



RELEVANT,
IMMEDIATE,
LOCAL:
GUIDE TO
COMMUNICATING
CLIMATE CHANGE
IN AUSTRALIA

The Climate Council is an independent, crowd-funded organisation providing quality information on climate change to the Australian public.

CLIMATECOUNCIL.ORG.AU

1.

APPROACHING COMMUNICATIONS

The Climate Council is an independent organisation committed to providing accurate information to the Australian public on climate change. We combat the lack of factual information in the media, and are consistently asked to provide guidance on how to communicate the complex science and solutions to the public.

When the Climate Commission was abolished in September 2013, the Commissioners decided that our mission was too important to give up. So we asked the Australian community to crowd-fund our relaunch as the new Climate Council. More than 15,000 people have donated to allow the Council to carry on.

Over the last five years the climate change landscape has changed significantly. While the discussion used to focus on future consequences, we now have significant data about the immediate impacts of climate change on human health, property, infrastructure, agriculture and biodiversity today. It's clear that extreme weather events are more frequent and severe; global action has accelerated with the global energy giants, China and the USA leading; and the price of renewable energy has dropped quickly enabling rapid increases in capacity in solar PV and wind power.

Despite these shifts climate change

remains a communications challenge. For decades there has been a concerted campaign of misinformation that has confused the public. Many of the myths remain potent and must be combatted. Additionally, climate change has predominantly been a highly complex and abstract discussion of science, policy and the economy. Making climate change information relevant, interesting and engaging for a general audience is an on-going challenge for communicators.

Those communicating in the media and to the public have the power to shape the national narrative about climate change. Climate change is happening now, without deep emission cuts its impacts on Australia could be devastating and we're in a great position to take advantage of clean energy solutions.

After years of toxic public discussion focused on the carbon tax, the conversation on climate change is shifting. Recent polling consistently

shows that public concern is increasing, particularly after two record-breaking summers and an international narrative of . This guide is to assist those communicating on climate change to do so accurately and effectively. We have analysed psychological and public opinion research from Australia and abroad to provide a simple framework to communicate; we have also included up to date facts on climate science, impacts, and solutions here in Australia.

This guide is to assist those communicating on climate change to do so accurately and effectively.

- **Section 1** provides some top-line guidance to communicating climate change.
- **Section 2** highlights the approach to communicating different parts of the climate change story and provides useful key facts and answers to common questions. Further factual information can be found at our website: www.climatecouncil.org.au.
- As with all communication, the key to communicating climate change is clear messages and repetition, repetition, repetition.

1. Make the problem relevant, concrete and local.

It is happening now.

- › It is human nature to think that future problems can be addressed in the future. If something is a future problem it can be deprioritised relative to immediate concerns, even if the consequences of a future problem are more serious. While a decade ago climate change may have been characterised as a future problem, today it is very much in the here and now. It is important to emphasise the consequences that we are already seeing today.

Australians are being impacted today.

- › Imperilled glaciers and polar bears are very far away from the day-to-day experience of most Australians. Focus on people rather than the environment. It is critical that we bring home that this is an issue that has immediate impacts for Australians, our families, our livelihoods and our way of life. We now have substantial data on how the climate has already changed. For instance, the number of heatwave days in Canberra has doubled, in Sydney heatwaves are starting 19 days earlier, and in Adelaide heatwave days are on average 4 degrees hotter than they used to be (Climate Council, 2014a). It is well known that longer, hotter heatwaves can cause a larger number of premature deaths, particularly among the most vulnerable in the community. Extreme heats put pressure on our health system, infrastructure, ecosystems and farmers.

Talk local.

- › Research in Australia and the US shows that the larger an issue is the less people feel a sense of responsibility for it. Consequently it is more engaging to focus on local, rather than regional or global scale consequences. Extreme weather is a useful vehicle to discuss the concrete consequences of a changing climate as nearly half of Australians directly identify with having experienced extreme weather (and all have indirectly experienced the consequences through the media) (CSIRO, 2013). The costs for a local community of coping with a changing climate, for instance, re-building expensive coastal infrastructure, can also be a powerful and tangible demonstration of the consequences of inaction.

Paint a picture of the future.

- › Public opinion research shows that people are far more likely to accept the science of climate change when they understand that solutions are available. It is then important to connect the story of the problem and the solution.
- › It is clear that we must reduce emissions from fossil fuels rapidly. Most of Australia's emissions come from coal-fire power so moving to renewable power sources, like solar and wind, is important.

Renewable power is popular, affordable and provides a clear example of solutions.

- › Approximately 10% of Australians now source energy from solar power (Climate Commission, 2013a). Renewable power is popular with the Australian public of all ages and regions. People understand that Australia is a sunny and windy country with huge opportunities for clean, renewable power.
- › Section 2.3 goes into more detail on renewable energy.

Focus on solutions rather than policies.

- › When a debate is focused on policy solutions, whether it is a carbon price, an Emissions Trading Scheme or the Renewable Energy Target, it is too abstract to engage most people. However, discussions of the outcomes of policy propositions, for instance more renewable power or reductions in pollution are more relevant and tangible.

There is a place for everyone in solving the problem.

- › In the face of such a huge global challenge with such serious ramifications anyone can feel daunted and overwhelmed. Couple this with a lack of clarity about solutions and ways for an individual to make a contribution and people can become disengaged, despairing and disempowered. Put simply it is hard to engage with a problem that you can have no role in solving it. The case

for inaction is designed to encourage these effects as it argues:

- There is not a problem (there is nothing to be solved)
- If there is a problem there is nothing we can do about it because
 - a) climate change is natural;
 - b) Australia is too small;
 - c) other countries pollute more than Australia;
 - d) it would destroy the economy;
 - d) renewable energy can't power the economy and so on.
- › Despite each of these arguments being spurious, the case for inaction is potent because it taps into people's helplessness and desire to shake off responsibility. Consequently when articulating the climate change problem it is important to both demonstrate the solutions that are available and the ways in which the community can engage in those solutions.

