
Climate of the Nation 2020

Tracking Australia's attitudes
towards climate change and energy

Research report

**Audrey Quicke
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The Institute publishes research that contributes to a more just, sustainable and peaceful society. Our goal is to gather, interpret and communicate evidence in order to both diagnose the problems we face and propose new solutions to tackle them.

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Key Findings

80%

of Australians think we are already experiencing the impact of climate change

82%

of Australians are concerned that climate change will result in more bushfires

83%

of Australians support a phase-out of coal-fired power stations

79%

of Australians rank solar in their top three preferred energy sources

40x

is the factor by which Australians overestimate gas industry employment

45x

is the factor by which Australians overestimate the oil and gas industry's contribution to Commonwealth revenue

65%

of Australians support the introduction of a levy on Australia's fossil fuel exports to help pay for climate disasters

65%

of Australians think the Australian Government should stop new coal mines

71%

think Australia should be a world leader in finding solutions to climate change

72%

of Australians believe mining companies should be liable for any land or water contamination caused by fracking

74%

of Australians believe governments should plan to phase out coal mining and transition to other industries

68%

of Australians support a national target for net zero emissions by 2050

77%

of Australians agree tackling climate change creates opportunities in clean energy for new jobs and investment

75%

of Australians would consider reducing electricity during times of high demand if they were paid to do so

12%

of Australians would prefer Australia's economic recovery to be primarily powered by gas, compared to 59% who prefer it to be powered by investment in renewables

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Contents

1	Key Findings
3	Foreword
4	Executive Summary
6	Aim + Approach
7	Attitudes Towards Climate Change
14	Energy Transition
18	Mining + Fossil Fuel Subsidies
25	Cost of Climate Inaction
29	Long-term Action
33	Demographics
36	Conclusion

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¹ The Australia Institute (2020) *Polling - Bushfire crisis and concern about climate change*. <https://www.tai.org.au/content/concern-about-climate-escalates-bushfire-crisis-continues-climate-nation-polling>

² NSW Bushfire Inquiry (2020) *Final Report of the NSW Bushfire Inquiry*. <https://www.dpc.nsw.gov.au/publications/categories/nsw-bushfire-inquiry/>

³ Ogge (2019) *The National Climate Disaster Fund*. <https://www.tai.org.au/content/put-levy-fossil-fuel-producers-pay-climate-disasters-australia-institute>

⁴ The Australia Institute (2020) *United in a Global Crisis - Webinar*. https://www.youtube.com/watch?time_continue=902&v=SGRPVBTI_2g&feature=emb_logo

⁵ NSW Government (2020) *Renewable Energy Zones*. <https://energy.nsw.gov.au/renewables/renewable-energy-zones>

⁶ Swann (2020) *Weapons of gas destruction* <https://www.tai.org.au/content/weapons-gas-destruction-lifting-lid-emissions-gas>

⁷ Richardson (2020) *Gender experiences during the COVID-19 lockdown*. <https://www.tai.org.au/sites/default/files/Gender%20experience%20during%20the%20COVID-19%20lockdown.pdf>

Foreword

As the Climate of the Nation Report entered its 13th year, Australia and the world grappled with crisis, disruption and uncertainty. In Australia, the year 2020 dawned as the horrendous Black Summer bushfires ripped through 12 million hectares of land, destroying thousands of homes, billions of animals and taking dozens of human lives. The majority of Australians were impacted, with 57% experiencing some form of direct impact from the bushfires or smoke.¹ Climate change clearly played a role in the conditions leading up to the fires and in the 'unrelenting conditions' that helped the fires to spread, according to the official NSW Bushfire Inquiry.²

A striking difference in the Climate of the Nation reports over the years is the increasing number of Australians who believe we are experiencing climate impacts right now. There is a strong correlation between direct experience of climate impacts like bushfires and the level and intensity of concern about climate change. This growing concern has reignited support for climate action, at all levels of government.

The Australia Institute's proposed climate disaster levy on fossil fuel exports would help cover the damage to communities caused by increasing climate impacts. The proposed levy gained traction in 2020, including from a number of mayors. Local councils are responsible for 25% of Australia's high value infrastructure assets with only a 4% share of public sector revenue and are often left to foot the damage bill.³ As the 2020 Climate of the Nation Report shows, two thirds of Australians (65%) support the introduction of a levy on fossil fuel exports (that make up most gas and coal production) to prepare for and protect communities from the consequences of climate change.

In February, the Black Summer bushfires gave way to the Covid-19 crisis. This time, Australians were forced indoors not by bushfire smoke but by the threat of a contagious virus. Restrictions were imposed and international and state borders closed. The Australian economy fell into its first recession in nearly 30 years, with GDP shrinking 7% in the June quarter. It was at this time that we asked almost 2,000 people their views on climate change for the 2020 Climate of the Nation Report.

The results show that despite the Covid-19 crisis, concern about climate change remains at record high levels. There is an appetite to address both Covid-19 and climate change.

We know what is driving climate change. we want to see a recovery that puts us more clearly and more firmly on the path to sustainability and to a sustainable future. We know that we will not be able to sustain life on this planet if we do not get a grip on climate change and the time is running out. The science is clear.

— Elliot Harris, United Nations Chief Economist⁴

The Australian Government's call for a 'gas-fired recovery' to reignite the economy in the wake of Covid-19 is not backed by popular support. The majority of Australians (59%) would prefer for the economic recovery be primarily powered by investment in renewables, with only around one in 10 (12%) preferring investment in gas. State governments like NSW are developing large renewable energy zones to power this recovery.⁵

Natural gas is, after all, a fossil fuel and a key contributor to climate change. New Australia Institute research shows Australia's gas resources, if fully tapped, could emit up to three times global annual emissions from fossil fuels. Even the current pipeline of proposed gas projects are equivalent to more than half of Australia's total annual emissions.⁶ Unfortunately, as the Report shows, the role of gas in the Australian economy and the number of jobs it provides is substantially overestimated.

To further understand this information gap, the Climate of the Nation 2020 Report carried out focus groups to provide qualitative data in addition to the Report's quantitative study. The focus group research was conducted with female participants, who, as Australia Institute research on the gendered impacts of Covid-19 shows,⁷ are disproportionately impacted by crises. Females also tend to be more concerned about climate change, and are often on the frontline of climate action and climate impacts.

2020 has been a year of profound disruption. The challenge will be in addressing the immediate crisis of the pandemic, while also addressing the all-consuming crisis that is climate change. This challenge is not insurmountable. Climate of the Nation 2020 shows the Australian public is ready to tackle both crises and want the Australian Government to take a leading role.

Richie Merzian
Climate & Energy Program Director, The Australia Institute

Executive Summary

The Australia Institute's annual Climate of the Nation report details changing attitudes and beliefs around climate change, including its causes, impacts and solutions.

The 2020 report shows more Australians believe climate change is occurring and that humans are the main cause than since 2012. Australians support a range of decarbonisation policies and increasingly want Australia to be a world leader in finding solutions to climate change.

Highest level of climate consensus and bushfire concern

Four in five Australians (79%) agree that climate change is occurring, the highest result since 2012. Three-quarters (74%) are concerned about climate change, the same level as in 2019 (74%). This result occurs in the middle of the Covid-19 pandemic and remains high despite other high-priority concerns around the public health and economic impacts of the crisis.

A special poll during the 2019–20 Black Summer bushfires showed a peak in concern about climate change, with people who experience climate change impacts more likely to be concerned about climate change (88%) compared to those not impacted (66%). Several months after Black Summer, bushfires are the climate change impact of concern for the greatest share of Australians (82%).

Australians prefer renewables-led recovery to gas-fired recovery

The Australian Government has publicly advocated for a 'gas-fired recovery' from the pandemic. However, the majority of respondents (59%) support Australia's economic recovery being primarily powered by investment in renewables, compared to 12% who would prefer it were powered by investment in gas. Solar is consistently Australia's most preferred energy source. Over half (54%) of Australians rank solar as their number one energy source and 79% rank it amongst their top three.

Coal and gas increasingly unpopular sources of energy

Coal ranks last in Australians' top 3 preferred energy sources. Two-thirds (65%) rank coal in their bottom 3 energy sources. Just 14% of respondents rank coal amongst their top 3 energy sources, a decrease of four percentage points from 18% in 2019.

Gas popularity remained at a low level with only 19% of Australians ranking gas in their top 3 energy sources.



Broad support for coal-fired power phase-out

Three-quarters of Australians (75%) agree governments need to implement a plan to ensure the orderly closure of old coal plants and their replacement with clean energy, up five percentage points from 70% in 2019.

Over four-fifths of Australians (83%) want coal-fired power stations to be phased out, including 52% who would prefer them phased out gradually, and 31% who would prefer them phased out as soon as possible.

Increased momentum for Australia to be a world leader in climate change

Climate of the Nation 2020 shows increased support for Australian leadership on climate change. A large majority of Australians (71%) agree Australia should be a world leader in finding solutions to climate change, up 9 percentage points from 62% in 2019.

Just under two-thirds (62%) disagree that Australia should wait for other countries before we strengthen our emission reductions targets.

Many countries are committed to achieving net zero emissions by mid century. Every Australian state and territory government and many of the largest private sector businesses have pledged similar net zero targets. Over two-thirds of Australians (68%) support a national target for net zero emissions by 2050, with majority support across Coalition, Labor and Greens voters.

Support for a levy on fossil fuel producers to help pay for the impacts of climate change

When asked who should primarily pay the costs of preparing for, adapting to, and responding to global warming impacts, half of respondents (50%) say fossil fuel producers (coal, gas and oil companies) should primarily pay. One-seventh of respondents (14%) believe taxpayers should primarily pay, and only one in ten (10%) think people facing climate impacts should primarily pay.

Almost two-thirds of Australians (65%) support the introduction of a levy on Australia's fossil fuel exports to help fund local government actions to prepare for, and protect from, the consequences of climate change.

I think that the time for action on climate change is yesterday

— Brisbane focus group participant, female undecided voter



Aim + Approach

Who

The Australia Institute Climate & Energy Program engaged leading firm YouGov Galaxy to conduct the quantitative and qualitative surveys for Climate of the Nation.

Quantitative

The quantitative survey was conducted on the YouGov Galaxy Online Omnibus between 14 July and 22 July 2020.

The sample comprises 1,998 Australians aged 18 years and older distributed throughout Australia, as follows:

NSW	407
Victoria	411
Queensland	416
South Australia	407
Western Australia	307
NT/ACT/Tasmania	50

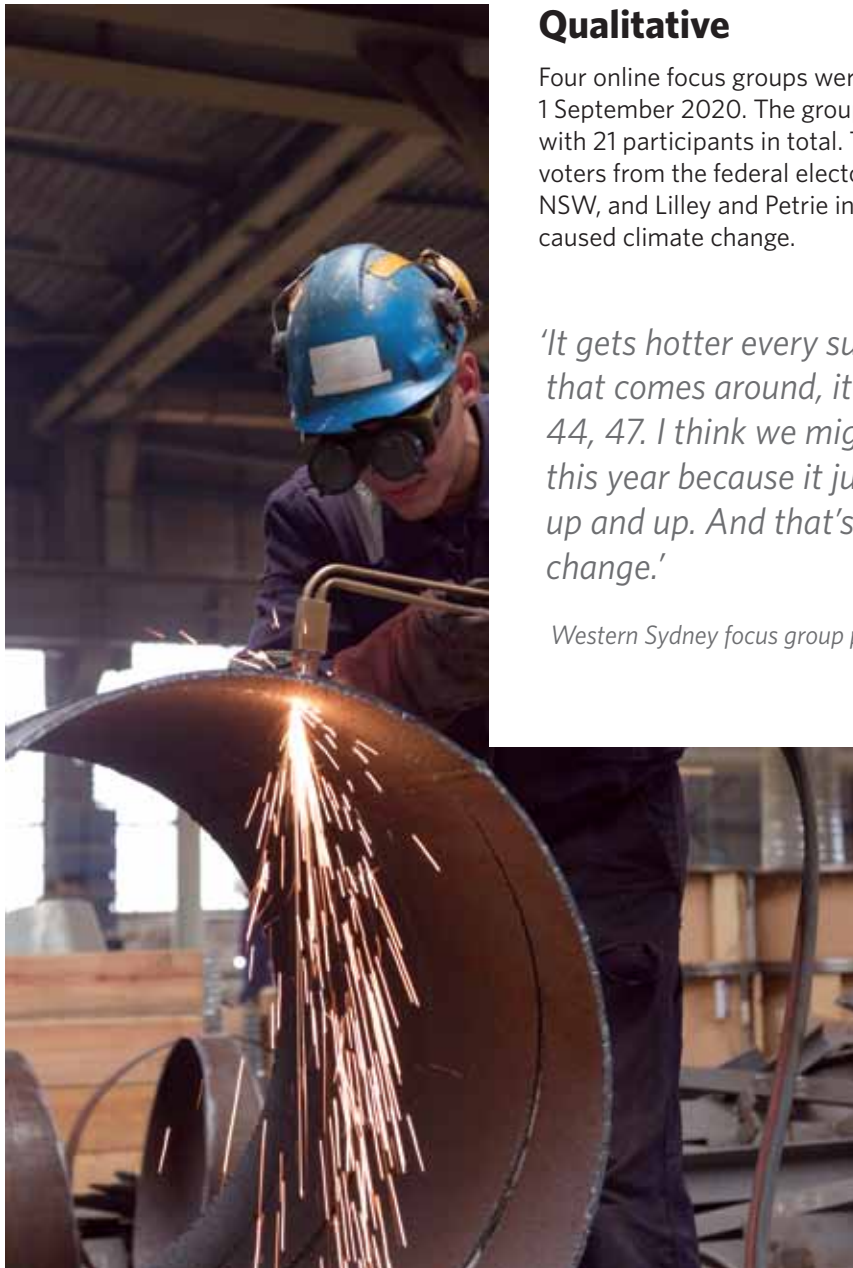
The margin of sampling error is 2%.

Qualitative

Four online focus groups were carried out on 31 August and 1 September 2020. The groups were conducted over Zoom with 21 participants in total. The target group was female swing voters from the federal electorates of Lindsay and Macquarie in NSW, and Lilley and Petrie in Queensland who believe in human-caused climate change.

'It gets hotter every summer. So every summer that comes around, it goes from 40 to 42 to 44, 47. I think we might even get closer to 50 this year because it just seems like it's going up and up. And that's just because of climate change.'

