

STRONGER TARGET, SAFER FUTURE: WHY AUSTRALIA'S 2035 CLIMATE TARGET MATTERS



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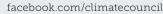


The Climate Council acknowledges the Traditional Owners of the lands on which we live, meet and work. We wish to pay our respects to Elders, past and present, and recognise the continuous connection of Aboriginal and Torres Strait Islander peoples to land, sea and sky. We acknowledge the ongoing leadership of First Nations people here and worldwide in protecting Country, and securing a safe and liveable climate for us all.





















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Key Findings

Climate change is accelerating, and current global efforts – including Australia's – are dangerously inadequate.

- Communities today are living with the consequences of past policy failures to curb climate pollution from coal, oil and gas.
- > Climate pollution has now formed a massive blanket of heat-trapping gases around the world, raising global average temperature by 1.3°C. That heat is driving more ferocious and frequent extreme weather and dramatically damaging the ecological systems that sustain human life and society.
- > Every fraction of a degree of global heating matters: the difference between 1.5°C and 2°C is existential for vulnerable communities, coral reefs, agriculture, and ecosystems.
- > While many countries are now taking measures to cut climate pollution, the combined effort is not yet at the speed or scale required to protect humanity from the worst impacts of climate change.
- The future scale and severity of the climate crisis will depend on how quickly and deeply we slash global climate pollution.

Australians are already living with climate consequences – and the costs are soaring.

- > In 2025, Australian communities have experienced: back-to-back flooding in New South Wales and Queensland; unprecedented marine heatwaves devastating reefs in Western Australia and Queensland, and decimating marine life in South Australia; and deepening drought in southern Australia affecting vast tracts of agricultural land.
- Climate-fuelled disasters are expected to cost the Australian economy \$94 billion a year by 2060 if pollution levels remain high, while at least 8.8% of Australian homes will be uninsurable due to high exposure to climate disasters by 2100.

> The total insured cost of extreme weather events in Australia in the first half of 2025 has now exceeded \$1.8 billion, following Ex-Tropical Cyclone Alfred, the North Queensland floods, and recent flooding on the Mid-North Coast and Hunter regions of New South Wales.

3 Australia's 2035 climate target must be very strong to be science-aligned.

- > Global governments, business and scientists all agree that holding global warming well below 2°C is vital to prevent massive disruption to the global climate system.
- New analysis shows that net zero by 2035 is the only target available to Australia with a strong chance of contributing to holding global warming below 2°C.
- Australia is one of the world's largest producers and exporters of fossil fuels like coal and gas. Yet we were late to tackling our climate pollution, with a decade of inaction from 2013-2022. Consequently, a science-aligned reduction curve is now steep.

A stronger 2035 climate target will keep Australians safer. A weaker target risks more disasters, more damage and more danger.

- > The Australian Government must set the strongest possible target to protect Australians from increasing climate harms with regular review opportunities to ratchet up as technology develops.
- Analysis shows that a 2035 target of -75% or more (on 2005 levels) is aligned with more than 2°C of global heating, but likely less than 2.3°C*.
- > Weaker targets are aligned with even higher levels of global heating. Each fraction of a degree of global heating is associated with more catastrophic impacts to communities and ecosystems.
- A -65% target is aligned with below 2.4°C of global heating.

^{*} If other countries were to follow Australia's lead and adopt the same per capita share of the remaining global budget from 2024 onwards.

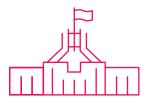


> Weak climate targets are an active commitment to global climate disruption and damage. Those advocating for targets that would see global heating well beyond 2°C should articulate clearly their costed plans to support, relocate and/or protect the Australian community through unprecedented socio-economic dislocation.

Significant economic and diplomatic opportunities can flow from a strong target.

- > The cost of cutting climate pollution is dramatically less than the cost of unchecked climate change, which would cost Australia \$4.2 trillion by 2070. Choosing a strong target now is far more costeffective than attempting to adapt to escalating climate damage.
- > Setting a strong climate target sends a clear signal to investors and industry and could unlock and accelerate growth in clean technologies and green exports, projected to approach \$1 trillion per year by 2050, creating over 400,000 jobs.
- Pacific Island Countries face an existential threat to their security from the climate crisis. Australia's security is entwined with the Pacific, but our credibility hinges on whether we are serious about climate action.

