

Climate of the Nation 2021

1 Jui

Tracking Australia's attitudes towards climate change and energy

Research report Audrey Quicke

E

> Climate & Energy.

About The Australia Institute

The Australia Institute is an independent public policy think tank based in Canberra. We conduct original research that contributes to a more just, sustainable and peaceful society. We barrack for ideas, not political parties or candidates. Since its launch in 1994, the Institute has carried out highly influential research on a broad range of economic, social and environmental issues.

Our Philosophy

New dilemmas confront our society and our planet. Unprecedented levels of consumption co-exist with extreme poverty. Through new technology we are more connected than we have ever been, yet civic engagement is declining. Environmental neglect continues despite heightened ecological awareness. A better balance is urgently needed. The Australia Institute's directors, staff and supporters represent a broad range of views and priorities. What unites us is a belief that through a combination of research and creativity we can promote new solutions and ways of thinking.

Our Purpose

The Australia 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.

Level 1, Endeavour House 1 Franklin Street Canberra, ACT 2601 Tel: 02 6130 0530 Email: mail@australiainstitute.org.au Website: australiainstitute.org.au ISSN: 1836-9014 The Institute is wholly independent and not affiliated with any other organisation. Donations to its Research Fund are tax deductible for the donor. Anyone wishing to donate can do so via the website at australiainstitute.org.au or by calling The Australia Institute on 02 6130 0530. Our secure and user-friendly website allows donors to make either one-off or regular monthly donations and we encourage everyone who can to donate in this way as it assists our research in the most significant manner.

Key Findings

82%

of Australians are concerned climate change will result in more bushfires, more droughts and flooding, and animal and plant species extinction

82%

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



of Australians rank solar in their top three preferred energy sources, compared to 15% for coal and 19% for gas

75%

of Australians are concerned about climate change

74%

of Australians support state governments putting in place incentives for more renewable energy

71%

of Australians support government subsidies to reduce the cost of purchasing an electric vehicle

70%

of Australians would consider switching to electric hot water systems

69%

think Australia should set targets and implement domestic action to limit global warming to 1.5-2°C and achieve net zero emissions

67%

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

66%

of Australians think the Australian Government should stop new coal mines

64%

of Australians support requiring all new car sales in Australia to be zero emissions vehicles by 2035

61%

of Australians support a levy on fossil fuel exports to help pay for climate disasters

60%

of Australians support Australia following the IEA pathway and not approving new gas, coal or oil projects

55x

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

23%

of Australians support the current level of fossil fuel industry subsidisation, compared to 57% that oppose it

12%

of Australians prefer Australia's economic recovery to be primarily powered by gas, while 63% prefer renewables investment

Climate of the Nation 2021

Tracking Australia's attitudes towards climate change and energy

Contents

I	Key Findings

- **3** Foreword
- **4** Executive Summary
- 6 Attitudes Towards Climate Change
- 11 Electricity Transition
- 15 Electrify Everything
- 20 Mining
- 25 Fossil Fuel Subsidies
- 29 Cost of Climate Inaction
- 32 Climate Action
- 37 Demographic Snapshot
- 40 Conclusion
- 41 Approach

Acknowledgements

Climate of the Nation is the longest continuous survey of community attitudes to climate change in the country. The Australia Institute acknowledges the dedicated work of the Climate Institute, which produced the report from 2007-2017.

The Australia Institute is delighted to carry forward this benchmark report for the fourth year and wishes to thank the following people and foundations for their support:

- Judith Healy in memory of Tony McMichael
- Mark Wootton
- Eve Kantor
- ACME Foundation
- The Graeme Wood Foundation

The Australia Institute also thanks the Australian Museum for their partnership on the Climate of the Nation 2021 report.

- PMF Foundation
- McKinnon Family Foundation
- Pace Foundation
- Australia Institute monthly donors

Foreword

2021 has been labelled "the make it or break it year" for climate change action by the United Nations Secretary General.¹ To "make it" requires more ambition from all countries in the lead up to November 2021, when the United Nations Climate Change Conference (COP26) will be held in Glasgow. COP26 will take stock of efforts since the landmark Paris Agreement in 2015, with an eye to ratcheting up short-term action on climate change.

To inform COP26, the international body for assessing climate science – the IPCC – released its most comprehensive and authoritative review of the physical science of climate change. It painted a sobering picture; without deep emissions cuts, the world is heading towards climate change catastrophe.

To many of those on the frontline of the climate crisis, this message was not a surprise. Australia is still recovering from the devastating Black Summer bushfires and the disastrous floods that followed twelve months later. To those that lost family and homes, the sheer urgency and reality of the climate crisis is palpable.

This sense of urgency cuts clearly through in Climate of the Nation 2021. Despite the significant disruption caused by the COVID-19 crisis, Australians are deeply concerned about climate change – more so than ever before. Concern about climate change is at an all-time high, and the intensity of that concern has increased.

Australia is not the only country to be already living the reality of the climate crisis. In the midst of increasingly frequent and severe weather events around the world, and in defiance of the global pandemic, other developed countries like the United States, Japan, Canada, Germany, France, and the United Kingdom are significantly stepping up their climate efforts. The European Union is taking the unprecedented step of penalising high emissions imports. Norway is on track to become the first country to only sell electric passenger vehicles in the next few years, and the United Kingdom has significantly increased its 2030 emissions reduction target. Commitments and actions in 2021 determine the level of climate action and ambition over the coming decade – called by some "the decisive decade". Every tonne of greenhouse gas emissions counts and every effort should be made to curb emissions and keep fossil fuels in the ground.

It is therefore unfortunate that current policy settings and ambition in Australia remain stagnant and largely out of touch with the prevailing public opinion on climate action. As Climate of the Nation 2021 shows, the majority of Australians think our leaders should be doing more to plan the orderly closure of coal power stations, increase electric vehicle uptake, and prepare for and adapt to the impacts of climate change. At the same time, the public shows little support for several Federal Government policies, including a gas-fired recovery and current levels of fossil fuel industry subsidisation.

Climate of the Nation 2021 reveals the extent of the hunger Australians have for leadership on climate change. Two-thirds agree that Australia should be a world leader in finding solutions to climate change. More than two-thirds want Australia to commit to net zero emissions and set targets to limit global warming to 1.5-2°C. At the very least, that requires halving Australia's emissions this decade (approximately doubling the current 2030 emissions reduction target) and not approving new gas, coal, or oil projects. While Australians support changes at a policy level, they are also willing to make changes themselves; to electrify their homes and their vehicles and power them using sun, wind, water and batteries.

Australian diplomacy in 2021 has thus far been disappointing. Our leaders have stubbornly resisted increasingly urgent calls by the United Nations and our key allies to increase Australia's climate ambition and decrease our reliance on fossil fuels.

However, the year is not over. There is still time to realise the great opportunities that lie in a genuine transition to a low carbon economy. 2021 can still be the year that Australia "makes it".

Richie Merzian Climate & Energy Program Director, The Australia Institute

¹ World Meteorological Organization (2021) 2021 is "make or break year" for Climate Action, https://public.wmo.int/en/media/news/2021-%E2%80%9Cmake-or-break-year%E2%80%9Dclimate-action

Executive Summary

The Australia Institute's annual Climate of the Nation report provides a comprehensive account of changing Australian beliefs and attitudes towards climate change, and its causes, impacts and solutions.

Climate of the Nation 2021 shows that concern about climate change is at record high levels, many Australians are experiencing the impacts of climate change right now, and there is broad support for a range of decarbonisation policies.

Concern about climate change at record high levels

Three-quarters (75%) of Australians are concerned about climate change, the highest level of concern since Climate of the Nation began tracking. The intensity of concern has also increased, reaching record high levels of those who are 'very' concerned about climate change (40%).

A consistent majority of Australians think we are already experiencing the impacts of climate change. The top three climate impacts concerning Australians are more bushfires (82%), more droughts and floods affecting food production and supplies (82%), and the extinction of animal and plant species (82%).

Broad support for electric vehicle policies

For the first time, Climate of the Nation explored Australians' attitudes to electric vehicles (EVs) and EV policies. Over twothirds (68%) of Australians think the Federal Government should be doing more to increase EV uptake in Australia. When asked about specific EV policies, Australians strongly support each of the nine electric vehicle policies polled.

There is broad support across political affiliation, gender, age, and state for policies that would drive the uptake of EVs in Australia, including government subsidies (71%) and fuel efficiency standards to reduce CO2 tailpipe emissions (65%).

Willingness to electrify homes and vehicles

The majority of Australians would consider electrifying their households and vehicles. Over two-thirds (70%) would consider switching to electric hot water systems, electric home heating (69%), and electric stoves and ovens (68%). Over two-thirds (69%) would also consider buying an EV, however a large portion of them would require financial incentives to consider doing so (42%).

Results suggest that widespread electrification of Australian household appliances and vehicles has public support, that financial incentives would help drive this shift, and that financial incentives are a particularly important factor affecting EV purchases.

Coal and gas power remain unpopular

Coal and gas are amongst the least popular energy sources. Just 6% of Australians rank coal as their number one preferred energy source and 5% rank gas as their number one (compared to 52% who rank solar as their number one energy source).

Despite the lack of public support for gas as a primary source of energy in Australia, the Federal Government plans to build a new gas power station. Only one-fifth of Australians (20%) would prefer the Federal Government to prioritise infrastructure spending on new gas power stations. Additionally, the government has no plans to ensure the orderly closure of old coal plants and their replacement with clean energy, despite three-quarters (74%) of Australians supporting this.



Lack of public knowledge of and support for fossil fuel subsidies

For the first time, Climate of the Nation 2021 explored Australian understanding and awareness of fossil fuel subsidies, finding that many Australians are unaware of the existence and extent of fossil fuel subsidies in Australia. Just 37% of Australians correctly answer that state, territory and federal governments provide subsidies to coal, oil and gas companies.

When informed about the amount that Australian governments subsidise fossil fuel industries (\$10.3 billion in the 2020-21 budget year), more than twice as many Australians oppose that amount than support it (57% oppose, 23% support). Australians prefer government spending on building renewable energy projects (63%), building large batteries (for renewable energy storage) (51%), and building and upgrading transmission lines to renewable energy zones (50%).

Additionally, the proposal of a 'gas-fired recovery' remains deeply unpopular. Only one-tenth (12%) of Australians prefer Australia's economic recovery to be primarily powered by investment in gas, compared to the majority of Australians (63%) who prefer it powered by investment in renewables.