Western Sydney focus group participant, female undecided voter



Attitudes Towards Climate Change

Over the summer of 2019–20, Australia endured some of the worst bushfires in recorded history, coinciding with a period of severe drought. Australia experienced its hottest and driest year on record in 2019, with significant heatwaves in January and December and a national-averaged rainfall 40% below average, according to the Bureau of Meteorology’s (BoM) annual climate statement.⁸ These record-breaking hot and dry conditions contributed to the prolonged drought, as well as the severe fire conditions experienced in the 2019–20 summer. The Black Summer bushfires killed 33 people, destroyed more than 3,000 homes, burnt about 12 million hectares across Australia, and killed or displaced an estimated 3 billion native animals.^{9 10}

The bushfires and the drought have increased the share of Australians who are concerned about the impacts of climate change, which are at historically high levels. More people than ever before believe that Australia is already experiencing the impacts of climate change and earlier polling conducted in the midst of the bushfires shows a strong correlation between direct experience of the bushfires and the level and intensity of concerns about climate change.¹¹

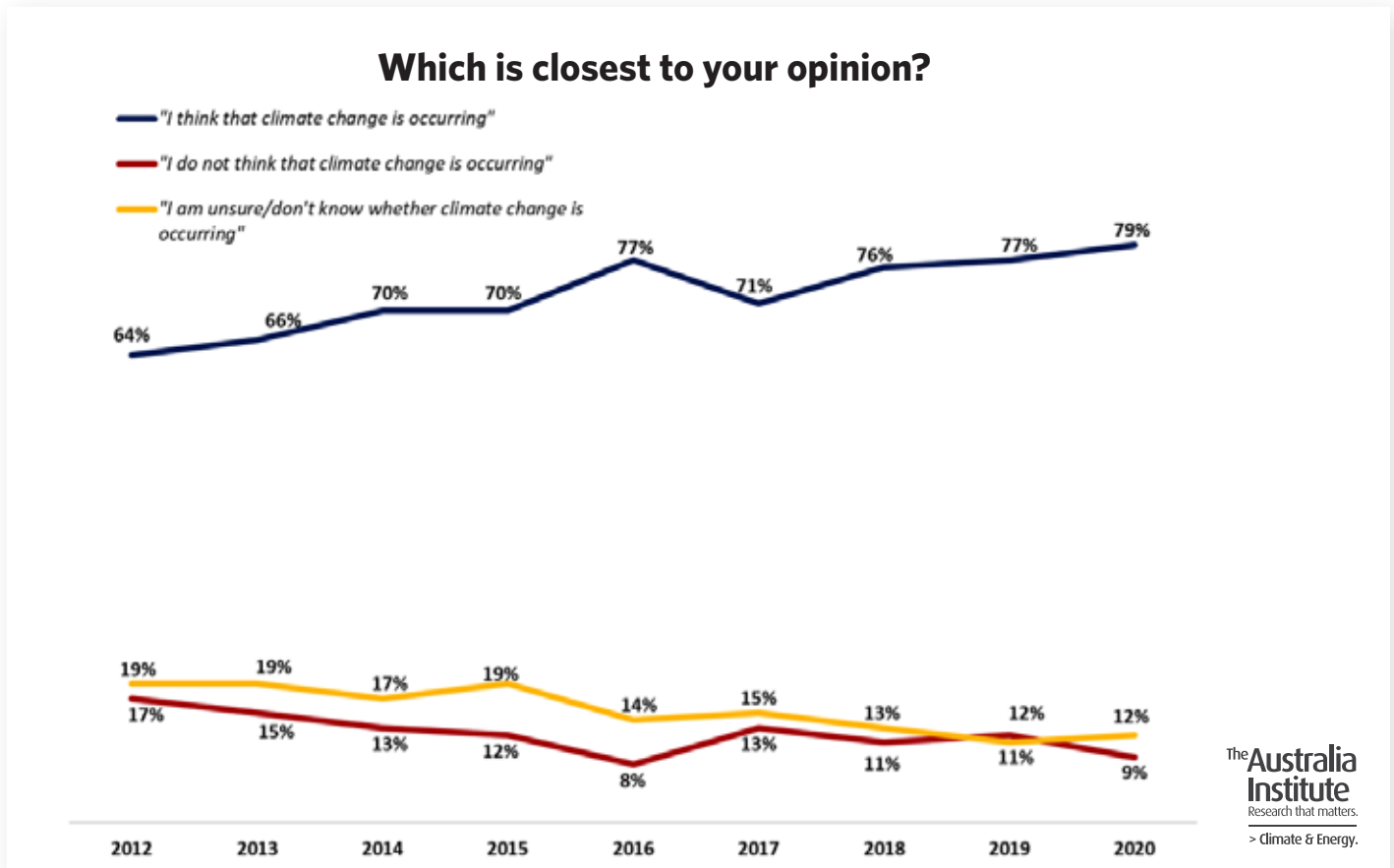
Climate change is occurring

More Australians than ever before believe climate change is occurring and that humans are the main cause, since tracking began in 2012.

Four in five Australians (79%) agree that climate change is occurring, the highest result since 2012. Correspondingly, less than one in ten Australians (9%) do not think climate change is occurring, one of the lowest levels recorded, dropping three percentage points since 2019 and eight percentage points since 2012.

Younger Australians are more likely to think climate change is occurring (88% of those aged 18–34, up five percentage points from 83% in 2019) than older Australians (83% of those aged 35–49; 74% of those aged 50–64 and 67% of those aged 65 or older).

FIGURE 1.1



⁸ Bureau of Meteorology (2020) Annual climate statement 2019. <http://www.bom.gov.au/climate/current/annual/aus/2019/>

⁹ SBS News (2020) Australia's 'Black Summer' bushfires 'not a one-off event', royal commission hears.

<https://www.sbs.com.au/news/australia-s-black-summer-bushfires-not-a-one-off-event-royal-commission-hears>

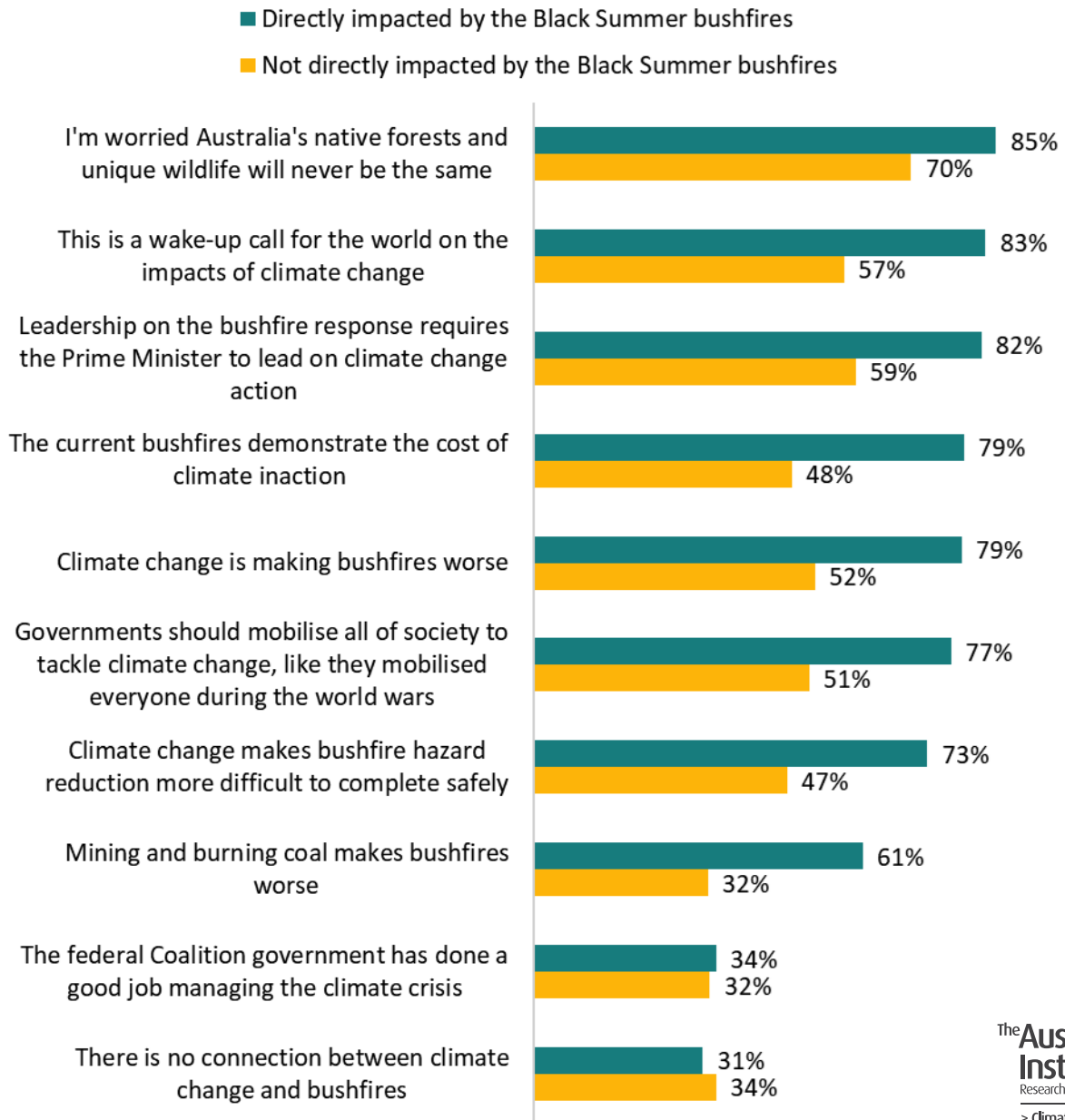
¹⁰ WWF (2020) Australia's 2019–2020 Bushfires: The Wildlife Toll.

<https://www.wwf.org.au/news/news/2020/3-billion-animals-impacted-by-australia-bushfire-crisis#gs.el6g9r>

¹¹ The Australia Institute (2020) Polling — Climate change concern. <https://www.tai.org.au/content/concern-about-climate-escalates-bushfire-crisis-continues-climate-nation-polling>

FIGURE 1.2

Attitudes to Bushfires and Climate Change



Bushfire Poll

In January 2020, Climate of the Nation conducted a special one-off survey in response to the bushfires. As found in previous research in Australia and elsewhere, the survey results find that people who experience climate change impacts are more likely to be concerned about climate change (88% concerned, directly impacted; 66% concerned, not directly impacted). Those impacted in some way by the fires were much more likely to be very concerned about climate change (58%) than those not impacted (32%), and much more likely to say Australia is experiencing 'a lot' of climate change impacts (68% vs. 42%).

People who said they were directly impacted by the fires were much more likely to agree with statements expressing concern about climate change impacts or the need for climate change leadership.

Concern about climate change intensified during the bushfire crisis. In January 2020, almost half of Australians (47%) were 'very concerned' about climate change, an increase of 10 percentage points since July 2019 when 37% were 'very concerned' about climate change.

It seems to be getting hotter and hotter, we're getting less and less rain. The ground is just extremely dry ... the men and women who were trying to take on these fires, the severity, and the strength of them - things that they had never seen before. I think that definitely is due to climate change.

Brisbane focus group participant, female undecided voter



Already experiencing climate change impacts

A consistent majority of Australians think we are already experiencing the impacts of climate change (80% in 2020). In the past five years, the number of Australians who think we are experiencing the impacts of climate change a lot (compared to a little, or not very much) has increased dramatically from 33% in 2016 to 48% in 2020, an increase of 15 percentage points.

In 2018, Climate of the Nation began tracking people's perceptions of the pace of climate impacts - whether they think climate change is already causing, likely to cause or unlikely to cause various impacts.

In 2020, three-quarters or more of Australians believe climate change is likely to cause or is already causing the melting of the polar ice caps (78%), more bushfires (76%), more heatwaves and extremely hot days (78%), as well as more extreme weather events like floods and cyclones and flooding affecting crop production and food supply (both 75%).

The winters are definitely warmer and they're shorter ... clothes that I used to wear - thick coats, scarves - I think I've worn a scarf once this winter. And I live in the Blue Mountains ... you just don't need that type of clothing anymore.