- To protect Australians from the most 6 significant risks of the climate crisis, we can go beyond domestic action to support global action to slash climate pollution. Australia's Nationally Determined Contribution can include commitments to phase out fossil fuels and support global action.
- > Developing clean industries that contribute to global pollution reduction, i.e. developing green iron, cathode and battery manufacturing, sustainable shipping and aviation fuels.
- > Supporting developing countries in their transition through climate finance or other mechanisms.
- > When burnt overseas, Australia's coal, oil and gas exports release climate pollution equivalent to 2.5 times Australia's annual climate pollution. While the Albanese Government has made clear progress cutting climate pollution domestically, it needs to go further and faster to protect Australians from the worst effects of the climate crisis by phasing out these polluting exports with our trading partners. The first step is to end new and expanded fossil fuel projects.



As we arrive at the middle of the critical decade for climate action, the window for meaningful global climate action is closing fast.

The Albanese Government's decision on Australia's 2035 climate target will reverberate for generations to come.

Recommendations

Climate Council recommends that Australia's 2035 climate target and our next Nationally Determined Contribution (NDC) to the Paris Agreement:

1. Aims to limit warming as much as possible with the highest probability of success. This means adopting the strongest possible targets aligned with holding global warming to well below 2°C.

The science is clear that to do our fair share to hold global warming to well below 2°C, Australia needs to reduce climate pollution to 75% below 2005 levels by 2030, and reach net zero by 2035. Any target set lower than this raises the level of risk for our families, community, economy and national security. Every fraction of a degree of avoided warming matters, and will be measured in lives and livelihoods saved, fewer families forced from their homes, and a safer future for our children.

In April 2024, the Climate Change Authority's preliminary advice to Government suggested that a 2035 target in the range of 65-75% (below 2005 levels) is achievable if additional action is taken (CCA 2024). New analysis commissioned by the Climate Council and conducted by Climate Resource shows that setting Australia's 2035 target within this range is aligned with a twothirds chance of limiting global warming to 2.4°C, assuming other nations followed on a per capita basis. Warming at this level is associated with catastrophic climate consequences. While the CCA has not yet released its final advice to Government, it is clear that even the top of this previously considered range (75%), would expose communities, the environment and our economy to an extremely high level of risk.

Setting as strong a 2035 target as possible today, while embedding regular review opportunities and a 2040 net-zero goal, will ensure Australia stays on the front foot and reduces this risk to the extent now possible.

For more detail, see section 1.4 and 2.

2. Is embedded in Australian law. Amending the Climate Change Act to legislate the new 2035 target will signal the Government's commitment to delivering Australia's Net Zero Plan and sectoral emissions reduction pathways.

A legislated 2035 target, supported by a credible national Net Zero plan, detailed sectoral pathways and a suite of stable, sensible policies to promote climate solutions and manage climate risk, will provide important signal, leverage and policy certainty for coordination across all levels of government, and for the business and investment community more broadly.



3. Includes a commitment to phase out fossil fuel use, production, exports and subsidies, including a clear plan with timelines.

Australia's ongoing approval of new coal, oil, and gas projects—and its status as a leading fossil fuel exporter—are a drag on our national climate targets and are significantly undermining global efforts to curb emissions. To be credible, Australia's next NDC must commit to a managed and orderly phase-out of fossil fuel use, production, and exports. This requires halting approvals for new coal, oil, and gas projects, capping and declining export volumes through a clear, time-bound plan, and ending ongoing fossil fuel subsidies. As a prospective COP31 host, committing to this fossil fuel exit would signal genuine climate leadership and support global progress.

For more detail, see section 2.5.