Fossil fuel companies should help pay for climate impacts

For the first time, more than half of respondents (51%) think the primary costs of preparing for, adapting to and responding to climate change should fall on fossil fuel producers. This is compared to 13% that think the burden should fall on taxpayers, and 9% allocating the cost to groups impacted by climate change.

Three-fifths (61%) of Australians support an actual levy placed on fossil fuel exports to pay for some of the impacts of climate change.

Economic role of coal and gas substantially overestimated

There continues to be a large gap between reality and public perceptions of the gas and coal industries, both in terms of employment and economic value.

Australians overestimate the size of gas and oil industry employment by a factor of 46, believing it employs 9.2% of the total workforce. In reality, oil and gas employment makes up less than 0.2% of the workforce. Australians also overestimate the economic value of the gas industry, believing it accounts for 11.3% of GDP, while the actual figure is around 3.2%. On average, Australians believe the coal mining industry makes up 9.8% of the total workforce, when in reality it makes up just 0.4% of the workforce. The share of GDP attributable to coal mining is also significantly overestimated by Australians. Australians believe coal mining makes up 12.6% of GDP, when in reality it accounts for just 2.5%.

Support for following IEA pathway

In 2021, the International Energy Agency (IEA) released a comprehensive study of how to transition to a global net zero energy system by 2050. The IEA global pathway to net zero sees no new fossil fuel projects approved in order to avoid 'the worst effects of climate change' and retain a chance of limiting global temperature rise to 1.5°C.

Three-fifths of Australians (60%) support Australia following the IEA pathway, and not approving new gas, coal, or oil projects, with one-fifth (20%) opposed. The majority of Australians (54%) support a moratorium that would stop Australia building new coal mines or expanding existing ones, more than twice the number of respondents who oppose a moratorium (21%). Almost three-quarters of Australians (73%) think Australian governments should plan to phase out coal mining and transition to other industries, while two-thirds (68%) think Australia should completely end coal-fired power generation within the next 20 years.

Support for policies to limit warming to 1.5-2°C

There is strong support for Australia to be a world leader in finding solutions to climate change and to implement policies and targets to limit global warming and achieve net zero emissions.

Two-thirds of Australians (67%) agree Australia should be a world leader in finding solutions to climate change, and more than two-thirds (69%) think Australia should set targets and implement domestic action to limit global warming to 1.5-2°C and achieve net zero emissions. Over half (53%) of respondents want Australia to set a more ambitious 2030 emissions reduction target.

Additionally, the majority of Australians (58%) disagree that Australia should not act on climate until other major emitters like the US and China do so, with less than one-quarter (23%) agreeing – showing that this excuse to delay domestic climate action is not accepted by most Australians.

Attitudes Towards Climate Change

Climate impacts are already being felt in Australia, from increased extreme heat days, to longer bushfire seasons and more intense rainfall events. Ongoing changes to Australia's climate are projected to continue and increase, bringing further social, environmental, and economic impacts. As highlighted by the IPCC report, the human influence driving these widespread and rapid changes is unequivocal.²

In 2020, the global average temperature was 1.2°C above preindustrial levels,³ and Australia's climate had warmed on average 1.44°C above pre-industrial levels.⁴ While parts of Australia are still recovering from the Black Summer bushfires of 2019-20, extreme weather events are devastating other parts of the world. Wildfires are blazing across southern Greece,⁵ and Hurricane Ida is wreaking havoc across the southern and eastern United States.⁶ These events have raised concern about climate change and its increasingly frequent and severe consequences.

Climate of the Nation 2021 shows that concern about climate change is at record high levels. There is an increased awareness of the causes and impacts amongst Australians, and increased consensus that climate change consequences will affect the way we live. A growing cohort of Australians believe we are feeling the impacts of climate change right now.

Climate change is occurring

More Australians than ever before believe climate change is occurring.

Four-fifths (81%) of Australians think climate change is occurring, up two percentage points from 79% in 2020. In turn, the percentage of those who think climate change is not occurring has remained the same at 9%.

Younger Australians are more likely than older Australians to think climate change is occurring (87% of those aged 25-34, compared to 76% of those aged 50-64). Belief in climate change has increased since 2020 in Western Australia (up 5 percentage points to 84%), Victoria (up 3 percentage points to 85%) and Queensland (up 5 percentage points to 77%), and amongst Coalition supporters (up 4 percentage points to 73%).

Three-quarters (74%) of those who think climate change is occurring accept that humans are the main cause.

FIGURE 1.1



² IPCC (2021) Climate Change 2021: The Physical Science Basis | Summary for Policymakers | Working Group I contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate

Change, https://www.ipcc.ch/report/ar6/wg1/#SPM

³ World Meteorological Organization (2021) State of the Global Climate 2020, https://public.wmo.int/en/our-mandate/climate/wmo-statement-state-of-global-climate

⁴ CSIRO & Bureau of Meteorology (2020) State of The Climate 2020, http://www.bom.gov.au/state-of-the-climate/

⁵ ABC (2021) Greek PM says devastating wildfires are 'reality of climate change', https://www.abc.net.au/news/2021-08-06/greece-wildfires-blamed-on-climate-change-by-prime-minister/100354910

⁶ Jang (2021) New York floods raise further climate questions, https://www.canberratimes.com.au/story/7416538/new-york-floods-raise-further-climate-questions/

FIGURE 1.2







Australians are experiencing the impacts of climate change now

Australians are increasingly feeling the impacts of climate change. A consistent majority of Australians think we are already experiencing the impacts of climate change (81%, similar to the 80% in 2020). This includes an increasing number who are experience the impacts of climate change 'a lot' (47%, up 14 percentage points from 33% in 2016).

When asked about specific impacts of climate change, fourfifths of Australians believe that climate change is already causing or is likely to cause the melting of polar ice caps (80%), more heatwaves and extremely hot days (79%), and more extreme weather like floods and cyclones (78%). The percentage of Australians who believe climate change is already causing specific impacts has risen since 2018 for every impact.

Climate change should not be ignored

Most Australians believe that climate change should not be ignored, and that doing so could cause higher living costs and adverse economic impacts. Three-quarters (74%) of Australians agree that ignoring climate change is simply not an answer as it increases the risk of the situation getting worse, with 9% disagreeing. Just under three-quarters (72%) agree that further extreme weather as a result of climate change will cause the cost of living to rise in Australia, such as increased food prices and higher home insurance premiums, with 8% disagreeing. Over two-thirds (70%) agree that further extreme weather because of climate change will cause adverse economic impacts for Australia, with 9% disagreeing.

Australians are divided about whether there are too many conflicting opinions about climate change, but are more likely to disagree than agree that the seriousness of climate change is exaggerated. Over half (53%) disagree that 'the seriousness of climate change is exaggerated', almost double the number (28%) of those who agree. Sentiments towards this statement vary slightly by state, with more respondents disagreeing with it in South Australia (56% disagree, 24% agree) and Tasmania (56% disagree, 25% agree), compared to Queensland (49% disagree, 32% agree). The statement that 'there are too many conflicting opinions for the public to be sure about claims made around climate change' produced more divisive results amongst Australians, with 48% who agree and 28% who disagree.



Australians are more concerned about climate change than ever before

Three-quarters (75%) of Australians say that they are concerned about climate change, the highest level of concern since Climate of the Nation began tracking this question. At the same time, the proportion of respondents who are 'very concerned' about climate change has increased to 40%, up six percentage points from 34% in 2020, and up 16 percentage points from 24% in 2017.

2021 has already delivered extreme weather and environmental events that can be attributed, in part, to climate change. Tasmania experienced its second warmest winter on record,⁷ the UNESCO World Heritage Committee proposed listing the Great Barrier Reef as 'in danger',⁸ and many areas are still recovering from the devastating Black Summer Bushfires of 2019-20. When asked about specific potential impacts of climate change, the top three concerns amongst Australians are more bushfires (82%), more droughts and floods affecting food production and supplies (82%), and the extinction of animal and plant species (82%). Concern has increased from 2020 levels for most impacts, rising the most for energy shortages and blackouts (up 5 percentage points to 71%), more refugees and displaced peoples (up 3 percentage points to 70%), rising sea levels (up 3 percentage points to 78%).

Concern About Climate Change

The Australia Institute Research that matters. > Climate & Energy.

Very concerned = Fairly concerned = Not very concerned = Not at all concerned = Don't know/not sure



FIGURE 1.3

⁷ Bureau of Meteorology (2021) Tasmania in Winter 2021, http://www.bom.gov.au/climate/current/season/tas/summary.shtml

* ABC (2021) Government 'blindsided' by move to list Great Barrier Reef as 'in danger', https://www.abc.net.au/news/2021-06-22/environment-minister-great-barrier-reef-listed-in-danger/100233088

Very concerned	Fairly concerned	Not very concerned	Not at all concerned	■ Don't know/Not sure
More droughts and flooding affecting crop production an food supply	g d	48%	34%	10% <mark>4%</mark> 3%
More bushfire	25	56%	26%	10% 5% 4%
Animal and plant specie becoming extinct	25	50%	32%	10% 4% 4%
Destruction of the Great Barrie Reef	er	50%	30%	11% 5% 4%
More extreme weather even like floods and cyclones	ts	48%	30%	13% 5% 4%
More heatwaves and extreme hot days	ly	48%	30%	14% 5% 4%
Melting of the polar ice cap	os	47%	31%	12% 6% 5%
Water shortages in our cities an towns	d	45%	33%	14% 5% <mark>4</mark> %
Rising sea levels threatening ou coastal communities	ır	42%	33%	14% 6% 4%
Impacts on health, e.g. illnes related to: water scarcity of quality, heat, mosquito-born viruses	s e 3	8%	35%	16% 7% 5%
Energy shortages and blackout	ts 349	6	37%	19% 5%
More refugees and displace peoples	d 36	%	34%	15% 8% 7%

Concern that Climate Change Will Result in the Following Outcomes

Research that matters. > Climate & Energy.

