

THE LOST YEARS: COUNTING THE COSTS OF CLIMATE INACTION IN AUSTRALIA



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The Climate Council acknowledges the Traditional Custodians of the lands on which we live, meet and work. We wish to pay our respects to Elders past, present and emerging and recognise the continuous connection of Aboriginal and Torres Strait Islander people to Country.

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Key findings

1

The Climate Council has assessed the Federal Government's climate performance over the past eight years in detail and finds there's been a complete and catastrophic failure to act on the climate crisis.

- › The Liberal-National Government's attacks on science have been frequent, wide ranging and debilitating, including on our premier national science agency. Starting in 2014, significant cuts were made to CSIRO, reducing Australia's climate science capacity, crippling our ability to understand the risks and impacts of climate change to Australia, and diminishing our contribution to the global climate science effort.
- › Throughout its terms of Government, the Coalition has scaled back or cut effective climate change programs and agencies, and failed to put any effective alternatives in place. Of the almost \$180 billion Australia spent on COVID recovery efforts, around 2 percent will help cut emissions. In contrast, Germany and France allocated half of their respective COVID recovery spending to climate solutions.
- › This Government appears averse to expert advice and credible climate information. It has repeatedly rejected the advice of domestic and international bodies and consistently covered up poor performance, with many of its Federal Ministers making misleading claims and offering false solutions.
- › This Government has shirked its international obligations by setting weak targets, refusing to raise them, undermining cooperation between countries and obstructing United Nations negotiations. This pattern of behaviour has cemented Australia's reputation as a global climate pariah.

2

A lack of climate action at the national level is a defining leadership failure of the past eight years. Australians are living with the everyday consequences of this, and we must work quickly to prevent catastrophe.

- › Climate change is accelerating, and Australia's overall contribution to this crisis has substantially increased under this Government. Since 2013, fossil fuel production has expanded by 19% with a negligible reduction in our national emissions.
- › Delaying action has not made the problem go away. It has only shortened the time we have to reduce emissions to avoid catastrophic outcomes, and made it harder to do so.
- › Australia squandered earlier opportunities to reduce greenhouse gas emissions and decarbonise our economy in the cheapest, most gradual and effective ways. With our abundant renewable energy potential, virtually no other country on Earth is better placed to prosper in a world beyond fossil fuels.
- › The ability of Australian communities and first responders to cope with worsening and compounding extreme weather events is being tested. Our country is woefully unprepared for what's here and coming, with the conditions that drove the 2019-20 bushfire disaster likely to be "average" by 2040.

3

The Federal Government has covered up poor performance with misleading claims, dubious accounting and censorship.

- › Australia is among the worst performing developed countries when it comes to cutting emissions and moving beyond fossil fuels. The Liberal-National Government has made misleading claims and selectively used data in efforts to persuade Australians and the international community that it is doing more than it is.
- › The Government uses its power and influence to prevent an accurate assessment of the Great Barrier Reef from being publicised, rather than on effective measures that would help protect it. For example, by lobbying to delay the World Heritage-listed icon from officially being declared 'in danger' when scientists agree all coral reefs are in mortal danger from climate change.
- › The Government is spending more than \$30 million on a public advertising campaign that makes spurious claims such as our national emissions have fallen by 20 percent when federally there are no effective mechanisms to eliminate coal, oil and gas.

4

Australia's next government must adopt credible climate policies as a matter of extreme urgency. This includes transparent and accurate reporting of Australia's climate performance.

- › Other nations have significantly cut emissions across their economies whereas Australia is yet to begin. The economics of doing so are now as compelling as the science, and the next Australian Government needs to rapidly reset our national approach.
- › Australia can start helping global efforts rather than remaining one of the few hold outs. As a signatory to the Glasgow Climate Pact, Australia is obliged to strengthen its 2030 emissions reduction target before the next UN climate summit in Egypt in November 2022.
- › State and local governments of all political persuasions as well as business, industry and the community, have been stepping up to the climate challenge. Leadership at a federal level will turbocharge their efforts, and help drive new investment, jobs and economic growth.
- › The Climate Council has established a climate action scorecard to monitor the Federal Government's climate performance over time, specifically around emissions pledges, accountability, transparency, timeliness, accuracy, and the provision of adequate funding and support.

Foreword

**Honorary Professor David Karoly,
FAA (Fellow of the Australian
Academy of Science)**

A decade ago, the Labor Government had clear plans and legislation to address climate change. Australia joined the global community that recognised much stronger climate action was needed to avoid the unmanageable and to manage the unavoidable.

In 2012, the Labor Government established an emissions trading scheme as part of its Clean Energy Future legislation, created the Clean Energy Finance Corporation to support new large-scale renewable energy projects and established the Climate Change Authority to provide independent advice to the government on Australian climate change policy and emissions reduction targets. I joined the Climate Change Authority as one of its inaugural members and the only climate scientist.

Back then, there were strong climate science research programs, led by the Bureau of Meteorology, CSIRO and many of our finest universities. In addition, the Government was supporting the National Climate Change Adaptation Research Facility.

A year earlier in 2011, the Labor Government had established the Climate Commission to provide expert advice and information on climate change to the Australian public. In its first report titled 'The Critical Decade', the Climate Commission said that unless Australia took climate action before 2020, our way of life would be at threat.

When Australia elected a Liberal-National Government in 2013, much of this changed. This report documents the decisions by this government and their profound impacts; the changes in legislation, the missed opportunities, the closure of programs, the misinformation and the self-censorship by government-funded organisations, as well as the increasing climate impacts that are harming Australians and our communities, businesses, ecosystems, and the places we love.

One of the first actions of the Liberal-National Government was to close the Climate Commission and restrict the provision of reliable information on climate change to the Australian public. When the Climate Commission was closed, it was instantly replaced by the new, independent and community-funded Climate Council, with the objective of continuing to keep the public informed.

The Liberal-National Government dissolved the legislation for the Australian emissions trading scheme in 2014 and ceased its operations in spite of its success. Australia's combined emissions from all sectors, excluding from forestry and land, fell over the period from 2012 to 2014, and then climbed for the next four years. The economists were correct: putting a price on greenhouse gas emissions led to a reduction in emissions and removing that price led to an increase in emissions.

In early 2014, the Climate Change Authority published its Targets and Progress Review, based on the best available data and climate science. This recommended a 2020 emissions reduction target for Australia of 19% and a 2030 target of 40% to 60% below 2000 levels. The Liberal-National Government ignored this independent advice and set its own much

weaker targets. The Authority completed its Final Report on Australia's emissions reduction targets in 2015 and reconfirmed its earlier advice.

Several members of the Authority resigned in 2015, but I continued on. This provided an opportunity for the government to appoint a new chair and members who were favourably inclined to support Liberal-National Government policy. With the majority of its members now new, the Authority was requested to undertake a Special Review on Australia's climate goals and policies in 2016. As two of the three original members left on the Authority, Clive Hamilton and I published a Minority Report that criticised many of the conclusions of the Special Review, particularly its support for the Liberal-National Government's emissions reduction targets.

The Australian Climate Change Science Program (ACCSP), the government's largest and longest-running climate science research program, was closed by the Liberal-National Government in 2016 after 27 years. It was to transition into the new Earth Systems and Climate Change Hub in 2015, but with substantially reduced funding in the government's new National Environmental Science Program (NESP).

The decision in 2014 to close the ACCSP had major funding implications for research in CSIRO. It was a major factor in the decision by CSIRO in 2016 to substantially cut the number of staff involved in climate change science, and almost led to the closure of the new Earth Systems and Climate Change Hub. The Hub lost its inaugural Leader in 2016, and was unable to find a new Leader until I agreed to start as Hub Leader in CSIRO early in 2018, moving from my position as a Professor at the University of Melbourne.

A number of people questioned my sanity at that time; joining CSIRO when it had just made a number of its climate researchers

redundant. I was also joining an organisation where staff were not allowed to publicly comment on government policy, no matter the relevance of the science research that they were undertaking. These constraints still apply to all public servants and to all climate scientists in the Bureau of Meteorology and CSIRO. I am only able to write this Foreword because I retired from CSIRO on Friday 4 February 2022.

Despite the efforts of the Liberal-National Government to handicap efforts to reduce Australia's greenhouse gas emissions and to hamstring climate change research in Australia, the last decade has seen some positive outcomes. States and Territories are leading the way on climate action. Many major Australian companies are pushing for stronger action to address climate change. Many young people across Australia have recognised that climate change will have a greater impact on their futures than on their parents, and have been striving for stronger action, for example through the School Strike 4 Climate.

As the major 2021 report of the Intergovernmental Panel on Climate Change concluded: "Every tonne of CO₂ emissions adds to global warming". The Liberal-National Government, throughout its time in office, has been making choices that make global warming worse. And that has been to the great detriment of our country.



Honorary Professor David Karoly, FAA
 School of Geography,
 Earth and Atmospheric Sciences
 University of Melbourne

1. Introduction

This report provides a detailed overview of the Federal Government's approach to climate change since the election of the Liberal-National Coalition in 2013. The past eight years have been characterised by cuts to climate-related funding and

effective programs, the rejection of advice from scientists and both national and international expert bodies, a lack of credible climate policy and claims that mislead the public on what's being done as well as what's possible.

The last eight years have been characterised by a relentless rolling back of effective climate policies and programs.



Figure 1: Black summer bushfire smoke engulfs Sydney Harbour on 10 December 2019. Exposure to air pollution during the Australian Black Summer bushfires was responsible for more than 400 deaths and 4,000 hospitalisations (Arriagada et al 2020).

Figure 2: Cuts to climate science and solutions.



Under the tenure of the Liberal-National Government, fossil fuels have been supported while funding for climate science and solutions have been cut.



ARENA's funding cut by

\$500 MILLION



CSIRO redundancies were followed by the subsequent creation of a new Climate Science Centre **costing taxpayers an estimated**

\$3 MILLION



54 STAFF

in CSIRO Oceans and Atmosphere Division lose their jobs. The cuts have damaged a world class capability built over decades and cannot be easily recovered.

\$0



The **Climate Change Authority** received no funding in the 2014 federal budget

The Liberal-National Government scrapped the (Howard Government's) Energy Efficiency Opportunities program in June 2014 – **despite it saving businesses \$808 million in avoided energy costs, and reducing emissions by 8.2 MtCO₂-e**



\$808M



-8.2 MtCO₂-e



↓ 20%

The Liberal-National Government **shrunk the large-scale Renewable Energy Target by 20%** in 2015

FROM 41,000 GWH TO 33,000 GWH



Australia's climate finance commitment for helping developing countries respond to climate change is only around

1/8TH

OF OUR FAIR SHARE

Since the Liberal-National Government came to power in 2013, there has been a relentless and deliberate effort to cut or scale back initiatives that were working to reduce emissions and scale up solutions.

This includes:

- › Scaling back the Renewable Energy Target
- › Cutting the Clean Energy Futures - the Gillard-era carbon price - and the Energy Efficiency Opportunities program
- › Cutting half a billion dollars from the budget of the Australian Renewable Energy Agency (ARENA)
- › Redirecting funds from the Clean Energy Finance Corporation (CEFC) to the Grid Reliability Fund.

In all this time, the Liberal-National Government has failed to replace these programs or funding with credible alternatives for cutting emissions. Time and time again, expert scientific advice has been either explicitly rejected by government ministers or implicitly rejected through a lack of policy response to the climate crisis.

Ignoring climate change is deadly. For example, a recent study found that between 2006 and 2017 around 36,000 premature deaths in Australia were caused by extreme

heat – or more than 3,000 per year (Longden 2019; Longden et al. 2020). The number of deaths is set to increase further due to climate change, though the size of this increase will be influenced strongly by how quickly we cut emissions this decade (IPCC 2022).

Australians are already paying the price for both our own and the world's failure to reduce emissions quickly enough or deeply enough.

On top of the health impacts of climate change, the burning of fossil fuels is a major source of air pollution, responsible for around 5,700 deaths every year in Australia (Vohra et al. 2021) – around five times the annual road toll. The health gains of moving away from fossil fuels are profound and immediate.

The Liberal-National Government has repeatedly misled the public on climate solutions and hidden its lack of climate action. It has repeatedly presented greenhouse gas emissions data in ways that obscure the real story, and released it at times it is unlikely to draw significant attention, like during football finals or at Christmas. Senior members of the Government have made claims about climate solutions that are demonstrably untrue, such as on the capabilities of electric vehicles.

Over the past decade, Australia has become increasingly isolated on the world stage when it comes to climate policy. In 2015, when a new international climate agreement was struck, the Liberal-National Government set a weak 2030 national emissions target. Today, that climate target is considered even weaker given the subsequent increase in ambition by many other countries and economies. As key allies have strengthened their climate targets, and Australia falls further behind, our relations with key security allies and neighbouring countries in the Indo-Pacific have suffered.

The Liberal-National Government has repeatedly misled the public and hid its lack of climate action.

Figure 3: Australia is a fossil fuel heavyweight.

AUSTRALIA IS A FOSSIL FUEL HEAVYWEIGHT

Climate change is a global problem that requires collective action to secure our safety and wellbeing. Coal, oil and gas are the largest contributors to the climate crisis, accounting for almost 90% of global carbon dioxide emissions from human activities.

Australia is the world's third largest fossil fuel exporter (the world's joint largest exporter of liquefied gas and second largest exporter of coal).



The Fuel Security Service Payment provides

\$2.3B

in public subsidies to Australian-based oil refineries.



Australia's fossil fuel production has increased

↑ 19%

since the Liberal-National Government came into office in 2013.



The Liberal-National Government is providing

\$600M

funding for the Kurri Kurri gas-fired power station, which is expected to run just 2-3% of the time.



The Liberal-National Government has spent: **\$176 billion on a COVID-19 recovery**, but only **\$3.6 billion** (around 2% of these funds) on solutions to reduce emissions.



By contrast, **Germany and France** allocated **1/2** of their respective COVID recovery spending on climate solutions.

The Liberal-National Government approved the Scarborough gas project, which is expected to add

800M TO 1.6B TONNES

of greenhouse gas emissions over the project's life (1.5 to 3x Australia's annual emissions).



The 2021-22 federal budget allocated

\$52.9M

TO GAS PROJECTS

with no new support for renewable energy or electric vehicles.

\$0



>25% of all gas consumed in Australia in 2019 was burned by the gas industry so that it could sell gas products overseas.



Cooking with gas accounts for

12%

 of the burden of childhood asthma in Australia.

Australia is now isolated on the world stage and ill-prepared to seize the economic opportunities of the global energy transition.

The ongoing legacy of nearly a decade of climate policy failure means that Australia is ill-prepared to seize the economic opportunities of the global energy transformation. Sub-national government policy and initiatives within the business sector, as well as community efforts, have resulted in a number of climate solutions being developed in Australia, but this has not been enough to make up for the lack of national action.

This report takes stock of the Liberal-National Government's track record on climate change over nearly a decade and introduces a climate action scorecard on 'Federal Government Climate Action' (See Section 2).

The scorecard aims to monitor climate performance, specifically around issues of accountability, transparency, accuracy, and the provision of funding and other support commensurate with responding to the climate crisis.

The Liberal-National Government is missing in action when it comes to responding to the climate crisis (See, for example, Table 1). This is putting Australians, the economy and ecosystems that underpin our wellbeing at risk. Our national government needs to be stepping up, not stepping back, from the climate challenge. Australian lives and livelihoods are on the line. We cannot afford to waste any more time.