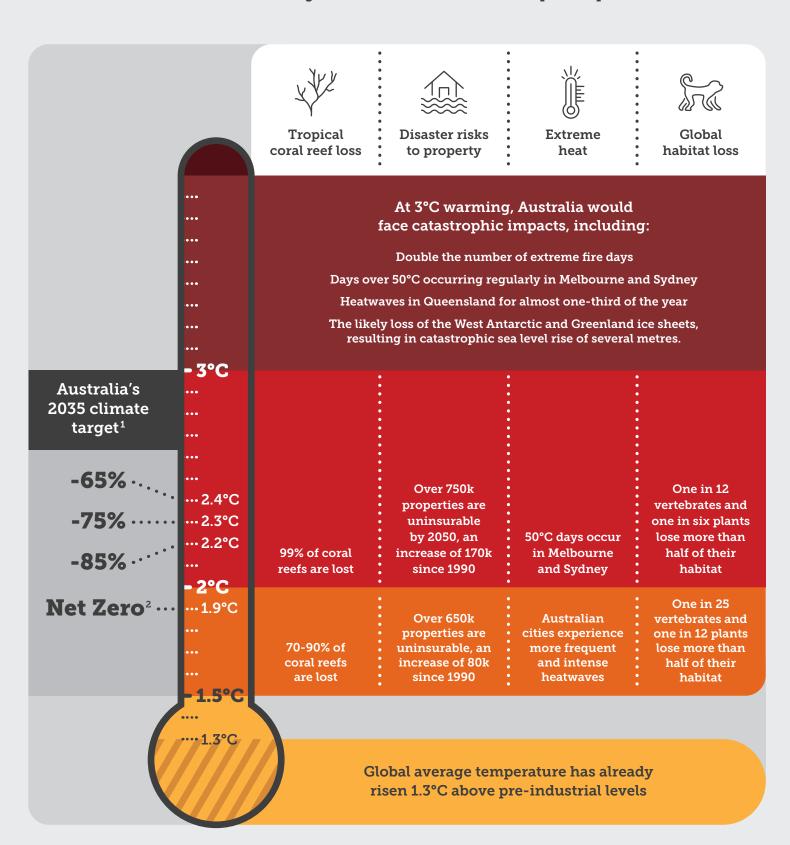
4. Is based on genuine and real reductions to climate pollution, including minimising reliance on offsets.

Australia's 2035 target and national climate plans and policies must be based on achieving genuine and real reductions to our emissions. The use of offsets must be minimised and accounted for separately, to ensure that we are measuring and transparently accounting for real and effective efforts to limit climate damage.

Australia's climate targets and plans must genuinely reduce emissions, deeply and rapidly.

TURNING DOWN THE HEAT ON AUSTRALIA'S 2035 CLIMATE TARGET

Setting a weaker target puts Australians, and our homes, businesses and environment at greater risk of severe or catastrophic impacts.



¹ If the world were to follow Australia's lead on a per capita basis, based on a 67% chance of successfully limiting warming to below this level.

² If Australia were to strengthen its 2030 target to -75% on 2005 levels and aim for Net Zero by 2035. See Appendix for calculations.

Introduction

The Albanese Labor Government's forthcoming decision on Australia's 2035 emissions reduction target will shape the lives of every Australian. At stake is the safety, security and prosperity of our communities and the natural environment in a fast-heating world.

Australians are living with the consequences of the climate crisis.

In 2025, Australian communities have experienced: back-to-back flooding in New South Wales and Queensland; unprecedented marine heatwaves devastating reefs in Western Australia and Queensland, and triggering a lethal algal bloom in South Australia; and deepening drought in southern Australia affecting vast tracts of agricultural land.

These climate consequences are the result of past policy failures to curb climate pollution. For decades, pollution from coal, oil and gas has been creating a blanket of heat-trapping gases in the atmosphere, raising the global average temperature by approximately 1.3°C above preindustrial levels. That additional heat is fuelling the extreme floods, heatwaves and droughts that Australians have experienced in 2025.

The Great Barrier Reef has now experienced six mass bleaching events in the past decade. With each wave of damage, biodiversity declines, and the jewel of Australia's tourism industry deteriorates further. Beyond 1.5°C of global heating, the cumulative effects of relentless bleaching will push the Reef into terminal decline.

Global momentum is building and this year represents a key moment to strengthen action.

Globally, countries have begun to accelerate efforts to cut climate pollution. Over the past decade, netzero commitments have become standard across advanced economies, and investment in clean energy now outstrips fossil fuels.

This year marks a critical moment: under the Paris Agreement, nations are required to submit new 2035 targets to cut climate pollution. Collectively, these targets must slash global climate pollution fast enough to keep temperature rise within internationally agreed limits – limits designed to prevent catastrophic harm to people and ecosystems.

