terms, with some fears for loss of existing jobs and a dominating concern about household expenses. But people see the benefits of a less polluted Australia, with new industries, cleaner technology and healthier people.

Apart from the high levels of scepticism concerning the political motivations behind 'the carbon tax,' the overwhelming majority of people have little understanding of the structure and application of the legislation. There is at best a vague notion that it applies to 'big polluting companies,' with many participants believing not just that companies will pass their increased costs on but that it is actually a direct tax on individuals for their energy use.

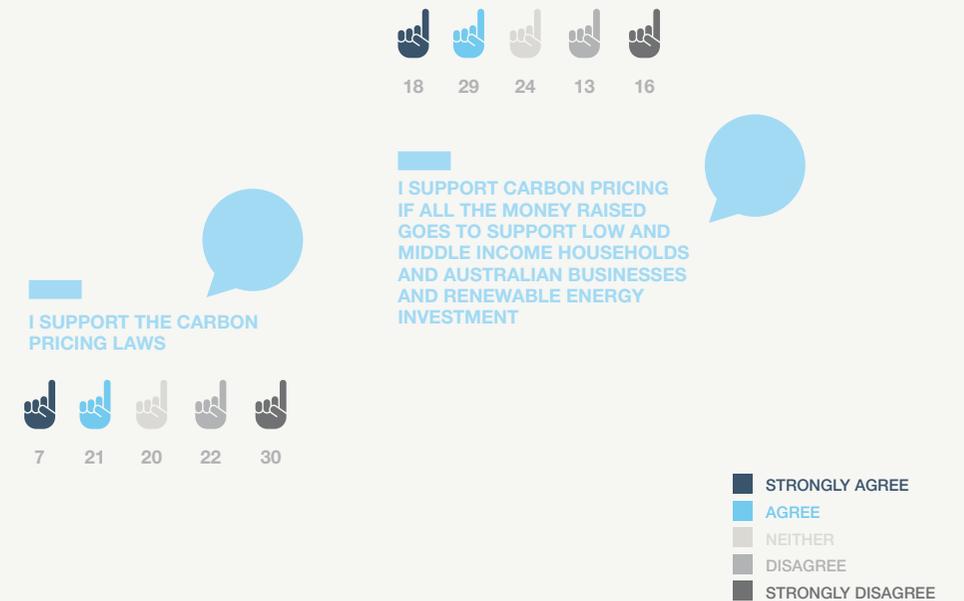
"Will I just receive a bill?" was a question asked by two of the discussion group participants that were subsequently interviewed in more detail for the case studies featured in this report (pages 39 and 40).

The effectiveness of pricing carbon is highly uncertain in Australians' minds: 43 per cent agree it will drive greater investment in renewable energy with 30 per cent uncertain. Some 35 per cent of Australians agree that carbon pricing will reduce Australia's emissions while 24 per cent are uncertain.

Not surprisingly, this lack of understanding and conviction leads to lack of support. Asked plainly if they support the carbon pricing legislation, 28 per cent agree, 52 per cent disagree and 20 per cent are uncertain.

These levels of support and opposition are broadly in-line with findings from the Lowy Institute<sup>15</sup>, Newspoll and Nielsen.

FIGURE 3



As in polls from Essential<sup>16</sup> and CSIRO, these figures change significantly if the question explains the legislation.

Support jumps to 47 per cent under the statement: "I support carbon pricing if all of the money raised goes to support low and middle income households and Australian businesses and renewable energy investment." Only 29 per cent still oppose it and 24 per cent are uncertain.

Just specifying one of the legislation's elements as reason to support it, revenues raised to be invested in renewable energy, increases support. More than half (52 per cent) of respondents support it then. Framed this way the carbon pricing legislation also draws the least amount of opposition, with only 27 per cent.

The discussion groups revealed another element that plays against support for carbon pricing - the perception that it is the only thing the Government is doing to address climate change. There is little awareness of funding and support for other initiatives.

Participants' support for carbon pricing is often on the proviso that it is 'hopefully' leading to actions to tackle climate change, such as research and development into renewable energy technologies.

## WHAT DO YOU THINK ABOUT THE CARBON PRICE SOLUTION?

A critical result in 2013 will be the extent to which support has changed through the demonstration of any effectiveness of the laws as well as a different 'lived experience' of real impacts on cost of living.

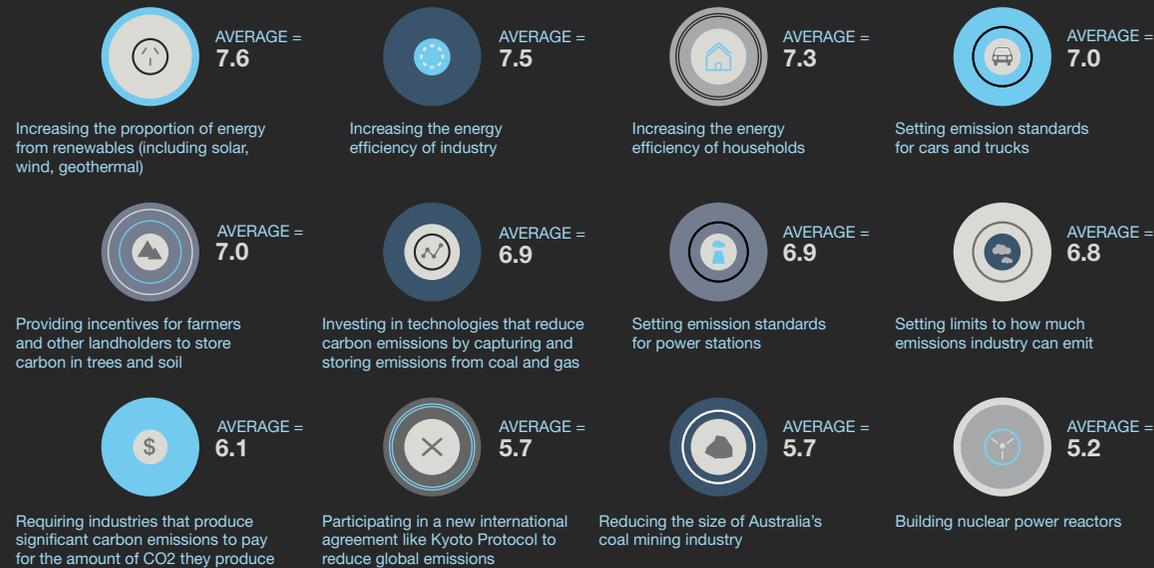
Responses in discussion groups also reveal uncertainty turns to support when the legislation's potential environmental and economic effectiveness is explained.

Supporters of the legislation may take heart from the New Zealand experience where business and public opposition reversed after 12 months.<sup>17</sup> The results from last month's GE's Low-Carbon Readiness Survey are also instructive.<sup>18</sup> "As the Business break-out section of this report (see pages 35-36) reveals, companies facing the carbon pricing are taking action as a result.

Whether the Coalition should or will repeal the legislation is another question again. Support for the Coalition repealing the legislation is at 48 per cent with 26 per cent uncertain. Agreement that the Coalition will repeal is less strong with 44 per cent agreeing they will and 36 per cent uncertain.

## YOUR PICK IDEAL ACTIONS MIX

FIGURE 4



Respondents were asked to rank the perceived effectiveness of the following national greenhouse gas emission reduction strategies, using a scale of 0 to 10, with 0 being 'not at all effective' and 10 being 'very effective.' These are the average responses provided.

## AUSTRALIANS' VISION OF A LOW-CARBON FUTURE IS FOCUSED ON CLEAN AND EFFICIENT ENERGY.

## THE MOST EFFECTIVE EMISSIONS REDUCTION POLICIES FOR RESEARCH PARTICIPANTS WERE ENERGY FROM RENEWABLE SOURCES AND INCREASED ENERGY EFFICIENCY OF INDUSTRY AND HOUSEHOLDS.

Australians' vision of a low-carbon future is focussed on clean and efficient energy.