The Liberal-National Government's climate leadership failure is putting Australians, the economy, and the ecosystems we depend on at risk.

Table 1: Timeline of key moments in global and Australian climate politics since 2011.

Year	What happened
2011	Under the Labor Government, Australia legislates a comprehensive suite of climate measures, including a price on carbon, the Clean Energy Finance Corporation, the Climate Change Authority (a body to guide policy and targets) and the Climate Commission (the forerunner of today's independent Climate Council).
2012	The price on carbon comes into force on 1 July.
2013	The new Liberal-National Government abolishes the Climate Commission, an organisation dedicated to communicating climate science to the Australian public.
	After the closing of the Climate Commission, the independent, community-funded Climate Council of Australia is established.
	The second commitment period of the Kyoto Protocol starts (2013-2020) with Australia having negotiated a target to reduce emissions by 5 percent below 2000 levels by 2020 – the weakest target in the world. (Australia's second Kyoto commitment was made in 2012 under the Labor Government.)
2014	The Liberal-National Government repeals the price on carbon. Funding is cut to key agencies including the CSIRO, Climate Change Authority, and Australian Renewable Energy Agency.
2015	The Liberal-National Government weakens the Renewable Energy Target.
	Australia sets a 2030 emissions reduction target of 26-28 percent below 2005 levels, among the weakest of developed countries.
	195 countries including Australia adopt the <i>Paris Agreement</i> .
2018	Australia announces it will use 'carry-over' credits from the Kyoto Protocol to meet its first commitment under the <i>Paris Agreement</i> . The move has no legal basis and is widely criticised for being against the spirit of the <i>Paris Agreement</i> .
2019	Australia is called out as one of a handful of countries holding up progress on the completion of the <i>Paris Agreement's</i> rulebook, specifically rules covering the international trade in emissions reductions (Article 6).
2019 – 2020	Australia experiences the catastrophic Black Summer bushfires on the back of the hottest and driest year on record for Australia. The Liberal-National Government ignored warnings from former fire and emergency services chiefs from throughout Australia, and the PM refused to meet with them or take advice.
2020	Liberal-National Government embarks on a so-called 'gas-fired' recovery from the COVID-19 pandemic.
2020	The Liberal-National Government approves the Scarborough gas project, expected to add between 800 million to 1.6 billion tonnes of greenhouse gas emissions over the life of the project (1.5 - 3 times Australia's annual emissions).
2021	The Liberal-National Government continues to support new coal and gas projects.
2021	The 2021-22 federal budget allocates \$52.9 million to gas infrastructure projects and a gas-fired power station (\$30 million), with no new support for renewable energy or electric vehicles.
2021	The Liberal-National Government took a net zero by 2050 target to COP26 and published "The Plan to Deliver Net Zero the Australian Way". The Plan fails to include a strengthened 2030 target, and it does not enable Australia to reach net zero by 2050.
2022	The Great Barrier Reef suffers from an unprecedented fourth mass bleaching event in seven years (2016, 2017, 2020 and 2022). In a report submitted to UNESCO in February 2022, the Liberal-National Government glossed over its woefully inadequate response to the deadly consequences of climate change on the Great Barrier Reef, citing that the Government has a plan to reach net zero by 2050. Yet its own modelling shows it will not reach this target on time. Even if it does, this is at least a decade too late to protect the Great Barrier Reef. Australia's 2030 target of reducing emissions by 26-28% on 2005 levels, if adopted globally, could see warming reach 3°C or more. No coral reef - the Great Barrier Reef included - can survive such catastrophically high levels of global warming.

Tackling climate change requires rapid and deep reduction of greenhouse gas emissions produced from the burning of fossil fuels (coal, oil and gas) and land clearing. Delaying action has not made the problem go away. It has just shortened the time we have left to act to avoid catastrophic outcomes. We also need to deal with the accelerating consequences that are already with us and get ready for even worse.

The 2020s are our 'Last-Chance Decade' to tackle the climate crisis. We cannot afford to waste any more time.

Figure 4: Recovering from the 2022 East Coast floods - one of the most extreme disasters in Australian history - will be slow and costly. Global action over this decade will determine how much worse things get. Australia is out of step with the rest of the world, and it must take much stronger, bolder commitments to global climate change action.



2. Scorecard on Federal Government Climate Action

The Climate Council's scorecard on Federal Government Climate Action will be an ongoing project to monitor climate performance, specifically around emissions pledges, accountability, transparency, accuracy, and the provision of funding and other support commensurate with responding to the climate crisis.

The Federal Government's rating of 'pass' or 'fail' is measured across a range of metrics, including:

- › Emissions reduction performance
- › The use of science-based climate targets
- › Timely and transparent emissions data reporting
- › Support for climate science and funding of climate-related programs
- › Providing the public with accurate climate information
- › Targets or policies in place to support the transition away from fossil fuels.

Based on the criteria as explained in Figure 5 below, the Liberal-National Government's climate performance has been assessed as a 'fail' mark.

Figure 5: Scorecard on Federal Government Climate Action.

SCORECARD

FEDERAL LIBERAL-NATIONAL GOVERNMENT

CLIMATE ACTION

Measure	Notes	Rating
Emissions pledges and performance	Australia ranks last among wealthy developed countries for its emissions performance and pledges according to several reputable, international bodies. (See Section 4.1 for more details.)	
A science-based 2030 emissions reduction target	The Climate Change Authority recommended in 2014 that Australia reduce its emissions by 45 to 65 percent by 2030 based on 2005 levels. The Liberal-National Government ignored this independent and science-based advice, instead choosing an emissions reduction target of 26 - 28 percent. This target has not been updated since 2015, despite most countries having done so. The Climate Council recommended in 2021 that Australia should be almost tripling its emissions reduction target. (See Sections 3.4 and 4.3 for more details.)	
Greenhouse gas emissions reporting	Australia meets international requirements for the measurement and reporting of emissions, and has worked to build a stronger transparency regime at the global level. The picture within Australia, however, is very different with the Liberal-National Government releasing its own emissions data in a heavily politicised and often highly misleading manner. (See Section 4.2 for more details.)	
Timely release of transparent and accessible quarterly emissions data	* In its first term, the Liberal-National Government repeatedly missed deadlines to release emissions data. Following intervention from the Senate to correct this, emissions data are now released in a timely manner. (See Section 4.2 for more details.)	
Support for climate science	Since 2013, Liberal-National Government attacks on science have been frequent, wide-ranging and debilitating. Collectively, these attacks have undermined the ability of the climate science community to provide cutting edge information to the public on climate trends, future projections, impacts, risks and solutions. In 2016, the Liberal-National Government announced a new Climate Science Centre in Hobart but overall there has been a major loss of expertise within Australia, and CSIRO's focus on climate change has been significantly weakened. (See Section 3 for more details.)	
International action and relations	Australia's approach to international climate negotiations has been regressive. Not only via its own weak commitments but also through blocking or frustrating world progress. As the need to tackle climate change has moved to the centre of the international agenda - and our policies have stagnated - Australia has become increasingly isolated. (See Sections 4.1, 4.3 and 7 for more details.)	

Measure	Notes	Rating
<p>Providing the public with accurate climate information</p>	<p>The Liberal-National Government has repeated many misleading and inaccurate claims about the costs and benefits of various policies, as well as its own progress.</p> <p>For example:</p> <ul style="list-style-type: none"> > Describing gas - which is a fossil fuel - as “clean” and viable as a solution. > Claiming that Australia’s climate track record is better than its major trading partners and allies in a taxpayer-funded advertising blitz by misrepresenting data. > Using dubious economic modelling to claim that stronger emission cuts will somehow “wreck the economy” <p>(See Section 5 for more details.)</p>	
<p>Support for climate-related programs</p>	<p>After the Liberal-National Government was elected in 2013, a number of effective climate policies and programs have been closed or cut back, including the Renewable Energy Target; the Energy Efficiency Opportunities program; the Australian Renewable Energy Agency; and the Clean Energy Finance Corporation. The Federal Government has proposed funding for projects of dubious credibility or benefit, such as i) a new “consensus centre” for economic analysis led by Bjørn Lomborg and ii) the allocation of \$443.3 million of taxpayers funds to the Great Barrier Reef Foundation without a competitive tendering process, and bypassing world-leading Australian research centres on coral reef ecology.</p> <p>(See Section 8 for more details.)</p>	
<p>Funding climate solutions</p>	<p>While the Liberal-National Government has funded renewables (predominately through programs it inherited), it continues to provide large amounts of public funding to fossil fuels. Of the estimated \$176 billion Australia has spent on COVID recovery efforts around two percent was spent on solutions to reduce emissions. Since the pandemic began, the Government has, for example, announced \$58.6 million for gas expansion, and further support for carbon capture and storage and hydrogen from fossil fuels as part of a \$540 million package.</p> <p>(See Sections 6.3 and 8 for more details.)</p>	
<p>OVERALL RATING</p>		

3. Attacks on science

Science is essential for the well-being of Australians, underpinning our economic and social success and informing our responses to profound societal challenges like COVID-19. Climate science is no exception, and over a number of decades Australia developed a world-class climate science capability. However, this capability has been seriously eroded by an almost decade-long Liberal-National Government attack on science.

These attacks have been diverse and debilitating, ranging from funding cuts to the CSIRO, which seriously stunted its climate research capability; to abolition of the Climate Commission; and repeated rejection of the scientific basis of climate change provided by leading national and international scientific institutions. Collectively, these attacks have undermined the ability of the climate science community to provide cutting edge information on climate trends, future projections, impacts, risks and solutions – information vital to safeguarding the economy, livelihoods and ecosystems that are fundamental to Australians' health and wellbeing.

Australia's climate science capability has been eroded by diverse and debilitating attacks, undermining the ability to provide information vital to our economy, safety and wellbeing.

3.1 Funding and job cuts for CSIRO's climate science division

In the 2014 federal budget, the Liberal-National Government culled CSIRO's budget by \$115 million over four years, approximately 16 percent of the organisation's total budget (Dayton 2014). It specifically cut funding to climate science programs such as the Australian Climate Change Science Research Program and the Pacific-Australia Climate Change Science Adaptation Planning Program (ABC 2016). The cuts played a large part in the loss of almost one-third of CSIRO jobs (from 5,000 to 3,500 total staff) in the two years up to June 2015. This, combined with the CSIRO CEO's decision in 2015 to significantly diminish the organisation's climate research capacity, put in jeopardy Australia's ability to understand, respond to and plan for the escalating climate crisis (CSIRO 2016; SMH 2016). Then came another blow, when in 2016 approximately 54 full time researchers were cut from the Oceans and Atmosphere Division, most of those from the Earth Assessment and Oceans and Climate Dynamics units (Commonwealth of Australia 2016).

The former CSIRO Chief Executive described the staff cuts as:

"Painful for our teams and our people who have dedicated themselves to the future of Australia and their families,"
- Dr Megan Clark (Commonwealth of Australia 2016, p. 4).

The Liberal-National Government's cuts to climate science were at odds with Australia's commitment in the lead up to and eventually under the *Paris Agreement* to join the rest of the world in tackling climate change. Part of this commitment includes strengthening climate science research capacity as a fundamentally important component of meeting the climate change challenge (UNFCCC 2015).

The cuts have significantly reduced our nation's ability to understand climate risks to our health and wellbeing, economy, water resources, cities, farmers, infrastructure, ports, and energy security. Moreover, the cuts have damaged a world-class capability that has taken decades to build and cannot be easily recovered (Climate Council 2016).

The CSIRO cuts also had repercussions for the global climate research community. Australia has the strongest climate research capability in the Southern Hemisphere, so these cuts have severely hampered the ability of the international scientific community to understand changing atmospheric and oceanic circulation in our part of the world. The cuts prompted widespread condemnation from the international science community. Almost 3,000 scientists across 60 countries highlighted how these cuts would severely limit CSIRO's capacity, with serious impacts for the Australian and global research effort (ABC 2016).

The Liberal-National Government's attacks on climate science have damaged a world-class capability built over decades, with repercussions for climate science globally.

In response, the Liberal-National Government announced a new Climate Science Centre in Hobart. Despite this concession, there has been a major loss of expertise and the focus on climate change at CSIRO has been significantly weakened (The Conversation 2016).

The process of creating redundancies and then creating a new Climate Science Centre cost taxpayers an estimated \$3 million (SMH 2017). Greens Senator Janet Rice described this as:

"A waste of money and talent - 54 positions were made redundant, yet CSIRO is now hiring climate scientists again... This whole schmozzle has cost CSIRO dearly and undermined staff morale while \$3 million could have paid for 15 climate scientists for a year" - Senator Janet Rice (Sydney Morning Herald 2017).

Figure 6: Hundreds of protesters rallied in Melbourne in response to the announcement of CSIRO staff cuts in 2016. Many of the job cuts were from the Atmosphere and Oceans Division, and the Land and Water Division, which both specialise in climate change research.



3.2 Australia ill-prepared for growing climate risks

The Liberal-National Government has placed lives in danger and the economy on the line by failing to prepare Australia for growing climate risks.

The 2017 Federal budget did not include renewed funding for the National Climate Change Adaptation Research Facility (NCCARF), an organisation with a mission to inform decision-makers on how best to prepare for and manage climate risk and sea-level rise (O'Donnell and Mummery 2017). The Liberal-National Government's decision not to renew NCCARF's funding has resulted in a lack of ongoing up-to-date information available to support climate adaptation.

The Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report clearly states that Australia can benefit significantly from taking adaptation action in highly vulnerable sectors (Reisinger et al. 2014). With accelerating climate change, the Liberal-National Government's decision to slash funding for climate adaptation research is negligent and exposes Australia's lack of preparedness to cope with more frequent and intense floods; water shortages in southern regions; deaths and infrastructure damage caused by heatwaves; bushfires; and impacts on low-lying coastal communities (O'Donnell and Mummery 2017).

A lack of pre-disaster preparedness and adaptation is also costly. In 2014, the Productivity Commission estimated that 97 percent of disaster funding in Australia is spent *after* an event has occurred (Productivity Commission 2014).

Over the past two years the Liberal-National Government has announced a number of new programs for building resilience and reducing disaster risks, including the Preparing Australia Program. However, the total funding for these programs is still significantly less than the amount of money spent on disaster recovery.

3.3 Abolition of the Climate Commission

The Climate Commission was established by the Labor Government in 2011 to communicate reliable and authoritative information about climate change to the Australian public. Plans to shut down the Climate Commission, along with a raft of other climate change-related institutions as well as the carbon price mechanism, were flagged by the Coalition before the 2013 election (SMH 2013).

On the second day of office after the election, the incoming Liberal-National Government dissolved the Commission. Between 2011 and 2013, the Climate Commission had produced nearly 30 reports on a range of climate-related topics including the fundamental

science of climate change, climate impacts in Australia, global action to reduce greenhouse gas emissions and the potential of renewable energy. The Climate Commission also convened numerous public meetings engaging with communities across Australia.

In response to the abolition of the Climate Commission and ongoing public demand for science-based information about climate change, the Climate Council was founded on 23 September 2013. The Climate Council was supported by tens of thousands of Australians, as a new, independent and community-funded organisation. Today the Climate Council is Australia's leading climate change communications organisation.

One of the first acts of the incoming Federal Government was to abolish the Climate Commission.

3.4 Climate Change Authority emissions target recommendations rejected

The Climate Change Authority (CCA), established under the Climate Change Authority Act 2011, has a mandate to provide independent, expert advice on climate change policy (CCA 2019).