Western Sydney focus group participant, female undecided voter

FIGURE 1.3

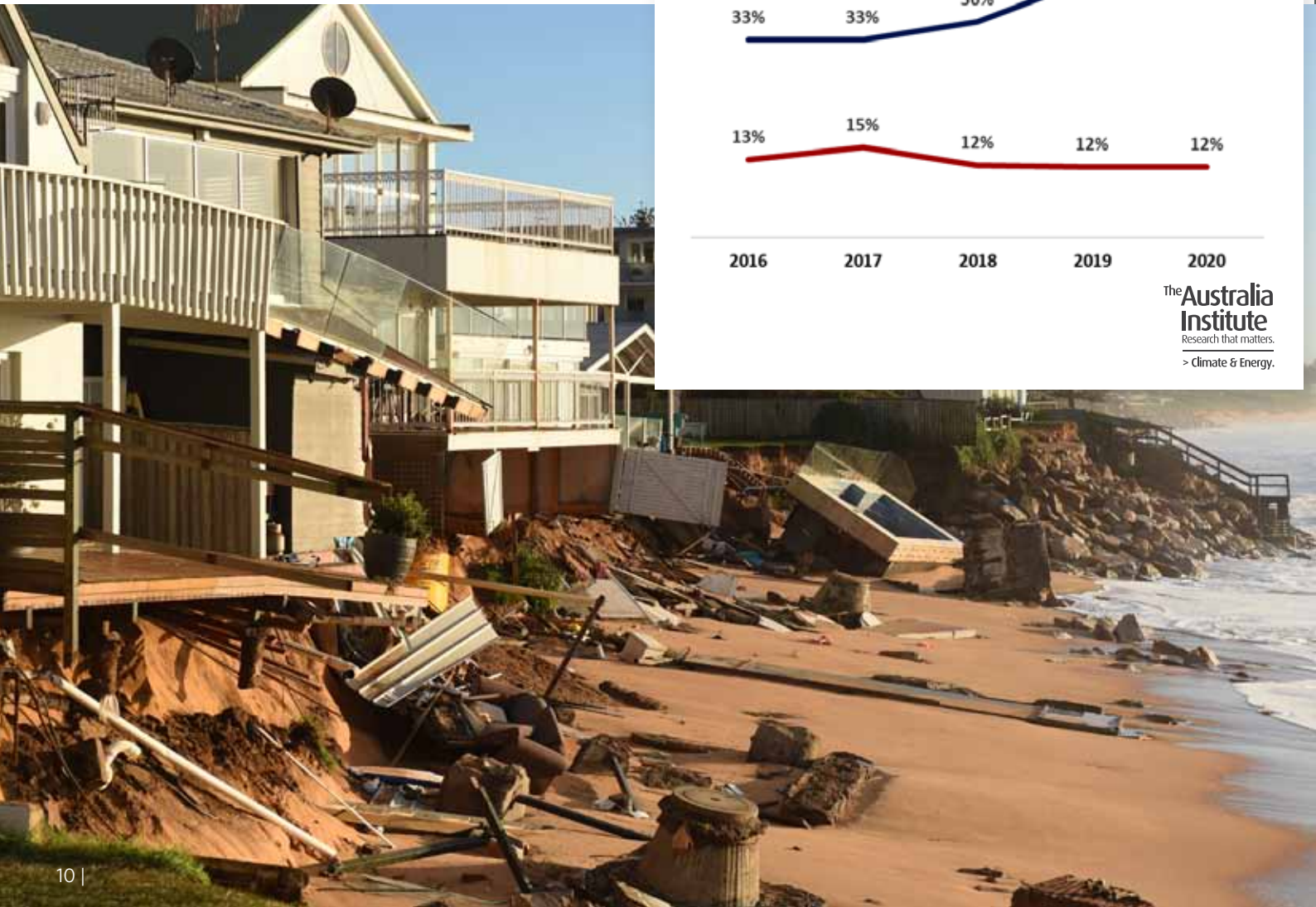
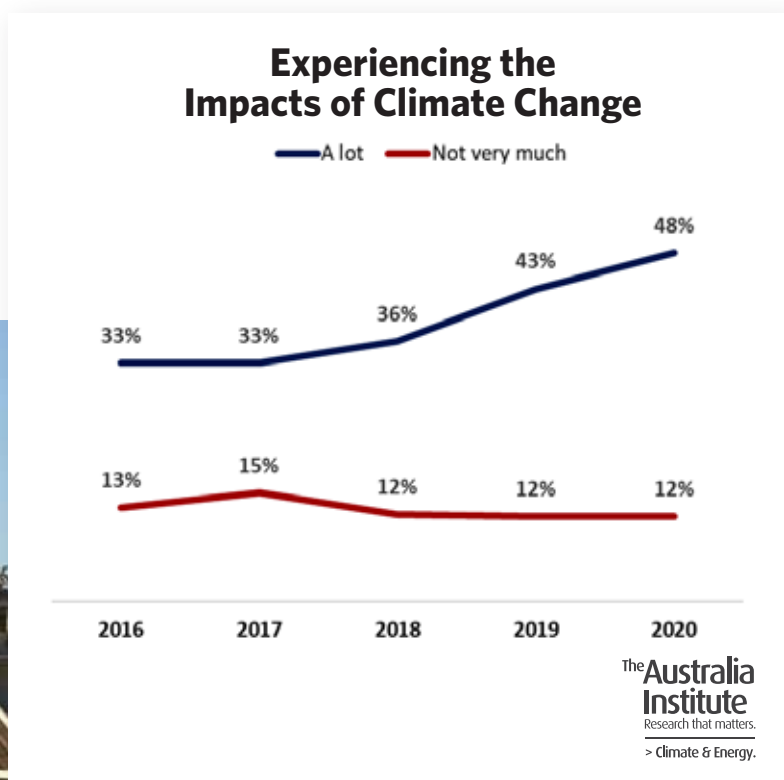
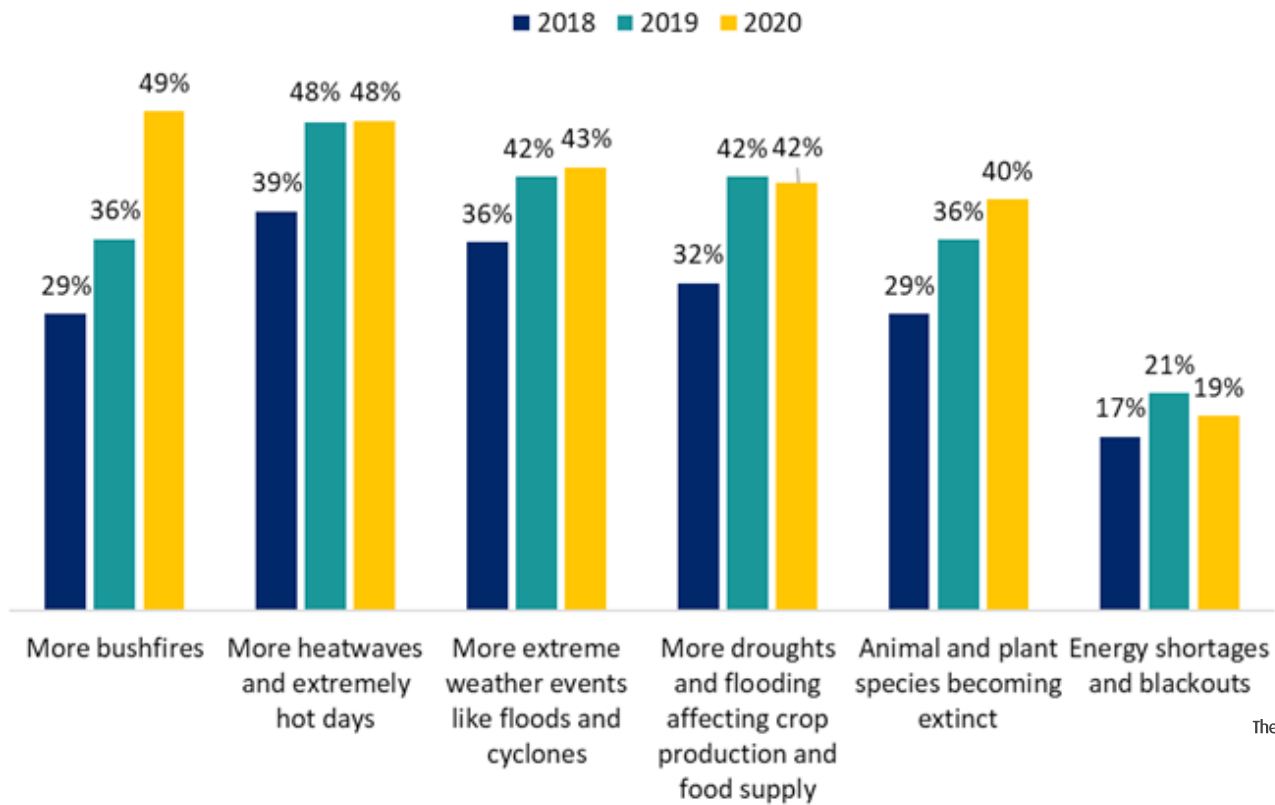


FIGURE 1.4

Global Warming is Already Causing ...



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Figure 1.4 focuses on whether respondents think climate change is already causing impacts relating to heat, drought and bushfires. Unsurprisingly, of the three-quarters of people who think climate change is likely to cause more bushfires, there has been a significant increase in the number of people who think climate change is already causing more bushfires (49% in 2020, up 13 percentage points since 2019 and 20 percentage points since 2018). Just under half (48%) of Australians think climate change is already causing more heatwaves and extremely hot days (up 9 percentage points since 2018), while those who think climate change is already causing animal and plant extinctions has risen 4 percentage points to 40%, up from 36% in 2019 and 11 percentage points since 2018.



Level of concern

A consistent three-quarters of Australians are concerned about climate change (74% in 2020, 74% in 2019, 73% in 2018). Concerns about the impacts of climate change are dominated by the effects related to heat and water. Unsurprisingly, the level of concern about bushfires has increased significantly in the wake of the Black Summer bushfires.

The top five impacts that Australians are concerned about are:

- 82% more bushfires (up from 76% in 2019);
- 81% more droughts and flooding affecting crop production and food supply;
- 80% animal and plant species becoming extinct;
- 79% destruction of the Great Barrier Reef; and
- 77% more extreme weather events like floods and cyclones.

Females are much more likely than males to be 'very concerned' about climate change impacts. There is a 10 or more percentage point difference between males and females who are 'very concerned' about climate change causing:

- more bushfires (females 59%, males 44%);
- destruction of the Great Barrier Reef (females 51%, males 39%);
- animal and plant species becoming extinct (females 50%, males 38%);
- more droughts and flooding (females 49%, males 38%); and
- more extreme weather events (females 44%, males 35%).





How Concerned Are You That Climate-Change Will Result in the Following Outcomes?

■ Very concerned
 ■ Fairly concerned
 ■ Not very concerned
 ■ Not at all concerned
 ■ Don't know/none

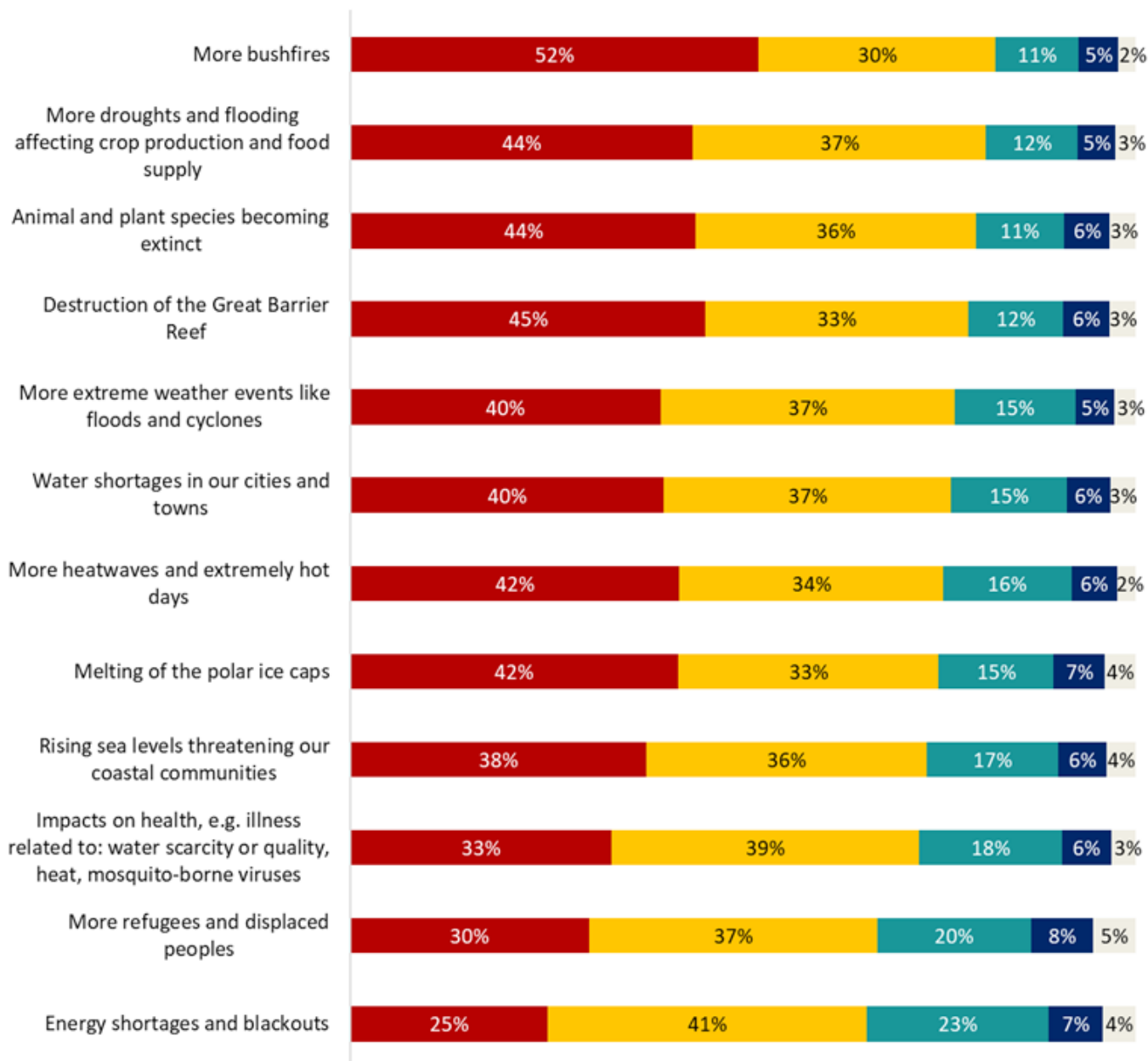


FIGURE 1.5

Energy Transition

Electricity remains the most polluting sector in Australia. A transition away from carbon-based electricity generation is necessary under any credible climate strategy. The year 2020 has seen coal generation fall to below 70% of the National Energy Market generation (excluding rooftop solar) for the first time,¹² and renewable generation reach a record high annual penetration of 25% in April.¹³

The Australian Government currently has no plan to transition Australia from domestic coal-fired power, and has publicly advocated for a 'gas-fired recovery' from the pandemic. It has agreed to subsidise an upgrade to an existing coal-fired power station, pushed for ageing coal-fired power stations to operate past their retirement age, and funded a proposal for a new coal-fired power station in Queensland with a lifespan of up to 50 years. Proponents of coal-fired power stations point to the need for 'reliable baseload power'. However, this does not match the data that shows a significant number of breakdowns, even amongst the newest plants.¹⁴

A strong commitment from government to decarbonise the electricity sector and coordinate the transition away from carbon-based electricity generation is supported by most Australians, and is only getting more popular.

Solar by far Australia's most preferred energy source

Previous Climate of the Nation reports have shown that solar is consistently Australia's most preferred energy source. In 2020, solar topped the list as the most popular energy source (54% rank solar as their number one preference), and was highest ranked as a top-three preference (79% rank solar in their top three preferences). In terms of ranking in respondents' top three preferred energy sources, solar and wind increased in popularity (solar 79%, up from 76% in 2019, and wind 62%, up from 58% in 2019).

Surely we're best placed ... to put time and energy into solar power. We've got the space, we've got the sun, what other countries have that, that kind of unique ability for solar power?