Electricity Transition

The electricity generation sector remains the largest source of emissions in Australia. While coal has historically dominated Australia's energy mix, renewable energy technologies are key to decarbonising the electricity sector. In 2020/21, the share of electricity generation from renewables rose above 30% for the first time (on an annual basis),⁹ renewables continued to be the cheapest form of new electricity generation in Australia and battery costs fell the most of any generation or storage technology.¹⁰ However, despite growth in renewable generation, fossil fuels continue to dominate the local energy sector and Australia's non-fossil fuel share of electricity generation ranks poorly compared to other OECD countries.¹¹

The Federal Government currently has no plan to transition from coal-fired generation. In 2021, the announced early closure of Yallourn coal-fired power station in Victoria¹² and an explosion at the Callide coal-fired power station in central Queensland, renewed calls for a government plan to transition from ageing and unreliable coal-fired generators to renewable energy and battery storage.¹³ Instead, Energy Minister Angus Taylor has backed the proposed introduction of a Physical Retailer Reliability Obligation (PRRO) that could see coal and gas generators paid to keep operating, a proposal widely opposed by industry and consumer groups.¹⁴

Despite the Federal Government's reluctance to plan the orderly closure of old coal plants and their replacement with clean energy, the Australian Energy Market Operator (AEMO) is preparing the country's main grid to handle periods of 100% renewable energy, which is expected to occur by 2025.¹⁵

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

	2019	2020	2021
Solar	76%	79%	79 %
Wind	58%	62%	63%
Hydro	39%	39%	37%
Power Storage	29%	29%	31%
Tidal/Wave	21%	22%	20%
Nuclear	22%	21%	20%
Gas	20%	19%	19 %
Geothermal	17%	16%	16%
Coal	18%	14%	15%

Solar consistently most popular energy source

Solar is consistently Australians' most popular energy source. When asked to rank preferred sources of energy, over half of respondents (52%) rank solar as their number one energy source (54% ranked solar number one in 2020).

In terms of top three energy sources, over three-quarters of respondents (79%) place solar in their top three choices. Wind is the second most preferred energy source (63% rank wind in their top three energy sources), followed by hydro (37%) and power storage (31%). Solar power is the most favoured energy source across gender, age, state and political affiliation.

Amongst the states, Western Australia expresses the strongest preference for solar (85%) and wind (71%) when ranking their top three energy sources. South Australia also has strong preference for solar (83%) and wind (67%). Preference for hydro as a top three energy source is most pronounced in Tasmania (55% compared to the national average of 37%), reflecting the state's reliance on hydro for most of its power. Preference for power storage batteries as a top three energy source is most pronounced in South Australia (44% compared to the national average of 31%), perhaps reflecting the success of the Hornsdale Power Reserve, South Australia's Big Battery.

Australians' strong preference for renewable energy is also reflected in The People's Climate Vote - the largest international survey of public opinion regarding climate change. The People's Climate Vote found majority support for solar, wind and renewable energy in eight out of ten countries with the highest emissions from the electricity/heating sector, including Australia. Three-quarters of Australians (76%) said they wanted more solar, wind and renewable energy - a finding that aligns with the Climate of the Nation report.¹⁶

- ¹¹ Saddler (2021) Back of the pack: An assessment of Australia's energy transition, https://australiainstitute.org.au/post/new-analysis-australias-energy-transition-among-worst-in-oecd/ ¹² Whittaker (2021) Battery in, coal-fired power out as energy giant closes plant four years early, https://www.abc.net.au/news/2021-03-10/yallourn-power-station-early-closure/13233274 ¹³ Nothling (2021) Callide Power Station is probably offline for another week — and now Queensland is turning to battery power, https://www.abc.net.au/news/2021-05-27/qld-renewable-energy-
- coal-fired-callide-power-station/100166152

⁹ Saddler (2021) National Energy Emissions Audit Report: September 2021, https://australiainstitute.org.au/report/national-energy-emissions-audit-september-2021/

¹⁰ Australian Government (2021) Australian Energy Statistics, Table O Electricity generation by fuel type 2019-20 and 2020, https://www.energy.gov.au/publications/australian-energy-statistics-table-o-electricity-generation-fuel-type-2019-20-and-2020

¹⁴ The Australia Institute (2021) Open Letter: Leading Energy Innovators United Against Proposed Subsidies to Coal Generators, https://australiainstitute.org.au/post/open-letter-leading-energyinnovators-united-against-proposed-subsidies-to-coal-generators/

¹⁵ Parkinson (2021) New AEMO boss wants Australian grids ready to handle 100 pct renewables by 2025, https://reneweconomy.com.au/new-aemo-boss-wants-australias-grid-to-handle-100-pctrenewables-by-2025/

¹⁶ United Nations Development Programme (2021) The Peoples' Climate Vote, https://www.undp.org/publications/peoples-climate-vote

Gas and coal power generation unpopular

Australians' views on the nation's ideal energy mix show coal and gas are amongst the least popular energy sources. Just 6% rank coal as their number one energy source, and 5% rank gas as number one. In terms of top three preferences, 15% rank coal in their top three energy sources, and 19% rank gas in their top three.

Coal and gas are more likely than other energy sources to be ranked in respondents' bottom three energy sources. Over twothirds of respondents (70%) rank coal in their bottom three, and over half (52%) rank gas in their bottom three.

Despite the lack of public support for gas as a primary source of energy in Australia, the Federal Government plans to build a gas power station at Kurri Kurri NSW using \$610 million of taxpayer funds,¹⁷ as well as support two other NSW gas plants near Wollongong and Port Kembla.¹⁸

Support for orderly closure of coal plants

The Federal Government has no plan to manage the electricity system transition and the retirement of ageing coal generators. Climate of the Nation 2021 shows a consistent majority of Australians support a government plan to transition the electricity sector. Three-quarters (74%) of Australians think governments need to implement a plan to ensure the orderly closure of old coal plants and their replacement with clean energy, similar to the 75% in 2020 (Just 9% disagree, similar to the 8% in 2020).

Governments Need to Implement a Plan to Ensure the Orderly Closure of Old Coal Plants and Their Replacement with Clean Energy



m Macdonald-Smith (2021) Snowy expects 2pc usage of \$610m Hunter gas plant, https://www.afr.com/companies/energy/snowy-expects-2pc-usage-of-610m-hunter-gas-plant-20210513-p57rhb

¹⁸ Humphries (2021) Millions in federal budget for Port Kembla hydrogen-fuelled power plant, https://www.illawarramercury.com.au/story/7251059/millions-in-federal-budget-for-port-kembla-hydrogen-fuelled-power-plant/

FIGURE 2.2



Respondents are more likely to disagree than agree with the proposition that market and energy companies should be the ones to decide when old coal plants are closed (41% disagree, 27% agree). Results are similar across states (ranging from 39%-45% that disagree). However, disagreement differs between political affiliation (31% Coalition voters disagree, 48% of Labor voters disagree, 61% Greens voters disagree, 31% of One Nation voters disagree, and 50% of Other voters disagree).

The majority of Australians (52%) think Australia's ageing coal-fired power stations are increasingly unreliable. Results are similar across states, with a majority agreeing in every state. Somewhat surprisingly, the biggest difference in opinion between age groups is between the two youngest groups — 44% of those aged 18–24 agree, compared to 58% of those aged 25–34.

While the Federal Government proposes to extend the life of old coal-fired power stations, the vast majority of Australians think they should be phased out. More than four-fifths (82%) of respondents would prefer Australia's coal-fired power stations to be phased out, including 34% who believe they should be phased out as soon as possible and 49% who believe they should be phased out gradually. In every state, the vast majority of respondents think they should be phased out (ranging from 79% in Queensland to 86% in Western Australia and South Australia). Additionally, a majority of respondents across each political affiliation believe coal power stations should be phased out.

Respondents increasingly agree that the phase out of coal power stations should occur as soon as possible, even if it costs more in the short term. The proportion of respondents who think they should be phased out as soon as possible has risen steadily each year to 34%, up from 21% in 2018.

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	40%		
In the next 10-20 years	28%		
In the next 20-30 years	12%		
In the next 30-50 years	6%		
Coal-fired power should never be completely phased out	15%		

Privatisation and company profit margins blamed for electricity price rises

Household electricity prices have risen over the last decade, reaching record highs in 2019.¹⁹ Prices are expected to fall before increasing again in 2022-23.²⁰ Most Australians blame increasing electricity prices on either the privatisation of electricity generation infrastructure (51%, down from 53% in 2020) or the excessive profit margins of electricity companies (50%, down from 55% in 2020). Slightly under two-fifths (38%) blame federal government policy uncertainty or poor policy making, and over a third (35%) recognise that excessive gas exports contribute to high domestic gas prices.

FIGURE 2.3



Blame for Electricity Price Rises



¹⁹ Australian Energy Regulator (2021) State of the energy market 2021, https://www.aer.gov.au/system/files/State%20of%20the%20energy%20market%202021%20-%20Market%20overview.pdf p. 8
²⁰ Australian Energy Market Commission (2020) Residential Electricity Price Trends 2020, https://www.aemc.gov.au/sites/default/files/2020-12/2020%20Residential%20Electricity%20Price%20Trends%20report%20
-%2015122020.pdf



Electrify Everything is a global movement arguing that the quickest way to decarbonise is through the widescale replacement of all combustion fuel technologies with electric alternatives. Switching energy supplies in transportation, buildings and industry from fossil fuels to renewable electricity is central to decarbonising national energy systems.²¹ At the household level, this involves switching to electric vehicles (EVs), and converting to electric cook tops, space heating, and water heating. Given the high efficiency of electric goods compared to alternatives, these measures would lower household spending alongside household emissions.²²

Internationally, the transition to EVs is well and truly underway. In 2021 global EV sales increased, new EV models entered the market, and major car makers including General Motors and Volvo announced their intention to go all-electric.²³ However, EV uptake in Australia lags behind comparable countries.²⁴ While uptake in international jurisdictions is being driven by significant fiscal incentives and fuel economy (CO2) standards,²⁵ these policies are not included in the Future Fuels Discussion Paper - the Federal Government's central policy for encouraging EV uptake. This vacuum in national leadership has left much of Australia's EV policy development to state and territory governments.

For the first time, Climate of the Nation explored Australian attitudes to EVs and EV policies, as well as Australians' willingness to electrify their homes. The 2021 report finds widespread support for a range of measures to encourage EV uptake, and a willingness to switch to EVs, home heating, water supply, stoves and ovens.