In July 2015, the CCA completed a comprehensive evaluation of Australia's emissions reduction targets, recommending that Australia's 2030 emissions reduction target be set at 45 - 65 percent below 2005 levels. At the time, the CCA considered these targets credible in relation to what the science requires; the actions of Australia's major trading partners and allies; and setting a global emissions reduction path consistent with a reasonable chance of limiting the increase in global warming to 2°C (CCA 2015a).

Six years ago, when the recommendation was made, the CCA's view was that the recommended emissions reduction target of 45 - 65 percent would:

"Send a credible signal to domestic and international stakeholders alike that the Government is intent on playing a leadership role in guiding Australia's long-term transition to a sustainable, low carbon world" (CCA 2015a, p. 6).

Despite the science-based advice from this independent advisory body, in August 2015, the Liberal-National Government announced an emissions reduction target of 26 - 28 percent below 2005 levels by 2030 (Australian Government 2015). This target is also the first

The Liberal-National Government rejected advice of the independent Climate Change Authority and weakened its independence and expertise through its appointments.

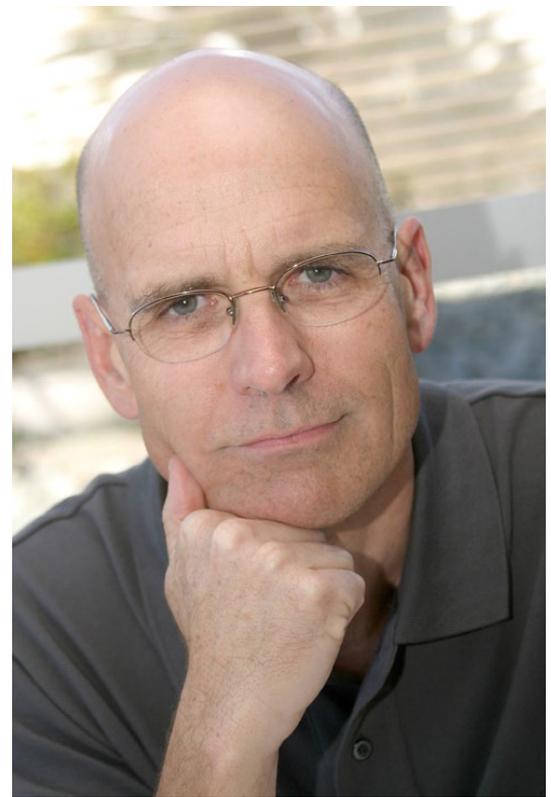


Figure 7: In 2016 the Climate Change Authority significantly weakened its recommended 2030 target to align with the Federal Government. Professor David Karoly (left) and Professor Clive Hamilton (right), who both sat on the Climate Change Authority Board, released a dissenting minority report.

commitment Australia made under the *Paris Agreement* (UNFCCC 2015). Australia has not strengthened this target since, despite international pressure as Australia's allies and many of its trading partners ratcheted up their 2030 emissions reduction targets in the lead up to or during COP26 in Glasgow in 2021. Notably, having been made back in 2015, the CCA's recommended emissions reduction target of 45 - 65 percent was based on limiting warming to 2°C, which was then the accepted international goal. Under the *Paris Agreement*, this goal was strengthened to 'well below 2°C' and pursuing efforts to limit it to 1.5°C, rendering the target chosen by the Liberal-National Government even more inadequate.

The Government did not provide an explanation of the discrepancy between the announced target and the CCA's recommendation. The CCA Chair subsequently characterised the Government's 2030 target as "substantially weaker than recommended by the Authority" (CCA 2015b).

In 2016, when the expertise of the Climate Change Authority had been significantly weakened by Liberal-National Government appointments, the CCA ignored its own previous recommendation – despite protests from the only remaining climate scientist on the panel – and accepted the Government's 26–28 percent 2030 emissions reduction target (CCA 2016). The actions recommended in the CCA's 2016 report were out of step with the science, and two high-profile members of the Authority's board released a minority report in response (see Hamilton and Karoly 2016).

Since July 2017, there have been no members of the CCA with climate science expertise. This is a glaring deficiency considering the CCA's mandate is to provide expert assessment of the effectiveness of proposed greenhouse gas emissions reduction targets and policies, and the projected impacts on Australia from current and future climate change (The Guardian 2017).

Australia's current 2030 target is not aligned with the science and is woefully inadequate when benchmarked against the level of action necessary to limit warming to 2°C, let alone the 'well below 2°C' and pursuit of 1.5°C to which we're now committed under the *Paris Agreement*. The Liberal-National Government has supported a "gas-fired recovery" from the COVID-19 pandemic rather than a clean economic recovery, and it has not ratcheted up its national 2030 emissions target (Climate Action Tracker 2021).

Independent analysis estimates that Australia's 2030 target, if adopted globally, could see warming reach over 3°C or more (Climate Action Tracker 2021). A 3°C world would have devastating consequences for Australia and the rest of the planet (See Box 1). There is much to be protected and saved in limiting warming to well below 2°C.

Australian governments, businesses, industries and communities can and must make deep cuts to emissions this decade. Given the scale of the global emissions reduction task, and taking into account Australia's very high level of emissions and our vast renewable energy resources, Australia should aim to reduce emissions by 75 percent below 2005 levels by 2030 and reach net zero emissions by 2035 (Climate Council 2021e). This is a fair and achievable contribution to the global task and an imperative given our high vulnerability to escalating extreme weather. The Climate Council's recommended 2030 target is only 10 percent higher than the upper end of the CCA's 2014 recommended range (45-65 percent) leading into the Paris summit. Considering Australia's vulnerability to severe impacts of climate change, it would make sense for us to be a global leader, rather than a global laggard, on climate change action (Climate Council 2021e).

Australia's 2030 target, if adopted globally, could lead to over 3°C of warming, with devastating consequences for Australia and the rest of the world.

3.5 Liberal-National Government and recommendations of world's most authoritative climate science body

Central to the *Paris Agreement* is the aim of holding the global temperature rise to well below 2°C above pre-industrial levels whilst pursuing efforts to limit the temperature increase to 1.5°C (UNFCCC 2015).

As part of the adoption of the *Paris Agreement*, the IPCC was invited to provide a special report on the impacts of global warming of 1.5°C and pathways to limiting warming to 1.5°C.

Launched on 8 October 2018, the IPCC Special Report on Global Warming of 1.5°C outlines the impacts of global warming of 1.5°C above pre-industrial levels. The report clearly articulated ways to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty. It was produced by 91 authors and editors from 40 countries, assessed more than 6,000 research papers, and received 42,000 comments in three reviews.

Despite the IPCC's status as the most authoritative international body on climate science, then Environment Minister, Melissa Price said that the Report's advice on phasing out coal in a bid to limit global warming was "drawing a long bow" (see interview transcript, ABC 2018).

In response to the release of the first part of the IPCC's Sixth Assessment Report in August 2021, which covered the physical science of climate change, Deputy Prime Minister Barnaby Joyce said he would not be "berated into complying" with specific IPCC conclusions, including the finding that global heating "of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions in CO₂ and other greenhouse gas emissions occur in the coming decades" (The Guardian 2021a).

4. Australia's track record on climate targets and greenhouse gas emissions

The problem of climate change, and the need to reduce emissions to avoid the worst possible consequences, has been well understood for decades. In 1992, Australia – along with most other nations in the world – ratified the United Nations Framework Convention on Climate Change (UNFCCC) – the world's first dedicated climate change treaty.

While later treaties - including the Kyoto Protocol and the *Paris Agreement* - contained more concrete goals, Australia was, right from the outset, committed to reducing its contribution to climate change. Upon signing the Convention, Australia indicated it would do its share to cut emissions. Despite this promising start, Australia has since become a global laggard and blocker of climate action.

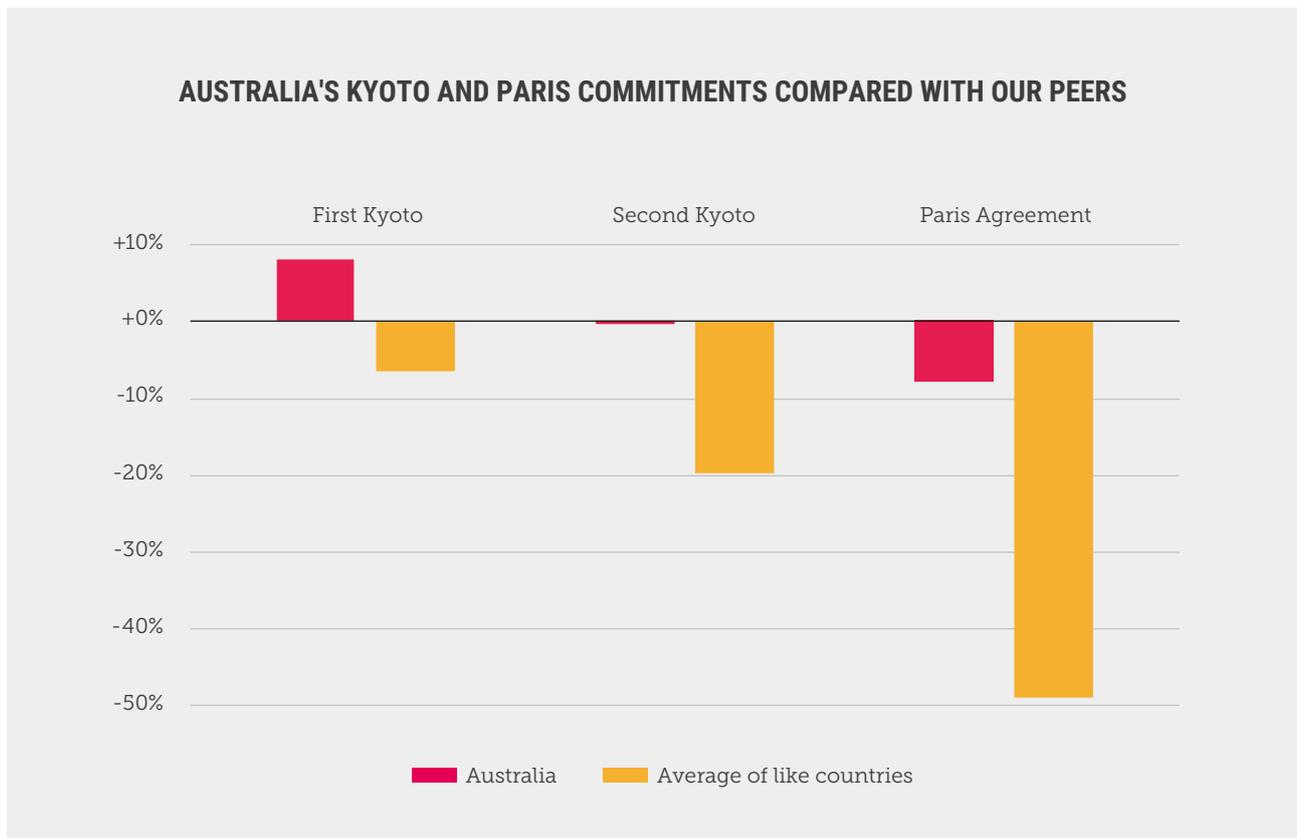
4.1 Climate action blocker

The Liberal-National Government's approach to international climate negotiations has led it to negotiate weak commitments for Australia, while also blocking or interfering with climate progress around the world. On the home front, Australia has failed over three decades to make meaningful cuts to its greenhouse gas emissions, except for the short period when the carbon pricing mechanism was in place and a brief yet inconsequential drop due to the COVID-19 pandemic. The government continues to support new coal and gas developments,

such as the Scarborough project in Western Australia which in its lifetime could release up to three times Australia's total national annual emissions (Bourne 2022).

Australia cemented its reputation as a drag on global efforts at least two decades ago in Kyoto, insisting on special treatment that would allow it to easily meet its weak commitments during the two Kyoto emissions reduction periods (2008-2012 and 2013-2020).

Figure 8: Australia's first and second commitments under the Kyoto Protocol and its first Nationally Determined Contribution to the Paris Agreement, compared to the average across comparable countries. To ensure fair comparison across time and between countries, all commitments are quantified relative to 1990 emissions. (Data source: Climate Council).



Australia also went on to set a very weak first target for itself under the *Paris Agreement* of just 26-28 percent below 2005 levels by 2030, maintaining its position at the back of the pack of developed countries. Australia has since fallen even further behind as almost all other advanced economies significantly increased their 2030 targets ahead of COP26 in Glasgow. Australia's progression over time as well as the progress over time of like countries - being those countries that are both OECD member nations and who were named in Annex I of the UNFCCC - are shown in Figure 8. A recent assessment by the Climate Council, based on the latest science and the goals of the *Paris Agreement*, has recommended that Australia's 2030 target be increased to 75 percent below 2005 levels (Climate Council 2021e). This would take Australia from the back to the front of the pack globally, ensuring Australia can take advantage of the considerable opportunities that decarbonisation presents, both at home and abroad.

Because Australia presents its relative emissions reductions in misleading ways, Australia's national commitments are even worse than these headline figures suggest. At the international climate negotiations at Kyoto in 1997, Australia negotiated an artificially inflated baseline against which emissions reductions are measured, by securing a clause that allowed Australia to consider emissions from land clearing in its base year (The Guardian 2021b). This uniquely privileged Australia among its international peers by inflating emissions in our base year more than any other comparable nation.

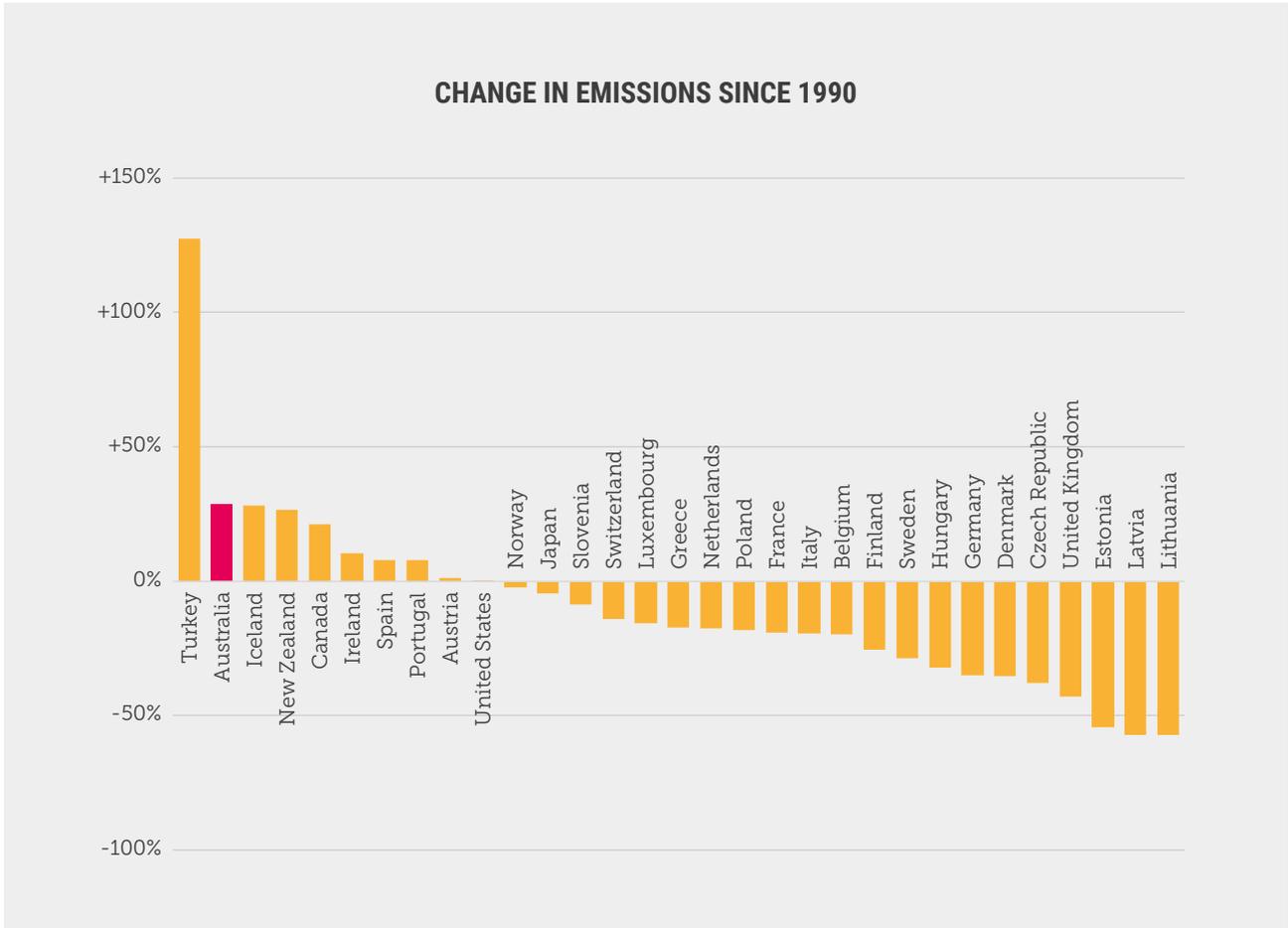
Leaning on this unequal treatment is central to the Liberal-National Government's efforts to make misleading claims on how Australia is performing well in comparison to other countries. Spurious comparisons based on this historical anomaly - which the ABC has independently fact checked and determined to be 'misleading' (ABC

2021a) - are prominent in the Liberal-National Government's taxpayer-funded 'Making Positive Energy' pre-election campaign (RenewEconomy 2021). This will be discussed further in Section 5.4.