Western Sydney focus group participant, female undecided voter

TABLE 2.1: PREFERRED ENERGY SOURCES WHICH RANKED IN RESPONDENTS' TOP 3 PREFERENCES*

	2019	2020
Solar	76%	79%
Wind	58%	62%
Hydro	39%	39%
Power Storage	29%	29%
Tidal/Wave	21%	22%
Nuclear	22%	21%
Gas	20%	19%
Geothermal	17%	16%
Coal	18%	14%

* excludes 6% who did not answer

¹² Saddler (2020) *National Energy Emissions Audit Report June*. <https://www.tai.org.au/publication/national-energy-emissions-audit>

¹³ Saddler (2020) *National Energy Emissions Audit Report May*. <https://www.tai.org.au/publication/national-energy-emissions-audit>

¹⁴ Ogge, Quicke & Browne (2020) *Coal Out: Fossil fuel power station breakdowns in Queensland*. <https://www.tai.org.au/content/queensland-top-state-breakdowns-fossil-fuel-power-stations>

¹⁵ AER (2020) *Wholesale Markets Quarterly Q2 2020*. <https://www.aer.gov.au/system/files/Wholesale%20markets%20quarterly%20Q2%202020%2811441393.1%29.pdf>

Orderly transition necessary

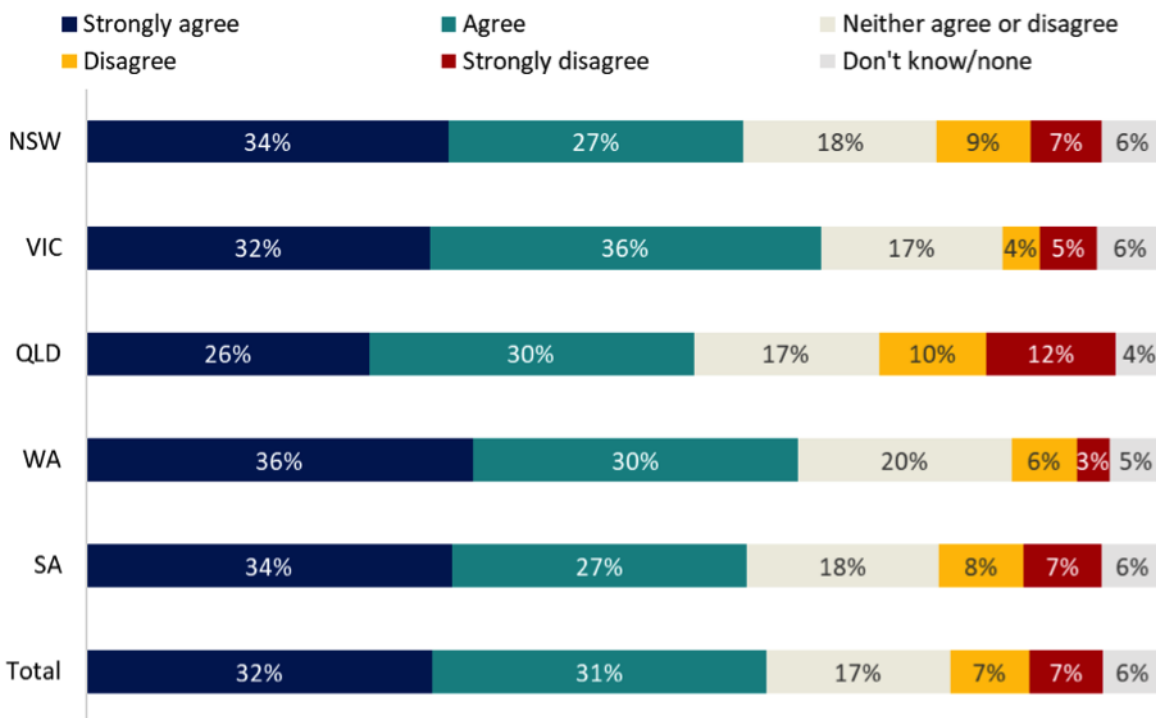
The Australian Government has no plan to manage the electricity system transition and the retirement of ageing coal generators. It has finally conceded to the closure of the Liddell coal-fired power station in 2023, but insists the closure will leave a gap that must be replaced with a large gas power station. This is contrary to both the Liddell Taskforce report and the Australian Energy Market Operator's forecasting.

An increasing share of Australians support a government plan to transition the electricity sector. Three-quarters (75%) agree governments need to implement a plan to ensure the orderly closure of old coal plants and their replacement with clean energy, up five percentage points from 70% in 2019. The majority of Australians (63%) agree Australia's current coal-fired generation will need to be closed and replaced with clean alternatives.

I personally would like to see a movement from coal into wind farms, solar heating, and all that type of thing ... Germany did a transition where over the last 30 years they've moved their employees from the mines into sustainable energy. And I thought, "Why don't we do something like that? We've got the wind, we've got the sun - what's your problem?"

Brisbane focus group participant, female undecided voter

Australia's Current Coal Fired Generation Will Need to be Closed and Replaced with Clean Alternatives

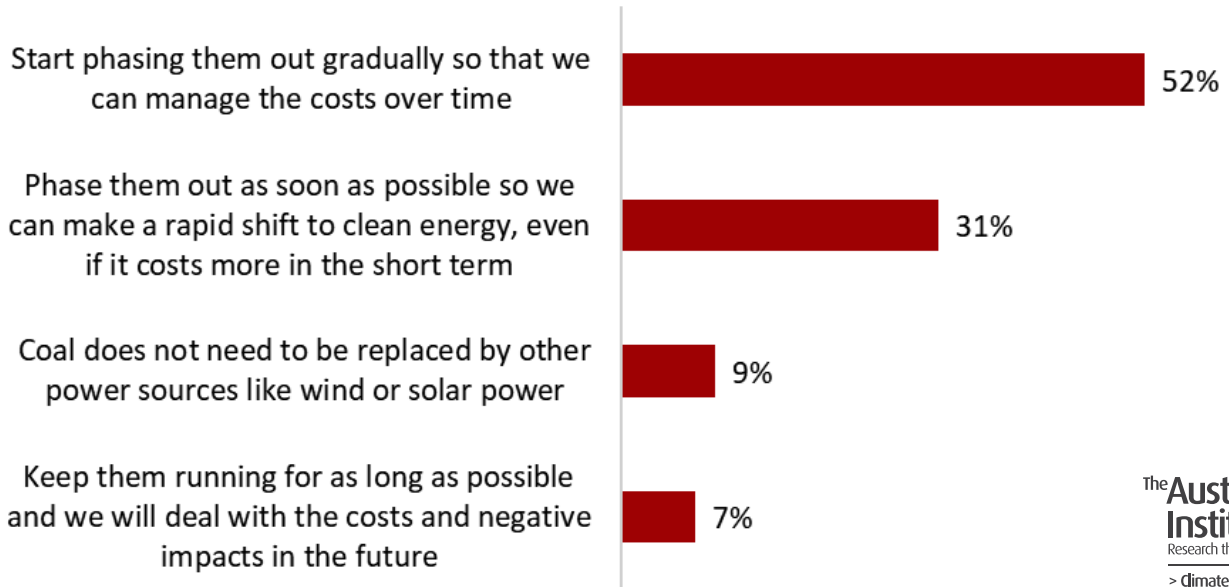


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FIGURE 2.1

FIGURE 2.2

Preferred Future for Australia's Coal-Fired Power Stations



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Left to the market, Australia's coal-fired power stations are going to be replaced with cleaner technologies, like wind and solar. It is 30% cheaper to build a renewable power plant with six hours of back-up energy than it is to build a new coal plant.¹⁶

A long-term plan is needed to help smooth the transition and support communities. Over four-fifths of Australians (83%) prefer coal-fired power stations to be phased out, including 52% who would prefer them phased out gradually, and 31% who would prefer them phased out as soon as possible.

Respondents increasingly disagree with the proposition that the market and energy companies should be the ones to decide when old coal plants are closed – 42% disagree, up 6 percentage points in two years (40% disagreed in 2019, 36% disagreed in 2018).

[On the government's approach to climate change] I think it's weak at best to be honest. I would like to see a more aggressive approach.

Brisbane focus group participant, female undecided voter

When asked about a specific timeline for the transition, the majority of Australians (68%) think coal-fired power generation should end within the next 20 years, including 39% who think it should end within the next 10 years. Just 14% of respondents believe coal-fired power should never be completely phased out. More Coalition voters believe coal-fired generation should end within the next 10 years (23%) than believe coal-fired power should never be phased out (21%).

TABLE 2.2: TIMELINE FOR PHASE-OUT OF COAL-FIRED POWER

When should Australia completely end coal-fired power generation?	
Subtotal (within next 20 years)	68%
Within the next ten years	39%
In the next 10-20 years	29%
In the next 20-30 years	10%
In the next 30-50 years	7%
Coal-fired power should never be completely phased out	14%

¹⁶ AEMO & CSIRO (2018) *GenCost 2018: Updated projections of electricity generation technology costs*. <https://publications.csiro.au/rpr/download?pid=csiro:EP189502&dsid=DS1>

¹⁷ ACCC (2018) *Restoring electricity affordability and Australia's competitive advantage*. <https://www.accc.gov.au/publications/restoring-electricity-affordability-australias-competitive-advantage>

¹⁸ AEMO (2019) *National fact pack — 2019 Residential Electricity Price Trends*. <https://www.aemc.gov.au/market-reviews-advice/residential-electricity-price-trends-2019>

¹⁹ Saddler (2020) *National Energy Emissions Audit Report — June 2020*. <https://www.tai.org.au/sites/default/files/NEEA%20June%202020%20%5BWEB%5D.pdf>

Privatisation and company profit margins blamed for electricity price rises

Consumer electricity prices have risen over the last decade, reaching record highs in 2019.¹⁷ Electricity prices are now forecast to fall for the next few years.¹⁸ Emissions from electricity generation have also fallen due to much slower growth in electricity consumption and a significant increase in renewables generation, notably rooftop solar and wind.¹⁹

When asked to select reasons why prices have increased, the majority of Australians blame the excessive profit margins of electricity companies (55%) or the privatisation of electricity generation (53%). Seven in 10 (69%) Australians blame either excessive profit margins or privatisation, or both, for electricity price rises. More than one in three (36%) recognise gas exports contribute to high domestic gas prices.

Willingness to participate in demand response

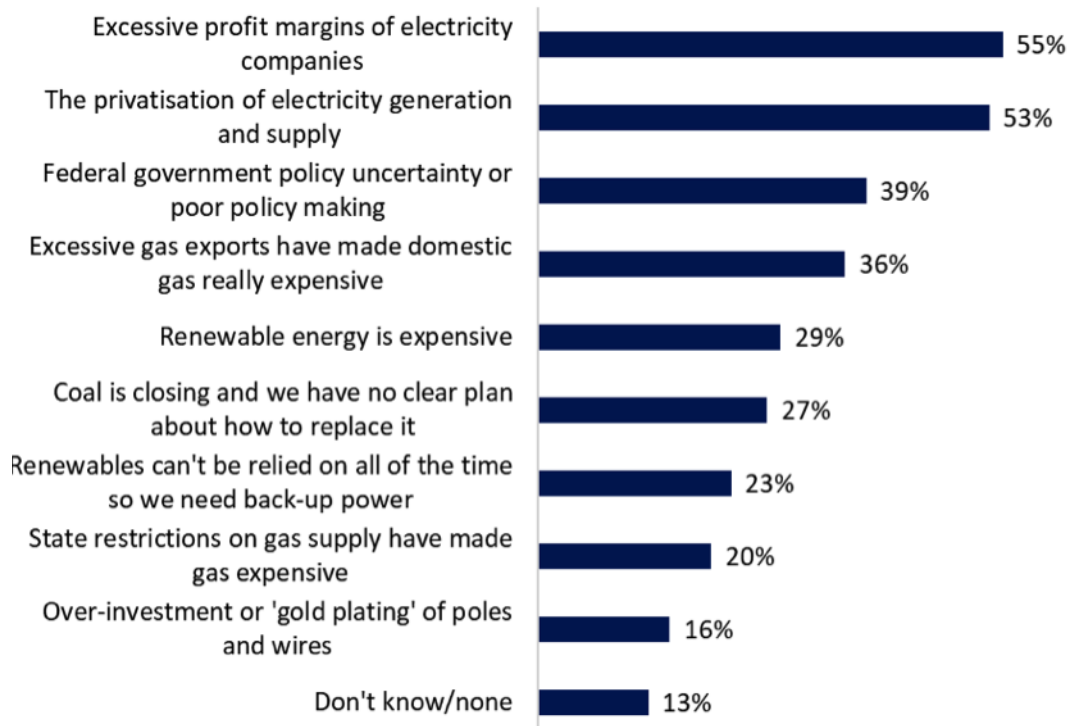
Demand response is the voluntary reduction of energy use when demand and wholesale prices peak to affordably reduce demand rather than increase supply. Additional supply is often generated from expensive gas 'peaking' plants.

A wholesale demand response draft rule change, proposed by The Australia Institute, the Public Interest Advocacy Centre, and the Total Environment Centre, and accepted by the Australian Energy Market Commission in 2020, will allow large energy users to trade demand in the wholesale electricity market, paving the way for a two-sided energy market. Demand response will help the electricity market cope with peak demand days and the increasing number of extreme heat days due to climate change. However, it is not currently available for households to participate in.

Climate of the Nation 2020 shows households would consider participating in demand response. Three-quarters of Australians (75%) would consider reducing electricity during times of high demand if they were paid to do so, an increase from 72% in 2019.

FIGURE 2.3

Blame for Electricity Price Rises



Mining + Fossil Fuel Subsidies

Gas

Gas features prominently in the Covid-19 recovery plans of the Australian Government, with ministers calling for a 'gas-fired recovery', which would include subsidies for both gas mining and gas consumption.²⁰ However, the gas industry is a poor option for stimulus and recovery spending as it provides few jobs, pays little tax and is unlikely to bring energy prices down. More gas will lock in increased emissions, displacing the renewable energy we need to reduce energy prices and tackle global warming.²¹

Australians overestimate the size and economic value of the gas industry

For the first time, the 2020 Climate of the Nation Report explored Australian perceptions of gas industry employment, share of gross domestic product (GDP) and government revenue. Results show that Australians overestimate the size of the gas industry, both in terms of employment and economic value.

Australians overestimate the size of Australian gas industry employment by a factor of 40. Excluding those who say they do not know, respondents on average believe that gas mining and exploration makes up 8.2% of the total workforce. In reality, gas mining and exploration employs less than 28,600 workers, making up less than 0.2% of the 12.5 million people employed in Australia.²² This means Australians overestimate the employment value of the gas industry to an even greater degree than they do the coal industry, as discussed further below.

Australians also overestimate the economic value of the gas industry. Respondents on average believe that the industry accounts for 10.3% of GDP, while the actual figure is less than 2.3%.

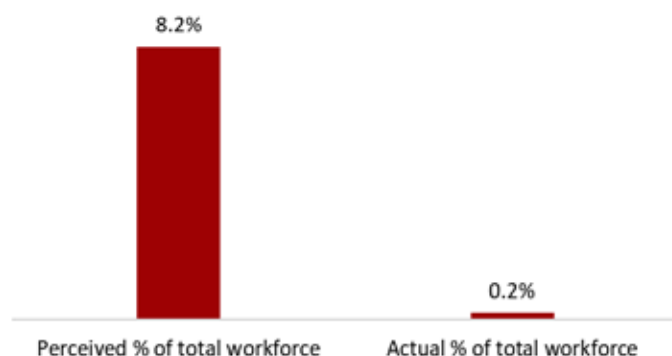
Oil and gas resources in Australia are legally owned by the Australian and state governments. In return for the right to extract these finite resources, the Australian Government imposes a tax on oil and gas companies, the Petroleum Resources Rent Tax (PRRT).²³ On average, Australians believe that the PRRT, described as the main way the Australian Government collects revenue from oil and gas, contributed 10.8% to the Commonwealth budget for the 2018-19 year (excluding those who do not know). In reality, the PRRT contributed 0.2% to the Commonwealth budget, \$1.15 billion of the total \$485 billion.²⁴ In other words, respondents perceive the oil and gas industry as contributing around 45 times more to Commonwealth revenue than it actually does.