2. What to avoid.

Avoid reinforcing false debate.

- › There is no debate about the basic science of climate change. In fact over 97% of scientists in the field agree that climate change is happening and human activities are the cause (Cook, 2013). It serves proponents of inaction to continue to cast false doubt on the science and give the impression of a debate as it prevents the conversation from moving onto action. In contrast, demonstrating agreement on the problem is important to shifting the conversation to solutions.

Highlight that concern about climate change is widespread.

- › For many years public opinion research has consistently found that a vast majority of Australian's think that climate change is happening. This consensus also exists across all major public health bodies, scientific bodies, universities, emergency services, major Australian businesses and the military. Despite this agreement, there is still a strong perception that skeptics (those that believe that climate change is either not happening, or humans have no role) are roughly half the population. In fact, it is less than 10%. Highlighting prominent skeptics gives a false impression that skepticism is widespread. This perception prevents community members from speaking up at a BBQ or in the schoolyard because they believe the issue is hotly contested. Demonstrating the widespread concern opens up a

community conversation on action.

Avoid language of belief.

- › You may believe in god, or even the Essendon Bombers. But you don't 'believe in gravity'. It's not an article of faith, but an objective fact. Climate change is the same.
- › Comments like: "climate change is real"; "I believe in climate change" inadvertently reinforce the ideas that a) climate change is based on belief rather than scientific evidence; and b) there is a debate. These phrases are also often used to distinguish oneself from a group of "non-believers" which further reinforces the perception of a false debate.
- › Instead it is best to assume that most audiences broadly agree climate change is happening and get on with explaining what the impacts will mean

 **SNAPSHOT OF PUBLIC OPINION**

CSIRO's research has found that:

- › 79% believe climate change is happening;
- › 60% of Australians are worried about climate change;
- › 65% report already experiencing the impacts;
- › 80% expect that they will experience some level of harm from climate change; and
- › 58% of people believe extreme weather is happening more frequently and 60% think extreme weather events have become more severe(CSIRO, 2013).

Essential media, Lowy and Newspoll all show concern for climate change increasing in the last 12 months.

and what the solutions are. However, when confronted with skepticism the language of language of “risk” can be more effective.

- › Instead of saying “climate change is real,” it’s clearer to say “climate change is already impacting Australians.” Rather than “I believe in climate change,” clearer is “The science of climate change is clear.”
- › Eg. “When the top scientists in Australia and the world tell us about the impacts of climate change. When CSIRO, the Bureau of Meteorology, NASA, the Australian Medical Association, our emergency services, our military brass all tell us climate change is risking our health and our way of life I take that very seriously. It would be foolish not to.”

Don’t get bogged down in the detail.

- › Debating the details of the science further reinforces the notion that there is a debate. It is better to simply focus on highlighting the consensus, the tangible examples that climate change is already happening and using a language of risk.
- › Eg. “Some people are still debating whether smoking causes cancer. Others have accepted the science and moved on to action, making sure the community understands the risks.”
- › Eg. “The most trusted authorities, CSIRO, the Bureau of Meteorology, NASA all agree that climate change is happening now and is a significant risk to our way of life”.

- › For information on how to answer a comprehensive list of climate change myths: <http://www.skepticalscience.com/>

To negate a myth can reinforce it.

- › When Richard Nixon said “I am not a crook,” he didn’t dispel the idea. He reinforced it. Unfortunately for Richard, there was some truth to the allegation. Climate myths, on the other hand, are not true. But the same logic applies: negating them can simply reinforce them.
- › One of the persistent myths is that Australia is “leading the world” or “doing far more than other countries. However, statements like “Australia is not leading the world” or “Australia is not doing more than other countries” may actually serve only to continue confusion among the public. Similarly statements like “there is not a pause in warming” continue confusion about the science. Instead of a negation it is preferable to either a) boldly call out the myth; or b) clearly advance your case without repeating the narrative.
- › So instead of saying, “There is no pause in global warming,” it’s clearer to say : “That is a myth. The Earth is warming strongly we are now in our 38th year in a row of above average temperatures as a globe. CSIRO, NASA and any other respectable science body you can name has shown that.”

2.

COMMUNICATING THE PROBLEM

Over the past half-century, rapid changes have been observed across the world including heating of the ocean and the air; changing rainfall patterns; reduction in the extent of Arctic sea ice; mass loss of polar ice sheets; increasing sea level; and biodiversity loss and ecosystem destruction.

Many of the risks scientists warned us about in the past are now happening (Climate Commission, 2013b). Australia has become hotter. We are now experiencing double the number of hot days we were experiencing 50 years ago. There have been some dry years and some wet years, but over the last 50 years south-eastern and south-western Australia has experienced a long term drying trend affecting our population centres and food bowl regions. Hotter and drier conditions have also led to increasing bushfire risk.

Since the beginning of the industrial revolution human activities, primarily the burning of fossil fuels like coal and oil, have increased the amount of heat trapping greenhouse gases in the atmosphere by 40% (Climate Commission, 2013b).

Effectively communicating the climate change problem requires canvassing the local and personally relevant effects. Audiences are most engaged with problems that are directly connected to them. The public discussion on climate change has been largely disconnected from people's day-to-day experiences. It has been focused on:

- a) The scientific basis, explaining why climate change is happening, rather than why it is important to people's lives; and
- b) High level policy, the process for achieving emission reduction, rather than the positive outcomes of emission reductions.

Since 1998 human activities have introduced 2 billion Hiroshima bombs worth of heat into the atmosphere.