Other nations have significantly reduced greenhouse gas emissions across their economies, but Australia is yet to begin (Figure 9). Changes to state land clearing laws - in Queensland in particular (The Guardian 2021c) - significantly reduced greenhouse gas emissions from land clearing between 1990 and 1995, and again between 2005 and 2015 (DISER 2021a). To put historical land clearing into context, even at today's significantly reduced levels, Australia is still consistently rated as a global deforestation hotspot (WWF 2021). Between 2005 and the beginning of the COVID-19 pandemic, the emissions from anthropogenic land use, land use change and forestry (LULUCF) - which include land clearing emissions - as calculated in the Federal Government's official reports has shifted very considerably. In 2005, LULUCF was a major source of emissions in Australia - 88 million tonnes of carbon dioxide equivalent greenhouse gas in the 2005 calendar year. In 2019, it was a minor sink, LULUCF drawing down 25 million tonnes more than it released. A total change of 113 million tonnes (DISER 2021a).

Other nations have significantly reduced greenhouse gas emissions across their economies, but Australia is yet to begin.

Figure 9: Comparing the change in emissions in wealthy developed countries between 1990 and 2019 (excluding land use). Australia is among a minority of countries in which emissions have increased rather than decreased since 1990. Only Turkey – which has only very recently ratified the Paris Agreement – has seen a larger increase in emissions than Australia, and Australia still has significantly higher emissions per person. (Data source: PRIMAP-hist, Climate Council 2021a).



In the thirty years since Australia first committed to tackling climate change, our emissions have *increased* by more than a quarter.

Over the same period, fossil fuel and other industrial emissions - the dominant cause of climate change worldwide - increased by 6 percent in Australia (DISER 2021a).

Including land use emissions and historical changes to state land clearing laws should not obfuscate the Liberal-National Government's failure to act on climate change.

4.2 A dubious track record of delaying and hiding emissions data

In its first term, the Liberal-National Government had a consistent track record of delaying the release of emissions data, projections or important climate policy information, and then publishing this information in the week before Christmas:

- › In 2014, quarterly emissions data for June 2014 were released on Christmas Eve (6 months late).
- › In 2015, quarterly emissions data for June 2015 were released on Christmas Eve (6 months late).
- › In 2016, two sets of quarterly emissions data for March and June 2016 were released in the week before Christmas (almost 9 months late) (22 December 2016).
- › In 2017, the Federal Government released delayed quarterly emissions data for June 2017, Emissions Projections 2017 and the 2017 Climate Policy Review all in the week before Christmas (19 December 2017).
- › In 2018, the Federal Government released Emissions Projections in the week before Christmas.

Other emissions reports have been published late on Friday afternoons, including releasing quarterly emissions data for March 2018 on 28 September 2018, the eve of football finals and on a public holiday in Victoria (The Guardian 2018). Freedom of Information documents obtained by the Australian Conservation Foundation showed that in this case, the March 2018 quarterly emissions data were finalised two months prior to publication, but were withheld. It is perhaps no coincidence that all the delayed reports have consistently found that emissions are rising.

In response to the Liberal-National Government's track record of withholding emissions data, the Senate passed a bill in October 2018 which now requires quarterly emissions data be provided to the Minister within five months of the end of the quarter, and that data are then to be published as soon as practicable, and tabled in Parliament within a set timeframe (The Parliament of the Commonwealth of Australia 2018). Despite the binding senate order being in effect, the data were again released late in June 2019, after the documents had been readied for release weeks earlier by the Department (ABC 2019).

4.3 Failure to ratchet up target ahead of major climate summit

At the COP26 climate summit in Glasgow (in November 2021), Australia failed to meet international expectations to strengthen its national climate targets. The 2015 *Paris Agreement* requires all countries to provide new, more ambitious, national targets for reducing greenhouse gas emissions every five years. The COP26 summit – delayed one year by the COVID-19 pandemic – marked the deadline for the next set of targets. Ahead of Glasgow, most wealthy nations set stronger targets to reduce emissions this decade. The G7 group of countries promised to halve their emissions by 2030. Australia was the only major developed country that refused to pledge stronger emissions cuts by 2030. Instead, Australia took to Glasgow the same grossly inadequate 2030 target that it took to Paris six years earlier. If all countries were to follow Australia's approach,

global warming could reach over 3°C or more (Climate Action Tracker 2021). Such a scenario would be devastating for Australia and the rest of the world (See Box 1).

To provide a fair assessment of Australia's climate performance as we headed towards Glasgow, the Climate Council produced two new, original rankings that compared Australia with its peers. The first index ranked wealthy developed countries on emissions reductions, taking account of both their pledges and their actual record in reducing emissions. Australia ranked last.

The second looked specifically at fossil fuel dependence, taking account of fossil fuel exports as well as domestic fossil fuel use. Australia ranked equal last (with Canada) among wealthy developed countries for its extraction and use of fossil fuels.



Figure 10: Scott Morrison arrives at the COP26 climate summit in Glasgow in 2021. Australia was the only major developed country that failed to pledge stronger emissions reductions by 2030 in the lead-up to or during COP26.

Australia is the only major developed country yet to significantly strengthen its 2030 emissions reduction target.

 **BOX 1: HEADING TO A 3°C WORLD AND WHAT THIS MEANS**

If countries were to adopt the same approach as Australia, the Earth would experience a rise in global average temperature of more than 3°C by the end of the century (Climate Action Tracker 2021).

The recent Australian Academy of Science (AAS) report “The Risks to Australia of a 3°C Warmer World” paints a grim picture of the devastating impacts Australians would experience if warming continues on its current trajectory (Hoegh-Guldberg et al. 2021).

Predicting what Australia might experience at 3°C or more of warming is based on observations of what is already occurring at a 1.1°C global temperature rise, modelling future impacts, and assessing the evidence from historical and paleoclimate records. The report paints a vivid picture of what life might be like if we don't achieve the *Paris Agreement* temperature goal, including:

› **Impacts on health and well-being:** The most serious threats of a warmer world are already being experienced at 1.1°C of warming: worsening heatwaves, bushfires, extreme heat, droughts, cyclones and storms, and torrential rains, flooding and hailstorms. These events will become much more intense and/or more frequent in a 3°C world. A much hotter world will have profound implications for our physical and mental health, like the psychological impacts from disasters and prolonged drought, a likely rise in infectious and vector borne diseases, and other psychological impacts of economic hardships driven by a changing climate.

› **Wide-spread property damage:** The vast majority of Australians live in urban areas. A one-metre sea-level rise, possible by the end of the century, would put 160,000 to 250,000 properties at risk of increasing coastal flooding. The combination of rising sea levels and increasingly intense low-pressure systems and cyclones greatly increases the damage from storm surges, inundation and coastal erosion. Extreme heat, bushfires and severe storms put mounting pressure on urban infrastructure and dwellings, rendering many properties and businesses uninsurable. Emergency services can no longer cope with more frequent, worsening disasters driven by extreme weather such as the Black Summer bushfires.

› **Impacts on Australia's ecosystems:** At a rise of 1.1°C in global temperature, the Great Barrier Reef has already suffered four mass bleaching events in the last seven years. The Reef would long cease to exist in a 3°C world. Intensifying heat stress would destroy many other coastal and marine ecosystems, with significant loss of biodiversity. Many land ecosystems would be destroyed or changed beyond recognition as multiple climate-related stresses – extreme heatwaves, bushfires and drought – intensify further and become more frequent.

› **Severe impacts on agriculture, forestry, fisheries and food production:** The long-term drying trends in southwest and southeast Australia, punctuated by severe droughts, are already hammering our most important agricultural regions. In a 3°C world, escalating heat stress would have severe impacts on the welfare, production and reproduction of livestock. Primary producers would suffer reduced water availability, elevated heat stress and reduced water supplies, triggering declining health and economic well-being.

 **BOX 1: CONTINUED**

A 3°C world would have devastating consequences for Australia and the rest of the planet. Limiting warming to well below 2°C is essential to defending our precious way of life and our beloved ecosystems and all the creatures that call Australia home.

Figure 11: Farmer engulfed in a dust storm on his drought-affected property in Forbes, NSW in 2020. Climate change means severe droughts are expected to become more frequent, increasing the risk of water shortages for agriculture and urban water supplies.



4.4 'The Australian Way' does not meet net zero emissions by 2050 goal

In the lead-up to COP26 late last year, the Prime Minister and Minister for Industry, Energy and Emissions Reduction notionally committed Australia to a net zero by 2050 goal in a plan it labelled 'The Australian Way' (Australian Government 2021a).

The Plan fundamentally fails to meet the expectations of the international community in that it does not include a strengthened 2030 target. Moreover, the strategies outlined in the Plan do not enable Australia to reach net zero by 2050.

The modelling that 'The Australian Way' is based on presumes corporations will take it upon themselves to pay \$25 per tonne (Australian Government 2021a), while recently, Australian Carbon Credit Units have been trading at up to \$55 per tonne (AFR 2022). Whilst some corporations are choosing to voluntarily incorporate a carbon price to mitigate risk, it is unlikely that all corporations will do this in the absence of any policies requiring them to do so.

The modelling in the plan shows that current policies are inadequate to reach the Liberal-National Government's own stated goal (The Guardian 2021d). While a simple chart in the plan (see Figure 17 in 'Australia's long-term emissions reduction plan'; Australian Government 2021a) makes it appear as though Australia's net zero plan is complete, it is difficult to see how this will be achieved in reality given the detail of the report.

The Plan estimates that the most significant contribution to reducing Australia's emissions (40 percent compared to 2005 levels) will come from the 'Technology Investment Roadmap'. Notably, most of the emissions reduction under this heading come from the continued rollout of renewable energy in the electricity sector (approximately 28 percent) in a trend that substantially pre-dates the Technology Investment Roadmap. The next largest share comes from decarbonisation of transport - a sector not directly covered by the Technology Investment Roadmap (See Table 2 in the plan). A further 15 percent reduction

'The Australian Way' falls way short of Australia reaching net zero by 2050.

'The Australian Way' does not put in place any effective policy mechanisms to reduce emissions. The document explicitly relies on others to act on its behalf. The central logic of the work - and its associated modelling - is that corporations will voluntarily, and with no pressure or impetus from the Government, begin to pay a carbon price that is virtually indistinguishable from the one they repealed in 2014. The carbon price under Clean Energy Futures was initially set at \$23 per tonne (Reuters 2011).

The costs of failing to act include lost job opportunities, being penalised by other countries, and the massive costs of climate impacts.

is assumed to be delivered by largely-unaccounted-for 'global technology trends' and another 10-20 percent will be purchased as offsets, with a heavy reliance on 'wildly overinflated' estimates of soil carbon abatement potential (Canberra Times 2021a). Notably, no additional funding has been set aside to purchase these offsets. A final 20 percent reduction is already accounted for as already delivered - through historical reductions in land clearing (see section 4.1).

Even if the Liberal-National Government's estimate of emissions reduction potential here turns out to be correct, the cumulative abatement of these three strategies – Technology Investment Roadmap (40 percent), Global technology trends (15 percent) and offsets (10-20 percent) – does not amount to the outstanding 80 percent reductions required. That is, the 2050 net zero target will not be met. A final category 'further technology breakthroughs' is used to cover the shortfalls in the plan. Although none of these 'breakthroughs' are enumerated or assessed, leaving a gap between the Federal Government's plan and attaining net zero.

On top of this, the plan fails to consider the cost of climate change impacts and is not backed by any significant funding or policy and does not formally commit the Federal Government to taking any action at all (RenewEconomy 2020).

The Liberal-National Government's policies are based on the premise that stronger action on climate change will be to the detriment of our economy. This premise is fundamentally flawed. Government investment is required to address climate change, but the benefits of this investment will far outweigh the costs of failing to act. The costs of failing to act include lost opportunities for "jobs and growth" as the rest of the world embraces renewables and phases out fossil fuels, penalties from international policies such as Carbon Border Adjustment Mechanisms (see Climate Council 2021d) and the massive costs of climate impacts. Research clearly shows that investment in addressing climate change delivers many benefits. This is discussed further in Section 5.2.



Figure 12: The Federal Government's 'Plan to Deliver Net Zero' failed to include an updated 2030 target and makes unreasonable assumptions about what other decision makers will do to reduce emissions with no policy incentive. Overall, the strategies outlined in the plan are not sufficient to enable Australia to meet net zero by 2050.

5. Setting the record straight

5.1 Gas is dirty

"We are building a robust and competitive gas industry that will allow both gas producers and users to thrive, with lower prices and lower emissions benefiting all Australians."

The Honorable Angus Taylor MP, Minister for Industry, Energy and Emissions Reduction (Australian Government 2020).

Gas is a fossil fuel which needs to be extracted from deposits in the ground and is then burned for energy by households and industry. The extraction and burning of gas releases greenhouse gases that escalate climate risk and put more Australians in harm's way. Even before it is burned, gas causes climate harm. The main component of gas, methane, is a greenhouse gas nearly 100 times more potent than carbon dioxide in the short term.

Along the entire gas supply chain large quantities of methane and carbon dioxide are released, known as fugitive emissions. Often, these fugitive emissions are not counted when considering the emissions from gas, adding to the incorrect assumption

that gas is cleaner than other fossil fuels (Climate Council 2020). Once fugitive emissions are included, any supposed climate benefit of gas often disappears. Gas is also the fastest growing fossil fuel in the world and its contribution to climate change is increasing. The rapid growth of Australia's export gas industry is the main reason that Australia's total greenhouse gas emissions have remained stubbornly high over the past several years (Climate Council 2020).