The most effective emissions reduction policies for research participants were energy from renewable sources and increased energy efficiency of industry and households.

Ideal energy mixes show that people acknowledge that Australia needs to move away from its dependence upon coal as energy source, with coal being nearly the most unpopular of desired energy sources, even trailing nuclear (see Figure 4).

Solar, wind, hydro and other renewables, as well as gas, are the top choices in an ideal scenario, with the first two largely outpacing all others.

Solar is by far the most popular ideal energy solution, perhaps due to widespread recognition of Australia's solar potential and familiarity with rooftop photovoltaic panels. This and other public studies from CSIRO and industry show that wind is far more popular than recent media debates would indicate.<sup>19</sup>

## YOUR PICK IDEAL ENERGY MIX

FIGURE 5

Respondents were asked to rate their most preferred and least preferred energy sources for Australia.

	MOST PREFERRED	LEAST PREFERRED
<b>SOLAR</b>	<b>81</b>	<b>6</b>
<b>WIND</b>	<b>59</b>	<b>13</b>
<b>HYDRO</b>	<b>44</b>	<b>11</b>
<b>GAS</b>	<b>28</b>	<b>31</b>
<b>GEOTHERMAL</b>	<b>23</b>	<b>28</b>
<b>TIDAL/ WAVE</b>	<b>23</b>	<b>32</b>
<b>NUCLEAR</b>	<b>20</b>	<b>64</b>
<b>COAL</b>	<b>14</b>	<b>66</b>
<b>BIOMASS (WOOD WASTE ETC)</b>	<b>8</b>	<b>52</b>

The desire to see Australia develop its 'boundless renewable energy resources' came out strongly in the discussion groups for this research. The potential for Australia to be a leader in renewable energy strongly resonates, with feelings of national pride and the potential for new jobs as leading factors.

Apart from the obvious abundance of Australia's renewable energy resources, the existence of large scale renewable energy projects in other countries raises the question of 'why Australia is not doing the same?' In a number of the detailed case study interviews, people raised this question.

In the words of Warren Robertson<sup>20</sup>, who on a recent trip was impressed by wind turbines construction and farms in Ireland and California: "They are taking climate change pretty seriously in some parts of the world, much more so than we seem to be here."

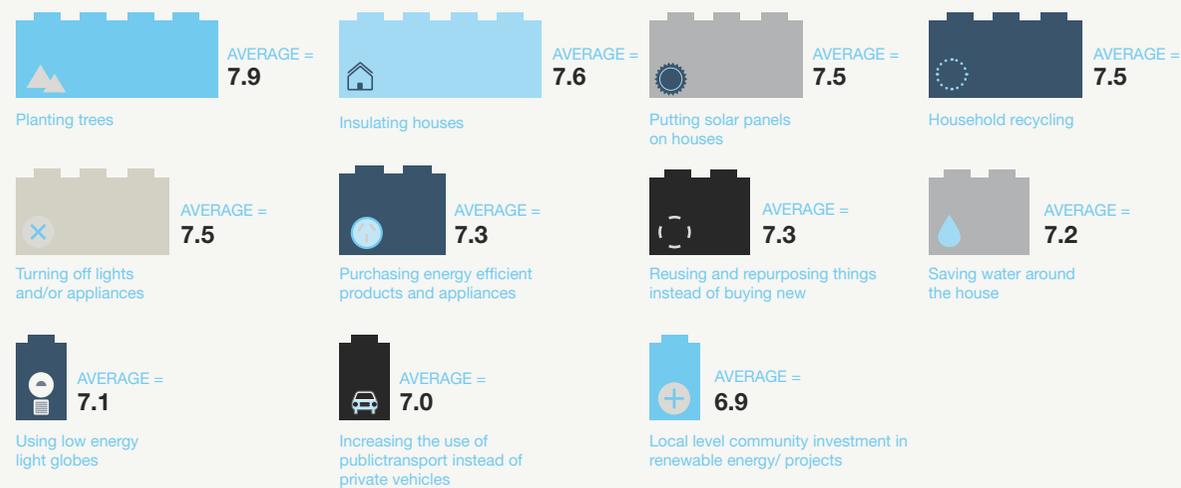
Aside from taking advantage of its renewable energy options, discussion group participants identified two other compelling reasons to act on climate change. The first is a strong sense that decisions made today have lasting consequences for future generations.

The second is a desire to see Australia act now to prepare for impacts of climate change. There is a fear that we are not doing enough to act on climate change, which is all the more frustrating when people become aware of the possibilities for action. Acting now by 'doing things that we can do' brings both a sense of achievement and peace of mind that helps to over-ride the growing fear of the potential consequences of inaction.

Traditional energy sources such as coal and nuclear ranked the lowest, with nuclear being slightly preferable to coal (see Figure 5).

## WHAT DO YOU THINK ARE THE MOST EFFECTIVE ACTIONS THAT YOU CAN TAKE TO BUILD A MORE SUSTAINABLE FUTURE?

FIGURE 6



Respondents were asked to rank the perceived effectiveness of the following emissions reducing personal actions, using a scale of 0 to 10, with 0 being 'not at all effective' and 10 being 'very effective.' These are the average responses provided.

At the individual level, the sense of being part of the solution, or 'doing my bit,' is strong. People hold firm to an individual responsibility to act on climate change even when prompted with the prospect of catastrophic climate change caused by unavoidable natural events and the inevitable futility of personal actions against the potential magnitude of such events.

The justification for this is contained in the fact that similar actions had achieved success in the past and that it just boils down to 'doing what I can do.' The most consistently cited example of previous success was water saving practices during the last drought – which had worked not just to save and reduce water usage in the short term, but had changed attitudes and behaviors in the longer term.

While participants talked extensively about the actions they can take, they also raised concerns about those actions being futile if government and business don't do their bit.

There was discussion on energy saving efforts, reduced use of high emissions vehicles such as petrol powered cars and an increased reliance on recycling, re-use, minimizing resource use and 'thinking and shopping locally.' It is interesting to note that water saving receives significant mentions when prompted for actions on climate change, which is where the topic is most readily confused with the broader issue of environmental conservation.

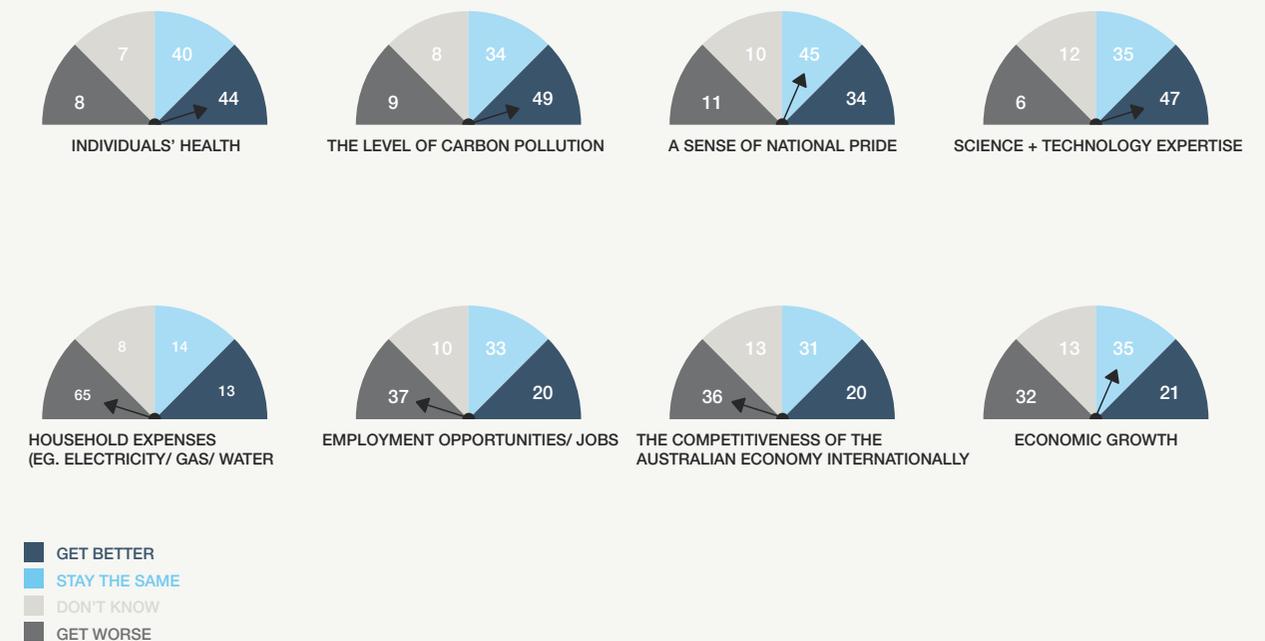
Asked why that particular action is important to them, people respond with a mix of concern for savings, reducing pollution, and improving health and more broadly their quality of life.