It may sound obvious, but climate change matters because it has grave implications for our health, prosperity and way of life. It is important that communicators make climate change as relevant as possible to the audience they address. There is now substantial national, regional and, in some cases, local data on the effects climate change is already having on extreme weather, human health, agriculture, property and infrastructure. This allows communicators to better tailor their communications to different audiences.

Key facts:

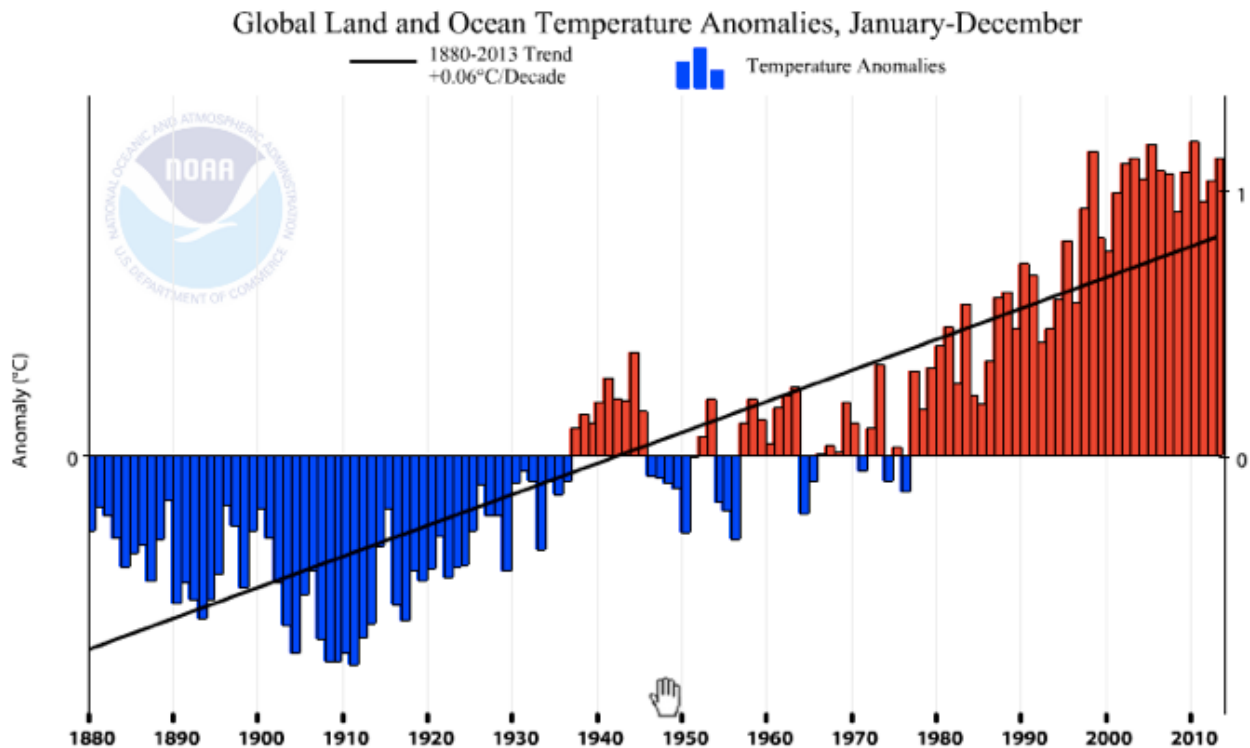
1. The world is warming strongly.

- › The global average temperature has been rising steadily for over 50 years.
- › 2013 marked the 37th year in a row that the yearly global temperature was hotter than average. The last time global annual temperature was below average was in 1976.
- › The hottest 10 years in Australia have all occurred since 1980.

2. Climate change is already impacting Australian's health, property, infrastructure, as well as Australian industries like agriculture and tourism.

Health:

- › Heat causes more deaths than any other type of extreme weather event in Australia. Recent heatwaves around Australia have increased hospital admissions and fatalities. Changes in temperature and rainfall may allow mosquito-borne illness like dengue fever to spread south



- › Property and infrastructure. Much of Australia's commercial buildings, industrial facilities, airports, ports, hospitals, schools, roads and railways and many residential buildings are in close proximity to the coast, putting much property and infrastructure at risk from sea-level rise. Nationally, coastal assets at risk from the combined impact of coastal flooding and erosion include:
 - 5,800 to 8,600 commercial buildings, with a value ranging from \$58 to \$81 billion;
 - 3,700 to 6,200 light industrial buildings, with a value of between \$4.2 and \$6.7 billion; and
 - 27,000 to 35,000 km of roads and rail, with a value of between \$51 and \$67 billion (2008, replacement value) (DCCEE, 2011; Climate Commission 2013b).

Agriculture:

- › Changing rainfall patterns and increasing risks of extreme heat and bushfire weather pose long-term risks for Australian agriculture. Production of water and temperature sensitive broad acre crops, vegetables or wine grapes are all likely to be under pressure.

(For more detail on the impacts of climate change see The Critical Decade: Science, Risks and Responses: available at: <https://www.climatecouncil.org.au/critical-decade-risks-responses>)

3. This is the critical decade for action.

- › The decisions we make from now to 2020 will largely determine the severity of climate change our children and grandchildren experience. The global community has agreed that a global temperature rise of 2°C is a threshold that should not be crossed due to the grave implications for humanity. To have a good chance of keeping temperature rise below 2°C degrees it is clear that most fossil fuels must be left in the ground and cannot be burned.



Common questions:

Avoid getting bogged down in debating the myths. Debunk them and then move on to communicating why climate change is so important.

1. Is there is a “pause” in warming?

- › “No. 2013 marked the 37th year in a row that the yearly global temperature was hotter than average. In Australia last year, 2013, was the hottest year on record. The Earth continues to warm strongly.”