We do not need new gas when renewables are cheaper and cleaner, and can be backed by storage. The cost of the core components of lithium ion batteries, used for battery storage, have fallen by nearly 90 percent in the past decade, from \$1,100 per kilowatt hour in 2010 to \$132/kWh in 2021 (Bloomberg NEF 2021). The Australian Energy Market Operator projects a steadily shrinking role for gas over the next 20 years (Australian Energy Market Operator 2020). Wind and solar powered generation, even with storage, are still the cheapest forms of new electricity generating infrastructure (CSIRO 2020).

Even before it is burned, gas causes climate harm. The main component, methane, is a greenhouse gas nearly 100 times more potent than carbon dioxide in the short term.



Figure 13: Gas flaring at Woodside's gas plant in Karratha, Western Australia. Along the gas supply chain, large amounts of fugitive emissions are released.

5.2 Strong climate targets create jobs and economic growth

The Liberal-National Government claimed that the Labor Opposition's emissions reduction targets would "be a wrecking ball through the economy" (SMH 2021a), whilst the Coalition's will be good for the economy and solve the climate crisis.

Examples of such claims include:

"Labor's radical carbon cuts will cause massive job losses in Queensland and leave us marooned, while letting other states off the hook" - Matt Canavan, Senator for Queensland (Courier Mail 2021).

"A 43 percent target isn't safe for the Hunter. It's not safe for Gladstone. It's not safe for Bell Bay. It's not safe for our manufacturers. It's not safe for jobs" - Prime Minister Scott Morrison (SBS 2021a).

"The last time they [Labor Party] had a go at climate policy, we got a doubling in electricity prices, (and) we lost one in eight Australian jobs" - Treasurer Josh Frydenberg (The West Australian 2021).

The Liberal-National Government's claims that strong emissions targets will destroy the economy and jobs are misleading and baseless. Many of these claims relate to modelling released ahead of the 2019 federal election that claimed to assess the cost of the Labor Party's climate policy. This modelling was discredited by a number of economists. One leading economist said the modelling used "absurd cost assumptions" (SMH, 2019). More recently, the claim that 1 in 8 jobs were lost due to the Australian carbon price has been debunked (ABC 2022).

There is a growing consensus that strong climate targets will help drive investment and will create jobs and promote economic growth. The Business Council of Australia has not only come out in support of Labor's higher target (ABC 2021b), but is now promoting its own, even stronger target.

A 46-50 percent reduction by 2030 would add \$890 billion to the economy and create 195,000 jobs over the next five decades, particularly in regional areas, according to the BCA (ABC 2021b).

Although exact job creation numbers are difficult to assign to a given emissions target, AlphaBeta calculated that 76,000 new jobs could be created in under three years by policy changes addressing climate change and the recovery from the COVID-19 pandemic (Climate Council 2020).

Concerns have been raised regarding the reduction in export income for Australia given our reliance on coal. However, a recent report from Beyond Zero Emissions (2021) has shown that a green export industry could reach almost triple the current value of fossil fuel exports, to \$333 billion by 2050. Similarly, Accenture (2021) found that a clean export industry could create 395,000 jobs and add \$89 billion to the economy in 2040 – both numbers being higher than the current contribution of the fossil fuel industry.

Acting on climate change is in fact crucial for safeguarding the economy. With a variety of countries and regions, including the EU, setting strong emissions reduction targets, there is a risk that Carbon Border Adjustment Mechanisms may be introduced against Australia if we do not take similar measures. Such measures, which apply tariffs to products with high emissions, could shave \$12.5 billion from the economy every year and risk thousands of jobs, particularly in NSW and QLD (Climate Council 2021d).

When Matt Kean, then Environment Minister of NSW, increased the state's 2030 emissions reduction target to 50 percent he said: "The economics of climate change are now as compelling as the science; more than ever before the fortunes of the state are tied to the fortunes of our planet" (Kean 2021).

Strong climate targets will help drive investment, create jobs, and promote economic growth.

5.3 Electric vehicles are a viable solution

The transport sector accounts for 18.3 percent of Australia's greenhouse gas emissions, the third largest source of emissions (Australian Government 2021a). Australia's transport emissions have been steadily rising and are projected to continue to rise. Solutions are, however, readily available to cut rising greenhouse gas emission levels from the transport sector. These include introducing vehicle emissions standards; planning for and investing in infrastructure to enable more people to walk, cycle and use public transport; powering cars, buses and rail with renewable energy; and increasing the uptake of electric vehicles (Climate Council 2018a).

There has been significant media and public focus on electric cars and the benefits of shifting to this mode of transport. Unlike their petrol and diesel counterparts, electric cars powered by renewables cut greenhouse gas emissions, reduce our

reliance on imported fuels, result in cleaner air and quieter roads, and have potential to create new investment and jobs in vehicle manufacturing (Climate Council 2018a; Commonwealth of Australia 2019a).

The variety and capabilities of electric vehicles have developed quickly. There are now electric Sport Utility Vehicles (SUV) (such as the Tesla Model X) that can tow caravans and trailers. Electric utility vehicles (utes) are also on the way with almost 20 companies soon to enter, or already having entered, the market (EV Central 2022). Ford's F150 Lightning is now cheaper than the petrol version, which is the highest selling vehicle in the USA (Carsales 2022). Finally, regarding the last bastion of electric vehicle fear mongering, range anxiety, battery technology is progressing rapidly with a new proof-of-concept battery allowing a Tesla Model S to travel over 1,200 km on a single charge (Automotive Daily 2022).

The personal and societal economic benefits of electric vehicles continue to improve as well. An EY report (2020) found that replacing a petrol or diesel car resulted in average net benefits to government revenue and society of \$8,763 per vehicle while replacing a diesel bus resulted in an average net benefit of \$40,051 per bus. These benefits include: increases in revenue from increased GST; Luxury Car Tax and stamp duty on capital costs as well as annual vehicle registration; increased income taxation due to a redistribution of expenditure to more job intensive industries than fuel retailing; and a reduction in expenditure on Strategic Fuel Reserve leasing.

Electric vehicles can cut emissions, reduce reliance on imported fuels, reduce air and noise pollution, and create new manufacturing jobs.



Figure 14: The ACT Emergency Services Agency has signed an agreement with Rosenbauer to take delivery of Australia's first Plug-In Hybrid Electric Fire Truck in the first half of 2022.

Rather than highlight such benefits, the Liberal-National Government has chosen to mislead the public on the capabilities of electric vehicles. In 2019 Prime Minister Scott Morrison claimed that:

"[An electric vehicle's] not going to tow your trailer. It's not going to tow your boat. It's not going to get you out to your favourite camping spot with your family."
(See transcript from media release, Prime Minister of Australia 2019).

These criticisms culminated in the Coalition's now infamous claim that electric vehicles would "end the weekend" (see, for example, transcript from media release, Prime Minister of Australia 2019).

In November 2021, the Liberal-National Government announced it was expanding the Future Fuels Fund to \$250 million to support a roll out of enabling infrastructure in urban and regional Australia (ARENA, 2021). However, as the Electric Vehicle Council described it at the time, the Future Fuels Strategy "is a fizzer" (EVC 2021).

Although charging infrastructure is important, much more needs to be done to promote the uptake of electric vehicles. Australia is the last country in the OECD to develop a vehicle emissions standard. Michael Bradley, the CEO of Australia's peak motoring body, the Australian Automobile Association, said: "We are at the back of the queue [for cars] because we don't have one of these things, we don't have a cap-and-trade scheme or a CO₂ standard" (ABC 2021c).

A strong target for electric vehicle sales would also help. In Norway, a target of all new car sales to be electric by 2025 has helped transition the car market so much that over half of all cars on the road were electric by the end of 2020 (Norsk elbilforening 2021).

Despite many countries charging ahead on electric vehicles (see Figure 15, Climate Council 2021a), the Liberal-National

Government continues to prioritise fossil fuels. At the same time as announcing the Future Fuels Fund, the Federal Government announced the Fuel Security Service Payment. This payment provides more than \$2.3 billion in subsidies to Australian-based oil refineries (Australian Government 2021d).

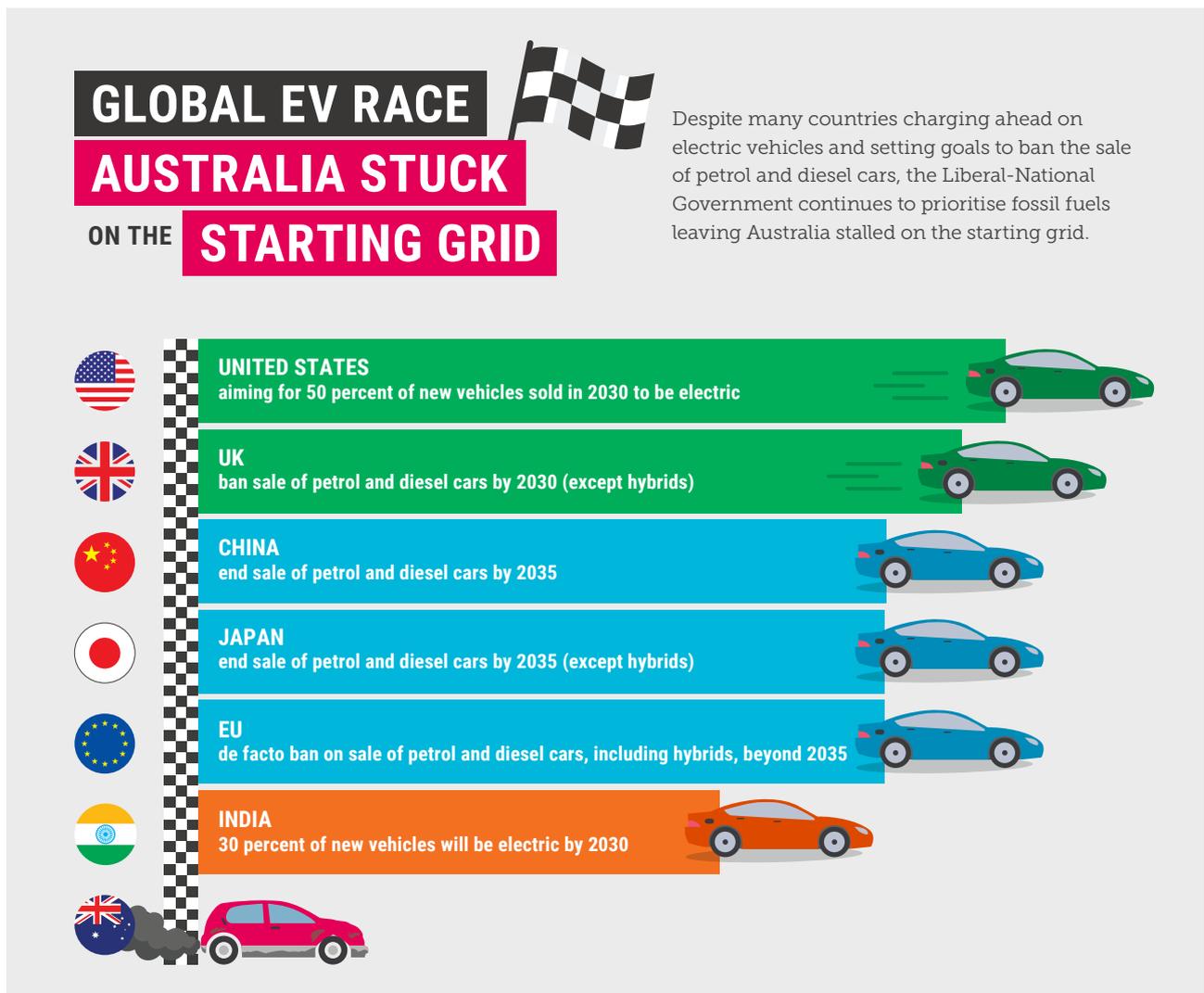


Figure 15: Global EV Race: Australia stuck on starting grid.

5.4 States and Territories are forging ahead

The Liberal-National Government is now riding on the coattails of the state and territory government's climate action achievements.

During the 15 month review of the national Renewable Energy Target, and following its subsequent reduction in 2015, considerable uncertainty shrouded the renewable energy industry, stymying investment. During that time, the ACT Government's reverse auction process and projects funded by Australian Renewable Energy Agency and the Clean Energy Finance Corporation were the only drivers of large-scale renewable energy in Australia (Renew Economy 2016a).

Due to an ongoing lack of effective national climate and energy policy, many state and territory governments have moved ahead with policies and programs, including renewable energy and emission reduction targets, to encourage the roll out of additional renewable energy and storage (Climate Council 2018b).

The expected reductions in Australia's emissions, which would see the 2030 target met are due to:

- › State and territories' uptake of renewable energy and electric vehicles
- › Earlier retirement of coal
- › Land sector changes, and
- › A likely decrease in demand in international markets for coal and gas due to the commitments made by countries under the *Paris Agreement*

(Climate Analytics and ACF 2021).

Figure 16 shows the various state and territory emissions reduction targets compared to the Federal Government's national target. If all countries were to adopt similarly weak targets to Australia's national target, warming could reach over 3°C (Climate Action Tracker 2021).

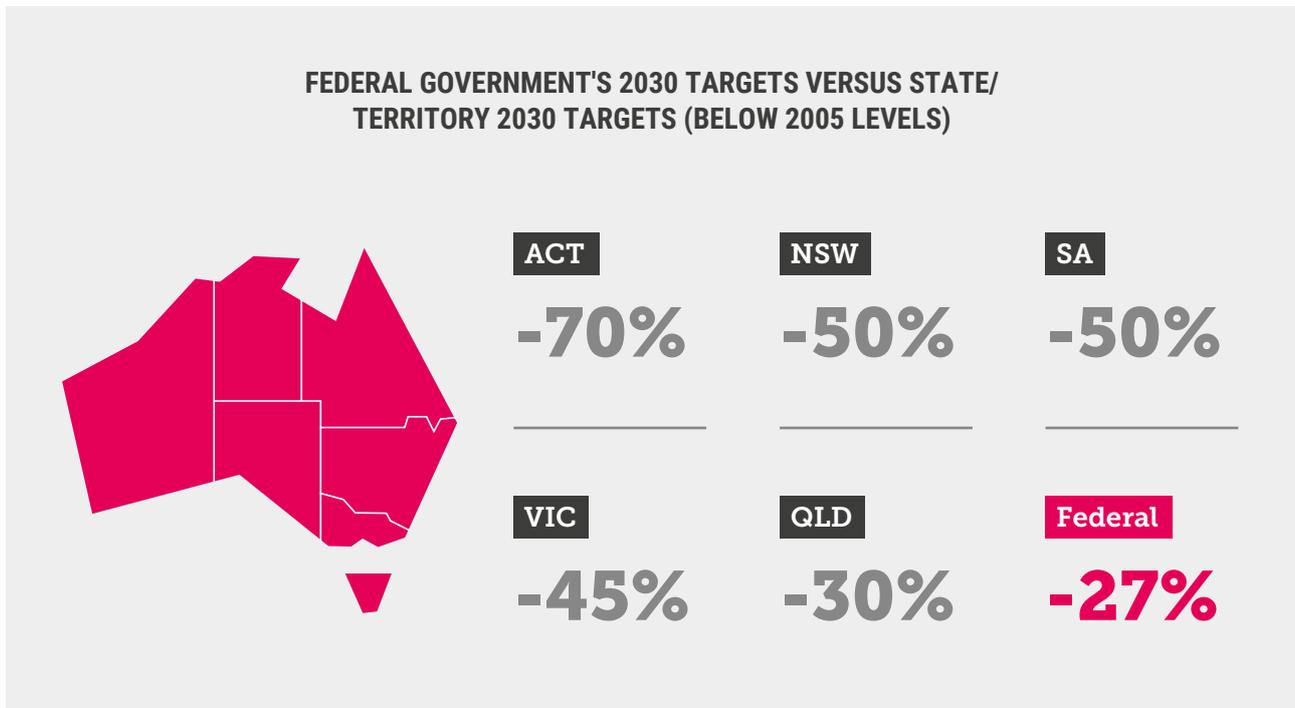


Figure 16: Federal Government's 2030 targets versus state and territory 2030 targets. (Only those states and territories that have set their own 2030 targets are shown).