Around a quarter of the gas mined in Australia is used and burned in Australia, while three-quarters is exported overseas.²⁵ In 2020, Australia overtook Qatar as the world's biggest liquified natural gas (LNG) exporter.²⁶

On average, respondents believe that 29% of gas mined in Australia is used and burnt in Australia, which is close to the actual answer (25%). The majority of respondents (56%) also correctly selected that the amount of gas mined in Australia has increased compared to 10 years ago. This may reflect that Australians understand gas is an export industry, which may in turn contribute to their high expectations for its economic and employment value and contribution to government revenue.

FIGURE 3.1

Gas Industry as Percentage of Total Employment, Preception vs Reality



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²⁰ Foley (2020) *Gas to fire economic recovery and capitalise on cheap oil prices*. <https://www.smh.com.au/politics/federal/gas-to-fire-economic-recovery-and-capitalise-on-cheap-oil-prices-20200421-p54lw8.html>

²¹ Ogge and Swann (2020) *Gas Fired Backfire*. <https://www.tai.org.au/content/gas-fired-backfire>

²² Average figure for oil and gas extraction employment for year to May 2020 in ABS (May 2020) *Labour Force, Australia, Detailed, Quarterly, Table 06*. Separate petroleum exploration data is only available in five-yearly census data. The 2016 Census found 1,997 people worked in petroleum exploration.

²³ Some gas extraction also attracts state royalties.

²⁴ Commonwealth Government (2020) *Budget Paper No.1 Budget Strategy and Outlook 2018-19 Statement 4: Revenue*.

²⁵ Swann (2020) *Weapons of gas destruction*. <https://www.tai.org.au/content/weapons-gas-destruction-lifting-lid-emissions-gas>

²⁶ Toscano (2020) *Australia tops Qatar as world's biggest LNG exporter*. <https://www.smh.com.au/business/the-economy/australia-tops-qatar-as-world-s-biggest-lng-exporter-20200106-p53p5h.html>

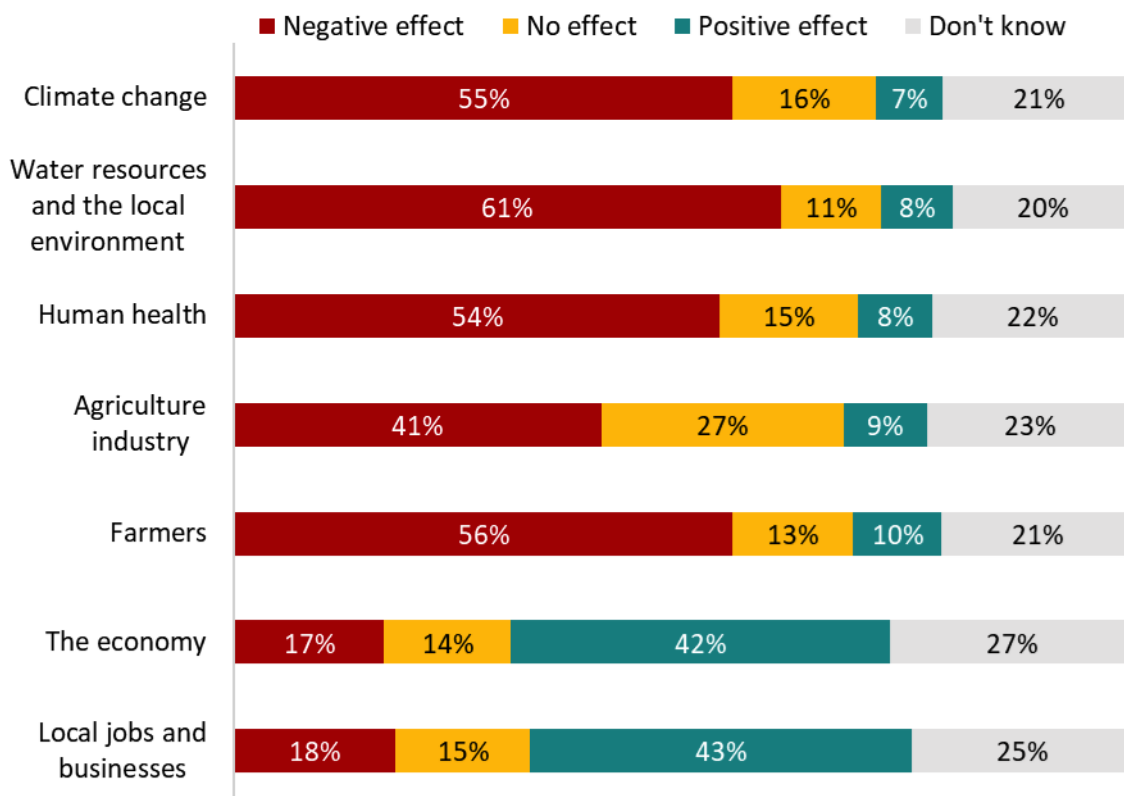
Effects of unconventional gas

Coal seam gas (CSG) and shale gas are forms of unconventional gas and are more difficult and expensive to extract than conventional gas. The methods required for the extraction of unconventional gas include hydraulic fracturing (fracking), horizontal drilling and multiple drilling. A majority of Australians believe CSG and shale gas mining have a negative effect on water resources (61%), farmers (56%), climate change (55%), and human health (54%). When it comes to the effect on the economy, more respondents believe CSG and shale gas mining have a positive effect on the economy and local jobs and business (42% positive compared to 17% negative, and 43% positive compared to 18% negative respectively), perhaps reflecting the public's overestimation of its employment and revenue. Females are less likely to think that CSG has a positive effect on local jobs and businesses (38%) compared to males (47%) and less likely to think that CSG has a positive effect on the economy (37%) compared to males (48%).

The relatively positive impression that respondents in the wider Australian community have of the economic impacts of CSG development are in contrast with the experience reported by local communities actually impacted by gas fields. Even in gas industry funded studies on the economic and social impacts of gas development in Queensland's unconventional gas fields, local stakeholders reported a deterioration in local financial capital, infrastructure, local skills and social cohesion. Fewer than one in four local people approved of the unconventional gas industry, with less than 6% believing it would "lead to something better".²⁷

FIGURE 3.2

Do CSG and Shale Gas Mining have a Positive or Negative Effect on the Following?



²⁷ Walton et al. (2014) CSIRO survey of community wellbeing and responding to change: Western Downs region in Queensland. <https://gisera.csiro.au/wp-content/uploads/2018/03/Social-2-Final-Report.pdf>. See also Ogge (2015) *Be careful what you wish for: The economic impacts of unconventional gas in Queensland and implications for Northern Territory policy makers*. <https://www.tai.org.au/content/be-careful-what-you-wish>

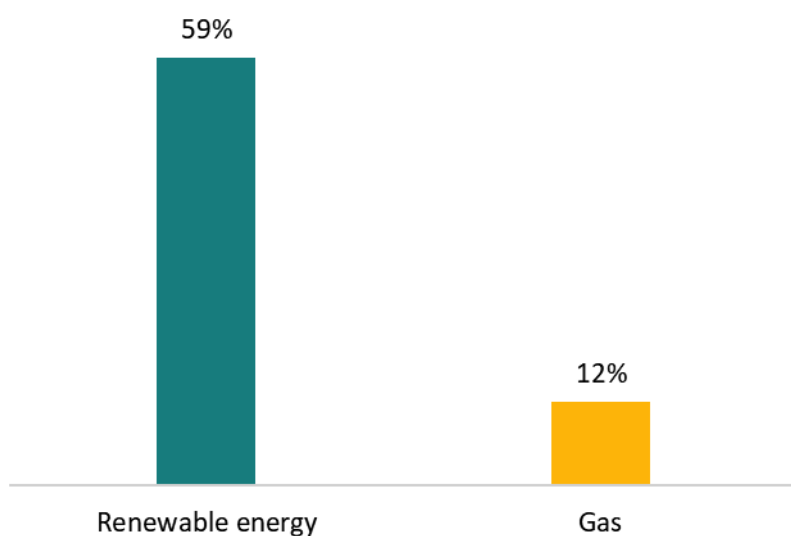
Investment in renewables preferred to gas-fired recovery

The Energy Minister has proposed supporting the gas industry for a 'gas-fired recovery' following the pandemic. This is not popular. Only one-tenth of Australians (12%) prefer gas, compared to the majority of Australians (59%) who prefer Australia's economic recovery being primarily powered by investment in renewables (11% prefer neither gas nor renewables, and 18% do not know). The popularity of a renewables-led recovery was consistent across all states, genders, ages and voting intentions.



FIGURE 3.3

Prefer Australia's Economic Recovery to be Primarily Powered by Investment in ...



Coal

Australia is the number one exporter of coal in the world. Per capita, Australian emissions are the highest in the OECD and among the highest in the world.²⁸ Addressing climate change requires a transition away from coal-fired electricity generation, an end to new coal mines and a gradual phase-out of existing mines. Like gas extraction, coal mining is not a major employer in Australia's overall labour market and the phase-out of thermal coal (used for power generation) would have no significant impact on government revenues.²⁹

Australians overestimate the size and economic value of the coal industry

Australians continue to significantly overestimate the size of the coal industry, both in terms of employment and share of GDP.

Respondents overestimate the size of the Australian coal industry by a factor of 23. Excluding those who say they do not know, Australians on average believe that coal mining makes up 9.4% of the total workforce. In reality, coal mining employs around 48,200 workers, making up just 0.4% of the more than 12.5 million people employed in Australia.³⁰

The perceived share of GDP attributable to coal mining is also significantly overestimated. On average, Australians believe coal mining makes up 12.4% of Australia's GDP (excluding the 49% who say they do not know). In reality, coal mining accounts for just 2.3% of Australia's GDP – \$43.1 billion of nearly \$1.88 trillion.³¹ In other words, Australians who believe they know the role of coal perceive coal mining as being five times larger than it actually is in terms of share of GDP.

The consequences [of giving up coal]? I would say job losses in the industries as they exist. I would say that the power production within Australia, we would be able to rely on renewables. The infrastructure for that would be expensive at the start, but it's not like we don't have alternatives here. We do. But phasing out the coal industry would be a lot of jobs and export money.

Western Sydney focus group participant, female undecided voter

Support for phasing out coal mines

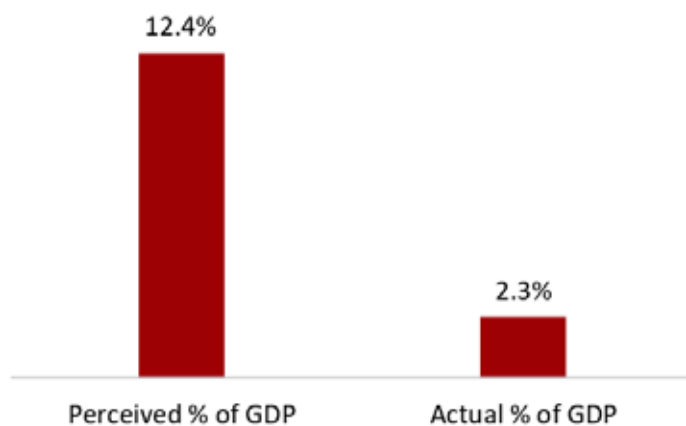
Almost two-thirds of Australians (65%) want the Australian Government to stop new coal mines. This result has been consistent for the past two years (64% in both 2019 and 2018). This is split between one-third (34%) who want new coal mines stopped and existing coal mines phased out as soon as possible, and just under one-third (31%) who want new coal mines stopped, but for existing coal mines to operate until the end of their approvals. A majority of Coalition (52%), Labor (79%), Greens (87%) and Other (63%) voters want the Australian Government to stop new coal mines. One Nation voters are the only voting intention group without majority support for stopping new coal mines (38% want new coal mines stopped).

Two-thirds of Australians (66%) agree that managing Australia's transition from the mining boom requires stopping the approval of new coal mines. This is an increase of 10 percentage points in two years from 62% in 2019 and 56% in 2018.

Almost three-quarters of respondents (74%) agree Australian governments should plan to phase out coal mining and transition to other industries. Younger respondents are more likely to agree than older respondents (84% of those aged 18-34 agree, compared to 61% of those aged 65 or older).

FIGURE 3.4

Coal Mining Share of GDP, Perception vs Reality



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²⁸ Swann (2019) *High carbon from a land down under*. <https://www.tai.org.au/content/new-analysis-australia-ranks-third-fossil-fuel-export>

²⁹ Quiggin (2020) *Getting off coal*. <https://www.tai.org.au/sites/default/files/P881%20Getting%20Off%20Coal%20%5BWEB%5D.pdf>

³⁰ ABS (May 2020) *Labour Force, Australia, Detailed, Quarterly, Table 06*.

³¹ ABS (Mar 2020) *Australian National Accounts: National Income, Expenditure and Product, Table 45*.

I think we're in a global environment where the rest of the world is going to start moving away from fossil fuels ... We need to be preparing for that now, and thinking to use alternative fuel sources, and coming up with technologies that don't rely on coal-driven electricity ... I think we should be stepping away from our dependence on coal. It's not a winner, it's not a winner in the long term.

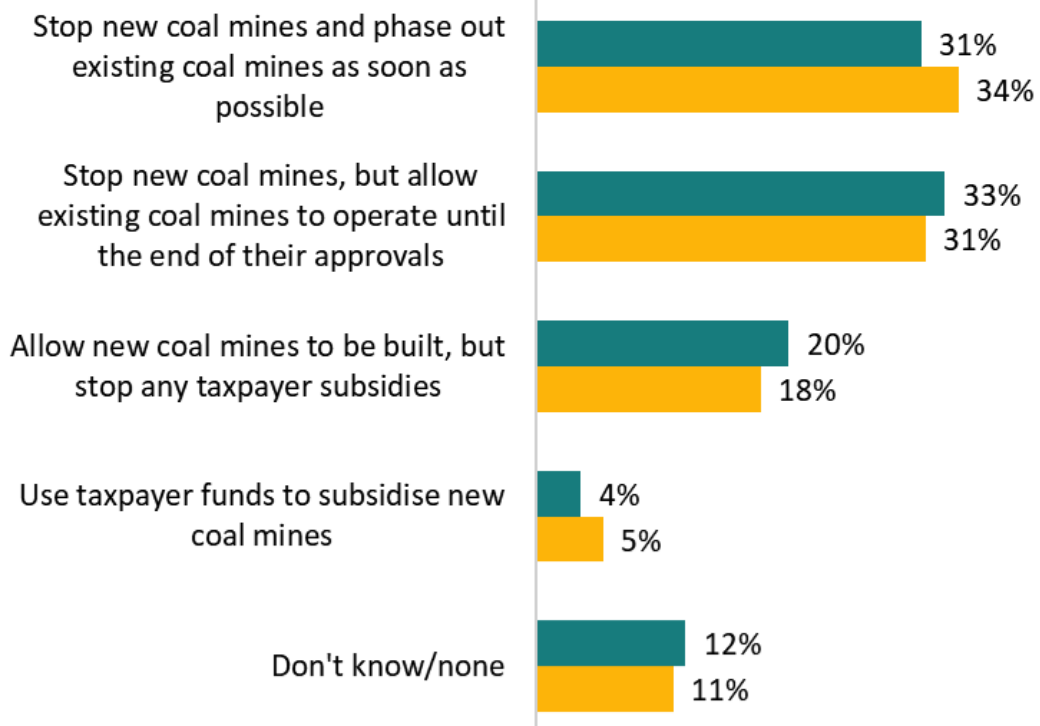
Western Sydney focus group participant, female undecided voter



FIGURE 3.5

The Australian Government Should ...