2. Is the Earth in fact cooling?

- › “No. 2013 marked the 37th year in a row that the yearly global temperature was hotter than average. In Australia last year, 2013, was the hottest year on record. The Earth continues to warm strongly.”

For information on how to answer a comprehensive list of climate change myths: <http://www.skepticalscience.com/>

A MORE DETAILED SCIENTIFIC ANSWER

“The Earth is warming. Pollution from human activities is trapping more and more heat. That heat is absorbed by the ocean, causing sea level rise; It’s absorbed by land, causing melting ice and glaciers; and it’s absorbed by the atmosphere, meaning higher temperatures. The ocean is steadily warming as it absorbs 93% of that trapped heat. Air temperature is a bit different, it fluctuates a lot in the short term, in the last few decades has both quickly increased, and increased more slowly. However, the most important thing to do is look at the long-term trend. The long-term trend is up and up and up. In fact 2013 marked the 37th year in a row that the yearly global temperature was hotter than average.”

2.2 Communicating Extreme Weather

While Australia has always been a land of “droughts and flooding rains”, today climate change is increasing the intensity and frequency of many extreme weather events with substantial consequences for Australians.

extreme weather event or whether such an event can be ‘attributed’ to climate change. Extreme weather events are a natural feature of the climate system and occur with or without human-driven climate change. The real question is how climate change is influencing extreme

“...all weather, including extreme weather events, are being influenced by climate change.”

Extreme events occur naturally and weather records are broken from time to time. However, climate change is influencing these events and record-breaking weather is becoming more common around the world

Extreme weather is a crucial lens for the community to understand climate change as events illustrate clearly the costs of a changing climate. Extreme weather events are reframing climate change from a future problem to a problem very much in the here and now.

Many have been confused about the link between individual extreme weather events and climate change. Much of the discussion of extreme weather events and climate change is based on the wrong question. The question is not whether climate change has ‘caused’ an

weather events. Global temperature has already risen significantly meaning that the climate system has more energy than it had 50 years ago. That energy fuels more intense and frequent extreme weather. Today all weather events are being influenced by climate change because they are occurring in a hotter climate.

 GETTING EXTREME WEATHER LANGUAGE RIGHT

While climate change is influencing all weather, scientists' understanding of the magnitude of the influence on different types of extreme weather can vary. This is primarily due to the complexity in understanding the processes that cause different types of events and the availability of data. Scientists are conservative in their language to ensure they are accurate. Here is a quick guide to ensure your language is accurate too.

Heat: Climate change is making heatwaves and extreme hot weather *worse*.

Fires: Climate change is *increasing* the occurrence of *high bushfire danger weather*.

Sea level rise: Climate change *exacerbates* coastal flooding from a storm surge by *increasing* sea level.

Water cycle: Climate change is *influencing* rainfall patterns and drought *conditions*.

Key facts:

Climate change has already increased the intensity and frequency of heatwaves in Australia. Heatwaves are becoming hotter, lasting longer, and occurring more often.

HEATWAVE DATA IN AUSTRALIA

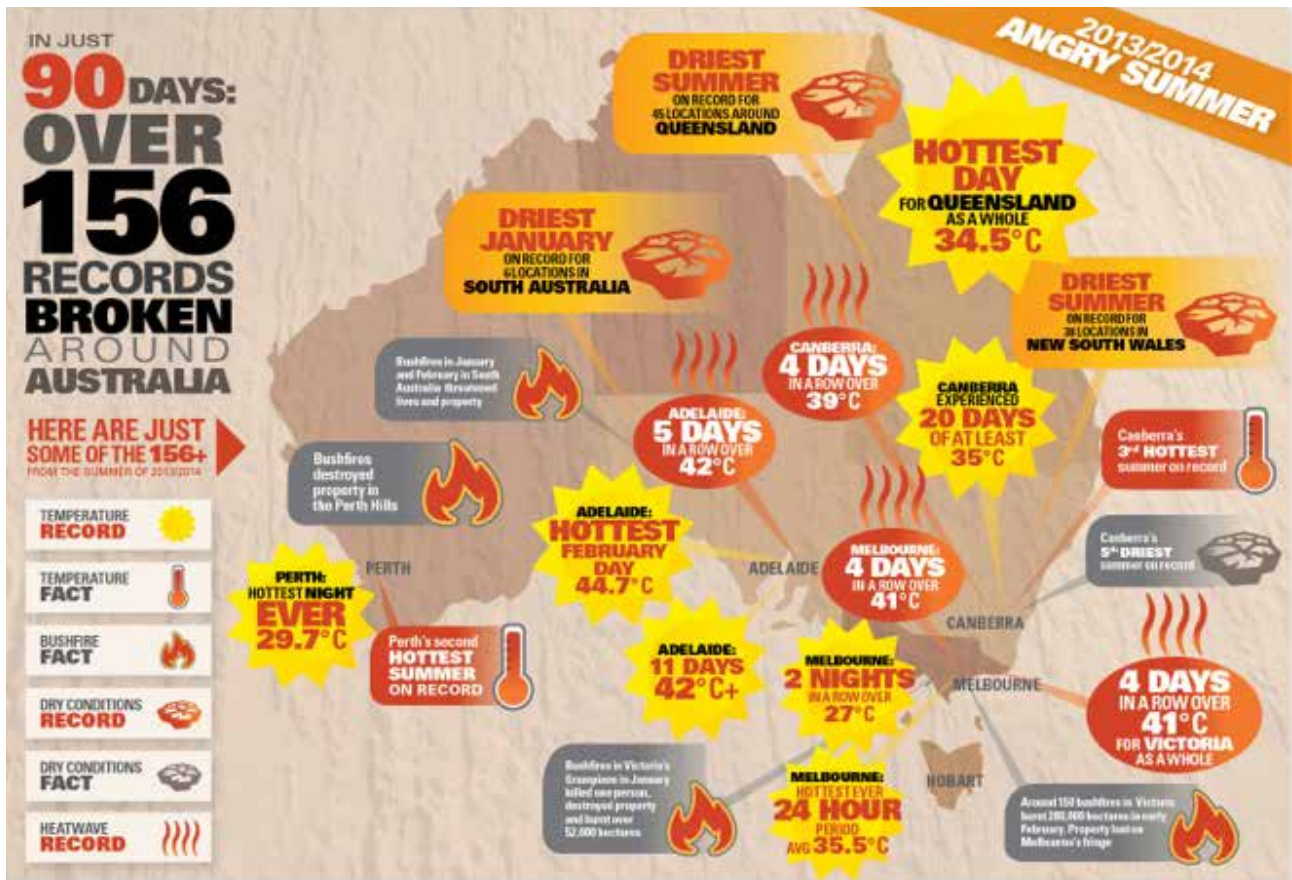
| City | Number of heatwave days | | Number of heatwaves (events) | | Length of longest event | | Changes in average intensity of the heatwave (°C) | Changes in average intensity of the peak day (°C) | Changes in timing of first event (days) |
|-----------|-------------------------|-----------|------------------------------|-----------|-------------------------|-----------|---|---|---|
| | 1950–1980 | 1981–2011 | 1950–1980 | 1981–2011 | 1950–1980 | 1981–2011 | | | |
| Sydney | 6 | 9 | 1-2 | 2-3 | 4 | 5 | 1.5 | 1.5 | -19 |
| Melbourne | 5 | 6 | 1-2 | 1-2 | 4 | 4 | 1.5 | 2 | -17 |
| Brisbane | 10 | 10 | 2-3 | 2-3 | 6 | 6 | 1 | 1.5 | -8 |
| Perth | 6 | 9 | 1-2 | 2-3 | 4 | 5 | 1.5 | 1.5 | +3 |
| Adelaide | 5 | 9 | 1-2 | 1-2 | 4 | 6 | 2.5 | 4.3 | -2 |
| Hobart | 4 | 5 | 1 | 1-2 | 4 | 4 | -1.5 | 1.7 | -12 |
| Darwin | 3 | 7 | 1 | 1-2 | 4 | 5 | 0 | 1 | -7 |
| Canberra | 6 | 13 | 1-2 | 2-3 | 5 | 7 | 0 | 1.5 | -3 |