BOX 2: FACT CHECK ON GOVERNMENT CLAIMS

In response to growing pro-climate action sentiment in the electorate, the \$30 million taxpayer-funded 'Making Positive Energy' pre-election media blitz across print, radio, television and online is intended to spruik the Liberal-National Government's climate credentials (RenewEconomy 2022). On top of this, Liberal MPs began sending taxpayer-funded promotional material to residents in their electorates through the later stages of 2021.

LIBERAL-NATIONAL GOVERNMENT CLAIM #1

"Australia's emissions have fallen more than those of New Zealand, Canada, Japan and the USA (since 2005)"

This claim is misleading for the following reasons:

1. To make a like-for-like comparison, it is necessary to assess Australia's emissions reductions in sectors other than land use, and to compare this to the emissions reduction performance of other countries in these sectors. Reliance on the raw data as reported to the UNFCCC overlooks the vast difference between how Australia reports its emissions and how other nations report theirs, and ensures a misleading representation of reality.
2. When making international comparisons of emissions, it is best practice to exclude land use emissions because these

BOX 2: CONTINUED

emissions are harder to measure and have higher levels of uncertainty. Not all countries have included land use emissions in the base-year against which they measure their targets, so to measure like-for-like, it is useful to exclude them across the board. Finally, as the land sector is the only sector where emissions can be recorded as negative, and as different countries have vastly different potential when it comes to the land sector as a carbon sink, including the land sector can advantage some countries over others. Excluding the land sector gives a much clearer picture when it comes to actual emissions from sectors such as energy, transport and industry.

3. At previous international climate negotiations, Australian diplomats successfully negotiated a considerable advantage over other nations in that Australia is permitted, under international accounting rules, to use an artificially inflated base year when determining its emissions reduction performance, through consideration of historical land clearing. While permissible under international accounting rules, the unique privilege Australia receives as a result of this inflated baseline means that responsibly comparing Australia's emissions reduction performance to that of other countries requires thought and nuance not evident in the Liberal-National Government's talking point.

**CHANGE IN GREENHOUSE GAS EMISSIONS (EXCLUDING LAND USE),
2005 LEVELS COMPARED TO 2019 LEVELS**

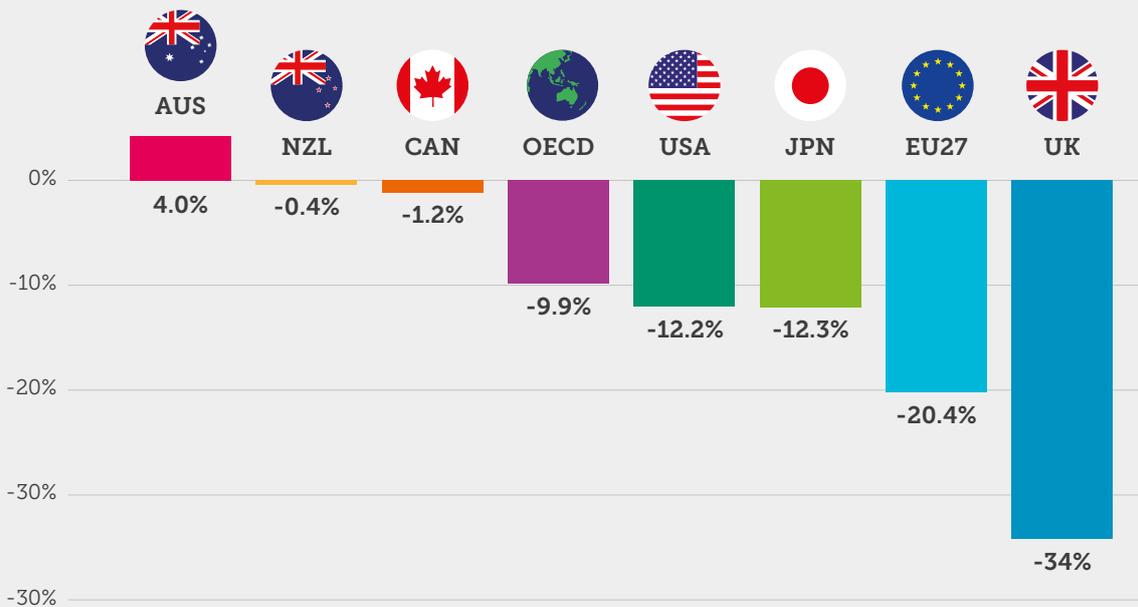


Figure 17: Greenhouse gas emission reductions (excluding land use), 2005 levels compared to 2019 levels. Data source: Gütschow et al 2021.

BOX 2: CONTINUED

4. The Liberal-National Government is also now comparing Australia’s emissions *after* a full year of the COVID-19 pandemic – with the resulting economic downturn and temporary emissions reduction – to every other nation’s *pre*-pandemic emissions. This is a misrepresentation of Australia’s relative performance.

When Australia’s emissions reduction performance is fairly compared to that of like nations by excluding emissions from land use and by using a common start *and finish* date for each country’s emissions, a very different - and more accurate - picture emerges, as shown in Figure 17.

LIBERAL-NATIONAL GOVERNMENT CLAIM #2

“Australia’s emissions are down more than 20 percent since 2005, the average for OECD countries is only 7 percent”

This claim is highly sensitive to the base year selected, and relies heavily on emissions reductions in the land sector (including reduced deforestation). In fact, most of Australia’s emission reductions since 2005 have come from changes in land management.

Unlike the Liberal-National Government’s approach, a fair and principled assessment of national emissions reduction performance shows that between 2005 and 2019:

- › Emissions of OECD nations fell by 9.9 percent, with emissions from several of our peers falling by much more.
- › Australia’s emissions increased by 4 percent over the same period.

When it comes to reducing emissions from electricity and moving beyond fossil fuels, Australia has made almost no progress. In fact, apart from small declines during the operation of the carbon price, and during the COVID-19 pandemic, Australia’s fossil fuel and other industrial emissions have steadily increased since 1990.



For more information, please refer to the [ABC Factcheck: Scott Morrison says there are only four countries in the G20 with a better emissions record than Australia. Is that correct?](#) (ABC 2021a).

6. Reckless conduct

6.1 Ignoring expert warnings of a summer of catastrophic bushfires in 2019-2020

In April 2019, a group of former fire and emergency services chiefs formed Emergency Leaders for Climate Action (ELCA). They shared deep concerns about the potentially catastrophic impact of the imminent 2019-20 bushfire season following serious bushfires in Queensland, NSW and Tasmania in 2018, and continuing drought. The ELCA group were united around the unequivocal scientific evidence that climate change, driven mainly by the burning of coal, oil and gas, is worsening extreme weather events, including more hot days, heatwaves, heavy rainfall, coastal flooding, and catastrophic bushfire weather - disasters they had all experienced during their long careers.

In April and May 2019, ELCA wrote to Prime Minister Scott Morrison asking for the opportunity to directly brief him on the alarming potential of the looming bushfire season. The group wrote again later in 2019 when the catastrophic fire season they had warned of, started to unfold. The PM refused to meet with them.

Ultimately after significant efforts to establish a dialogue, a short meeting was held with Ministers Littleproud and Taylor on 4 December. By then, hundreds of homes and a number of lives had already been lost in NSW and Queensland. No tangible changes or actions resulted from

the December meeting, and further lives, together with hundreds of homes, were subsequently lost to the flames in NSW, Victoria and South Australia.

ELCA recommended a number of significant measures that would have aided state and territory firefighting efforts, including approval of more funding previously requested by fire chiefs for additional large firefighting aircraft, and mobilisation of the Australian Defence Force to logistically support emergency services and aid in initial recovery. The recommendations were initially ridiculed by government politicians, then ignored, then belatedly implemented after public, political and media pressure, but not until after the worst damage and most deaths had already occurred.

It could be argued that the measures recommended by ELCA, if implemented, could have helped to reduce losses. By failing to heed expert warnings of a coming catastrophe, the Federal Government failed in its responsibility to protect Australians.

For more details, please refer to ELCA's submission to the Senate Inquiry: Lessons to be learned in relation to the preparation and planning for, response to and recovery efforts following the 2019-20 Australian bushfire season (ELCA 2020).



Figure 18: In the lead up to the 2019-20 Black Summer Bushfires the Emergency Leaders for Climate Action explained their deep concerns about the catastrophic outlook for the bushfire season, and how climate change is driving increased fire risk.

Recommendations from former fire and emergency services chiefs were initially ridiculed, then ignored, then implemented only after the worst damage and most deaths had already occurred.

6.2 Failing to implement key recommendations of the Bushfire Royal Commission

The Royal Commission into National Natural Disaster Arrangements was established on the 20th February 2020 in response to the horrific 2019-20 bushfire season. The final report was delivered to the Governor-General on the 28th October 2020, and tabled in Parliament on 30th October 2020.

The Federal Government released its response to the Royal Commission on Friday the 13th November 2020, and from Tuesday 2nd February 2021 published a document tracking its progress on a monthly basis. It stopped updating this midway through 2021.

Some of the Liberal-National Government's language around intent to implement is unclear or noncommittal and many recommendations have not been assigned an implementation time frame.

Emergency Leaders for Climate Action (ELCA) repeatedly sought clarification from the Federal Government on this matter, including meeting with and writing to the Emergency Management Minister, but once again were ignored.

The Royal Commission report and recommendations goes to the heart of building resilience to the ever-increasing threat of extreme weather-driven disasters caused by a warming climate. The Liberal-National Government seems intent on avoiding responsibility by saying that many of the recommendations are for other levels of government and has taken no responsibility for coordinating and

monitoring implementation. ELCA recently pointed out how the Liberal-National Government's failure to act on the majority of recommendations adversely affected preparations, response and recovery efforts for recent flood disasters in NSW and Queensland.

The Government must unequivocally accept all of the findings of the Royal Commission, and set clear and urgent deadlines for implementation. The Government has not clearly outlined which recommendations it has accepted, with many recommendations "noted" or "supported in principle", or dismissed as not being Federal Government responsibility. To help hold the Federal Government to account on implementing the Royal Commission recommendations, ELCA has highlighted 10 key recommendations of the 80 and tracked their progress live. See ELCA website for more details (<https://emergencyleadersforclimateaction.org.au/bushfire-royal-commission-accountability-tracker/>).



For more details, please refer to ELCA's submission to the [Senate Inquiry: Lessons to be learned in relation to the preparation and planning for, response to and recovery efforts following the 2019-20 Australian bushfire season](#) (ELCA 2020).

6.3 Spruiking a fossil fuel-led COVID-19 recovery and continuing to greenlight major fossil fuel projects

COVID-19 fundamentally reshaped the world that we knew, and after the 2019-20 climate change-fuelled bushfires, many communities are still doing it tough.

Australia needed a plan to create jobs in the short to medium-term while also solving long-term problems like climate change. Despite the opportunities for a climate and economic smart recovery, the Liberal-National Government pressed on with its plan for a gas-fired recovery from the COVID-19 economic downturn.

For example, the Liberal-National Government has forged ahead with approving the climate-wrecking Narrabri Gas Project, a project that will have devastating impacts on local biodiversity and water resources, and will accelerate dangerous climate change. In late December, it also announced \$600 million in funding for a gas-fired power station at Kurri Kurri.

This power station will be run just two to three percent of the time and will result in just 10 more jobs (The Guardian 2021e). This significant investment from the Liberal-National Government could instead be spent on harnessing wind and solar, renewable resources Australia has in abundance.

There is no sense in Kurri Kurri because gas is more expensive than existing alternatives. Experts have labelled gas an all-round terrible investment (Hepburn 2020). The chair of the Energy Security Board has said that a taxpayer-funded gas-fired power station in the Hunter Valley makes little commercial sense, given there are cheaper alternatives like wind, solar, big batteries, and pumped hydro already available (The Guardian 2021f).

HOW CONTAMINATION AFFECTS HUMAN HEALTH

The pathway from an emissions source can be complex and diffuse, but there are a few key elements.

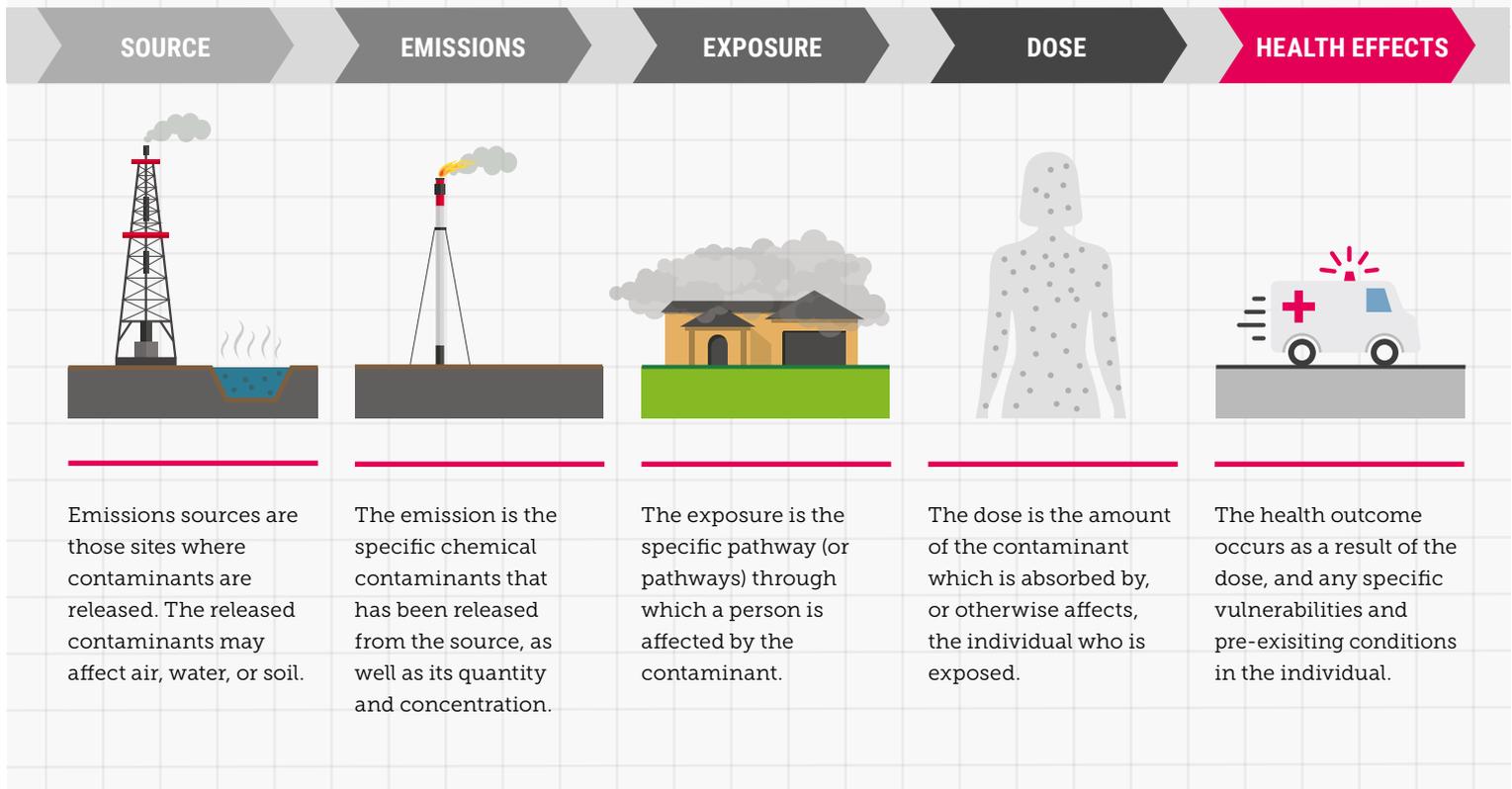


Figure 19: Illustrative exposure pathways between emissions source and health impact in gas fields.