The central goal of the Paris Agreement is "holding the increase in the global average temperature to well below 2°C above pre-industrial levels" and pursuing efforts "to limit the temperature increase to 1.5°C above pre-industrial levels."

Crossing the 1.5°C threshold risks climate change impacts becoming even more destructive, including more frequent and severe droughts, heatwaves and rainfall. 1.5°C is also considered the upper limit of what vulnerable communities, coral reefs, and many ecosystems can withstand.

Once global temperatures exceed 1.5°C above preindustrial conditions, the risk of triggering irreversible and cascading climate impacts – such as loss of West Antarctic and Greenland ice sheets, Amazon rainforest dieback, loss of mountain glaciers and disruptions to global weather systems – increases.

To be scientifically credible and aligned with the Paris Agreement, each country's target must be strong enough to contribute fairly and effectively to holding global temperature rise well below 2°C. All countries must continue to strive to limit warming to 1.5°C over the long term.

Strong targets are crucial to protecting Australians.

This report provides new, detailed scientific analysis on a scientifically credible, and Paris-aligned target for Australia. It shows that net zero by 2035 is the only target available to Australia with a strong chance of contributing to holding global warming below 2°C.

Despite our relatively small population, Australia is the world's 15th largest climate polluter and the 10th highest on a per capita basis. We emit more climate pollution per person than the USA, India, or China. After a decade of delay, meaningful national climate action only began in earnest again in 2022. All those years of inaction now mean that the pathway to align with science is steep. If we had acted earlier, the curve would have been gentler.

The analysis demonstrates the expected temperature rise associated with different Australian climate targets, if other countries were to adopt the same per capita share of the remaining global carbon budget from 2024 onwards. It shows that the stronger Australia's 2035 target is, the better our chance of shielding Australians from escalating climate harm. Every fraction of a degree of global heating exposes Australian communities and industries like agriculture and tourism - to more frequent and ferocious extreme weather events.

The good news is that Australia can rise to this

challenge. Numerous reports have shown that strong reductions are achievable across the economy - supported by our abundant renewable energy resources, technological capacity, and skilled workforce. Already, solar and wind are cheaper than new coal and gas. Green iron production, critical minerals and sustainable fuels offer massive economic potential. With the right policy settings, these sectors can drive regional jobs, national investment, and export strength.

Strong targets can also bolster our credibility and influence in the Pacific where neighbouring Island nations face existential climate threats.

Conversely, a weak target locks Australia into escalating climate damage. It means exposure to more destructive extremes, more economic disruption, and catastrophic impacts on our tourism, agricultural and property sectors. Those who advocate for weak targets must be prepared to articulate their costed plans for adaptation, relocation, and disaster recovery. The cost of inaction is no longer abstract. It is already being paid by communities across Australia.

We are the last generation with the power to tackle the climate crisis. This is Australia's opportunity to protect what we love, and build a future that is safer for those that come after us.

We are the last generation with the power to tackle the climate crisis.

A strong target is 1. necessary to protect Australian lives and livelihoods

Australia's 2035 climate target is an opportunity to set Australia on the right path, one which keeps our children safer from climate change and sets our economy up for success in a fossil fuel-free world.

Image 1: A bushfire rages on the NSW mid north Coast during the 2019-2020 Black Summer.



1.1 TARGETS AND TEMPERATURES

What is a national target?

The Paris Agreement, adopted by 195 countries in 2015, represents the world's collective approach to tackling climate change. Under the agreement, nations submit targets to cut climate pollution – described as Nationally Determined Contributions. Together, these targets chart a global pathway to slash climate pollution and prevent global temperatures from exceeding agreed limits.

The Paris Agreement operates on a five-year cycle, where countries submit increasingly strong targets every five years. This requires countries to "ratchet" (or ramp up) their effort over time to tackle the climate crisis.

National targets need to be backed by plans and policies to allow those planned reductions to be achieved.

Temperature thresholds

The climate science is clear: humanity is now releasing huge volumes of heat-trapping greenhouse gases into our atmosphere, primarily from the burning of coal, oil, and gas. This layer of gas acts like a blanket, trapping more heat every year. That heat fuels worsening extreme weather events: it melts ice and raises the oceans, and causes havoc with the global climate system on which we all depend.