Source: Climate Council, 2013b

1. Australia is getting hotter.

- › Hot days have doubled in Australia in the last 50 years. In the last decade, hot weather records have occurred three times more often than cold weather records. Hot weather in Adelaide, Melbourne and Canberra has already reached levels predicted for 2030.

- › Over the last two years, record-breaking temperatures have been experienced across the country. More than 120 weather records were broken in the 2012/2013 Angry Summer, including the hottest summer, the hottest January, and the hottest day. The Angry Summer of 2013/2014 also smashed records.



Source: BoM 2014a–h, The Age 18 January 2014; The Age 11 February 2014

www.climatecouncil.org.au

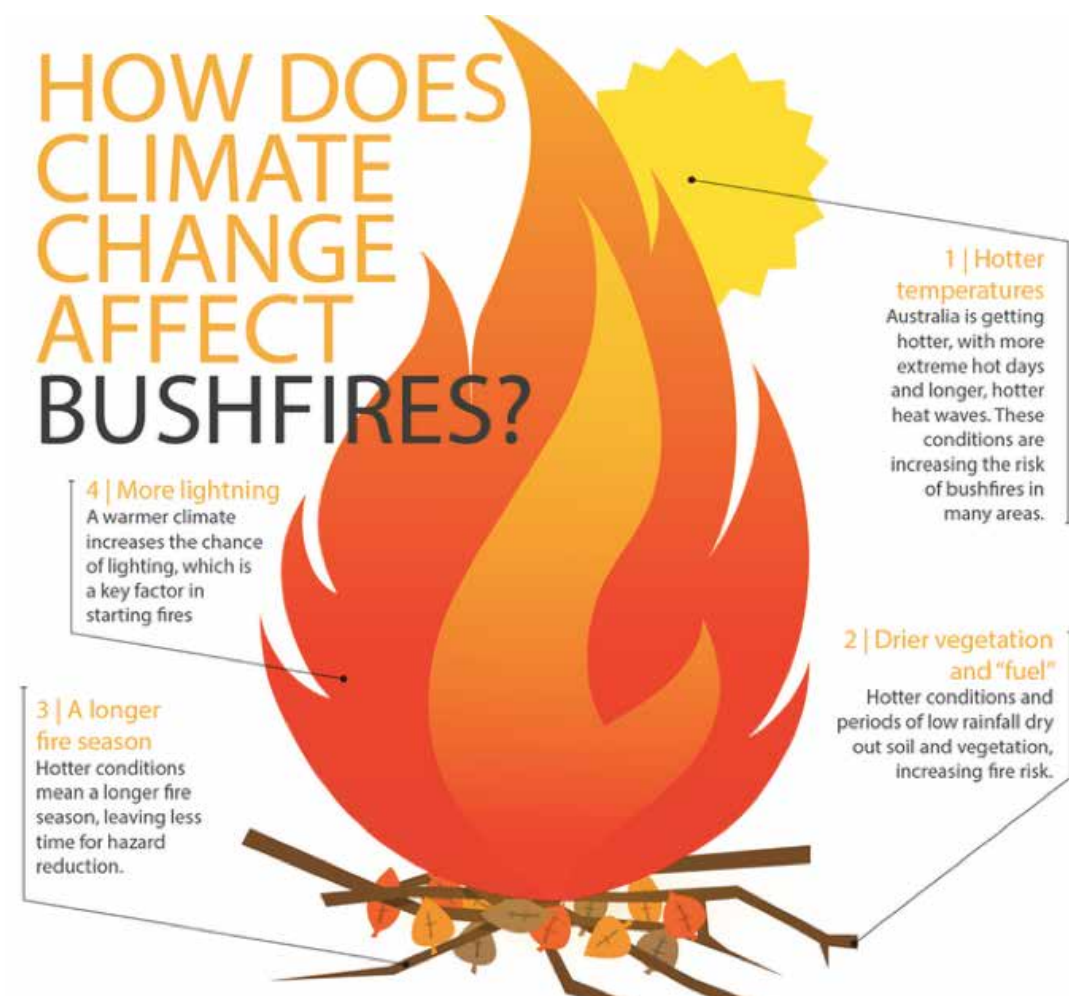
2. Heatwaves are a silent killer.