²¹ ClimateWorks Australia (2014) Pathways to deep decarbonisation in 2050: how Australia can prosper in a low carbon world, https://www.climateworksaustralia.org/resource/pathways-to-deep-decarbonisation-in-2050-how-australia-can-prosper-in-a-low-carbon-world/ p. 10 ²² Saul Griffith (2021) *Rewiring Australia Households Report*, https://www.rewiringaustralia.org/

- 23 International Energy Agency (2021) Policies to promote electric vehicle deployment Global EV Outlook 2021 Analysis, https://www.iea.org/reports/global-ev-outlook-2021/policies-to-promote-electric-vehicle-deployment

²⁴ Senate Select Committee on Electric Vehicles (2019) Select Committee on Electric Vehicles: Report, https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Electric_Vehicles/ElectricVehicles/Report ²⁵ Senate Select Committee on Electric Vehicles (2019b) Select Committee on Electric Vehicles: Report

FIGURE 3.1



Government should be doing more to increase EV uptake

More than two-thirds (68%) of Australians believe the Federal Government should be doing more to increase EV uptake in Australia, including just under one-third (31%) who strongly agree. Just 17% of people disagree, including 6% who strongly disagree. For the year 2020 EVs accounted for less than 1% of new car sales in Australia.²⁶

A majority of respondents across all age groups agree the Federal Government should be doing more; however, agreement is strongest amongst younger Australians compared to older Australians (81% of those aged 25-34 agree, compared to 62% of those aged 50-64 and 65+). Across Coalition, Labor, Greens and Other political affiliations, at least twice as many respondents agree than disagree that the Federal Government should be doing more to increase EV uptake. One Nation voters are split, with 42% agreeing and 44% disagreeing. Two-fifths (40%) of Australians believe the current Federal Government has actively discouraged EV uptake in Australia - significantly more than the quarter (26%) who disagree. The widely reported critical public remarks about EVs made by Prime Minister Scott Morrison (particularly during the 2019 election campaign) may have contributed to this perception amongst a significant proportion of Australians.²⁷

Unsurprisingly, views on whether the current government has actively discouraged EV uptake differ between political affiliations. Greens voters are most likely to agree that the Federal Government has actively discourage EV uptake (61%), followed by Labor voters (49%), Other voters (43%), Coalition voters (30%) and One Nation voters (26%). Conversely, Coalition voters are most likely to disagree (40%).

Reducing emissions from passenger vehicles — a good way to combat climate change

Almost three-quarters (73%) of Australians think reducing CO2 emissions from Australian passenger vehicles is a good way to combat climate change, including 25% that strongly agree. Just over one-tenth disagree (12%), including 4% who strongly disagree.

The transport sector is responsible for 18% of Australia's total CO2 emissions,²⁸ with passenger vehicles the biggest source of transport sector emissions.²⁹ Methods of reducing emissions from passenger vehicles include switching from internal combustion engine (ICE) cars to EVs, increasing car share services, electrifying public transport, and increasing active transport like walking and cycling.

- 28 Australian Government (2020) Quarterly Update of Australia's National Greenhouse Gas Inventory: December 2020, https://www.industry.gov.au/data-and-publications/national-greenhouse-
- gas-inventory-quarterly-update-december-2020 p. 5 ²⁹ Australian Government (2021) National Inventory Report 2019, https://www.industry.gov.au/data-and-publications/national-greenhouse-accounts-2019/national-inventory-report-2019 p. 50

²⁶ Electric Vehicle Council (2021) State of Electric Vehicles 2021, https://electricvehiclecouncil.com.au/reports/state-of-electric-vehicles-2021/

²⁷ Murphy & Karp (2021) Scott Morrison walks back 'end the weekend' rhetoric on electric vehicles, http://www.theguardian.com/environment/2021/aug/10/scott-morrison-walks-back-end-theweekend-rhetoric-on-electrical-vehicles



Benefits

Emissions reductions, improved air quality and increased national energy security are perceived as the major benefits of EV uptake. Respondents were asked to select up to three of the biggest benefits of EV uptake in Australia from a list of nine, including options to specify a benefit not included in the list of options or select none. A majority of respondents (60%) think reduced greenhouse gas emissions is the largest benefit, followed by improved local air quality (56%) and reduced dependence on foreign oil (45%). Other benefits specified by respondents included 'easier to manufacture', 'technology has more potential', 'less noxious driving emissions' and 'long term lower costs and reliability'.

Strong support for EV policies across demographics

Climate of the Nation 2021 asked respondents whether they supported or opposed specific policies to encourage EV uptake. The nine policies draw on proven solutions overseas as well as policies identified by The Australian Electric Vehicle Market Study with the most potential to drive uptake of EVs in Australia including direct financial incentives, fuel efficiency regulations, and global ICE vehicle bans.³⁰

Results show strong popularity for each EV policy across demographics. Government support to increase domestic manufacturing of EVs and their component parts is the most popular policy (75% support, 11% oppose), closely followed by a government funded network of fast charging stations (74% support, 12% oppose) and fully electrifying state bus fleets by 2030 (74% support, 11% oppose).

A significant majority of Australians support each EV policy. There is more support than opposition for each of the nine policies across gender, age, state, and political affiliation, with the exception of requiring all new car sales in Australia to be zero emissions vehicles by 2035, which One Nation voters are more likely to oppose than support (30% support, 53% oppose).

The Climate of the Nation 2021 report also reveals broad support for The Australian Electric Vehicle Market Study recommendations (71% support government subsidies, 65% support fuel efficiency standards, and 64% support all new car sales being zero emissions from 2035).

Official targets to phase out the sale or registration of new ICE vehicles by a certain date have already been adopted by 14 countries including Canada (2040 goal), the United Kingdom (2030/2035 goal), Singapore (2030 goal), and Norway (2025 goal).³¹ Additionally, fuel efficiency (CO2) standards have been adopted in 80% of the light vehicle market, and subsidies to reduce EV purchase cost are available in many countries.



30 Prepared by ENERGEIA for ARENA and CEFC (2018) Australian Electric Vehicle Market Study, https://arena.gov.au/knowledge-bank/australian-electric-vehicle-market-study/

a International Council on Clean Transportation (2021) Update on government targets for phasing out new sales of internal combustion engine passenger cars, https://theicct.org/publications/updategovt-targets-ice-phaseouts-jun2021 p. 6

FIGURE 3.3



Willingness to Electrify Everything

Asked for the first time in Climate of the Nation, the majority of Australians would consider electrifying household appliances and vehicles.

Over two-thirds (70%) of Australians would consider switching to electric hot water systems (including 46% who outright would, and 23% who might if there were financial incentives), over two-thirds (69%) would consider switching to electric home heating (including 46% who outright would, and 23% who might if there were financial incentives), and over two-thirds (68%) would consider switching to electric stoves and ovens (including 44% who outright would, and 24% who might if there were financial incentives). Only one-tenth of respondents would never switch to electric hot water systems, electric home heating, or electric stoves and ovens (11%, 10%, and 11% respectively). Respondents were also asked whether they would consider buying an EV the next time they were in the market for buying a car. Over two-thirds (69%) would consider buying an EV (including 27% who outright would and 42% who might if there were financial incentives). Less than one-fifth (18%) would never buy an EV.

While the total percentage of Australians who might consider switching to an EV as their next car is similar to the total percentage who might considering switching their home appliances to electric, a much larger proportion would require financial incentives to make the switch to an EV. Results suggest that mass electrification of Australian household appliances and vehicles is possible, that financial incentives would help drive this shift, and that financial incentives are a particularly important factor affecting EV purchases.

Mining

To have the best chance of avoiding catastrophic climate change, fossil fuel reserves must be left in the ground. This was echoed most recently in the IPCC Sixth Assessment Report,³² and by the International Energy Agency (IEA) - warning that new fossil fuel exploration and production projects must stop if the world is to have a chance of keeping global warming to 1.5°C.³³

Australia is a significant exporter of fossil fuels. In 2020, Australia was the largest exporter of liquified natural gas (LNG), and the second largest exporter of coal in the world.³⁴ Australian gas and coal burnt overseas is responsible for emissions more than twice the size of Australia's domestic emissions.³⁵ Despite this, Australia's economy is more diverse and less reliant on fossil fuels than many other exporters.

Australia currently has no plans to cease fossil fuel exploration and extraction; in fact, it plans to expand. Planned fossil fuel projects include exploring for new gas reserves in the Northern Territory's Beetaloo Basin³⁶ and developing the Scarborough to Pluto LNG project.³⁷ In NSW alone, 23 new coal mine projects are proposed, with combined additional annual production of more than 155 million tonnes.³⁸

As efforts to combat climate change ramp up internationally, demand for LNG and coal is likely to decline. In 2021, Japan, Australia's biggest LNG and thermal coal market, revised its planned electricity mix for 2030, reducing the use of coal and LNG. Given Japan burns more Australian coal than Australia,³⁹ this has sparked warnings that the national government must prepare for a transition away from fossil fuel exports.⁴⁰

Australians overestimate size and economic value of gas and oil industry

Climate of the Nation 2021 explored Australian perceptions of gas and oil industry employment, share of gross domestic product (GDP) and government revenue. Consistent with Climate of the Nation 2020, results show there is a huge gap between public perceptions and reality, and that Australians overestimate the size of the gas and oil industry both in terms of employment and economic value.

Australians overestimate the size of gas and oil industry employment by a factor of 46. Excluding those who say they don't know, respondents on average believe that oil and gas extraction employs 9.2% of the total workforce. In reality, oil and gas extraction employs around 23,200 workers, making up less than 0.2% of the 12.9 million people employed in Australia.⁴¹ Almost half of respondents (47%) say they don't know what proportion of the workforce is employed in oil and gas extraction industries.

Australians also overestimate the economic value of the gas industry, although to a lesser degree than they do its employment value. Respondents on average believe that the industry accounts for 11.3% of GDP, while the actual figure is around 3.2%, equating to \$63.3 billion of \$1.9 trillion.

FIGURE 4.1a & 4.1b



Gas and Oil Industry Share of Total **Employment, Perception vs Reality**



> Climate & Energy.