■ 2019 ■ 2020



Despite the strong support for phasing out coal mines, around one-third (35%) of respondents agree that coal mining has a strong economic future (down from 38% in 2019). Respondents from Queensland and NSW, the largest coal producers, are more likely to agree that coal mining has a strong economic future (45% and 37% respectively).

More than one-third (37%) of respondents agree with the statement that the economic benefits of coal mining outweigh its negative impacts on health, the environment and other industries (down from 39% in 2019), while 46% disagree. Interestingly, this sentiment in the wider Australian community is similar to that reported in the Hunter Valley, home to most of Australia's thermal coal industry. In 2014, in response to an Australia Institute poll, the same proportion of respondents (37%) agreed to the same statement, while 47% disagreed.³²

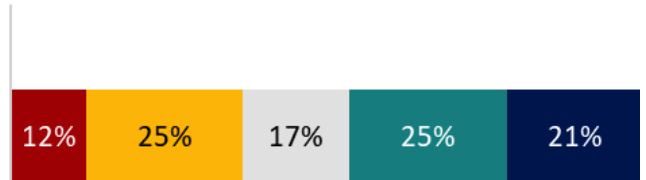


FIGURE 3.6

Role of Coal in the Economy

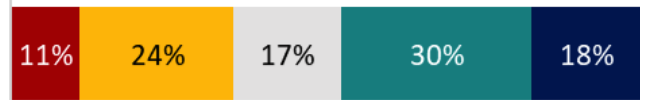
■ Strongly agree ■ Agree ■ Don't know/none ■ Disagree ■ Strongly disagree

Overall, the economic benefits of coal mining outweigh its negative impacts on health, the environment and other industries



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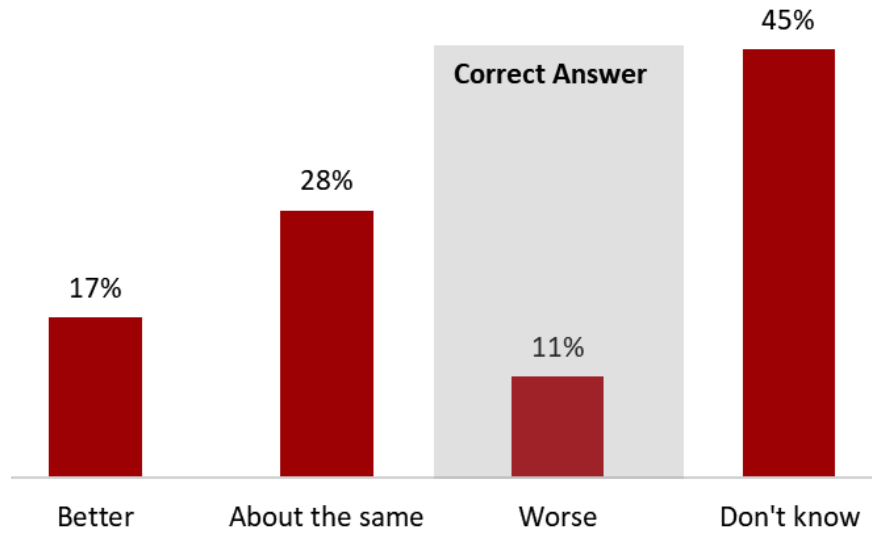
Coal mining has a strong economic future.



³² Campbell (2014) Seeing through the dust: Coal in the Hunter Valley economy. <https://www.tai.org.au/content/seeing-through-dust-coal-hunter-valley-economy>

FIGURE 3.7

Perceived Performance of Fossil Fuel Companies Compared to Top 300 ASX Companies



Majority opposition to fossil fuel industry subsidies

Most Australians (52%) oppose the Australian Government putting public funds into infrastructure to subsidise the expansion of the coal, oil and gas industries (a seven percentage point increase from 45% in 2019). Older respondents are more likely than younger respondents to oppose public subsidies for fossil fuel infrastructure (47% of those aged 18–34, compared to 57% of those aged 65 or older). Support for fossil fuel infrastructure subsidies has decreased to 29% (from 36% in 2019), including a decreased percentage that strongly support subsidies (7%, down from 12% in 2019).

Low awareness of fossil fuels' poor performance on the Australian Stock Exchange

Fossil fuels were the worst performing sector in the ASX 300 (the top 300 companies listed on the Australian Stock Exchange) over the last decade. A significant number of Australian superannuation account holders, as well as major investors, have expressed their desire to divest their portfolio of fossil fuel companies. Whilst some pursue this for ethical reasons, others doubt the long-term profitability of industries whose profitability relies on commodities that governments, companies and individuals are attempting to phase out.³³

The Climate of the Nation 2020 asked respondents whether they thought fossil fuel companies on the ASX had performed better, the same, or worse than overall returns for the top 300 ASX companies over the last decade. Just one-tenth (11%) of Australians correctly answered that fossil fuel companies have performed worse. Conversely, 17% think they have performed better, whilst 28% think they have performed about the same and 45% do not know.

The lack of public awareness of fossil fuel companies' poor performance on the stock market may be influenced by messaging from industry and political leaders that coal is the 'bedrock' of Australia's prosperity, or that gas will 'fire' the recovery from Covid-19.³⁴

³³ Swann (2020) *Dirty Big Secret: Financial performance of fossil fuel companies*. <https://www.tai.org.au/content/dirty-secret-fossil-fuels-worst-performing-sector-stockmarket>

³⁴ Ibid.

Cost of Climate Inaction

There are substantial costs associated with inaction on climate change. These costs are primarily borne by Australian households and businesses through uninsured losses, or paid by the community through rising insurance premiums. Costs covered by governments, including emergency services and infrastructure reconstruction, are provided by increasing taxes or redirecting funding from other areas such as education and health. The cost of inaction will increase as climate-related disasters become more intense and frequent.

The Black Summer bushfires were Australia's most expensive natural disaster, estimated to have cost up to \$100 billion.³⁵ The fires destroyed homes, contents and vehicles, and resulted in lost income from farm production, tourism and other industries. Some costs are more difficult to measure, including the devastating loss of human life, the social costs of mental health problems, unemployment, domestic violence, and the impact on animals and plants.

Australians have seen firsthand that it is possible to successfully reduce emissions whilst growing the economy. Under the carbon price period, Australian greenhouse gas emissions declined 2% and the economy grew 5%.³⁶ If the carbon price had not been repealed, emissions in 2020 would be 25 million tonnes CO₂-e lower, whilst total emissions from 2015 to 2020 would have been 72 million tonnes lower.³⁷

Governments are not doing enough on climate change

The majority of Australians (63%) think Australian governments are not doing enough, or are not at all concerned about preparing for and adapting to the impacts of global warming. One in five (21%) believe governments are doing enough, and only one in twenty (6%) think governments are doing too much.

I don't think they are even acknowledging it, that there is an issue, let alone doing anything about it.

Brisbane focus group participant, female undecided voter



³⁵ Read & Denniss (2020) *With costs approaching \$100 billion, the fires are Australia's costliest natural disaster*. <https://theconversation.com/with-costs-approaching-100-billion-the-fires-are-australias-costliest-natural-disaster-129433>

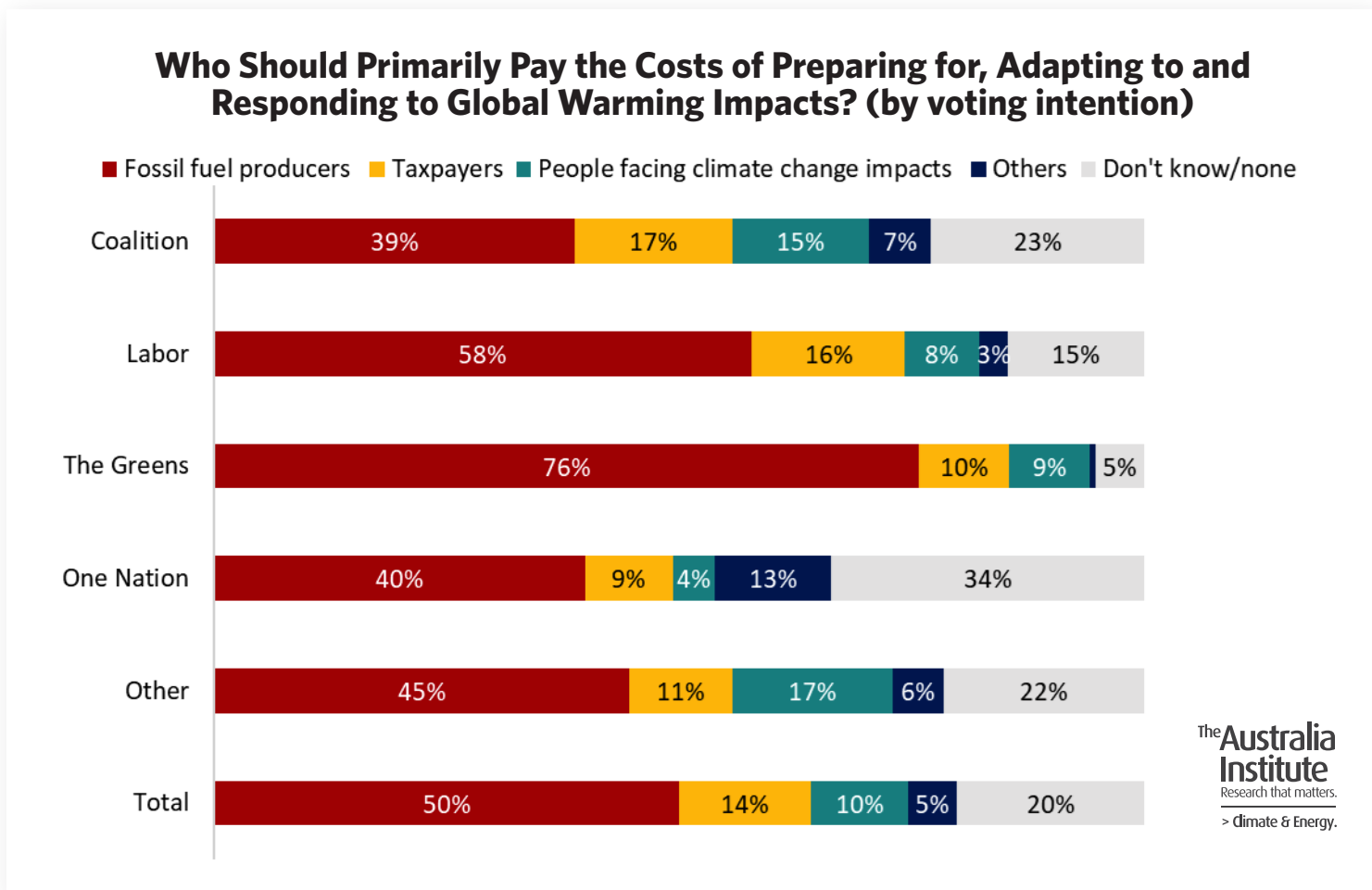
³⁶ Swann et al. (2019) *Cold shower on economics of global warming*. <https://www.tai.org.au/content/analysis-130-billion-year-benefit-gdp-avoiding-climate-change>

³⁷ Grudnoff (2020) *The Carbon Pricing Mechanism under the Gillard Government*. <https://www.tai.org.au/content/key-gillard-era-reform-carbon-price-would-have-saved-72-million-tonnes-emissions>

Fossil fuel producers should pay

When asked who should primarily pay the costs of preparing for, adapting to, and responding to global warming impacts, half of respondents (50%) say fossil fuel producers (coal, gas and oil companies) should primarily pay, up five percentage points from 45% in 2019. One in six respondents (14%) say taxpayers should primarily pay, down from 16% in 2019, and one in 10 (10%) say people facing climate impacts should primarily pay, the same result as 2019. Across all political parties, more people think fossil fuel producers should pay for climate disasters.

FIGURE 4.1





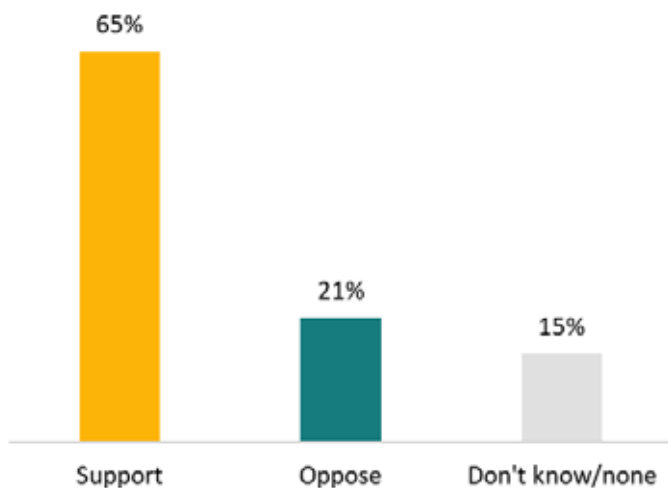
Support for a levy on fossil fuel exports to pay for climate disasters

To help pay some of the cost of increasing climate disasters, The Australia Institute has proposed a National Climate Disaster Fund, funded by a levy on Australian coal, gas and oil exports.³⁸ This proposal is popular amongst Australians.

Almost two-thirds (65%) of Australians support the introduction of a levy on Australia's fossil fuel exports (which make up the majority of Australia's fossil fuel production) to help fund local government actions to prepare for, and protect from, the consequences of climate change. Conversely, one-fifth (21%) of Australians oppose the introduction of a levy, and one in six (15%) don't know. If a levy of \$1 per tonne of carbon pollution was applied to fossil fuel production, Australia would raise around \$1.5 billion per year towards helping cover the cost of climate disasters.