It is important to note that individuals' primary reason for taking action on climate change is often not necessarily about addressing climate change or even environmental concerns. Just as often cost saving is the trigger or a requisite consequence of the action, with the environmental or climate benefit an added bonus.

What was also evident from this discussion is that people are doing what they believe they can do within their means in terms of actions on climate change. Further, they are prepared to do more, but need direction, leadership and new ideas.

## IN A LOW-CARBON FUTURE, WHAT DO YOU THINK WILL BE DIFFERENT?

FIGURE 7



### PEOPLE HOLD FIRM TO AN INDIVIDUAL RESPONSIBILITY TO ACT ON CLIMATE CHANGE.

Half of respondents believe that the level of carbon pollution will be reduced, or 'get better,' under a move to a low-carbon future, characterised as 'a cleaner way of doing business across a range of industries, including renewable energy, cleaner transport and carbon farming.' Nearly half (47 per cent) think that a low-carbon future gives a boost to Australian science and technology expertise.

Improved health and a sense of national pride are also seen as benefits (see Figure 7).

Only 20 per cent of respondents think that the Australian economy will be more competitive, versus 36 per cent who think it will be less competitive. This translates into uncertainty about economic growth under a low-carbon economy, and therefore concerns for jobs.

In the *Climate of the Nation 2010* research, 41 per cent of respondents thought that strong action on climate change will cost jobs. This year fewer, 37 per cent, hold that belief. But at the same time 27 per cent used to think that the low-carbon economy will improve job opportunities, while now that percentage is down to 20.

Most significantly, the unrelenting focus on household expenses and cost of living has clearly had an impact, with 65 per cent thinking that such expenses will get worse in a low-carbon economy. This was mirrored in findings that some two-thirds of participants think their household will be worse off under the carbon price legislation. More recent polls<sup>21</sup> report similar numbers but include signs that such fears may be softening.

These figures are critical to watch in the coming year to see the realisation of actual expenses and understanding of the household assistance from the carbon permit revenue.

# Warren

**Warren Robertson\* has often found himself the outsider looking in, observing society. Driving overnight trains in regional Sydney his clock went counter to others' – when they went to work, he went to bed. Now he is watching the climate debate and once again feeling like the odd one out.**

At the pub or at retired rail workers' gatherings when climate change comes up many of his friends say "oh that garbage," and they don't want to talk about it," he says. "I think they tend to be sceptics. People get some pretty strong views."

Most people engaged in the *Climate of the Nation* research felt that climate change is real. But most did not understand or support the carbon legislation. Warren does wholeheartedly.

"Everything has a price to it and polluting the planet hasn't had a monetary value until now," he says. "We are only a small country. Some might say it's insignificant what we do, that it won't matter. That may be so, but we have a responsibility to do something."

Warren's awareness of climate change crystallised in recent years.

"Riding the trains, as you'd come from the Blue Mountains into the Sydney Basin, you'd see all that haze. Especially in the mornings, you'd see all that haze and thinking 'geez we live down there.'"

Pollution over Sydney eased up as vehicle standards improved, but Warren remained concerned. "You can't see carbon but you can see the others, so we do something about them."

Another reminder was during the railway construction around Green Square.

"They had to go through soft silt – because there is an ancient sea bed under Botany. That's only one metre above sea level. Most of Mascot is not much more than that. My mother lives in Mascot."

"I know something like significant sea level rise is not something that's going to happen overnight, but we should be thinking about it."

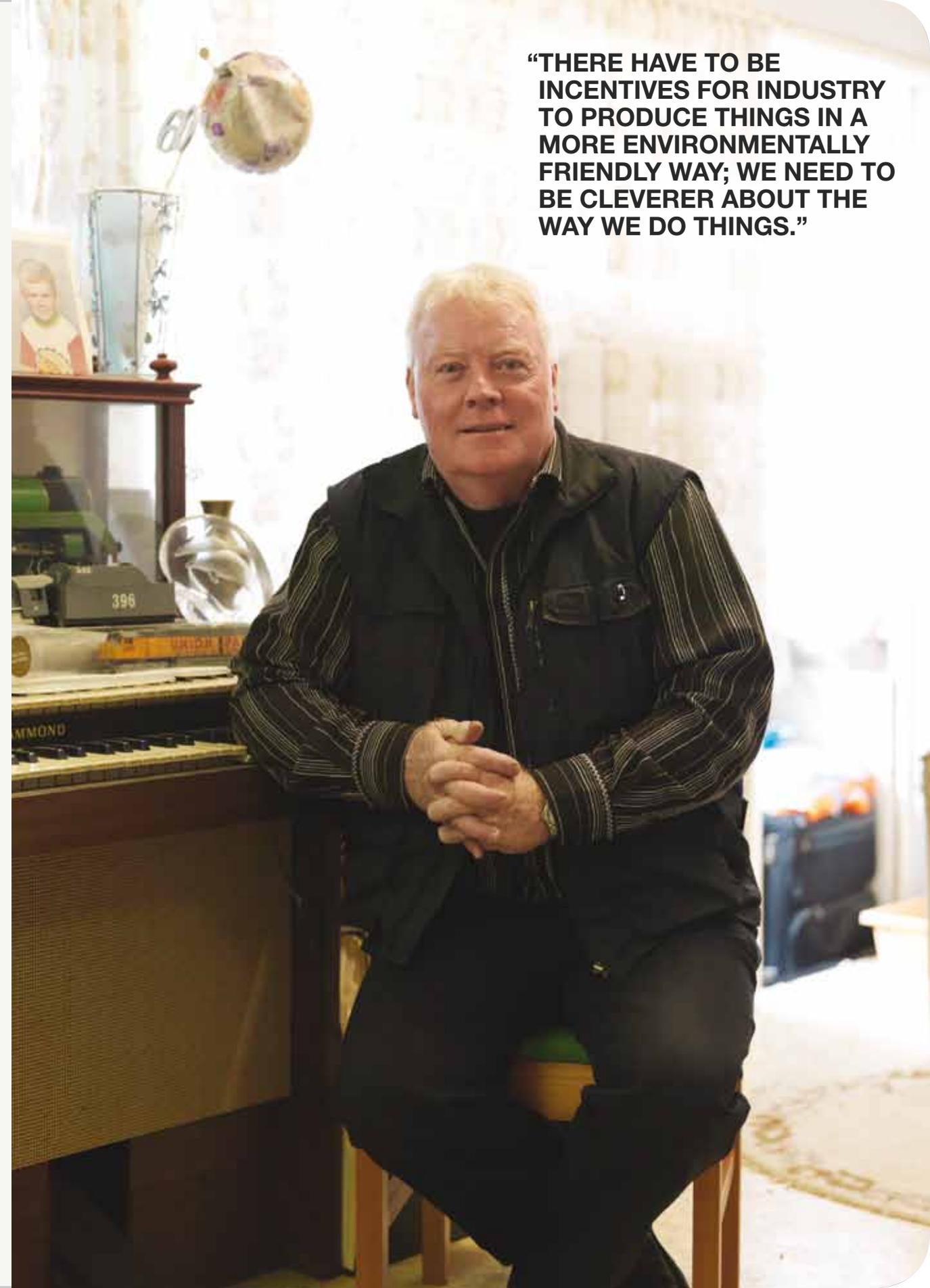
In retirement Warren has also done some travelling - California, where he was impressed by endless wind farms and Belfast – which has made him think.