- › Over the past 100 years heatwaves have caused more deaths than any other natural hazard. In Victoria the January 2009 heatwave caused 374 excess deaths, while the recent January 2014 heatwaves reportedly saw a 20 fold increase in ambulance call outs.

For more information on this section see Heatwaves: Hotter, Longer and More Often available at: <http://www.climatecouncil.org.au/heatwaves-report>

Key facts: Bushfire weather

1. Extreme fire weather has increased over the last 30 years in NSW, Victoria, Tasmania and parts of South Australia.
- › Climate change is making hot days hotter, and heatwaves longer and more frequent. Some parts of Australia are becoming drier. These conditions are driving up the likelihood of very high fire danger weather, especially in the southwest and southeast.



2. In southeast Australia the fire season is becoming longer, reducing the opportunities for hazard reduction burning.

- › The fire season will continue to lengthen into the future, further reducing the opportunities for safe hazard reduction burning. The fire season started unusually early this year with 76 fires burning across NSW at the beginning of August.

3. Impact of fires

- › Recent severe fires have been influenced by record hot, dry conditions.
- › The 2013 severe October fires in the Blue Mountains and Central Coast of NSW followed the hottest September on record, days well above average in October and exceptionally dry conditions. Climate change exacerbated the fire risk.

- › The Black Saturday fires in Victoria were preceded by a decade-long drought with a string of record hot years, coupled with a severe heatwave in the preceding week. The previous record for the Forest Fire Danger Index was broken by such an extent that it was revised and the category "Catastrophic" or "Code Red" was added.
- › To keep pace with asset growth and population, as well as the increasing threat of climate change, the Australian professional fire service will need to double by 2030.

For more information on this section see: Climate Change and the Australian Bushfire Threat, <http://www.climatecouncil.org.au/be-prepared>

"The kicker is that the fires are becoming more difficult to control. We are seeing a move towards fire acting more unpredictably, moving very quickly and destructively. There's only so much you can do with a fire engine if there's a 10km wall of flame heading towards you."

Jim Casey NSW branch of the Fire Brigade Employees Union

Key facts: Other types of extreme weather

1. Coastal flooding:

- › Climate change exacerbates the effects of a storm surge by increasing sea level. A global sea level rise of 0.2m has already increased the incidence of high sea-level events. For instance, Fremantle has experienced a 3-fold increase in high sea-level events since 1950 compared to earlier decades.

2. Cyclones:

- › Projections into the future suggest that tropical cyclones are likely to become more intense but are not likely to increase in overall number.

For more detail of the consequences of more frequent and severe extreme weather events, as well as other types of extreme events see *The Critical Decade: Extreme Weather* <http://www.climatecouncil.org.au/extreme-weather-report>

Common question on extreme weather

Can an individual extreme weather event be linked to climate change?

Yes. Today all weather events are being influenced by climate change because they are occurring in a significantly hotter climate. A hotter climate is a more energetic climate that fuels more intense and frequent extreme weather. For instance, heatwaves in Sydney now start 19 days earlier, are 1.5 degrees hotter and happen more frequently on average than they used to (see the table on page xx for this data for other cities).

Should I talk about extreme weather and climate change when an extreme weather event is occurring?

Yes. One of the challenges in communicating climate change is making it real and tangible to people's daily experiences. Worsening extreme weather events demonstrate clearly the gravity of a changing climate. When an extreme event occurs it is an opportunity to alert the public to the significant risks faced by communities and emergency services. We can only properly prepare for future extreme weather if we understand how they are changing. However, as extreme weather can have grave implications it is of course important to communicate in a way that is sensitive to those impacted.

If a hot event is evidence of climate change, does that mean that a cold event is evidence that it is not happening?

There will continue to be cold days and hot days, and very cold days and very hot days. What we know is we are seeing hot records broken now three times as often as cold records. We have seen hot days double across Australia.

Questions related to a misunderstanding of cause and effect. For instance, "Aren't bushfires caused by lightning striking or a match, rather than by climate change?"

A fire will only take hold if the conditions are right. If the conditions are dry, hot and windy a fire is likely to take hold, but if it is cool and wet it will not. Climate change is driving up the likelihood of extremely hot and dry conditions. It is these conditions, not what ignites a fire that is the most important factor to whether it fizzles out or becomes a bushfire.

2.3 Communicating the solutions: Renewable power

It's easier to accept that a problem is happening if you can do something about it.

Public opinion research shows that people are far more likely to accept the science of climate change when they understand that solutions are available. Right around Australia and the world there are now real examples of significant activities to reduce emissions, whether that is the construction of energy efficient buildings, installing solar power on residential and commercial properties or developing wind farms.