FIGURE 4.2

A Levy on Fossil Fuel Exports to Help Pay for Climate Disasters



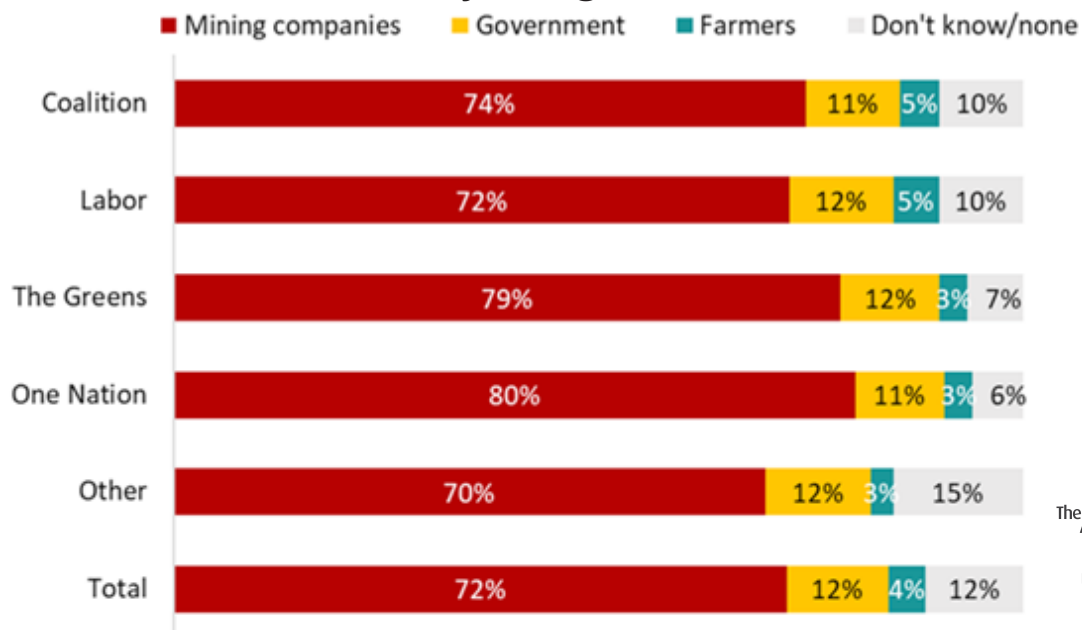
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³⁸ Ogge (2019) *The National Climate Disaster Fund*. <https://www.tai.org.au/content/national-climate-disaster-fund-ncdf>

Mining companies should be liable for contamination from fracking

In 2020, one of Australia's largest insurance companies announced it would no longer cover farmers for public liability if they had CSG infrastructure on their property, exposing farmers to liability risks.³⁹ Asked for the first time, 72% of Australians believe mining companies should be liable for any land or water contamination from fracking. One in ten (12%) believe government should be liable, 4% believe farmers should be liable, and 12% do not know.

Who Should be Liable for Contamination From Fracking? (by voting intention)



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FIGURE 4.3

³⁹ Roberts (2020) *Australian farmers' insurance coverage to be pulled if CSG infrastructure is on properties*. <https://www.abc.net.au/news/2020-06-10/coal-seam-gas-farmers-queensland-insurance-pull-out-lag/12337156>

Long-Term Action



Australia's lack of climate action has provoked criticism on the international stage. In 2019, the Prime Minister failed to attend the United Nations Climate Action Summit in New York, and the Australian Government was seen as a regressive force in international climate negotiations at the 25th Conference of the Parties (COP25).⁴⁰ Australia's climate policy is poor by international standards, ranking amongst the worst-performing countries on climate change policy in the international Climate Change Performance Index.⁴¹

Australian states and territories are stepping up in the absence of federal leadership on climate action. Climate of the Nation 2020 shows widespread support for state and territory action on climate change and for states to play a leading role in taking action. Every Australian state and territory has adopted a net zero emission by 2050 target, and many have ambitious renewable energy targets. Both the bushfire crisis and the Covid-19 crisis saw strong state-level leadership and successful crisis response, instilling a renewed sense of trust in Australian governments.

In 2017, the Australian Government committed to developing a long-term climate strategy by 2020.⁴² As the Government prepares to spend more on recovery, it should do so with climate in mind and provide a framework for Australia's climate action.

International action

Climate of the Nation 2020 shows increased support for Australian leadership on climate change. Seven out of ten Australians (71%) agree Australia should be a world leader in finding solutions to climate change, up from 62% in 2019. Over three-quarters (77%) agree that tackling climate change creates opportunities in clean energy (for example, solar, wind, geothermal) for new jobs and investment, up from 71% in 2019. It is unpopular to wait for climate action. Just under two-thirds (62%) disagree that Australia should not act on climate change until other major emitters like the United States and China do so, up from 54% in 2019. And just under two-thirds (62%) disagree that Australia should wait for other countries before strengthening emission reductions targets, up from 54% in 2019.

We [Australia] don't seem to want to be a world leader when it comes to climate change.

Brisbane focus group participant, female undecided voters

⁴⁰ Merzian (2019) *One of the world's biggest emitters is trying to fly under the radar at Cop25*, <https://www.climatechangenews.com/2019/12/06/one-worlds-biggest-emitters-trying-fly-radar-cop25/>

⁴¹ Burck et al. (2020) *Climate Change Performance Index*. https://newclimate.org/wp-content/uploads/2019/12/CCPI-2020-Results_Web_Version.pdf

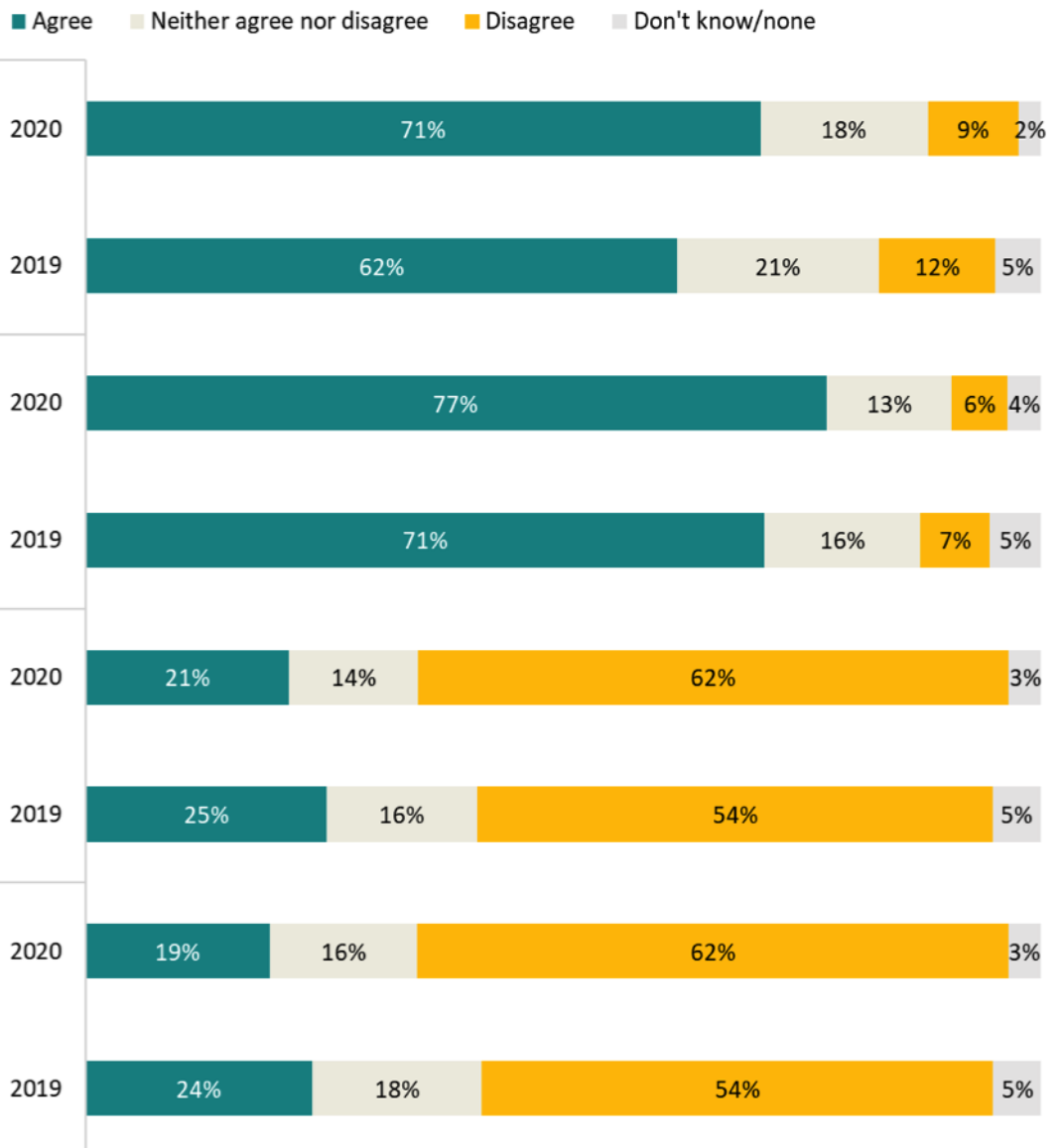
⁴² Australian Government Department of Environment and Energy (2017) *Review of Climate Change Policies*. <https://www.environment.gov.au/system/files/resources/18690271-59ac-43c8-ae1-92d930141f54/files/2017-review-of-climate-change-policies.pdf>



FIGURE 4.4

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Climate Action



Support for net zero target

Globally, economies are planning the shift towards net zero emissions. Seventy-three countries, including the United Kingdom and New Zealand, have committed to net zero emissions targets.⁴³ Every Australian state and territory government, and an increasing number of Australian businesses and groups, have pledged net zero targets, including Australia's largest energy provider AGL, industry super fund HESTA, and the National Farmers' Federation. All that is missing is a similar target from the Australian Government.

Climate of the Nation results show this call is popular with Australians. Over two-thirds of Australians (68%) support a national target for net zero emissions by 2050. There is majority support for a net zero target across Coalition, Labor, Greens, and Other voting intentions. One Nation voters are split, with 42% supporting and 42% opposing a national net zero emissions target.



Should Australia have a National Target for Net Zero Emissions by 2050?

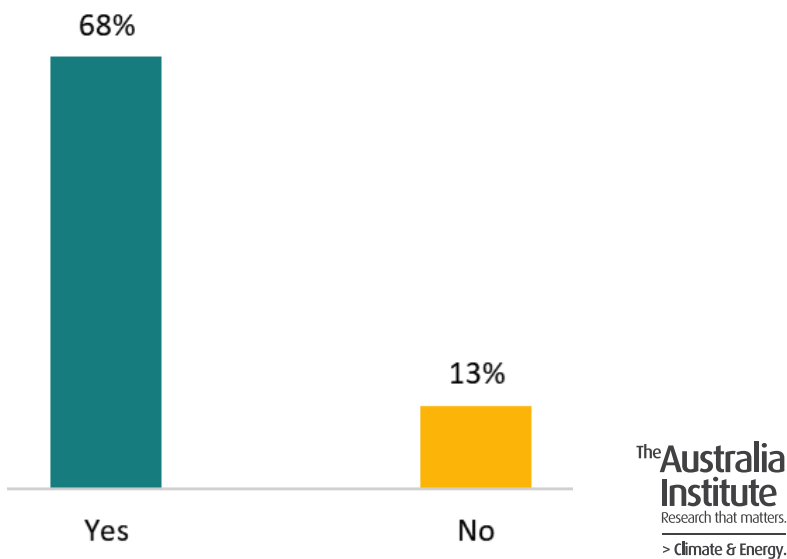


FIGURE 4.5

⁴³ IISD (2020) 73 Countries Commit to Net Zero CO2 Emissions by 2050. <https://sdg.iisd.org/news/73-countries-commit-to-net-zero-co2-emissions-by-2050/>

Support for state-level climate action

There is widespread support for state-level climate action. Three-quarters (76%) of Australians support state governments putting in place incentives for more renewable energy. Support is high amongst respondents from all states, ranging from 70% support in Queensland to 79% support in Victoria.

Seven in 10 (70%) Australians think state governments should be taking a leading role in action on climate change, and should do so regardless of what other actors are doing. Seven in 10 (69%) agree state governments should develop plans to phase out coal-fired power stations. More respondents agree than disagree across each age, state and voting intention bracket, for each of these statements.

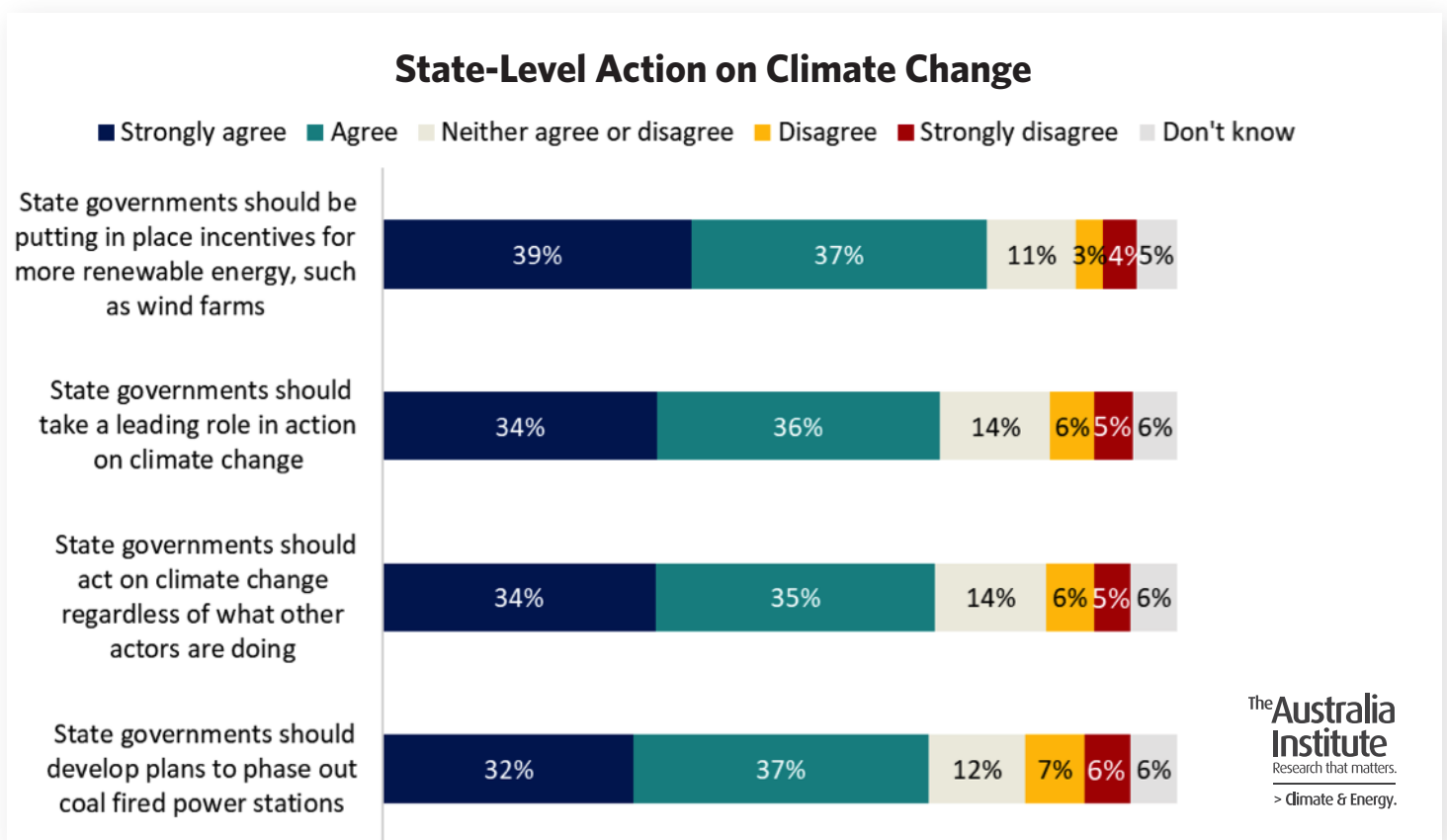


FIGURE 4.6

Demographics

Gender

Women are at the forefront of both climate action and climate impacts. Young women, including Greta Thunberg, Howey Ou and Isra Hirsi, have become powerful voices for the climate justice movement, building widespread youth engagement and momentum for climate action. At the same time, women are disproportionately impacted by climate change effects, including extreme weather events and food insecurity, particularly women of colour, women with disability and LGBTIQ+ people.