"They are taking climate change pretty seriously in some parts of the world, much more so than we seem to be here," he says. "We were in Belfast last year, at a ship yard, the one that built the Titanic, I can't remember the name of it now, and they had the most enormous propeller blade I have ever seen in my life. It was for a wind farm. And I'm thinking this country over here should be building wind turbines, we're really losing the plot."

"There are no visible signs around us that we are addressing any serious carbon issues," he says.

"I'd like to see fairly major [wind and solar] projects ... so that we can move away from coal as our major power generation source. There have to be incentives for industry to produce things in a more environmentally friendly way; we need to be cleverer about the way we do things."

**"THERE HAVE TO BE INCENTIVES FOR INDUSTRY TO PRODUCE THINGS IN A MORE ENVIRONMENTALLY FRIENDLY WAY; WE NEED TO BE CLEVERER ABOUT THE WAY WE DO THINGS."**



## Voice Of The Street

In mid-June, some 40 people around Sydney's CBD and Inner West were randomly asked what they would do to address climate change, almost as if they had a magic wand. These were their responses.



I do what I can before it's too late because I don't want the environment as I know it to disappear.



I'd employ a very good public relations or communications team. It has been explained but people don't really understand the explanations.



Get people to stop wasting things. We have far too much materialism and turnover of goods which are not built to last.



I'd put David Attenborough in charge. If all the leaders were listening to him the world would be a better place.



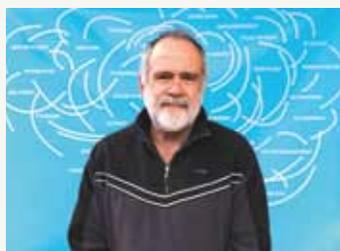
Get some strong scientific opinion on how to help solve the problem.



Make sure young people are educated early. I need to know more to be able to do something about it.



Appeal to people. Help them understand how they are contributing and how they can make a difference.



Certainly start looking around the issue of carbon... and put much greater funding into alternative energy sources.



Retire. I just realise what's going to happen and you can't battle inevitability. It will be hard to change our ways.

## IF YOU WERE IN CHARGE OF THE WORLD WHAT WOULD YOU DO ABOUT CLIMATE CHANGE?



I guess it's pretty hard to change people and how they act. So the first thing is to educate.



I try to have as low a carbon footprint as I can. It's a pretty simple thing but we can encourage everyone to do their part.



All I can do is look after my little corner of the world. I try to do my little bit. Collectively we can make a difference.



I would be investing a lot of resources into research and development of alternative energy sources.



I don't think man has got a solution. Politicians are thinking short term. The Creator is the only one who can fix it up.



Get governments to work together and stop playing the blame game. It doesn't matter who did it, it's going to affect everyone.



Understanding is half the key. If I knew what I could do I would be doing it. Awareness is a big issue.



I can't answer that straight away. It's hard to fix. 20 years ago we were talking about these things. We've been talking, talking, talking.



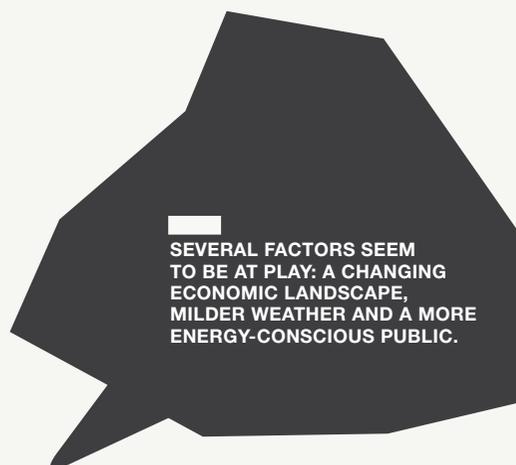
I'd encourage people to take more responsibility in their own lives. I think people are really concerned about what changes they'll have to make and how that will affect their lifestyles.

These responses and others that are not included in this report are available online in a series of videos at [www.climateinstitute.org.au](http://www.climateinstitute.org.au)

# Energy

## Understanding Energy Trends

This break-out section contains a review of energy use trends among individuals and the residential and commercial sectors. It was provided by report partner NetBalance.



## OVERVIEW



## USAGE

Australian businesses and households are progressively reducing their energy consumption and increasing their uptake of clean technologies and energy efficient appliances, accelerating the transition to a sustainable future.

After continuously rising each year, electricity consumption in Australia peaked in 2009, and has since dropped by 3 per cent. Several factors seem to be at play: a changing economic landscape, milder weather, energy efficiency policies coming into effect, and a more energy-conscious public.<sup>22</sup>

More fundamentally, this change emerges as the era of cheap energy comes to an end. Consumers and businesses are responding to higher power bills, driven not only by significant domestic investment in electricity network infrastructure, but also rising global prices for resources like oil and gas.

## RESIDENTIAL



## DRIVERS

On average, the household sector is responsible for roughly 12 per cent of Australia's energy consumption and about 20 per cent of annual emissions.<sup>23,24</sup>

Several policies and programs are encouraging consumers and producers to improve their energy efficiency use. The energy star rating system has become increasingly influential, with more than 50 per cent of households now considering energy star ratings when choosing most major appliances). In NSW, Victoria, South Australia, and the ACT retailers are obliged to help their customers achieve a targeted amount of energy savings or face penalties.

These programs help overcome the market barriers that can prevent households from investing in energy efficiency.

## COMMERCIAL



Businesses are showing a similar willingness to reduce their energy consumption. Seventy five per cent of businesses either have taken action to improve their energy efficiency in the last three years, or plan to in the next three years. This proportion has increased from about 60 per cent in 2010.<sup>25</sup>

## INDUSTRIAL

The Government's Energy Efficiency Opportunities program requires large corporations to assess their energy use, identify cost effective energy efficiency opportunities and report them publicly. Participants include companies in the resources, manufacturing and transport sectors, Australia's largest energy-consuming industries.

By mid-2011, these 252 companies had identified opportunities to reduce energy and greenhouse gas emissions equivalent to 2.8 per cent of Australia's entire annual energy use and emissions. The oil and gas sector identified energy efficiencies of nearly 20 per cent.

Companies have adopted just over half of the identified energy efficiencies, and are expected to save about \$800 million a year. More than two-thirds of adopted savings pay for themselves in less than two years.<sup>26</sup>

**WHILE ENERGY WAS CHEAP, AUSTRALIA INVESTED RELATIVELY LITTLE IN ENERGY PRODUCTIVITY COMPARED WITH OTHER DEVELOPED COUNTRIES.<sup>27</sup> WITH ENERGY COSTS RISING, IMPROVED ENERGY EFFICIENCY IS VITAL TO MAINTAIN AUSTRALIA'S COMPETITIVENESS IN THE GLOBAL ECONOMY.**

## GREEN STAR

**\* 18%**

The Green Star rating program for commercial buildings has driven advancements in environmentally efficient building design. Around 18 per cent of Australia's CBDs are now Green Star rated, with benefits ranging from reduced energy consumption to improved workforce productivity.<sup>28</sup>

## OIL + GAS



**THE OIL AND GAS SECTOR IDENTIFIED POTENTIAL ENERGY SAVINGS OF NEARLY 20 PER CENT. COMPANIES HAVE ADOPTED ABOUT HALF OF THE IDENTIFIED ENERGY SAVINGS. BUT IN MOST SECTORS COMPANIES CHOSE MAINLY TO IMPLEMENT EFFICIENCIES THAT WOULD PAY FOR THEMSELVES IN UNDER TWO YEARS.**

Improved energy efficiency also reduces domestic pollution and cuts the cost of achieving Australia's emissions reduction targets. Investment in cost effective energy efficiency measures could achieve more than a third of Australia's minimum 5 per cent target and a quarter of our 25 per cent target in 2020, while saving more than \$7.5 billion.<sup>29,30</sup>

# Responsibility.

WHO DO WE THINK SHOULD LEAD THE WAY + TAKE ACTION ON CLIMATE CHANGE?