Unconventional gas development, including fracking, is also exposing Australian communities to unnecessary health risks. Gas extraction and processing involves many hazardous substances including those that cause cancer, interfere with hormones, trigger asthma and contaminate the local environment through airborne pollution and wastewater (see, for example, Carey et al. 2014; Colborn et al. 2011; DiGiulio and Jackson 2016; McKenzie et al. 2012). Continued expansion of gas across the country puts more people and communities at risk of adverse health impacts (see Figure 19).

Burning gas at home can harm our children's health. Far from the "clean and natural" image that the gas industry markets, the use of gas for heating and cooking indoors carries many health risks. Cooking with gas is estimated to be responsible for up to 12 percent of the burden of childhood asthma in Australia (Knibbs et al., 2018). A child living with gas cooking in the home faces a comparable risk of asthma to a child living with household cigarette smoke (Climate Council 2021f).

Figure 20: Household gas use, especially from gas stoves, contributes significantly to the burden of childhood asthma in Australia.



Growing Australia's gas industry is exposing Australian communities to unnecessary health risks. We do not need new gas when renewables are cheaper and cleaner.

Gas causes climate harm and its emissions are under-reported in Australia. The international gas market is in crisis, and Australia is dangerously exposed to job losses and power price volatility. Governments can prevent health issues (see, for example, Figure 20), and reduce harm, by helping households, and the country, get off gas. The largest user of gas in Australia is the gas industry itself, and that is costing all Australians. In the financial year ending 2020, more than one quarter of all gas consumed in Australia - 453 petajoules - was burned by the gas industry to provide the energy required to process and compress its own product for sale overseas

(Department of Industry, Science, Energy and Resources (2021). The bottom line is that we do not need new gas when renewables are cheaper and cleaner.

Data from the Global Recovery Observatory shows that Australia has spent around \$176 billion on COVID-19 recovery efforts, but less than two percent of these funds has been invested in solutions that reduce emissions. In contrast, Germany and France allocated 47 percent and 50 percent of their respective recovery spending to clean solutions (UNDP 2021).

Australia has put less than 2 percent of its COVID-19 recovery spending towards solutions that reduce emissions. By contrast, Germany and France have allocated around half.

6.4 Promoting fossil fuels at COP26

Australia, with its already warm climate, high rainfall variability, threatened ecosystems and coastal population, is among the most vulnerable developed countries to the impacts of climate change. Moreover, Australia is also surrounded by countries facing even greater impacts as the world warms, including atoll nations in the Pacific for whom climate change is a truly existential threat (Climate Council 2021c). Ensuring a safe and dignified future for Australians, our neighbours, and the world at large, depends on a rapid phase-out of coal, oil and gas through the swift transition of our energy system to renewables.

In November 2021, governments from around the world gathered in Glasgow for the 26th Conference of the Parties to the UN Framework Convention on Climate Change (COP26). COP26, designed to urgently accelerate global action and cooperation under the *Paris Agreement*, was a pivotal moment in the world's response

to the climate crisis. Success hinged on countries coming to the table with stronger commitments for cutting emissions this decade and for accelerating the transformation of the world's energy systems.

The Liberal-National Government arrived in Glasgow as the worst performing developed country government on climate action (Climate Council 2021a) and Australia was the only large developed country yet to update its 2030 emissions reduction target. At COP26 the Liberal-National Government put considerable effort into promoting the continued use of fossil fuels and into resisting efforts to accelerate their phase-out.

Most brazenly, the Liberal-National Government hosted a number of fossil fuel companies at the Australian Pavilion, which cost taxpayers more than \$1 million (RenewEconomy 2022), offering some of Australia's most polluting businesses a platform to promote their agendas to the world.

Having arrived in Glasgow as the worst performing developed country government on climate action, the Liberal-National Government then put considerable effort during the conference into promoting the continued use of fossil fuels.



Figure 21: The Australian pavilion at the UN climate summit in Glasgow featured Carbon Capture and Storage exhibition provided by major gas producer, Santos. When paired with gas, CCS is simply an attempt to prolong the life of fossil fuels in our energy system.

This was the first time in many years that the Australian Government, which has often preferred to maintain a relatively low profile at UN climate conferences, had chosen to have its own pavilion. While it is normal for governments to use their national pavilions to host a range of businesses and other organisations, the Australian Pavilion was conspicuous for the prominence it gave to fossil fuel interests.

By far the most prominent exhibitor at the Australian pavilion was Santos, Australia's second largest producer of fossil gas. At multiple times during the conference, the Australian pavilion was dominated by a large model of a carbon capture and storage (CCS) facility provided by Santos and bearing its branding (The Guardian 2021g). When paired with gas, CCS is simply an attempt to prolong the life of fossil fuels in our energy system (Climate Council 2021b). Woodside, Eni and Chevron were also among the companies offered speaking slots during various events hosted at the pavilion (Australian Government 2021b). The Liberal-National Government's use of the pavilion at COP26 was consistent with Minister Angus Taylor's commitment to promote Australia as a good place to invest in fossil fuel projects (The Guardian 2021h).

The Liberal-National Government failed to join landmark deals announced at COP26 aimed at accelerating the phase-out of fossil fuels including a new UK-led commitment on phasing out coal-fired power and the Beyond Coal and Gas Alliance. Australia also did not join the Global Methane Pledge, through which more than 100 countries pledged to cut methane emissions by 30 percent by 2030. Reducing emissions of methane - a highly potent greenhouse gas - is one of the most effective measures to limit global warming in the short term. The fossil gas industry is responsible for large and increasing amounts of methane emissions, and its expansion is incompatible with working towards the goals of the *Paris Agreement* (Climate Council 2020).

Overall, the Liberal-National Government's promotion of fossil fuels at COP26 ran not only against the spirit and intent of COP26 and the *Paris Agreement*, thereby risking harming international cooperation, but was highly reckless in the context of the acute vulnerability of Australia and its region to climate change.

6.5 Liberal-National Government censorship of UNESCO report and blocking listing Great Barrier Reef as endangered

The Liberal-National Government has been warned for years that it must act on climate change to protect the reef. The health status of the Great Barrier Reef has never been poorer, following four mass bleaching events in the past seven years (in 2016, 2017, 2020 and 2022), caused by rising ocean temperatures driven by the burning of coal, oil and gas.

In June 2021 the United Nations Educational, Scientific and Cultural Organisation (UNESCO) released a draft decision that the Great Barrier Reef should be placed on the list of World Heritage sites that are 'in danger', due to massive coral declines over recent years (UNESCO 2021). The recommendation from UNESCO was a long time in the making - In 2015 the Great Barrier Reef narrowly missed an endangered listing, despite meeting several criteria for inclusion. At the time, UNESCO warned that Australia must do much more to protect the natural wonder. The Liberal-National Government launched a lobbying campaign in an effort to avoid an 'in danger' listing, which included sending delegates to most of the 21 countries represented on the World Heritage Committee, and establishing a dedicated taskforce (SMH 2015a).

UNESCO's June 2021 draft decision to place the GBR 'in danger' was released ahead of a meeting of the World Heritage Committee,

scheduled for the following month.

In response, Australia's Environment Minister Sussan Ley, flew to Paris to personally lobby member states on the committee, while key ambassadors were invited on a reef snorkelling trip. Following this concerted lobbying effort, members of the committee voted to delay the decision, requesting that Australia instead report on the reef's health status in 2022. In February 2022, the Liberal-National Government issued its report to UNESCO. The report contains very few numbers and no maps of the damage wrought by the three bleaching events in the past six years. Indeed, even the word "bleaching" is used sparingly, frequently replaced by a much vaguer "disturbance".

The Great Barrier Reef is in very serious trouble. The only chance for the survival of at least some coral reefs is limiting global warming to no more than 1.5°C above the long-term average (Schleussner et al. 2016). However, a global average temperature rise of 1.5°C would be insufficient to prevent more frequent mass bleaching events (IPCC 2022a) and would still see the majority (70-90%) of tropical reefs disappear (IPCC 2018). Multiple lines of evidence suggest that the world is now likely to reach 1.5°C of warming in the early 2030s (Climate Council 2021e).



Figure 22: The Great Barrier Reef has been hit by mass bleaching four times in the past seven years due to rising ocean temperatures driven by the burning of coal, oil and gas.

The Liberal-National Government has consistently ignored warnings that protecting the Great Barrier Reef requires stronger action on climate change, censored key reports, and lobbied against the Reef being listed as 'in danger'.

According to the IPCC, under a very low greenhouse gas emissions scenario, warming could be limited to 1.5°C by the end of the century with only a small and temporary overshoot (IPCC 2021).

Australia's status as an international pariah on climate policy will not be overcome by spin. A net zero target by 2050, setting aside the fact that the Liberal-National Government does not have a credible plan to achieve it, is at least a decade too late to save the Reef. In March 2022, a monitoring mission for UNESCO will visit Australia to consider the reef's current condition and will report to a 21-country World Heritage Committee meeting in June. The committee will consider inscribing the Reef on the list of World Heritage sites 'in danger'.

During the governmental approval process of the latest IPCC assessment report (IPCC 2022), the Australian government advocated for weaker language to say the Great Barrier Reef is not yet in crisis (The Guardian 2022). Such a position is fundamentally anti-science. The greatest threat to the survival of the world's reefs is accelerated climate change, which is driven largely by the burning of coal, oil and gas.

The Liberal-National Government also requested UNESCO remove references to the Great Barrier Reef and two other Australian World Heritage sites in a report published by the Union of Concerned Scientists and UNESCO on climate change threats to World Heritage Areas in 2016. After scientists who reviewed the sections on the Great Barrier Reef questioned why it was cut, the Environment Department admitted publicly that it had asked for the reef to be omitted as the findings could be confusing and damaging to the tourism sector (The Guardian 2016).

7. Undermining Australia's international relations

Over the past decade, Australia's approach to climate policy has seen the country become increasingly isolated on the world stage. As the need to tackle climate change has moved to the centre of the international agenda – and friends, allies and trading partners have strengthened their climate targets – Australia's climate policy has stagnated. The Liberal-National Government has been acting in the opposite direction from where we need to go, continuing to support and develop the fossil fuel industry.

This has had real costs for Australia's foreign policy, including Australia's relations with key security allies and with neighbouring countries in the Indo-Pacific. Former Australian Prime Minister Malcolm Turnbull has noted that:

"We are more out of step on climate with the rest of the world and in particular our closest friends and allies than we have ever been on any big international issue." - Former Australian Prime Minister Malcolm Turnbull (Australian Foreign Affairs 2021)

7.1 Climate policy and international cooperation

The Liberal-National Government's approach to climate change is at odds with Australia's long-standing commitment to rule-making through diplomacy. Australia's approach to international relations is defined by support for a rules-based global order (DFAT 2017). To pursue its interests in the world, Australia relies on agreed rules that are negotiated collectively between countries in areas like international trade, maritime shipping, management of the high seas, and limiting the spread of nuclear weapons. Global cooperation is also important for managing pandemics.

When it comes to UN climate rules however, the Liberal-National Government has sought to avoid obligations, under both the 2015 *Paris Agreement* and 2021 Glasgow Climate Pact, that require Australia to set a stronger national target to cut emissions (Morgan and Baxter 2022). Australia now finds itself among a small and isolated group of countries, including

Russia and Saudi Arabia, resisting stronger global action to cut emissions. This approach to international obligations undermines Australia's professed commitment to the rules-based order, which in turn makes it more difficult for Australia to achieve foreign policy priorities.

In late 2021, more than 100 former Australian diplomats and officials called for Australia to adopt a 'climate-focussed foreign policy' (Matthews 2021). They explained that putting climate action at the centre of Australia's foreign policy would help cement Australia's reputation as a reliable partner, and secure economic opportunities in a world rapidly shifting to net-zero emissions. By contrast, they argued that failure to act on climate "will reduce our influence in international fora and reduce our ability to achieve our international objectives as allies, partners and competitors penalise us for not pulling our weight on climate change" (Diplomats for Climate Action Now 2021).

Australia now finds itself among a small and isolated group of countries, including Saudi Arabia and Russia. Australia's approach to climate policy is at odds with its commitment to a global rules-based order.

7.2 Letting our allies down

Climate change is a global problem requiring international cooperation. However, over the past decade the Liberal-National Government's approach to climate policy has resulted in Australia becoming increasingly out-of-step with traditional security allies, including the United States and the United Kingdom. Both the US and the UK have integrated climate action into their foreign policy and national security priorities (White House 2021). In October 2021, the US National Intelligence Council released an assessment of the threat posed by climate change (National Intelligence Council 2021). It found the physical impacts of a warming climate pose multiple threats to US national security interests, and could exacerbate geopolitical flashpoints. The assessment also suggests the way countries respond to climate change has become a key dynamic in geostrategic competition.

Expectations are growing that Australia will work with western allies to pursue a coordinated response to climate change. Indeed Prime Minister Scott Morrison has told the federal cabinet that climate action is now considered a key pillar of the western alliance (AFR 2021). However, Australia is letting its allies down, as the only major developed country refusing

to strengthen its 2030 target under the *Paris Agreement*. Both the US and the UK have strengthened their targets, and are committed to halving emissions by 2030.

The Liberal-National Government's climate policy is especially out-of-step with Australia's key security ally, the United States. Australia's 2030 emissions reduction target was explicitly pegged to the 2030 target set by the US in 2015 (Wilkinson 2020). Last year however, the US set a much more ambitious target for cutting emissions by 2030, and now plans to cut emissions by 50-52 percent below 2005 levels by 2030. For its part, the Liberal-National Government has refused to strengthen Australia's 2030 target, and plans to cut emissions by 26-28 percent below 2005 levels by 2030.

Diplomats from both the US and the UK have made it clear they expect Australia to do more to cut emissions this decade. UK High Commissioner Vicki Treadell said: "the majority of other countries are going for 40-50 percent [cuts by 2030] so ideally that is what we would like to see" (SBS 2021b). US *charge d'affaires* Mike Goldman said the US expects Australia to make deeper emissions cuts by 2030, to be consistent with achieving net zero emissions by 2050 (ABC 2021c).

Australia's inaction on climate change has come at a real cost for our international relations, including with key security allies and with neighbouring countries in the Indo-Pacific.