32 IPCC (2021) Climate Change 2021: The Physical Science Basis | Summary for Policymakers | Working Group I contribution to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change

³³ International Energy Agency (2021) Net Zero by 2050: A Roadmap for the Global Energy Sector, https://www.iea.org/reports/net-zero-by-2050 ³⁴ Geoscience Australia (2021) Australia's Energy Commodity Resources 2021, https://www.ga.gov.au/digital-publication/aecr2021/home

35 Swann (2019) High Carbon from a Land Down Under: Quantifying CO2 from Australia's fossil fuel mining and exports, https://australiainstitute.org.au/report/high-carbon-from-a-land-down-under-quantifying-co2-fromaustralias-fossil-fuel-mining-and-exports/

36 Mazengarb (2021) Pitt slammed for \$21m handout to Liberal Party linked Beetaloo gas projects, https://reneweconomy.com.au/pitt-slammed-for-21m-handout-to-liberal-party-linked-beetaloo-gas-projects/

37 Ogge (2021) Why the Scarborough LNG development cannot proceed, https://australiainstitute.org.au/report/why-the-scarborough-lng-development-cannot-proceed

38 Denniss, Campbell, & Littleton (2021) One Step Forward, Two Steps Back: New coal mines in the Hunter Valley, https://australiainstitute.org.au/wp-content/uploads/2021/03/P1029-New-coal-in-NSW-Web.pdf ³⁹ Campbell (2021) *Out of Sight, Out of Mind*, https://australiainstitute.org.au/report/out-of-sight-out-of-mind/

⁴⁰ Morton (2021) Australia's reliance on gas exports questioned as Japan winds down fossil fuel power, http://www.theguardian.com/environment/2021/jul/23/australias-reliance-on-gas-exports-questioned-as-japan-/inds-down-fossil-fuel-power

41 Average figure for oil and gas extraction employment for year to May 2021 in ABS (May 2021) Labour Force, Australia, Detailed, Quarterly, Table 06.







Coal Mining Share of Total Employment, Perception vs Reality



> Climate & Energy.

Oil and gas resources in Australia are publicly owned and taxed by the Federal Government through the Petroleum Resources Rent Tax (PRRT). In theory, this provides the Australian community with a fair share of the profits from the extraction of oil and gas resources. However, in practice the poor design of the PRRT has led to declining revenue from the tax in real terms, and both as a share of the economy and a share of gas exported. In comparison, Qatar exports a similar amount of gas as Australia but earns around 30 times more than Australia in royalties from gas exports.⁴²

A CONTRACTOR OF THE OWNER

On average, Australians believe that the PRRT, described as the main way the Australian Government collects revenue from oil and gas, contributed 11.0% to the federal budget for the 2020-21 year (excluding those who don't know). In reality, the PRRT contributed 0.2% to the federal budget, \$800 million of the total \$500 billion. In other words, respondents perceive the oil and gas industry as contributing around 55 times more to Australian Government revenue than it actually does.⁴³

Australians overestimate size and economic value of coal industry

Australians continue to significantly overestimate the size of the coal industry, both in terms of employment and share of GDP. On average, Australians believe the coal mining industry makes up 9.8% of the total workforce. In reality, coal mining employs around 50,900 workers, making up just 0.4% of the 12.9 million people employed in Australia.⁴⁴

The share of GDP attributable to coal mining is also significantly overestimated by Australians. Excluding those who don't know (48%), Australians believe coal mining makes up 12.6% of GDP. In reality, coal mining accounts for just 2.5% of Australia's GDP - \$49.3 billion of \$1.9 trillion.



⁴² Khadem (2019) Tax credits for oil and gas giants rise to \$324 billion, https://www.abc.net.au/news/2019-04-01/tax-credits-for-oil-and-gas-giants-rise-to-324-billion/10959236
 ⁴³ Australian Government (2021) Budget 2021-22: Budget Paper No. 1 - Budget Strategy and Outlook, https://budget.gov.au/2021-22/content/bp1/download/bp1_2021-22.pdf p. 146
 ⁴⁴ Average figure for coal mining employment for year to May 2021 in ABS (May 2021) Labour Force, Australia, Detailed, Quarterly, Table 06



Support for moratorium and phasing out coal mines

The majority of Australians (54%) support a moratorium that would stop Australia building new coal mines or expanding existing ones. More than twice the number of respondents support a moratorium as oppose it (21% oppose). At least half of respondents from each state support a moratorium, as do at least half of Coalition, Labor and Greens voters. Across age groups, more respondents support than oppose a moratorium, with the biggest disparity in support by age group between the two youngest age brackets (48% of those aged 18-24 and 60% of those aged 25-34 support). The levels of national and state support for a moratorium seen in Climate of the Nation 2021 are in line with findings from Australia Institute polling conducted in the NSW state electoral seat of Upper Hunter in April 2021. Respondents from the Upper Hunter were asked about former Prime Minister Malcolm Turnbull's call for a moratorium on new coal mine approvals and remediation plan for existing mines in the Hunter Valley. The majority of voters (57%) in the Upper Hunter seat support a moratorium on new coal mine approvals and a remediation plan.⁴⁵

FIGURE 4.3



⁴⁵ The Australia Institute (2021) Upper Hunter Polling: Majority of Voters Agree with Turnbull Call for Moratorium on New Coal Mines, https://australiainstitute.org.au/post/upper-hunter-polling-majority-of-votersagree-with-turnbull-call-for-moratorium-on-new-coal-mines/



Climate of the Nation respondents were asked about their view on what the Federal Government should do regarding coal mines. Two-thirds of Australians (66%) think the Federal Government should stop new coal mines – including one-third (32%) who say that existing mines should be phased out as soon as possible, and another third (34%) who say existing mines should continue operating until their approvals expire.

Support for phasing out existing coal mines as soon as possible is higher amongst those aged 25-34 (36%, compared to 29% for those aged 35-49), Tasmanian and South Australian residents (38% and 35% respectively, compared to 29% for Queensland residents), and Greens and Labor supporters (60% and 43% respectively, compared to 14% of Coalition supporters). One-fifth (18%) of Australians say that new coal mines should be built, but without taxpayer subsidies — a view more likely to be held by Coalition supporters (31%, compared to 9% for Labor supporters) and those aged 65+ (25%, compared to 11% for those aged 18-34). Three-quarters of respondents (73%) say that Australian governments should phase out coal mining and transition into other industries. Additionally, almost half of respondents (49%) disagree that the economic benefits of coal outweigh its negative health and environmental impacts (compared to 34% who agree), or that coal has a strong economic future in Australia (49% disagree, 33% agree). Agreement that coal has a strong economic future has declined in Queensland by 8 percentage points from 45% to 37% since Climate of the Nation 2020.

Preferred Future for Australian Coal Mines ^{The}Australia Institute esearch that matters > Climate & Energy. 34% 32% 18% 12% 4% Stop new coal mines, Allow new coal mines to Use taxpayer funds to Stop new coal mines Don't know/Not sure subsidise new coal and phase out existing but allow existing coal be built, but stop any coal mines as soon as mines to operate until taxpayer subsidies mines possible the end of their approvals

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

Quiggin (2020) Getting off coal. https://www.tai.org.au/sites/default
 ABS (May 2020) Labour Force, Australia, Detailed, Quarterly, Table 06.

IGURE

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



Support for following IEA pathway

In 2021, the IEA released a comprehensive study of how to transition to a global net zero energy system by 2050. The global pathway to net zero emissions set out by the study sees no new fossil fuel projects approved, in order to avoid 'the worst effects of climate change' and retain a chance of limiting global temperature rise to 1.5°C.

Three in five Australians (60%) support Australia following the IEA pathway, and not approving new gas, coal, or oil projects, with one in five (20%) opposed. Support is strongest in NSW (63%). Conversely, opposition is strongest in Queensland (25%). Coalition, Labor, Greens and Other voters are all more likely to support following the IEA pathway than oppose it.

FIGURE 4.5



Fossil Fuel Subsidies

Fossil fuel industries receive significant subsidies and assistance from governments, including through tax concessions and infrastructure provision. This is particularly prevalent in major fossil fuel producing countries like Australia, where fossil fuel industries are politically powerful. In the 2020-21 budget year, Australian governments provided a total of \$10.3 billion worth of spending and tax concession to bolster fossil fuels.⁴⁶ The Federal Government's main tax concessions to fossil fuel users was the fuel tax credit scheme, with a price tag of \$7.84 billion — exceeding money budgeted for Australian Army Capabilities in the same year.

If Australia is to decarbonise and meet the goals of the Paris Agreement, it needs to urgently reform and eliminate fossil fuel subsidies. The United States aims to do this by replacing fossil fuel subsidies with incentives for clean energy production, and to rebuild a new economy based on good-quality jobs and climatefriendly infrastructure investments.⁴⁷ The COVID-19 economic recovery is an opportunity to reverse the trend of fossil fuel subsidies by centring COVID-19 recovery plans and assistance on clean energy projects rather than coal, oil and gas industries. However, COVID-19 recovery plans in Australia are currently heavily centred on gas, and Australian Governments have committed substantial public funding to fossil fuel projects since the start of the COVID-19 crisis.⁴⁸

Climate of the Nation has tracked Australians' opinion of fossil fuel subsidies since 2018. The 2021 report builds on previous versions, exploring Australian attitudes to fossil fuel subsidies in more depth. Results reveals that many Australians are unaware of the existence and extent of fossil fuel subsidies in Australia. When informed about the amount that Australian governments subsidise fossil fuel industries, the majority of Australian's oppose that amount, and prefer it spent on renewable energy projects. Additionally, the proposal of a 'gas-fired recovery' remains deeply unpopular.

Increased opposition against fossil fuel subsidies

Since Climate of the Nation began tracking attitudes to fossil fuel subsidies in 2018, consistently more Australians have opposed than supported governments putting public funds into infrastructure to subsidise the expansion of the coal, oil and gas industries.

A majority of Australians (51%) oppose governments subsidising the expansion of coal, oil and gas industries, while less than one-third (29%) support this. These results are similar to the 2020 results (52% oppose, 29% support). Since 2018, opposition to subsidies has risen 7 percentage points (from 44%), while support for subsidies has decreased 3 points (from 32%).

Older age groups are more likely than younger age groups to oppose putting public funds into infrastructure to subsidise the expansion of the coal, oil and gas industries (58% of those aged 65+ oppose, compared to 44% of those aged 18-24). Opposition to subsidies by state ranges from 49% in Victoria to 56% in Tasmania. Coalition voters are most likely to support subsidies, though a large proportion also oppose them (45% support, 40% oppose). For all other political affiliation groups, more respondents oppose than support subsidies for fossil fuels.

Levels of opposition to fossil fuel subsidies are similar across household income brackets. More than half (54%) of those with household income below \$50,000 oppose subsidies, as do more than half (55%) of those with household income over \$150,000.