Australians take personal responsibility for their impact on the environment and climate change and are prepared to do their bit. Indeed the discussion groups and external evidence (see the Energy break-out section, pages 29-30) reveal that action on energy conservation is layering upon past action and literacy on waste, i.e recycling and water conservation. Literacy and action on carbon is less advanced but could follow a similar path.

The Australian public also maintains a strong view around the responsibility befalling business and government. At the moment their sense is that these actors are failing to provide leadership or act effectively to address climate change.

There is a belief that coordinated action can be effective, just as occurred with collective water saving actions during the drought – which worked not just to save and reduce water usage in the short term, but to change attitudes and behaviours in the longer term. There is concern though, that without government and business action, individual actions will be futile.

Australians are looking to government and industry to lead action on climate change. In discussion groups, the three key reasons given for this are: a sense that government and industry have an obligation to provide leadership and direction, that they can afford to respond to the challenge, and because they are a major contributor to the problem of climate change.

In fact, regardless of whether people like or dislike the carbon pricing legislation, in a December 2011 Essential poll they ranked 'addressing climate change with a carbon tax' as the most important thing that the Government has done since elected, outranking issues like the mining tax and childcare benefits, among other measures.<sup>31</sup>

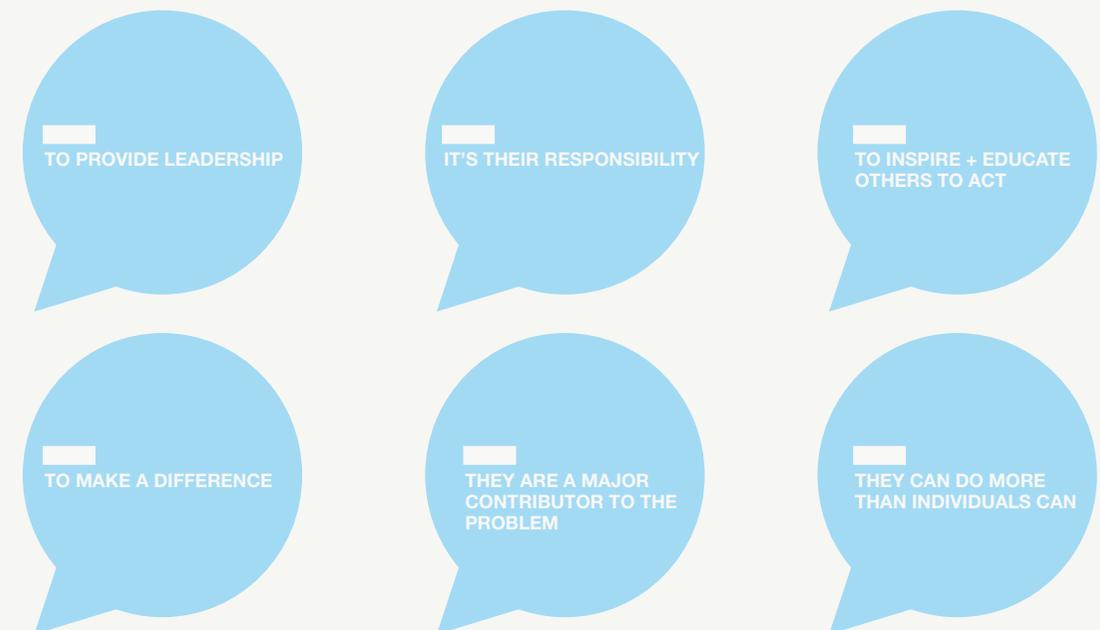
The Federal Government is seen as the party with the highest responsibility for action, with two-thirds (67 per cent) of Australians considering that it should be taking a leading role on climate change, followed by state and territory governments (57 per cent).

Individuals and households were identified as having a contributing role on taking action on climate change (69 per cent) rather than a leading role (20 per cent).

A minimum of 9 per cent for any one group thought that no action was required.

## WHY DO YOU THINK BUSINESSES + GOVERNMENTS ARE RESPONSIBLE FOR TAKING ACTION ON CLIMATE CHANGE?

FIGURE 8



Participants in the discussion groups shared a view that responsibility for action on climate change befalls individuals, business and governments alike. They feel that individuals are acting, but that government and business can do much more. These are the 'top of mind' reasons that they cited for why business and government have a responsibility to act on climate change.

## THE AUSTRALIAN PUBLIC MAINTAINS A STRONG VIEW AROUND THE RESPONSIBILITY BEFALLING BUSINESS AND GOVERNMENT. AT THE MOMENT THEIR SENSE IS THAT THESE ACTORS ARE FAILING TO PROVIDE LEADERSHIP OR ACT EFFECTIVELY TO ADDRESS CLIMATE CHANGE.

The role of government and business is important in the international context as well. Just as people are confused about the carbon pricing legislation, they lack knowledge and information about what other countries are doing to address climate change.

In the discussion groups there was a clear perception that highly polluting nations such as China (particularly) and India are 'not acting on climate change.' This is cited as a reason for Australia to hold off its own emission reduction ambition. But evidence of China's and India's action prompts strong backing for Australian action.

In the national poll, most Australians see a role for their country to lead in this space. More than half (52 per cent) think that Australia should be a leader in finding solutions to climate change with only 23 per cent disagreeing. This is little changed from April 2010 polling when 55 per cent of respondents agreed, down from 69 per cent in February 2009.

Irrespective of global ambition, this year only 37 per cent agree that Australia shouldn't act until major emitters like China and the United States do. This is up from the 28 per cent who agreed with this proposition in February of 2009.

# Out In Front?

While Australians expect governments and industry to lead the way on responding to climate change, more rate their performance negatively than positively. Media is an even worse performer in this space.

The Federal Government is meant to be leading on action on climate change, but its net approval is minus 6. Perhaps curiously, local and state governments receive worse ratings.

But government is significantly outperforming industry, which 40 per cent of Australians think is doing a 'poor' job at addressing climate change. With a net disapproval of -21, only media, with -22, is seen as failing as badly on its role in relation to climate change.

With many discussion group participants talking about the need for third parties to explain everything from what climate change is to how it can be addressed, environmental groups and non-profit organisations received the highest rankings for performance.

Half of Australians (50 per cent) rated environmental groups and non-profits as performing well in leading a response to climate change.

The next highest rated group was local communities, with 32 per cent giving a positive rating to their local community for taking action on climate change.