7.3 Undercutting relations in the Pacific

The Liberal-National Government's reluctance to address climate change has undercut relations with Pacific island countries, and Australia risks losing geopolitical influence in our region. After coming to power in 2018, Prime Minister Scott Morrison's signature foreign policy was the 'Pacific step up' – an initiative intended to cement Australia's position as a security partner of choice for Pacific island countries (Wallis 2021). However, it is clear the step up will not succeed until Australia does more to tackle the issue that Pacific island leaders see as their main security threat: climate change.

Pacific island countries have formally declared climate change the 'single greatest threat' to the region (Pacific Islands Forum 2018), and island governments want Australia – as the largest member of the Pacific Islands Forum – to do more to reduce emissions, and to promote climate action on the global stage. Instead, Australia has resisted stronger climate targets and has actively vetoed Pacific climate diplomacy.

Ahead of negotiations for the 2015 *Paris Agreement*, Pacific leaders made it clear they wanted a treaty to limit warming to 1.5°C above pre-industrial levels. This was a threshold they felt should not be crossed as doing so would threaten the survival of low-lying atoll countries such as Kiribati, Tuvalu and Marshall Islands. At the 2015 Pacific Islands Forum in Port Moresby however, then Prime Minister Tony Abbott blocked any reference to the 1.5°C goal. After that meeting, Kiribati's President at the time, Anote Tong suggested Australia should leave the Pacific Islands Forum if the government did not back island positions in global climate talks.

"We cannot negotiate this, no matter how much aid. We cannot be bought on this one because it's about the future ... We expect them as bigger brothers, not bad brothers, to support us on this one because our future depends on it."
Former Kiribati President Anote Tong (ABC 2015).



Figure 23: At the 2019 Pacific Island Forum meeting in Tuvalu, Prime Minister Scott Morrison ruled out language in a regional declaration on emissions reduction and phasing out coal, incensing other Pacific Island Leaders.

At the 2019 Pacific Islands Forum, held in Tuvalu, Prime Minister Scott Morrison also vetoed Pacific climate diplomacy, when he ruled out language in a regional declaration on emissions reduction and phasing out coal. Pacific leaders were incensed, and there were again calls for Australia to be ousted from the Pacific Islands Forum. After a bruising twelve-hour stand-off at the Forum leaders' retreat, Fiji prime minister Frank Bainimarama told reporters Morrison had tried to head off Pacific concerns with the promise of aid money. He explained: "I thought Morrison was a good friend of mine; apparently not" (The Guardian 2015).

It is clear that Australia will need to do more to tackle climate change if it is to pursue its strategic interests in the Pacific. Bainimarama, currently the chair of the Pacific Islands Forum, says Pacific island countries expect Australia to set a new target to cut emissions by at least 50 percent by 2030 (Canberra Times 2021b). He says "strong commitments will make strong friendships" (SMH 2021b).

8. Funding and program decisions

Numerous climate policies and programs have been axed or cut under the current Liberal-National Government.

Some of these policies include the Energy Efficiency Opportunities program and the national Renewable Energy Target, which commenced under the Howard Government. Funding decisions have also raised questions over the Liberal-National Government's commitment to action on climate change.

Figure 24: Climate policies and programs cut or axed.

CLIMATE POLICIES AND PROGRAMS

CUT OR AXED

BY THE
**LIBERAL-NATIONAL
GOVERNMENT (2014-2021)**

2014



Federal Budget:

Total defunding of ARENA, in preparation for dissolving the agency at a later date. The Agency is then rescued by other parties, but with a **half billion dollar funding cut**.



Energy Efficiency Opportunities Program closed

2015



The Liberal-National Government issues draft directive to **prevent CEFC from investing in wind and rooftop solar**



The Liberal-National Government **attempts to abolish CEFC and CCA**



Large-scale RET wound back by 20 percent
(from 41,000 GWh to 33,000 GWh)

2017



The Liberal-National Government sought to **amend the CEFC's legislation to enable the corporation to invest in carbon capture and storage technologies**

2019



The Liberal-National Government announced the **Grid Reliability Fund (GRF)**, which includes the **Underwriting New Generation Investments (UNGI) program** and **five gas projects**

2021



Liberal National Government **legislation allows for ARENA to fund fossil fuel technologies** like hydrogen from gas with carbon capture and storage

8.1 Climate-related programs closed or cut

After the Liberal-National Government was elected in 2013, a number of effective climate policies and programs have been closed or cut back. These include policies that were established under the Howard Government.

The Energy Efficiency Opportunities program was closed in June 2014. This program, established in 2006 under the Howard Government, was designed to reduce energy use and costs for medium and large energy users. A five-year review of the program found it saved participants \$808 million in avoided energy costs, and reduced emissions by 8.2 MtCO₂-e (Energy EXchange 2019).

For over a decade - from 2001 to 2014 - Australia's Renewable Energy Target (RET) had bipartisan support at the national level. In 2001, the Howard Government established the original target, which was then called the Mandatory Renewable Energy Target. The initial target legislated for 2 percent new renewable electricity by 2010 (legislated as 9,500 GWh of renewable electricity from new sources). In the lead up to the 2007 federal election, both major political parties committed to expanding the RET to 15-20 percent of electricity use. In 2009 and 2010 the RET was increased and then split into large-scale and small-scale renewable energy targets with the large-scale target set at 41,000 GWh. The RET was expected to reduce Australia's emissions by 102 Mt CO₂-e over the period 2012-13 to 2020-21 (CCA 2012).

Numerous funding cuts, including to climate programs established under the Howard Government, have further demonstrated the Liberal-National Government's lack of commitment to action on climate change.

In the lead up to the 2013 federal election both major political parties committed to retaining the RET (The Guardian 2014). In May 2015, however, the Federal Government wound back Australia's large-scale RET by 20 percent (from 41,000 GWh to 33,000 GWh). The cut followed 18 months of investment uncertainty caused by the repeal of the carbon pricing mechanism together with multiple reviews of the renewable energy target (a review led by Dick Warburton and two reviews by the Climate Change Authority - CCA). The Federal Government had initially proposed to cut the RET by more than a third (37 percent) to 26,000 GWh (Tahlberg and Workman 2016). As a result of the uncertainty, investment in large-scale renewable energy dropped 88 percent in 2014 (SMH 2015b).

In 2014, the Liberal-National Government also made a failed attempt to abolish other key climate and renewable energy bodies - the CCA and the Clean Energy Finance Corporation (CEFC) (as part of a package to abolish the carbon pricing mechanism). When abolition proved politically impossible, the effectiveness of the bodies were instead curtailed by budget cuts; in the 2014 Federal Budget, the CCA received no funding and ARENA's budget was cut by \$1.3 billion over five years (Tahlberg and Workman 2016).

Such a funding cut which would have effectively meant the end of ARENA, a body established to support research and development in renewable energy (Ison and Dunston 2016). A deal between the Federal Government and the Opposition saw the proposed cuts wound back to \$500 million. This enabled the agency to remain, but dramatically reduced its capacity (Hopkin et al 2016).

In 2015, the Government then tried to limit the CEFC's remit to support renewable energy by issuing a draft directive to prevent the CEFC from investing in wind and rooftop solar (Tahlberg and Workman 2016).

In 2017, the Government sought to amend the CEFC's legislation to enable the corporation to invest in carbon capture and storage technologies but this bill has yet to pass the Parliament (Parliament of Australia 2017).

Although both the CEFC and ARENA remain, their functions have been changed to fund fossil fuel projects and associated technologies. In October 2019, the Coalition announced the Grid Reliability Fund (GRF), which is to be administered by the CEFC (DISER 2021b). The GRF includes the Underwriting New Generation Investments (UNGI) program, which although as the Government has stated, should not see the CEFC fund any coal projects, does include five gas projects. The legislation to establish the GRF has not yet passed parliament, and is unlikely to be before the Federal election. Earlier legislation was withdrawn after some members of the Government insisted that the legislation be changed to allow the CEFC to invest in coal (ABC 2021d).

Then, in 2021, the Government introduced new regulations to change the projects ARENA is able to fund, beyond those involving renewable energy. ARENA will now be open to fund carbon capture technologies, including carbon capture utilisation and storage and negative emissions technologies, blue hydrogen (hydrogen from gas using CCS), and soil carbon (Taylor 2021).

8.2 Funding of projects of dubious emission reductions credibility or benefit

In 2016, the Federal Government announced \$15.5 million funding over four years for a new centre at CSIRO to promote growth in oil, gas, coal and uranium (RenewEconomy 2016b). In the 2018-19 budget, the Government extended funding for the centre, called the National Energy Resources Centre, until 2022 (NERA 2018). As climate change is driven by the burning of coal, oil and gas, a centre working to promote these resources is completely at odds with a responsible approach to tackling climate change.

In May 2018, the Liberal-National Government announced almost \$500 million in funding for the Great Barrier Reef. However, the funding announcement was targeted at addressing water quality issues, coral resilience, culling of the crown-of-thorns starfish, and community engagement, while failing to deal with the serious threat that climate change poses to the Great Barrier Reef (Brodie 2018).

There have been additional questions regarding the decision to allocate \$443.3 million of this funding to the Great Barrier Reef Foundation without a competitive tendering process. This decision was subject to an audit by the Australian National Audit Office (2019) and an inquiry by the Environment and Communications References Committee of the Senate (Commonwealth of Australia 2019b). The Senate Committee recommended unspent

Great Barrier Reef Foundation partnership funds be returned and used for projects to protect and preserve the reef. The Senate Committee also recommended:

“that the Commonwealth Government take steps to address and effectively tackle climate change as an underlying cause of economic, social and environmental damage to the Reef and the Australian environment more broadly” - Senate Committee (Commonwealth of Australia 2019b).

In January 2022, the Liberal-National Government announced \$1 billion will go towards improving water quality, reef management and research for the Great Barrier Reef. Any additional funding for the environment in Australia is welcome, as it is severely under-resourced. However, handing out cash for the Great Barrier Reef with one hand, while funding the very industry – fossil fuels – that is driving devastating climate impacts like marine heatwaves and coral bleaching, means the Liberal-National Government is adding to the very problem they are claiming they want to fix. Climate change is the number one threat to the Great Barrier Reef and coral reefs globally. The only way to protect the Reef from this threat is to move rapidly away from coal, oil and gas.

8.3 Stopping contributions to the Green Climate Fund

Over the past decade, Australia - led by the Liberal-National Government - has failed to provide its fair share of international climate finance, and has withdrawn from the UN's Green Climate Fund. This has undercut Australian diplomacy in the developing world, and has earned Australia a reputation as a shirker among wealthy nations who have collectively promised to support developing countries to tackle climate change.

At the outset, Australia played an important role in the establishment of the Green Climate Fund (GCF), intended to mobilise and disperse climate finance to developing countries. International climate finance is critically important in enabling poorer countries to transition rapidly to new energy sources and to build their resilience to

the escalating impacts of climate change. Under the *Paris Agreement* wealthy nations committed to jointly mobilise US\$100 billion a year to developing countries by 2020. The GCF, while accounting for only a portion of the commitments towards the US\$100 billion goal, is an important part of the global climate finance system and a key driver of international cooperation. Australia has failed to provide a fair share towards the US\$100bn goal and has ceased contributions to the GCF entirely. Such failures damage global cooperation, trust between nations and progress under the *Paris Agreement*.

Initially Australia leveraged the GCF to help ensure Australia's neighbours in the Indo-Pacific could access a greater share of global climate finance. This helped to win friends

Australia has failed to provide its share of funding to support climate action in developing countries, undermining trust and international cooperation.

in the region (Maclellan 2018). Australian diplomat Ewen McDonald became co-chair of the board of the GCF in 2014, and former Australian climate negotiator Howard Bamsey was executive director of the GCF in 2017 and 2018. However, after coming to power in 2018 Prime Minister Scott Morrison announced - without warning, on air during a discussion with conservative talkback radio host Alan Jones - that Australia would withdraw from the GCF. He explained:

"[We are not] bound to go and tip money into that big climate fund, we're not going to do that either. So I'm not going to spend money on global climate conferences and all that sort of nonsense".

Prime Minister Scott Morrison (Office of the Prime Minister 2018)

Ceasing contributions to the GCF has undermined Australian influence in this key institution, including the ability to help ensure it is effective in meeting the needs of the Pacific.

Australia continues to provide climate finance, including through the aid program, but lags well behind peers in terms of how much funding is provided. Current allocations are for AUD\$2 billion to be provided as climate finance from 2021-2025. However, if we assume Australia's 'fair share', based on our wealth and our greenhouse gas emissions, to be around 2.4% of the global effort (Jotzo et al. 2011), then Australia's overall commitment is still only around an eighth of its fair share towards the longstanding and still unfulfilled global goal of mobilising USD\$100 billion a year by 2020. Moreover, if we base our fair share calculation on an estimate of the actual level of need for support with climate action worldwide, which far exceeds USD\$100 billion a year, then Australia could reasonably be expected to go well beyond an eight-fold increase in its current contribution over the coming years (Oxfam et al. 2021). (Oxfam et al. 2021). The Liberal-National Government has also continued to resist calls, including from Pacific island countries, to resume contributions to the GCF.

9. Conclusion

Australia's national approach to climate change has been out of step with global action for many years, and has been regularly criticised at home and abroad. While there has been a vacuum of leadership at the federal level, state and local governments, as well as business, industry and the community, have been stepping up. All States and Territories now have net zero targets and have been strengthening their respective commitments to renewable energy.

However, these efforts still fall far short of the pace and scale of action required. The latest assessment of combined global commitments shows barely a dent in total global emissions before 2030. Almost all countries, including Australia, need to immediately escalate their efforts, and make far deeper emission reductions before the end of this decade.

As temperatures rise, so too do the consequences. Australia and many other regions have suffered losses (for example, from the catastrophic 2019-20 Black Summer bushfires and 2022 East Coast floods), but there is still so much to be protected and saved. Warming avoided can be measured in lives, species and ecosystems saved. This is why it is vital to take strong, bold climate action this decade. Getting global emissions down to net zero as quickly as possible is the top priority.

To limit temperature rise to well below 2°C, global emissions need to be halved by 2030, and there is a need to get to net zero by 2040 at the latest.

Australia has everything it needs to drive far stronger action at home, and to support other countries to do the same.

Australia is primed to meet this challenge. Leadership from States and Territories has shown us the way. Technological advancements, plummeting costs, and the unrivalled potential of our sun-drenched continent to generate renewable energy mean we have everything we need to drive far stronger action at home, and to support other countries to do the same.

Given these advantages and opportunities, along with our very high emissions and historical contribution to climate change, Australia can and should cut its emissions at an even faster rate than the required global average. The Climate Council recommends that to make a fair contribution to the required global effort, Australia should achieve net zero emissions by 2035, and reduce emissions by 75 percent below 2005 levels by 2030. As a first step, Australia should match its

key allies and commit to at least halving emissions by 2030. We should aim high, and we should move fast in order to maximise the benefits and minimise the risks.

Embracing our natural advantages in clean energy, zero-carbon manufacturing and other climate solutions will ensure jobs and prosperity for Australians now and for generations to come. It will improve our health, and help protect our natural heritage. Bold and transformative action this decade is not only fundamental to protecting all of us, but can also secure Australia's economic prosperity.

It's crunch time. Another lost decade will put us on the precipice of climate catastrophe. The 2020s are our 'Last-Chance Decade' - a decade the next Federal Government cannot afford to squander.

Australia can and should cut its emissions by 75% below 2005 levels by 2030. Stronger action this decade will be measured in lives, species and ecosystems saved.

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