FIGURE 5.1

Do Australian State, Territory and Federal The Australia Institute **Governments Currently Give Subsidies to Coal, Oil and Gas Companies?** > Climate & Energy. 46% Correct Answer 37% 9% 5% 4% Don't know/ Yes, both levels of Yes, just the Yes, just state and No Not sure government federal territory government governments

46 Campbell, Littleton, & Armistead (2021) Australian fossil fuel subsidies hit \$10.3 billion in 2020-21, https://australiainstitute.org.au/post/australian-fossil-fuel-subsidies-hit-10-3-billion-

in-2020-21/

⁴⁷ U.S Department of the Treasury (2021) The Made in America Tax Plan, https://home.treasury.gov/system/files/136/MadeInAmericaTaxPlan_Report.pdf
⁴⁸ Energy Policy Tracker (2021) Australia, https://www.energypolicytracker.org/country/australia/



Lack of public knowledge of fossil fuel subsidies

For the first time, Climate of the Nation explored Australians' understanding and awareness of subsidies to fossil fuel industries. Respondents were told that a subsidy is financial assistance (like grants or tax breaks) provided by government to companies - and asked whether, to the best of their knowledge, Australian governments currently give subsidies to coal, oil and gas companies.

Results reveal limited knowledge of the existence and scope of fossil fuel subsidies in Australia. Just 37% of Australians correctly answer that state, territory and federal governments provide subsidies to coal, oil and gas companies. Around half (46%) 'don't know'. Queenslanders are most likely to know that both levels of government provide subsidies (43%) compared to respondents from other states - perhaps reflecting the fact that the Queensland government provides the highest level of fossil fuel subsidies of any state or territory government.⁴⁹ Across all political affiliations, less than half of respondents know that both levels of government subsidise these industries.

Respondents were then told that both levels of government provide subsidies and asked how much they thought was provided in the 2020-2021 budget year. Results varied, ranging from '\$0' to '\$99999999999', suggesting Australians have limited knowledge of the extent to which fossil fuels are subsidised by Australian governments. The vast majority of answers (98%) were less than the actual subsidy amount and the mean answer (\$1.5 billion) was substantially less the actual amount (\$10.3 billion).

Opposition to fossil fuel subsidies

In the 2020-21 budget year, state, territory and federal governments provided \$10.3 billion to subsidise Australian fossil fuel industries. Once informed of this, respondents were asked whether they support or oppose this amount of government subsidies to fossil fuel industries.

More than twice as many Australians oppose the current level of fossil fuel industry subsidisation than support it (57% oppose, 23% support). This is a 5 percentage point decrease in support and 5 point increase in opposition towards public subsidies from the previous question about support for fossil fuel subsidies, suggesting that respondents are more likely to oppose fossil fuel subsidies when they are aware of their cost.

More respondents from each political affiliation oppose than support this amount, including Coalition voters (39% of Coalition voters support, and 44% oppose). Labor voters are more clearly opposed, with 69% opposed and 15% in support. There is majority opposition to the subsidy amount across all age groups.

⁴⁹ Campbell, Littleton, & Armistead (2021) Australian fossil fuel subsidies hit \$10.3 billion in 2020-21



Gas-fired recovery

To help the Australian economy recover from the COVID-19 crisis, Federal Government Ministers have called for a 'gasfired recovery'⁵⁰ — including subsidies for gas mining and gas consumption. Details of the gas-fired recovery remain vague but spending under its ambit has included public funding to establish five strategic gas basins including the Northern Territory's Beetaloo Basin, financing the Gas Industry Social and Economic Research Alliance (GISERA), and upgrading roads used by gas industry trucks. The gas industry is a poor option for stimulus and recovery spending as it employs very few Australians, is unlikely to bring energy prices down, but will increase emissions, fuelling further climate change.⁵¹

A gas-fired recovery also remains unpopular. Only one-tenth (12%) of Australians prefer Australia's economic recovery to be primarily powered by investment in gas, compared to the majority of Australians (63%) who would prefer it powered by investment in renewables. Since 2020, the same low proportion of Australians prefer a recovery powered by investment in gas (12% in both 2020 and 2021), while the proportion that prefer a recovery powered by investment in renewables has risen 4 percentage points (from 59% in 2020 to 63% in 2021). The preference for a renewable-led recovery over a gas-led recovery is consistent across all states, ages and political affiliations.

FIGURE 5.3

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



⁵¹ Ogge (2021) Wrong way, go back: Why the Gas-fired Recovery plan will fail to reduce energy prices or create jobs but will increase emissions, https://australiainstitute.org.au/wp-content/uploads/2021/04/P1019-Gas-Fired-Recovery-Submission-Australia-Institute-WEB.pdf

⁵⁰ The Hon Scott Morrison MP (2020) Gas-fired recovery: Media release, https://www.pm.gov.au/media/gas-fired-recovery

Climate of the Nation 2021 | 27





Government subsidies to renewables preferred

Australians across age groups, political affiliations, and states believe building new renewable energy projects should be the top priority for government infrastructure spending. Respondents were asked to select infrastructure projects that they would prefer government to prioritise spending on from a list of ten options, including options to specify their own or select 'don't know/none of the above'.

The top three priorities for government spending are building renewable energy projects (63%), building large batteries (for renewable energy storage) (51%), and building and upgrading transmission lines to renewable energy zones (50%). Building new renewable energy projects is the top priority across the political spectrum, with majority support from Coalition voters (53%), Labor voters (75%), Greens voters (83%) and Other voters (54%). It is also the top priority across states, ranging from 61% in Queensland to 68% in Tasmania. The lowest priorities for government spending are direct payments to oil refineries (7%), infrastructure upgrades at oil refineries (13%), building new gas pipelines (16%) and building new gas power stations (20%). In NSW, where the Federal Government plans to build a \$600 million gas-fired power station in the Hunter Valley, just one-fifth (21%) of respondents prefer government to prioritise infrastructure spending on new gas power stations.

Recent Federal Government spending runs contrary to Australians' clear preference for spending on renewable energy projects, transmissions lines and batteries. In the 2021-22 Federal Budget, \$2 billion was allocated to payments to oil refineries – far outweighing spending on renewable energy and battery projects.⁵²

⁵² Australian Government (2021) Locking in Australia's fuel security, https://www.minister.industry.gov.au/ministers/taylor/media-releases/locking-australias-fuel-securit28y

Cost of Climate Inaction

Climate inaction is already costing Australians. Individuals and communities are dealing with the impacts of climate change experiencing longer bushfire seasons, intense storms, rising sea levels and extreme heat events that are expected to increase in frequency and intensity without a rapid reduction in emissions. These growing climate costs are currently paid by everyday Australians through property loss, disruption, ad hoc or higher taxes, and increased insurance premiums. There are also significant indirect social and economic costs including loss of income and impacts on people's physical and mental health.

The financial costs of climate change to today's young Australians were calculated at between \$125,000 and \$245,000 per child (a conservative estimate that excludes health impacts) in a landmark 2021 judgment about the proposed Vickery coal mine.⁵³ Although the full financial and health costs to young Australians will likely be much larger, the case highlights the tangible and quantifiable cost of climate inaction to Australia's younger generations.

As climate change intensifies extreme weather events, insurance premiums will likely continue to rise. In 2021, the Federal Government announced a \$10 billion, taxpayer funded reinsurance pool to subsidise high premium costs for cyclone and flood prone areas of north Queensland, raising questions about who should pay for the impacts of climate inaction, and whether government efforts should focus on mitigating the risk rather than insuring the recovery.⁵⁴

Climate of the Nation 2021 explored Australians' perceptions of whether governments are doing enough to prepare for and adapt to climate change, and who should pay for the impacts of climate change. The majority of Australians support a climate disaster fund, financed by a levy on Australian coal, gas and oil exports.

Governments are not doing enough to prepare for and adapt to climate change

Over half (55%) of Australians think Australian governments are not doing enough to prepare for and adapt to the impacts of climate change. Slightly less than one-quarter (23%) think governments are doing enough, and less than one-tenth think governments are doing too much (8%). A majority of respondents across age groups and states believe governments are not doing enough.

Differences in opinion run along political lines. Just under threequarters (72%) of Labor supporters say governments are not doing enough, compared with 33% of Coalition supporters. Just under half (47%) of Coalition supporters think that governments are doing enough, compared to 11% of Labor supporters. However, neither Coalition supporters nor Labor support are very likely to think that the government is doing too much (11% of Coalition voters, 5% of Labor voters).

The perception amongst a substantial cohort of Australians, that governments are not doing enough to prepare for and adapt to climate change, may reflect the lack of long-term national funding and support to help communities cope with climate threats. Australia has never undertaken a national climate change risk assessment nor developed a national adaptation plan to effectively manage current and future climate change impacts. The National Climate Resilience and Adaptation Strategy 2015 does not address climate impacts that are already occurring or the pace and extent of forecasted climate change impacts, and both the National Climate Change Adaptation Research Facility (NCCARF) and the Climate Adaptation Flagship of the CSIRO have been closed down.⁵⁵



⁵³ Mallon (2021) Independent Expert Report by Dr. Karl Mallon in the Matter of Anjali Sharma & Ors V Minister for the Environment (Commonwealth) Federal Court of Australia, VID 607/2020 ⁵⁴ Ludlow (2021) PM 'listening' to North Queensland with \$10b reinsurance pool-20210504-p57oqc ⁵⁵ Rickards & Howden (2020) Climate adaptation is not a far-off idea - it's here and it affects us all, https://www.smh.com.au/environment/climate-change/climate-adaptation-is-not-a-far-off-idea-it-s-here-and-it-affects-usall-2020019-p53q7r.html

Fossil fuel producers should pay for the costs of dealing with climate impacts

Increasingly, respondents believe fossil fuel producers should primarily pay the costs of responding to climate change. For the first time ever, over half of Australians (51%) think the primary costs of preparing for, adapting to and responding to climate change should fall on fossil fuel producers (such as coal, oil, and gas companies), with 13% saying the burden should fall on taxpayers, and 9% allocating the cost to groups affected by climate change (like coastal communities or those in bushfire or flood prone areas). Two trends are visible when it comes to attitudes to who should pay for climate change impacts. The proportion of respondents who think fossil fuel producers should pay has increased every year since 2018, rising from 38% to just over half (51%). Conversely, those who think taxpayers should primarily pay has decreased 8 percentage points from 21% in 2018 to 13% this year.

Higher support for fossil fuel producers to shoulder the climate change costs can be found amongst those aged 25-34 (60% compared to 45% for those aged 65+) and in Western Australia (59% compared to 48% in Queensland, Tasmania, and NSW). Across all political affiliations, more respondents believe fossil fuel producers should pay than taxpayers or people facing climate impacts.