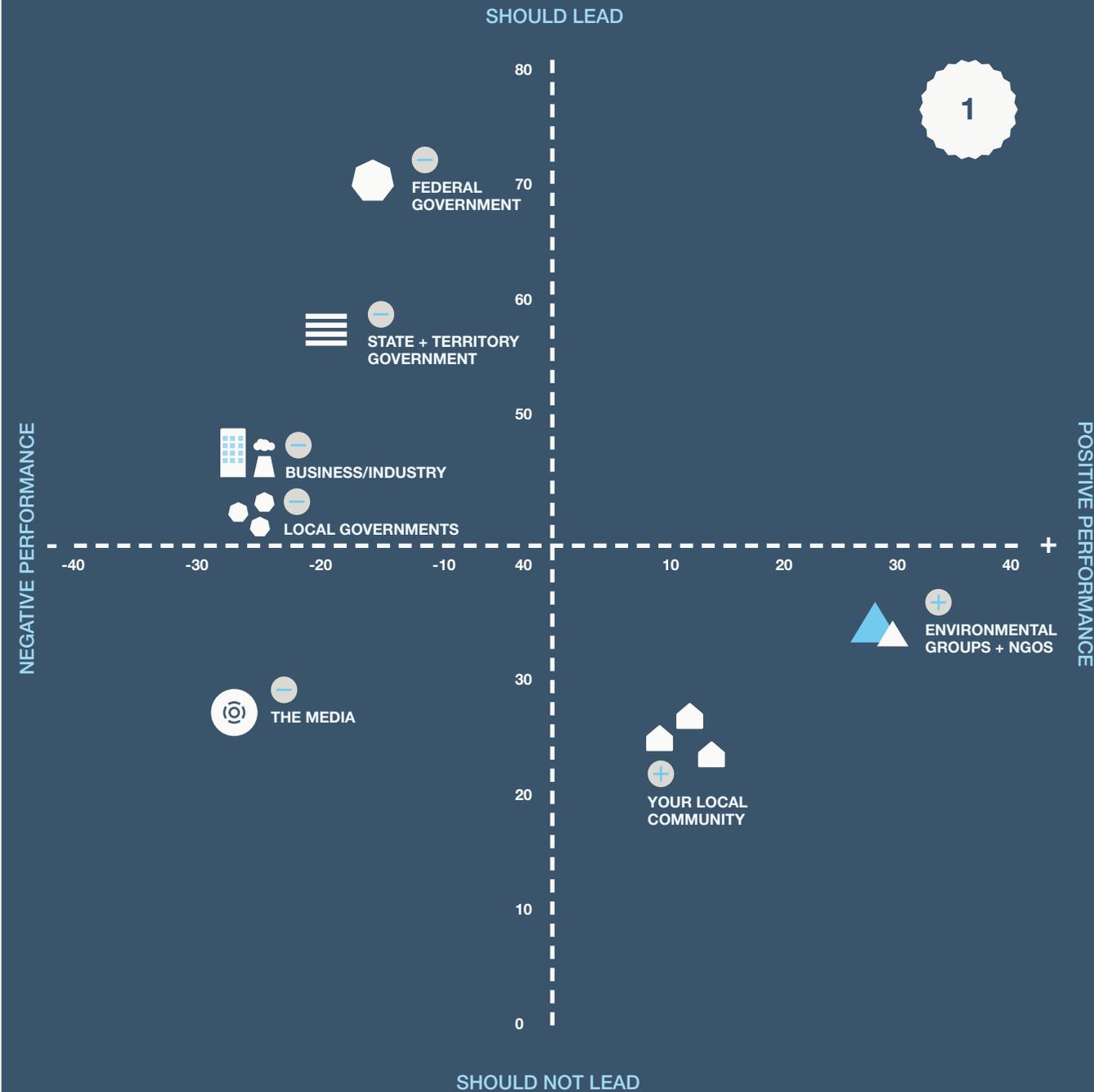
## AUSTRALIANS ARE PREPARED TO DO THEIR BIT SO LONG AS GOVERNMENT AND BUSINESS SHOULDER RESPONSIBILITY AND PERFORM BETTER.

Awareness about the role of business in managing personal investments such as superannuation, and concern about their performance has grown.

Asked about the impact of climate change on superannuation funds in *Climate of the Nation 2008* research, half of respondents were concerned and the other half were not. They were split roughly equally between being confident and not confident about their funds' performance in managing the long-term risks and opportunities that climate change poses to their investments.

Confidence has since slipped. This year, similar percentages of respondents are concerned and unconcerned about the effect of climate change on their long-term investments (44 per cent and 41 per cent, respectively). But two-in-five (41 per cent) respondents were not confident that funds would be able to manage long-term risks and opportunities, compared with 31 per cent who reported being confident.

FIGURE 9



# Business

## Understanding Low-Carbon Readiness

This break-out section contains high level findings from the second annual 'Australian Low-Carbon Readiness Barometer' conducted by the Economist Intelligence Unit and commissioned by report partner GE.<sup>32</sup>

ALMOST THREE-QUARTERS OF AUSTRALIAN BUSINESSES AGREE THAT CARBON PRICING IS HERE TO STAY, AT LEAST IN ONE FORM OR ANOTHER.

## OVERVIEW



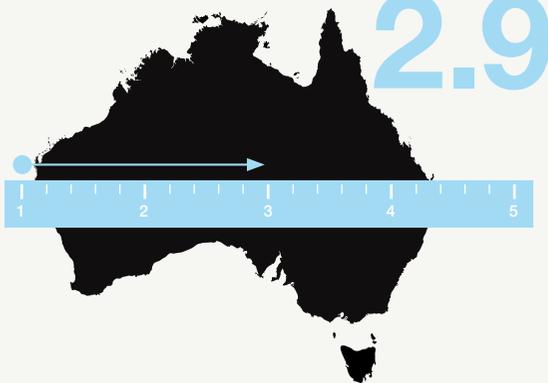
## IMPACTS

Of all firms surveyed, more than two-thirds now have some sort of carbon reduction strategy in place. Almost a third have modeled the impact on their business operations.

Of the firms directly affected by the carbon price, 85 per cent now have a carbon reduction strategy in place, with a further 6 per cent in the midst of developing one. Only half of indirectly affected firms have such a strategy.

More than half of surveyed companies are investing in resources to capitalise on energy efficiency opportunities. Just under a third have recruited a government lobbyist, or hired an external consultant to help identify such opportunities.

## LOW-CARBON FUTURE



## LOW-CARBON READINESS BAROMETER

Australia's overall low-carbon readiness is 2.9 out of 5, down slightly from 3.1 last year (on a scale of 1 to 5, with 5 denoting excellent readiness).

**A RECENT SURVEY OF 136 SENIOR EXECUTIVES IN AUSTRALIA ACROSS A BROAD MIX OF INDUSTRIES FOUND THAT INDUSTRY IS ACTING ON CLIMATE.**

## CARBON PRICING

3/4

Almost three-quarters of Australian businesses agree that carbon pricing is here to stay, at least in one form or another. This is a similar finding to that of a recent Australian National University survey, in which 79 per cent of respondents said that they expect that there will be a carbon price in Australia in 2020.<sup>33</sup>

## COSTS

Almost half believe that a new regime will eventually replace the current scheme, with almost two-thirds believing A\$23 per tonne price is too high, and around 10 per cent believing it is too low.

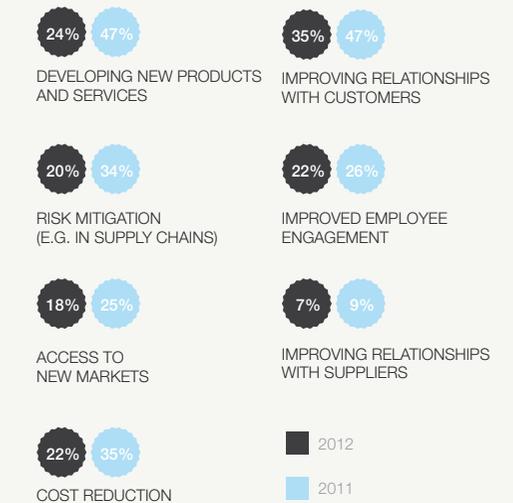
**OF THOSE FIRMS DIRECTLY AFFECTED BY A CARBON PRICE: 85% ALREADY HAVE AN ENERGY REDUCTION STRATEGY IN PLACE, WITH A FURTHER 6% IN THE MIDST OF DEVELOPING ONE.**

## OPPORTUNITIES



**THE CORPORATE AGENDA HAS SHIFTED TOWARDS COST REDUCTION, BUT CUSTOMER RELATIONSHIPS AND NEW SERVICES STILL REMAIN IMPORTANT.**

What do you think are the biggest opportunities to your business in taking steps to reduce its carbon footprint?



# Credibility.

WHO DO WE LISTEN TO + BELIEVE ON CLIMATE CHANGE?

Discussion about action on climate change degenerates into farce once politics and politicians enter the fray.

There is a deep cynicism about the motivations of all sides of politics on this issue and any sense of environmental consideration is almost completely lost. There is an almost singular focus on the 'carbon tax' and the self-interest, short term vote implications for the parties.