The extraordinary growth of the global clean energy industry provides hope that we can rapidly reduce emissions and tackle climate change. As a solution clean energy is also highly tangible as most Australians now have, or know someone that has, solar panels. Renewable power is popular with the Australian public of all demographics.

Australia is the sunniest country in the world and one of the windiest. Millions of Australians are already making use of our clean natural resources by powering their homes, businesses and farms with renewable power.

Key facts: The Growth of Clean Energy in Australia

1. Renewable Power: Growth in Jobs

- › 21,000 people were employed by the renewable energy industry at the end of 2013 in Australia. (Clean Energy Council, 2013).
- › This is a trend seen around the world. Over one million people are employed in leading countries installing solar power in 2012 and 2013 (Climate Council, 2014b)
- › If the Renewable Energy Target (RET) is retained, modelling shows that the RET will generate approximately 18,400 new jobs by 2020 (Clean Energy Council, 2014).

2. Renewable Power: Investment Opportunities

- › In 2013, investment in Australian clean energy during 2013 was \$5.187 billion, the third successive year that it has been over \$5 billion (Clean Energy Council, 2013).
- › Unfortunately, due to policy uncertainty large scale renewable energy investment has largely stalled.
- › If the RET is kept in its current form, it will generate a further \$14.5

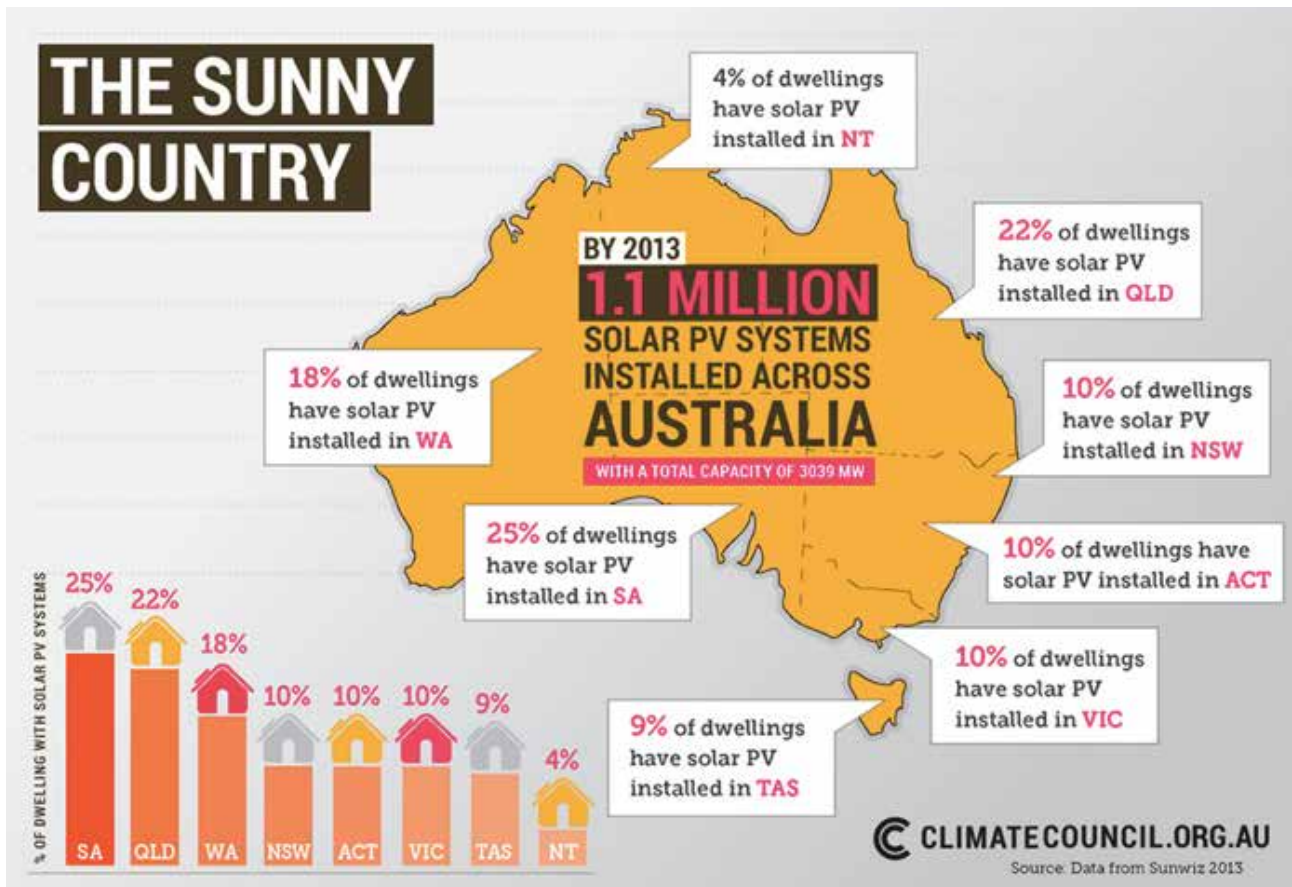
billion of investment (Clean Energy Council, 2014b).

3. Renewable Power: Popular and Affordable.

- › Over 1.1 million Australian householders had installed solar PV on their roofs to reduce their exposure to higher power prices. 10,000-15,000 more homes add solar PV each month (Climate Council, 2014b).
- › Renewable energy is getting cheaper all the time, with wind projected to be 20-30% cheaper by 2020 and solar PV is expected to halve in cost (Climate Council, 2014b)..

4. Renewable power: exponential global growth in renewable power.

- › Wind power capacity is forecast to double world-wide by 2017.
- › Global PV capacity is growing on average over 40% a year since 2000.
- › 140 Countries now have Renewable Energy Targets to drive growth in renewable power.