FIGURE 6.1





Support for Climate Disaster Levy on fossil fuel exports

The Australia Institute has proposed a National Climate Disaster Levy to pay for some of the impacts of climate change. The levy would initially be set at \$1 per tonne of embodied carbon on all fossil fuel exports from Australia, raising around \$1.3 billion per annum to assist communities to respond to and recover from climate disasters. Results of Climate of the Nation show this proposal is popular amongst Australians. Three-in-five (61%) Australians support a levy on fossil fuel exports to fund governments' preparatory actions and responses to climate change. Though support for the levy remains high, it has decreased 4 percentage points from the high following the Black Summer bushfires in 2020 (65%) and is now similar to the level of support in 2019 (62%). Support for the levy is higher amongst those aged 25-34 (71%) than those aged 50-64 (54%) and those aged 65+ (61%). Conversely, oppositional voices are over twice as high amongst those aged 50-64 and aged 65+ (both 29%), than those aged 25-34 (11%).

The majority (73%) of Labor supporters favour a levy, with only 12% opposed. Over half of Coalition supporters (53%) support a levy, compared to 34% who oppose it.

FIGURE 6.2



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

Climate Action

FUND OUR FUTURE - NOT GA

The IPCC's Sixth Assessment Report was a stark reminder that the world is not on track to limit global warming to 1.5°C — the critical temperature threshold adopted under the Paris Agreement, beyond which the most dangerous impacts of climate change will be felt. Current international climate targets fall short,⁵⁶ putting the world on track to potentially exceed the temperature threshold of 1.5°C in the early 2030s.⁵⁷ As nations prepare for the 26th United Nations Climate Change Conference (COP26) in Glasgow, more ambitious mitigation commitments are required to close the gap between what governments have promised to do to save the climate and the targets and policies they have put in place.

Australia's climate change policy is very poor by international standards. Australia is ranked last on climate action of the 193 United Nations member countries in the 2021 Sustainable Development Report,⁵⁸ and second last for climate policy in the Climate Change Performance Index 2021 (only behind President Trump's United States of America).⁵⁹ Meanwhile, the world's seven largest advanced economies agreed in May 2021 to stop financing international coal projects, phase out support for inefficient fossil fuels by 2025 and meet globally agreed climate change targets.⁶⁰ A number of countries have submitted updated and more ambitious 2030 emissions reduction targets, including the European Union, United Kingdom, Japan, Canada and United States.⁶¹ Australia will face increasing pressure to adopt more stringent climate policies, with the introduction of international carbon border adjustment mechanisms to restrict 'carbon leakage' (the movement of emissions intensive production to countries with more lax climate policies).⁶²

Climate of the Nation 2021 shows strong support for Australia to be a world leader in finding solutions to climate change and to implement policies and targets to limit global warming and achieve net zero emissions. Additionally, there is a strong appetite for states and territories to take the lead on climate action.

Support for targets and action to limit warming and achieve net zero emissions

More than two-thirds (69%) of respondents think Australia should set targets and implement domestic action to limit global warming to 1.5-2°C and achieve net zero emissions, including over one-third (36%) who strongly agree. Just one-tenth (10%) disagree. A majority of Coalition and Labor voters agree Australia should set targets and implement action to limit global warming to 1.5-2°C and achieve net zero emissions (58%, and 82% respectively), compared to the small portion that disagree (4%, and 18% respectively). Those aged 25-34 are most likely to agree than to disagree (80% agree, 3% disagree) compared to those aged 65+ (63% agree, 18% disagree).

Sustained and rapid cuts to greenhouse gas emissions are necessary to limit global warming to 1.5-2°C. As part of their broader climate strategies, many jurisdictions have set net zero emissions targets. All Australian states and territories have targets to reach net zero emission by 2050, with the Australian Capital Territory committed to 2045. In addition, 80% of Australia's exports are to countries that have net zero pledges. However, Australia has not committed to a national net zero goal — the absolute minimum necessary to avoid the worst impacts of climate change.

To limit temperature rise to 1.5-2°C, much more than long term net zero targets is required. Strong interim targets and policies to drive economy-wide decarbonisation are necessary. Throughout 2021, domestic political infighting about whether to implement a net zero by 2050 target has distracted from the more pressing issue of updating Australia's inadequate 2030 emissions reduction target (26-28% reduction on 2005 levels).

⁵⁶ UNFCCC (2021) Nationally determined contributions under the Paris Agreement: Synthesis report by the secretariat, https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determinedcontributions-ndcs/nationally-determined-contributions-ndcs/ndc-synthesis-report

³⁷ Meinshausen, Grose, Canadell, & Nicholls (2021) IPCC says Earth will reach temperature rise of about 1.5 in around a decade. But limiting any global warming is what matters most, http://theconversation.com/ ipcc-says-earth-will-reach-temperature-rise-of-about-1-5-in-around-a-decade-but-limiting-any-global-warming-is-what-matters-most-165397

ipcc-says-earth-will-reach-temperature-rise-of-about-1-5-in-around-a-decade-but-limiting-any-global-warming-is-what-matters-most-165397 ⁵⁸ Sachs, Kroll, Lafortune, Fuller, & Woelm (2021) Sustainable Development Report 2021: The Decade of Action for the Sustainable Development Goals, https://www.sustainabledevelopment.report

 ⁶⁹ Burck, Hagen, Höhne, Nascimento, & Bals (2020) *Climate Change Performance Index 2021*, https://ccpi.org/download/the-climate-change-performance-index-2021/
 ⁶⁰ G7 Ministers responsible for Climate and Environment (2021) G7 *Climate and Environment Ministers' Communiqué*, https://www.g7uk.org/g7-climate-and-environment-ministers-communique/
 ⁶¹ Climate Analytics (2021) CAT *Climate Target Update Tracker*, https://climateactiontracker.org/climate-target-update-tracker/

⁶² Muller, Saddler, & Melville-Rea (2021) Carbon Border Adjustments: What are they and how will they impact Australia?, https://australiainstitute.org.au/report/carbon-border-adjustments/





FIGURE 7.1

63 The Hon Scott Morrison MP (2021) Address — National Press Club Barton ACT | Prime Minister of Australia, https://www.pm.gov.au/media/address-national-press-club-barton-act

⁶⁴ Butler (2021) Why the 2050 net zero fight is missing the real danger, https://thenewdaily.com.au/news/2021/06/27/net-zero-2050-delay-danger/

2030 target

Climate of the Nation 2021 shows that more Australians support an ambitious 2030 target than support the current target or a less ambitious version. Over half (53%) of respondents want Australia to set a more ambitious 2030 emissions reduction target, including 29% who prefer a much more ambitious one. Around one-fifth (21%) think Australia should keep its current target, and one-tenth (12%) think the target should be less or much less ambitious.

Australia's emission reduction pledge for 2030 under the Paris Agreement, a 26-28% reduction below 2005 levels by 2030, falls short of the commitments made by other developed countries. When compared using a common baseline year of 2005, Australia's target is well below those set by the United Kingdom (64%), the European Union (51%), the United States (52%) and others.⁶⁵





FIGURE 7.2

⁴³ Muller et al. (2021) Carbon Border Adjustments: What are they and how will they impact Australia

International ambition

There is strong support for Australian leadership on climate change. Two-thirds of Australians (67%) agree Australia should be a world leader in finding solutions to climate change, including 38% who strongly agree. Three-quarters (75%) agree that tackling climate change creates opportunities in clean energy (for example, solar, wind and batteries) for new jobs and investment, including 38% who strongly agree. Over threequarters (77%) agree that Australia should implement policies to protect the environment from the harmful impacts of climate change. More than half (56%) of Australians support Australia helping vulnerable peoples and developing countries adapt to the negative impacts of climate change. Climate of the Nation 2021 shows it is unpopular to wait for climate action. Just under three-fifths (58%) of Australians disagree that Australia should not act on climate change until other major emitters like the United States and China do so, including 33% who strongly disagree. Additionally, just under two-thirds (57%) disagree that Australia should wait for other countries before strengthening emission reductions targets. These results suggest that calls to limit Australia's climate action ambition until countries like China have done more are not backed by support from the Australian public.⁶⁶

FIGURE 7.3

Attitudes to Climate Action Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree Don't know/Not sure				The Australia Institute Research that matters. > Climate & Energy.	
Australia should implement policies to protect the environment from the harmful impacts of climate change	41%		36%	13% <mark>3</mark> 34	
Tackling climate change creates opportunities in clean energy (e.g. solar, wind, batteries) - for new jobs and investment	38%		38%	14% <mark>4</mark> 34	
Australia should be a world leader in finding solutions to climate change	38%		29%	17% <mark>6%</mark> 5% <mark>5</mark> %	
Australia needs to help vulnerable peoples and developing countries adapt to the negative impacts of climate change	20%	36%	24	% <mark>8%</mark> 6% <mark>5</mark> %	
Australia should not act on climate change until other major emitters like the US and China do so	12% 11%	15%	25%	33% 5%	
Australia should wait for other countries before we strengthen our emissions reduction targets	10% 12%	17%	28%	29% <mark>5</mark> %	

⁶⁶ Martin (2021) Australia is at risk of taking the wrong tack at the Glasgow climate talks, and slamming China is only part of it, http://theconversation.com/australiais-at-risk-of-taking-the-wrong-tack-at-the-glasgow-climate-talks-and-slamming-china-is-only-part-of-it-166154

State Action

As in 2020, there is widespread support for state- and territoryled climate action. Three-quarters (74%) of Australians support state governments putting in place incentives for more renewable energy. Support is high amongst respondents from all states, ranging from 71% support in Queensland to 77% support in South Australia and Western Australia. Two-thirds (67%) of Australians think state governments should be taking a leading role in action on climate change. Two-thirds (68%) think state governments should act on climate change regardless of what other actors are doing. Two-thirds (67%) agree state governments should develop plans to phase out coal-fired power stations. More respondents agree than disagree across each age, state and political affiliation bracket for each of these statements, with the exception of One Nation voters.

The strong appetite for state-led climate action seen in the Climate of the Nation 2020 and 2021 reports may reflect a changing attitude to state responsibilities and power during the COVID-19 crisis. Australia Institute polling research indicates that the role of the states and territories in Australian democracy has strengthened during the COVID-19 pandemic, with respondents consistently rating state and territory handling of the COVID-19 pandemic higher than handling by the Federal Government.⁶⁷



FIGURE 7.4

⁶⁷ Browne (2021) State Revival, https://australiainstitute.org.au/report/state-revival/

Demographic Snapshot

Attitudes to climate change and support for climate action differ between age groups, genders, and to a lesser extent, states.