People expressed little confidence that the compensation element of the carbon legislation would cover the expected price rises. They had little faith in the Government's estimates of price impacts. Many also feared that the compensation would only cover price rises in the first year or so, leaving people exposed to subsequent price rises.

There was a very consistent reaction that the carbon tax "is just going to hurt ordinary people like me." In many people's minds, the 'tax' is almost completely disconnected from action on climate change and seen as just another revenue source for Government.

Interestingly, however, when asked if carbon pricing is better than no policy on climate change, 39 per cent agree, 25 per cent are uncertain and 36 per cent disagree.

Consideration of whether to keep the carbon pricing legislation or not in the near future is often predicated on a 'hope' that it 'might' make a difference and that it is 'at least a start,' as captured by the discussion groups. People are also cynical that any government will walk away from a source of revenue.

Continuing a trend from previous *Climate of the Nation* research, respondents did not have a strong sense that either the Coalition or the ALP has an effective plan to achieve their shared minimum targets of 5 per cent reductions on Australia's 2000 greenhouse emissions by 2020.

Only 14 per cent agree that the Coalition has an effective plan to reduce Australia's emissions. A significant 44 per cent are uncertain with more than a third (42 per cent) disagreeing that they have an effective plan.

The ALP fares only a little better with over a quarter (28 per cent) agreeing that they have an effective plan with 32 per cent uncertain and a third (40 per cent) disagreeing.

The cost-centered debate appears to have sapped Australians' pollution reduction ambition with 33 per cent thinking the 5 per cent minimum target for 2020 'about right' but with 32 per cent thinking it 'too low.' In 2009, 26 per cent thought this appropriate with 57 per cent thinking it 'too low.'

## WHO CAN YOU TRUST? WHO SHOULD YOU BELIEVE?



CLIMATE CHANGE DOESN'T EXIST. IT IS JUST A NATURAL WEATHER CYCLE.



I DON'T KNOW WHO TO LISTEN TO. EVERY DAY SOMEONE SEEMS TO BE SAYING SOMETHING DIFFERENT AND I DON'T KNOW WHO YOU CAN BELIEVE.



I WANT TO DO SOMETHING BUT I DON'T KNOW WHERE TO START.

People interviewed on the street shared a sentiment of confusion. These are some of the things they said.

Given the mistrust of politicians and the increased polarisation of the discussion around climate change, it comes as no surprise that people find it difficult to identify any credible authorities on the subject.

In the discussion groups, at best participants named 'scientists in general,' 'the CSIRO' and 'the Chief Scientist' but no individual scientists were readily known and identified as a credible source of information. There is significant disconnection between the scientific community and the general community, leading to some mistrust of scientists and science.

A recent CSIRO report showed that while 'university scientists' are on average the most trusted, they are only marginally ahead of 'friends and family.' The latter category is the most trusted by those that think climate change is just being driven by natural causes.

People also have a distinct mistrust of politicians on the issue of climate change and similarly anyone who has a vested interest in the outcome of the debate.

Asked about responsibilities and performance on climate change by various groups, from government to non-profit groups and the media, the latter were singled out as a poor performer in providing information about climate change.

Some 82 per cent of respondents think that the media has a role to play in addressing climate change. But a large number (42 per cent) think that the media is doing a poor job in their responsibilities on climate change.

The media is a significant player to look at, given that what appears in the pages of daily newspapers influences public opinion. The issue of cost of living, for instance, went from being referenced an average of 300 times a year in 2002, to more than 3,000 times a year in 2011.<sup>34</sup>

Overall, messengers on climate change are so mistrusted that respondents who felt that climate change is real most often felt that was the case because "the weather and seasons aren't what they used to be."

That people have to rely on their own observations reveals not just a mistrust and lack of understanding of the available information. It also identifies an extraordinary risk related to an issue which will only build over time, requires pre-emptive actions and once initiated remains in place for centuries.

The confounding impact of competing opinions has been noted above, with two-thirds of Australians agreeing that there are too many conflicting opinions for the public to be sure about climate change.

# Caribe

**Caribe is a land surveyor by profession and lives in Newcastle. His love of nature is clear when he speaks of fishing as a child with his father. Now 35, the Maori descendent takes four of his five children on the small family boat. At just a few months of age, the youngest won't join the outings for some time.**



Caribe Tarawa has fond memories of his childhood, “living off the land quite a bit” in New Zealand.

“Crisp, fresh air, green grass – it’s all 100 per cent natural, like that travel campaign says. But you know, it’s true. I’ve lived in it and I’d hate to see it go. I want to share that with my kids and I mean future generations by that too.”

“I love nature and getting outside. Anything that’s going to destroy that type of stuff I am concerned about,” he says. Hence, his belief in climate change.

“Is it happening? Statistics and scientific studies are doing these reports and it seems to me that things are changing. So I suppose it is happening.”

“All you have to do is compare the economies of the world. We are producing a lot of CO<sub>2</sub> compared to 150 years ago. So obviously something is changing.”

He is careful to consider personal action for the environment when possible. The household is big on recycling (they recently upsized their bin), and in renovating the house they bought two years ago they’ve included insulation and LED lights, or “anything to reduce the power bill.”

He looked into solar but found the return on investment too far ahead.

“We have a young family and are a single-income home,” he says. “It’s a matter of bills but also reducing things that are harmful to the environment.”

Caribe, like many people that were involved in the Climate of the Nation research, is confused about the government’s carbon pricing legislation.

“As far as the environment goes, it’s a good thing. But is it a good thing for society in regards to your pocket? Once companies make less money they will put prices up and impact society.”

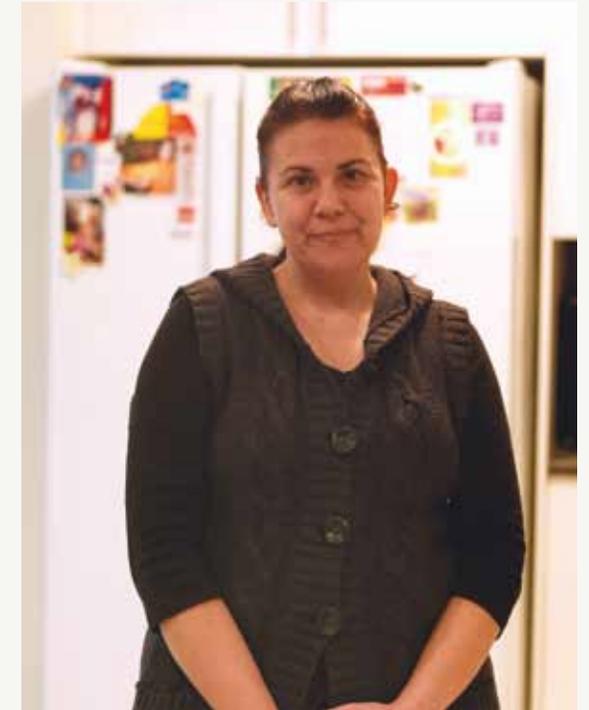
The \$500 in government assistance Caribe’s family just received as part of the legislation is “better than nothing.” But it makes you wonder, he says. “Companies have to pay, we get compensation. You gotta scratch your head.”

He fears the compensation won’t cover the cost increases the family might experience throughout the year. “It feels a lot like a token gesture,” he says.

“On one hand it will bring bills up, on the other hand the underlying reason to do it is the environment. So if I say that I don’t agree with [the carbon legislation] do I not support climate change, which I do? It’s very confusing.”

# Poppy

**Poppy is 45 and works as a pattern maker in ladies’ fashion. She is deeply concerned about the air she breathes and wants “a cleaner world.” With an 11-year-old daughter and a husband suffering from a degenerative muscle disease, living in Sydney is getting harder. The family aims to sell their Hurstville home and relocate to Bathurst by the end of the year.**



For Poppy Niotis, all the talk about climate change is confusing.