Common questions

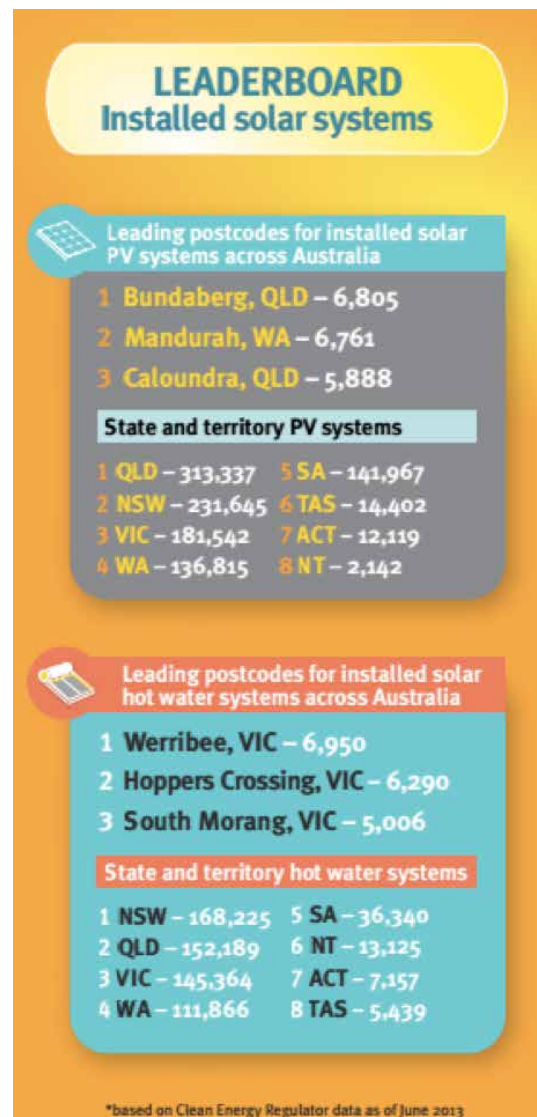
1. Does renewable energy increase power prices?

- › Renewable energy can also help to ease costs over the short term. During summer heatwaves in 2014 in South Australia and Victoria, electricity prices were at least 40% lower than they would have been without the contribution of wind energy (Climate Council, 2014b).
- › Surveys indicate the primary reason 70.4% of Australian household purchased solar PV systems was to save money on their power bills (Climate Council, 2014b).
- › Similarly the Renewable Energy Target puts downward pressure on wholesale electricity prices because it introduces competition between renewable and fossil electricity.

2. Is renewable energy just for rich people?

- › People most likely to install solar PV are those with mortgages and growing families, retirees, pensioners and mortgage belt communities on the fringes of our major cities (Climate Council, 2014)..

Source: Climate Council, 2013b



2.4 Communicating the solutions: global action

The insufficient action from the US and China has been used to justify inaction from Australia. While this may have had some truth in the past, today the energy giants are undoubtedly on the move. Both nations have been substantially growing their renewable energy capacity, introducing sub-national carbon pricing schemes and are on track to meet their international commitments.

Australia is often perceived as a small, inconsequential player globally on climate change. This too is a myth. Australia is one of the world's largest emitters, largest coal exporter, and one of the largest gas exporters. Australia is an influential middle power and has had a significant influence over global climate change policy.

Key facts:

1. Australia has an important role to play

- › Australia is the 15th largest emitter, larger than around 180 other countries.
- › Australia is also the largest emitter per person of any country in the developed world.
- › Australia belongs to a group of 20 carbon heavyweights – 20 countries that contribute 75 per cent of the world's greenhouse gas emissions. These countries are the most influential and will shape the global response to climate change.

2. The global energy giants, China and the US, are moving to reduce emissions and invest in renewable energy.

- › Emissions from electricity generation in the US have declined by about 16% from 2007 to 2012.
- › Important foundations have been set that are likely to have a lasting impact in the coming decades, including:
 - › In January 2013 the world's 9th largest economy, California, commenced an emissions trading scheme.
 - › More than half of US states now have policies to encourage renewable energy.

Key Facts

- › In just four years, between 2008 and 2012, the US has nearly doubled its installed renewable energy capacity.
- › US investment in renewable energy was US\$35.6 billion in 2012, second only to China.
- › China is the world's renewable powerhouse:

A MORE DETAILED SCIENTIFIC ANSWER

- › 63% of Australians say the government should be taking a leadership role on reducing carbon emissions.
- › 28% say it should wait for an international consensus.
- › 7% say the government should do nothing.

Source: Lowy Institute Poll (2014)

- Between 2005 and 2012 China increased its wind power generation capacity by almost 50 times. The amount of electricity generated from wind in 2012 was about 36 per cent higher than in 2011.
- New solar power capacity expanded by 75% in 2012. Solar power capacity is expected to triple to more than 21,000 megawatts by 2015.
- In 2012 China invested US\$65.1 billion in clean energy, 20% more than in 2011. This was unmatched by any nation and represented 30% of the entire G-20 nations' investment in 2012.



Common questions

There are a number of myths about international climate change efforts that tend to be used to justify inaction.

1. The classic example is:

“Should Australia really be leading the world on climate change while China and the US do nothing?”

- › This is a myth, a total myth. China is leading the world in renewable energy. Between in the last 7 years China increased its wind power generation capacity by almost 50 times while new solar power capacity expanded by 75% in 2012. Now that is leadership in renewable energy. While the sunny country is being left behind!

2. Australia is only 1.5% of the world’s emissions. Australia may be small, but it is still important.

- › Australia is one of the world’s carbon heavy weights – we are the 15th largest emitter with over 170s producing less pollution than we do. This means we have a big responsibility to act, but also that when we do act it makes a big difference.

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