In Australia and around the world, women are underrepresented in leadership positions. Female voices often go unheard in decision making processes. In Australia, women account for two out of nine state, territory and federal heads of government, and two out of nine energy ministers.

To sound out these voices, the Climate of the Nation 2020 conducted focus groups with female undecided voters in marginal electorates in Western Sydney and outer Brisbane. The focus group discussions centred on bushfires, extreme heat, coal and gas.

The focus group study added to the Climate of the Nation 2020 quantitative results and the large body of research showing gender differences in the public understanding of and attitudes to climate change. Females are more likely to be concerned about climate change compared to males (77% compared to 70%), and more likely to agree that we are already experiencing the impacts of climate change in Australia (83% of females agree compared to 77% of males).

Respondents were generally concerned about climate change and environmental issues, but felt overwhelmed by conflicting information and messaging about climate change.

I often hear conflicting things or information from different places, and I get confused myself with what's going on, or the risks, or whether or not it's real.

Western Sydney focus group participant, female undecided voter

The Black Summer bushfires were an emotive topic for most participants, eliciting discussion around the devastation, loss of life and property. Participants across all groups (both Western Sydney and Brisbane) expressed similar sentiments towards the bushfires, demonstrating the national significance of the Black Summer bushfire crisis.

Most participants felt that summers had gotten hotter, and appeared to link their experience of hotter summers with climate change. Australia Institute analysis of BoM data shows summers have gotten longer compared to average temperatures experienced in the 1950s and 1960s.⁴⁴ However, participants were divided over the extent to which climate change had impacted the Black Summer bushfires. While some firmly believed climate change had played a key role, others were more hesitant. Many believed climate change played somewhat of a role, but felt they did not know enough about climate change to take a firmer view.

I'm 50/50. I'm on the fence more because last summer was really hot, but we're constantly having bushfire seasons and sometimes I wonder if we're prepared enough... Climate change has been around forever. It's not something that's just come around. So I don't know if the severity was affected by climate change or because it happens regularly every year.

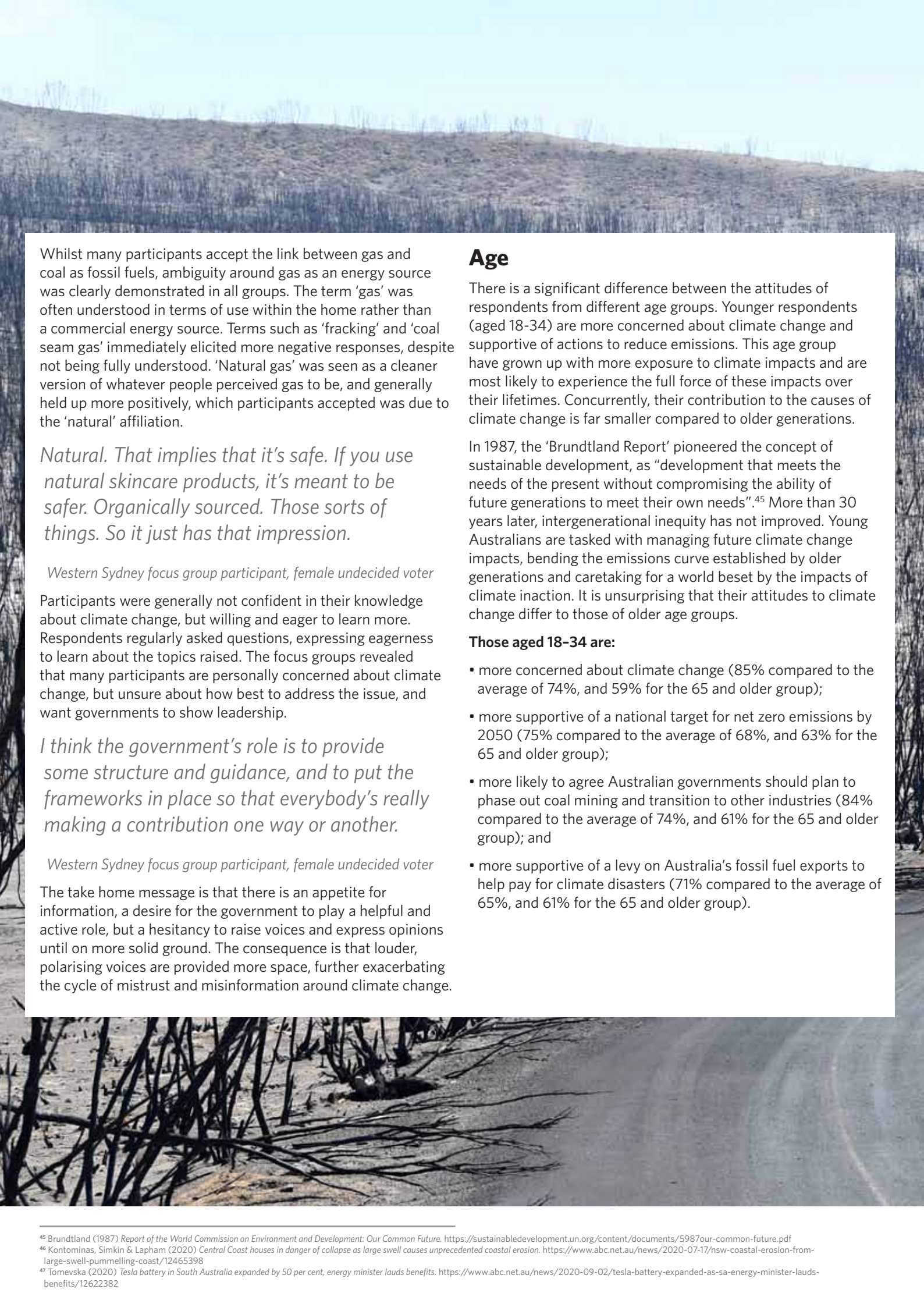
Brisbane focus group participant, female undecided voter

I think it contributed. Because of the droughts that we've had and as a result of that the fuel that has been raised in those areas ... I believe climate change is a contributing factor.

Brisbane focus group participant, female undecided voter

Participants were asked about both coal and gas. Unprompted, participants associated coal with pollution ('dirty', 'unclean', etc.), controversy and the climate change debate, and noted its 'finite' nature. Many participants also associated coal industry with jobs and the economy, and felt conflicted between the desire to phase out coal mining and a perceived risk to the economy from doing so. Most participants recognised that a transition away from coal mining and coal-fired power generation was necessary, and expressed a preference for government to plan that transition.

⁴⁴ Swann & Ogge (2020) *Out of Season: Expanding summers and shrinking winters in subtropical and temperate Australia*. <https://www.tai.org.au/content/australian-summer-now-over-one-month-longer>



Whilst many participants accept the link between gas and coal as fossil fuels, ambiguity around gas as an energy source was clearly demonstrated in all groups. The term 'gas' was often understood in terms of use within the home rather than a commercial energy source. Terms such as 'fracking' and 'coal seam gas' immediately elicited more negative responses, despite not being fully understood. 'Natural gas' was seen as a cleaner version of whatever people perceived gas to be, and generally held up more positively, which participants accepted was due to the 'natural' affiliation.

Natural. That implies that it's safe. If you use natural skincare products, it's meant to be safer. Organically sourced. Those sorts of things. So it just has that impression.

Western Sydney focus group participant, female undecided voter

Participants were generally not confident in their knowledge about climate change, but willing and eager to learn more. Respondents regularly asked questions, expressing eagerness to learn about the topics raised. The focus groups revealed that many participants are personally concerned about climate change, but unsure about how best to address the issue, and want governments to show leadership.

I think the government's role is to provide some structure and guidance, and to put the frameworks in place so that everybody's really making a contribution one way or another.

Western Sydney focus group participant, female undecided voter

The take home message is that there is an appetite for information, a desire for the government to play a helpful and active role, but a hesitancy to raise voices and express opinions until on more solid ground. The consequence is that louder, polarising voices are provided more space, further exacerbating the cycle of mistrust and misinformation around climate change.

Age

There is a significant difference between the attitudes of respondents from different age groups. Younger respondents (aged 18-34) are more concerned about climate change and supportive of actions to reduce emissions. This age group have grown up with more exposure to climate impacts and are most likely to experience the full force of these impacts over their lifetimes. Concurrently, their contribution to the causes of climate change is far smaller compared to older generations.

In 1987, the 'Brundtland Report' pioneered the concept of sustainable development, as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".⁴⁵ More than 30 years later, intergenerational inequity has not improved. Young Australians are tasked with managing future climate change impacts, bending the emissions curve established by older generations and caretaking for a world beset by the impacts of climate inaction. It is unsurprising that their attitudes to climate change differ to those of older age groups.

Those aged 18-34 are:

- more concerned about climate change (85% compared to the average of 74%, and 59% for the 65 and older group);
- more supportive of a national target for net zero emissions by 2050 (75% compared to the average of 68%, and 63% for the 65 and older group);
- more likely to agree Australian governments should plan to phase out coal mining and transition to other industries (84% compared to the average of 74%, and 61% for the 65 and older group); and
- more supportive of a levy on Australia's fossil fuel exports to help pay for climate disasters (71% compared to the average of 65%, and 61% for the 65 and older group).

⁴⁵ Brundtland (1987) *Report of the World Commission on Environment and Development: Our Common Future*. <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>

⁴⁶ Kontominas, Simkin & Lapham (2020) *Central Coast houses in danger of collapse as large swell causes unprecedented coastal erosion*. <https://www.abc.net.au/news/2020-07-17/nsw-coastal-erosion-from-large-swell-pummelling-coast/12465398>

⁴⁷ Tomevska (2020) *Tesla battery in South Australia expanded by 50 per cent, energy minister lauds benefits*. <https://www.abc.net.au/news/2020-09-02/tesla-battery-expanded-as-sa-energy-minister-lauds-benefits/12622382>

State differences

There are differences between the attitudes of respondents from different states. Victorians tend to be more concerned about climate change and slightly more supportive of actions to reduce emissions. State differences often reflect circumstances, such as the high concern about sea level rise in New South Wales, which recently experienced the impacts of coastal erosion,⁴⁶ and the support for batteries in South Australia, home to one of the world's largest energy storage batteries.⁴⁷

However, actions to reduce emissions and address climate change are generally popular amongst respondents from all states.

Respondents from NSW are:

- more concerned that climate change is causing rising sea levels threatening our coastal communities (77% compared to the average of 73%); and
- far more likely to think Australian governments 'are not doing enough' to prepare for and adapt to the impacts of global warming than think they are 'doing enough' (53% not doing enough, 19% doing enough).

Respondents from Victoria are:

- more likely to agree that Australia should implement policies to protect the environment from harmful impacts of climate change (81% compared to the average of 76%); and
- more likely to think Australian governments should plan to phase out coal mining and transition into other industries (79% compared to the average of 74%).

Respondents from Queensland are:

- more likely to think 'mining companies' should be liable for any land or water contamination from fracking (80% compared to the average of 72%); and
- far more likely to select 'solar' as their number one preferred energy source than 'coal' (54% solar, 10% coal).

Respondents from Western Australia are:

- more likely to agree the Australian Government should stop new coal mines (72% compared to the average of 65%); and
- far more likely to answer 'fossil fuel producers' than 'taxpayers' when asked who should primarily pay the costs of preparing for, adapting to, and responding to global warming impacts (55% fossil fuel companies, 12% taxpayers).

Respondents from South Australia are:

- more likely to rank power storage batteries in their top three preferred energy sources (44% compared to the average of 29%); and
- more likely to blame increasing electricity prices on Federal Government policy uncertainty or poor policy making (49% compared to the average of 39%).

Conclusion

There is a growing expectation amongst Australians for the Australian Government to show leadership on climate action. Seven in 10 Australians agree that Australia should be a world leader in finding solutions to climate change.

Despite the Covid-19 crisis, Australians remain concerned about climate change. Rather than being eclipsed by significant economic shock and the public health crisis, concern about climate change remains high and Australians are increasingly supportive of actions to reduce emissions. The vast majority of Australians agree that Australia should have a national target for net zero emissions by 2050, in line with all Australian states and territories and seventy-three other countries.

During the Black Summer bushfires, Australians saw firsthand the devastation caused by the impacts of climate change. To help pay some of the cost of increasing climate disasters, The Australia Institute has proposed a National Climate Disaster Fund. Funded by a levy on all coal, gas and oil produced in Australia, it will assist local government actions to prepare for, and protect from, the consequences of climate change. Almost two-thirds of Australians support this proposal.

Climate of the Nation 2020 shows the Australian Energy Minister's call for a 'gas-fired recovery' from the Covid-19 pandemic is unpopular amongst Australians. The majority of Australians prefer for Australia's economic recovery to be primarily powered by investment in renewables, compared to the small minority who would prefer if it were powered by investment in gas. Despite the current hype surrounding gas, popularity for gas as an energy source remains at a similarly low level to 2019.

The Covid-19 crisis is an opportunity to rebuild the Australian economy in line with long-term emission reduction goals, driving employment opportunities and climate solutions. Climate of the Nation 2020 reveals that Australians want the Australian Government to show leadership on climate action, plan the decarbonisation of the Australian electricity sector, phase out of coal mining, and invest in a renewables-led recovery. Australia can address the immediate crisis of Covid-19 and the overarching crisis of climate at the same time. It can and it should.