Gender

Australian women are more concerned about climate change than men and are generally more supportive of actions and policies to reduce emissions. Policies to increase electric vehicle (EV) uptake are an exception, where men are slightly more supportive than women.

Women are more concerned about climate change and climate change impacts.

- Women are more concerned about climate change (78% of women are concerned; 72% of men). Although, a similar number of women and men agree climate change is occurring (82% of women agree; 80% of men).
- Men are more likely to agree that the seriousness of climate change is exaggerated (36% of men agree; 21% of women).
- Women are more concerned than men about climate change impacts. For example, women are more concerned than men about heatwaves and extremely hot days (82% of women are concerned; 73% of men).

Women are more supportive of action to reduce emissions.

- Women are more likely to think Australia's coal-fired power generation should end within the next ten years (46% of women, compared to 34% of men).
- Women are much more likely to disagree that Australia should not act on climate change until other major emitters like the US and China do, an 11 percentage point difference (63% of women disagree; 52% of men).
- Women are more likely to agree that Australia should set targets and implement domestic action to help limit global warming to 1.5-2°C and achieve net zero emissions (72% of women agree; 67% of men).

Men are slightly more supportive of policies to increase EV uptake and more likely to consider purchasing an EV.

• Men are more likely to agree that the Federal Government should be doing more to increase EV uptake in Australia (72% of men agree, compared to 64% of women).

• Men are slightly more supportive than women of each of the nine EV policies polled. The difference in policy support between genders ranges from the same level of support for requiring all new car sales in Australia to be zero emissions vehicles by 2035 (64% of men and women), to a 6 percentage point difference in support for removing the Luxury Car Tax from EV purchases (72% of men support this; 66% of women). Conversely, men are also more likely than women to oppose all EV policies polled.

• Men are more likely to consider purchasing an EV as their next vehicle (72% of men would consider an EV, including if there were financial incentives, compared to 66% of women).

The gender gaps in the Climate of the Nation 2021 results align with the findings of the UN People's Climate Vote survey of 1.2 million respondents spanning 50 countries. The People's Climate Vote identified Australia as a country with one of the biggest gender gaps in support for policies to stop the burning of fossil fuels (where women are more supportive). It also noted that across all countries surveyed, men and boys were more favourable to electric car and bus policies.⁶⁸

Age

Younger respondents are more concerned about climate change and more supportive of actions to reduce emissions. There are statistically significant differences between the attitudes of respondents from different age cohorts, particularly between those aged 25-34 and those aged 55 and over.

Younger Australians are more supportive of policies to address climate change.

- Younger Australians are more likely to agree Australia should follow the IEA pathway and not approve any new gas, coal or oil projects (65% of those aged 18-24 and 73% of those aged 25-34 agree, compared to 52% of those aged 50-64 and 51% of those aged 65+).
- Younger Australians are more likely to think Australia should be a world leader in finding solutions to climate change (73% of those aged 18-24 and 77% of those aged 25-34 agree, compared to 60% of those aged 50-54 and 58% of those aged 65+).
- Younger Australians are more likely to agree Australia should set targets and implement domestic action to help limit global warming to 1.5-2°C and achieve net zero emissions (70% of those aged 18-24 and 80% of those aged 25-34 agree, compared to 61% of those aged 50-64 and 63% of those aged 65+).

Older Australians are more sceptical about climate change and less concerned about climate change impacts.

- Older Australians are least likely to think humans are the main cause of climate change (50% of those aged 65+ and 56% of those aged 50-64 think this, compared to 77% of those aged 25-34 and 75% of those aged 18-24), and most likely to think natural cycles are the main cause (40% of those aged 65+ and 28% of those aged 50-64 think this, compared to 11% of those aged 25-34 and 13% of those aged 18-24).
- Older Australians are most likely to think the seriousness of climate change is exaggerated (35% of those aged 65+ and 27% of those aged 50-64 think this, compared to 26% of those aged 25-34, and 18% of those aged 18-24).
- Older Australians are less concerned about climate change (66% of those aged 65+ and 69% of those aged 50-64 are concerned, compared to 84% of those aged 25-34, and 83% of those aged 18-24).

However, older Australians are more opposed to fossil fuel subsidies.

• Older Australians are most likely to oppose the government putting public funds into infrastructure to subsidise the expansion of the coal, oil and gas industries (58% of those aged 65+ and 56% of those aged 50-64 oppose, compared to 46% of those aged 25-34, and 44% of those aged 18-24).

• Older Australians are more likely to oppose the actual amount (\$10.3 billion) provided by governments in the 2020-21 budget year to subsidies fossil fuel industries (60% of those aged 65+ and those aged 50-64 oppose this, compared to 55% of those aged 25-34, and 52% of those aged 18-24).

The distinction between views held by younger and older Australians, revealed in Climate of the Nation 2021, is consistent with the findings of other recent studies — suggesting that younger Australians hold stronger pro-climate attitudes.⁶⁹

69 Colvin & Jotzo (2021) Australian voters' attitudes to climate action and their social-political determinants, Public Library of Science

States

Amongst respondents from all states, actions to reduce emissions and address climate change are generally popular. While there are some differences between the attitudes of respondents from different states, these tend to be smaller than the differences between other demographics.

Queenslanders are slightly less concerned about climate impacts and slightly less supportive of measures to address climate change.

- Queenslanders are slightly less concerned about climate change than respondents from other states (69% of Queenslanders are concerned, compared to the national average of 75%).
- Queenslanders are slightly less likely to agree that Australia should be a world leader in finding solutions to climate change (63% of Queenslanders agree, compared to the national average of 67%).

However, attitudes of Queenslanders have changed since 2020, becoming more supportive of some policies to phase out coal mining.

- Agreement amongst Queenslanders that coal mining has a strong economic future declined by 8 percentage points since 2020 (37% in 2021, down from 45% in 2020).
- Support for moratorium on coal mining amongst Queenslanders increased 3 percentage points since 2020 (50% support in 2021, up from 47% in 2020).
- Agreement amongst Queenslanders that environmental protection policies are needed in Australia increased 3 percentage points since 2020 (71% agree in 2021, up from 68% in 2020).

Other differences in attitudes between state cohorts often reflect particular circumstances, including sources of electricity generation in that state and recent experiences of climate related disasters.

- Tasmanians have a higher preference for hydro (55% of Tasmanians put hydro in their top three energy sources, compared to national average of 37%) reflecting the state's reliance on hydro for most of its power.
- New South Wales respondents are most likely to be very concerned about more bushfires, followed by Victorian respondents (60% of those from NSW and 59% of those from Victoria, compared to the national average of 56%) reflecting the recent Black Summer bushfires.
- South Australians have a higher preference for power storage batteries (44% of South Australians put power storage batteries in their top three energy sources, compared to the national average of 31%), reflecting South Australia being home to the Hornsdale Battery, the largest lithium-ion battery in the world when originally installed in 2017.⁷⁰

⁷⁰ Hornsdale Power Reserve (2019) South Australia's Big Battery, https://hornsdalepowerreserve.com.au/

Conclusion

The world is rapidly running out of time to address climate change. 2020-2030 is the decisive decade for climate action; the closing window to rapidly reduce greenhouse gas emissions in order to limit catastrophic climate impacts. Australians want their governments to be part of the solution, to lead on climate action and implement policies to curb global temperature rise.

Climate of the Nation 2021 shows that despite the ongoing COVID-19 health and economic crisis, Australians remain deeply concerned about climate change. Climate concern is at an alltime high, and the intensity of that concern has increased. More than four-fifths of Australians worry that climate change will result in more bushfires, droughts and floods, and the extinction of plant and animal species – concerns that are grounded in both experience and science.

As climate change and the need for action become increasingly accepted by Australians, there is a growing disconnect between Federal Government policies and public views on climate action. From fossil fuel generation, to net zero emissions targets, climate and energy policies in Australia are largely out of touch with the public opinion on climate action revealed in Climate of the Nation 2021.

The majority of Australians think the Federal Government should be doing more to plan the orderly closure of coal-fired power stations, increase electric vehicle uptake, and prepare for and adapt to the impacts of climate change. Several Federal Government policies lack a public support majority, including the gas-fired recovery and current levels of fossil fuel industry subsidisation. There is broad support for ambitious climate policies, from a levy on fossil fuel exports to ceasing the approval of new gas, coal and oil projects. Climate of the Nation 2021 also suggests that Australians are attune to efforts to delay climate action, and reject these climate delay tactics. The majority of Australians oppose the idea that Australia should wait for other countries like China or the US before acting on climate or strengthening emissions reduction targets. They want Australia to be a world leader on solutions to climate change.

As COP26 approaches and the window to avoid catastrophic climate change impacts closes, Climate of the Nation 2021 sends a message to Australia leaders -the majority of Australians support ambitious climate policies.

Prime Minister Morrison, in his response to the release of the IPCC report, said "I am listening to Australians about this issue".⁷¹ Climate of the Nation 2021 makes Australian attitudes to the climate change issue clear. Australians want their country to be a world leader on climate change solutions, and they support targets and domestic action to limit global warming to 1.5-2°C, the end of approvals for new fossil fuel projects, and shifting public finances from fossil fuel industries to renewables. The approach of COP26 in November this year will be an opportunity for Australian leaders to show that they are listening to Australians about climate change by implementing ambitious climate action now.



71 The Hon Scott Morrison MP (2021) Press Conference Canberra, ACT, https://www.pm.gov.au/media/press-conference-canberra-act-14

Approach

Who

The Australia Institute Climate & Energy Program engaged leading firm YouGov to conduct the quantitative survey for Climate of the Nation 2021.

Quantitative

The quantitative survey was conducted by YouGov from 2-11 August 2021.

The sample comprises 2,626 Australians aged 18 years and older.

The overall margin of sampling error is 1.91%.

The sample was distributed throughout Australia, as follows:

State	Sample size	Margin of erro
NSW	503	4.37%
VIC	509	4.34%
QLD	511	4.33%
SA	408	4.85%
WA	312	5.54%
TAS	284	5.81%

Age, gender, and location quotas were applied to the sample, and post-survey data was weighted by age, gender, and location to reflect the latest Australian Bureau of Statistics (ABS) population estimates.



> Climate & Energy.