“I think it’s real, but who helps with it? There are population issues, clean water issues, farmers with pesticides.” She adds: “We don’t know what happened with the climate 1000 years ago. It’s a natural phenomenon. So I think it’s a bit of both,” meaning man-made and natural phenomenon. “It’s really more the environment that is a problem.”

Growing up in Blacktown, it was all farm lands, Poppy recalls.

“Now it’s all condensed housing. And how do you think that changes the environment?”

“I want a veggie patch and some chooks and clean air,” says Poppy.

“My husband always says ‘bloody Greenies’,” and that usually ends conversations on climate or environment related issues. “He believes the world is doing what it will; basically he thinks [climate change] is a bunch of crocks,” says Poppy. “But I’m not like that.”

“I’ve got my front loader, do the washing with cold water, this house here is fully insulated. All that kind of thing helps keep my bills down and is for my environment.”

The first focus group Poppy ever partook in was for *Climate of the Nation*. She says the conversation made her realise how confused people are about climate change and the carbon pricing legislation. She was against the tax, but has changed her mind.

“I don’t mind paying the tax if I know it’s going to do something for our future,” she says. “But I don’t want that money just going into someone’s pocket. We need some research, universities, or some R&D to find better ways of fixing this future thing, because I want a future for my daughter.”

She wasn’t sure in what form the price would come. “There hasn’t been any information. To us it’s just another tax. How are we going to pay it? Is it just another bill that we’ll get?”

Poppy thinks companies should pay for their emissions, as long as it doesn’t hurt their bottom line or jobs are lost.

A company she worked for some years ago attributed its closure to new government regulations. The new rules required that water used for dyeing fabrics be filtered before it goes into the drainage.

“That company lasted only a year after,” Poppy says. “You see the government brings in these processes, but they don’t think about industry. Companies need help to make transitions with these kinds of processes.”

Politicians are at the heart of the problem, she says. “Politicians are politicians, you know, they forget what it’s like to be everyday people like us.”

“I think if politicians are involved, people put the red flag up straight away. They are only talking because they want the vote. For me, give me my veggie patch and some chooks and I’ll be happy.”

# Motivations.

WHAT MOTIVATES US TO THINK + DO WHAT WE DO ON CLIMATE CHANGE?

Values are humankind's most telling traits. They are inextricably intertwined with the concept of self and influence our ability to absorb, digest, accept or reject new information. Many theories for environmental action<sup>35</sup> and more recently care and behaviour towards climate change, argue that understanding value drivers is critical to understanding people's true feelings and potential for action.

From the discussion groups for this report, caring for the environment appears to be a key values driver of action on climate change. But this closely competes with a host of other drivers including values such as good health, financial security, consideration of future generations, personal enjoyment and happiness, peace of mind, quality of life, well-being, personal achievement, pride, belonging to a community, love of family, freedom and independence and faith in God.

This research found that the actions of many people who are driven specifically by a care for the environment are triggered by a desire to reduce or minimise their carbon footprint as their way of doing something for the environment. Reducing one's carbon footprint can also be driven by a desire for environmental sustainability and so connected to consideration for future generations.

Reducing carbon emissions can also be about contributing to community which connects to the values driver of belonging to a community, whilst for some people it is about 'doing the right thing' and a belief in the stewardship responsibility of humans to their God.

Good health is another common values driver of action on climate change, but it occurs through various pathways. In this case actions like recycling, planting trees, or growing one's own food are viewed from a clear air or healthier food prism.

For some people, there is satisfaction in taking an action that is achievable and for this they need actions that are inexpensive and easy to do, such as reducing energy use, saving water or recycling.

FIGURE 10



The pathways of thought represented here were constructed using research from the discussion groups. These pathways start with an action and then explain the importance people attribute to it, the consequence and benefit they see from it, and finally the value or goal they achieve from pursuing that particular action.

At the more functional, every-day level, much climate change action contains a cost saving element (or incentive), which is to be expected given the high salience of cost of living pressures for ordinary Australians.

The stark paradox for many is that the carbon price legislation seems to contain a cost threat (or disincentive). This means that people are initially open to ideas such as the campaign against the price on carbon as "a great big tax on everything." But evidence in this report suggests that proper explanation of the legislation can turn this around.

Whilst many actions with a cost of living component lead to a 'financial security' value (especially for people on fixed or low incomes), they can just as readily be driven by affordability considerations around:

- quality of life (e.g. more money for luxuries);
- personal enjoyment (e.g. more money for family activities); and
- good health (e.g. able to pay for specialist medical treatment).

## WHAT MAKES US THINK WHAT WE THINK + DO WHAT WE DO?

This is another illustration, perhaps, of support for energy efficiency and renewable energy, given that these are seen as a potential future financial savings as well as climate mitigation action.

While attitudes as found by this report appeared driven by the current political context and a rising concern for the cost of living, there is a growing body of literature that looks at other drivers of human behaviour regarding climate change.

Emerging literature shows that there are numerous dimensions to the way humans have been involved in the creation of the issue of climate change and the challenge with taking actions to respond to its manifestations.

The subject is complex. Some theories put the extreme variation in responses to coping mechanisms. Others put it down to whether individuals are egalitarian or not. Additional work looks into ethics, belief structures, conservatism, attitudes, constructivism, and other drivers of human behaviour.

# Conclusion.

SO WHERE DOES THIS LEAVE US ON THE ISSUE OF CLIMATE CHANGE?

The *Climate of the Nation 2012* report tells a story of the Australian public looking at climate change and clean industry issues through two lenses.

One lens is of unprecedented cynicism with the political process and its players. The other lens - perhaps as equally unprecedented - is a concern about cost of living that stems from real world over-leveraged experience but also incessant and effective scare campaigns. In a cruel irony this has, to date, ignored the reality that most households will be overcompensated for carbon price impacts.

For climate there are other filters at play, perhaps harder to discern in these polls because of the impact of politicisation. These include a reluctance to grapple with the potential enormity of climate change with various coping mechanisms being deployed, e.g. clinging to a small percentage of scientists who question climate basics. This - compounded by psychological analysis - reveals how basic differences in world views mean that certain messengers reinforce perceptions that the issue is a stalking horse for socialism/communism.

The end of the Millennium Drought and its bushfires and water shortages has also influenced people's concerns about climate change in general and its impacts in particular. Research here and in the United States shows this concern ebbs and flows with those impacts and individuals' experience.

The result is that Australians in 2012 are confused about the science and unconvinced by the solutions on offer but are open to be convinced. They are prepared to do their bit so long as government and business shoulder responsibility and perform better. There is a core, largely unchanged over the years, of 10 per cent who think that we should take no action on climate change

A narrow interpretation of limited poll questions can lead to analysis pleasing to all parts of the spectrum on this debate. But as we head into the reality of carbon price impacts and the likelihood of a return of El Niño weather conditions, proponents of inaction or half actions do so at peril of losing public support.

Proponents of action, though, need to also lift their game to highlight the effectiveness of solutions, the costs of inaction and the opportunities of action.

People won't be scared into action by the truths of climate impacts; they need to be convinced that action can bring with it a satisfactory quality of life for them and their children. In addition, proponents need to improve the crop of messengers and not just the message.



**AUSTRALIANS IN 2012 ARE SICK OF THE POLITICS, SCARED OF RISING COSTS, YET STILL ANXIOUS ABOUT THE IMPACTS OF CLIMATE CHANGE ON THEIR WAY OF LIFE AND THE ENVIRONMENT. MORE PEOPLE THAN IN THE PAST ARE UNCERTAIN ABOUT THE SCIENCE AND MANY ARE UNCONVINCED BY THE CARBON LAWS.**

**BUT ULTIMATELY A SIGNIFICANT PART OF THE POPULATION IS OPEN TO BE CONVINCED ON BOTH.**

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*Climate of the Nation 2012* and associated video content can  
be accessed at [www.climateinstitute.org.au](http://www.climateinstitute.org.au)

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