The scale and severity of the climate crisis will depend on:

- > how quickly we cut climate pollution; and
- > how much global temperatures rise as a result.

Every fraction of a degree of global temperature rise leads to more frequent and ferocious extreme weather events, ecosystem damage, and impacts on lives around the world. Conversely, avoiding even a fraction of a degree of global heating is extremely significant in reducing risks to communities worldwide.

While climate impacts happen along a continuum, the Paris Agreement identifies two critical temperature limits:

"Holding the increase in global average temperature to well below 2°C above preindustrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change"

- Paris Agreement, Article 2, 1a.

For decades, holding global warming to well below 2°C has been identified by scientists as a boundary that should not be crossed due to the catastrophic consequences for humanity. While some climate impacts are getting progressively worse, like heatwaves or fire risk, beyond 2°C scientists warn that we will see abrupt, irreversible changes or tipping points that supercharge global warming and cause widespread system collapse (e.g. McKay et al. 2022). Examples include:

- The loss of the Greenland and West Antarctic ice sheets leading to multi-metre sea level rise.
- Frozen soils in the Arctic melt, releasing vast quantities of heat-trapping gases.
- The Amazon rainforest experiences massive dieback – where plants die off en masse – releasing huge volumes of heattrapping gases as the landscape changes to savannah.
- > The Atlantic Meridional Overturning Circulation (AMOC), a major ocean current system that regulates the global climate (including the Gulf Stream), slows down. This would disrupt rainfall patterns, agriculture, and ocean ecosystems, in Europe and Africa.

Risks of these tipping points being triggered rises sharply beyond 2°C of warming.

A safer boundary is 1.5°C. The difference is existential for communities in the Pacific that are highly vulnerable to sea level rise. While coastal inundation is already significant in many places, 2°C would force entire communities – and even countries – from their homes. It is similarly existential for the one billion people who depend on coral reefs for food and livelihoods. While some coral can be sustained on reefs below 1.5°C, at 2°C, 99% of coral reefs are expected to die.

Global average temperature rise is now 1.3°C above the pre-industrial average, and in 2024, global average temperatures hit 1.6°C over a full year for the first time. Importantly, these temperature thresholds cannot be breached in a single year. Climate science, and the Paris Agreement, take a longer-term view of global average temperature over decades. But this is a clear warning sign that we are moving closer and closer to exceeding the 1.5°C temperature threshold. Swift action to slash climate pollution from the burning of coal, oil and gas is the only solution which can protect those most vulnerable to the catastrophic impacts.



1.2 THE ACTION IMPERATIVE

"Climate history is playing out before our eyes. We've had not just one or two record-breaking years, but a full 10-year series. This has been accompanied by devastating and extreme weather, rising sea levels and melting ice, all powered by record-breaking greenhouse gas levels due to human activities."

- World Meteorological Organisation (WMO) Secretary-General Celeste Saulo (WMO 2025a).

Ten years since the Paris Agreement, countries have increased their collective efforts to reduce climate pollution. For instance, new data from the International Renewable Energy Agency shows that global renewable capacity grew by a record 585 gigawatts in 2024, representing over 90% of all new power added worldwide, and the fastest annual growth rate in two decades (IRENA 2025a).

Since the 2022 federal "climate election," the Australian Government has made clear progress cutting climate pollution domestically. Our main electricity grid is now powered by more than 40% renewable energy and storage (while being upgraded to accommodate higher electricity use), new vehicle efficiency standards are making cleaner and cheaper-to-run new cars more affordable, and a signature election policy to subsidise household batteries has started rolling out. Stricter limits on Australia's biggest industrial polluters have been set via reforms to the Safeguard Mechanism, and

the *Climate Change Act* sets legally binding climate pollution targets across government, with clear reporting requirements.

However, global efforts remain insufficient to bring down climate pollution to the levels required to keep us safe from the worst impacts of climate change. 2024 saw record levels of global climate pollution. The ten hottest years in recorded history have occurred within the last decade, with 2024 the hottest of all (WMO 2025b).

We are currently on a trajectory towards drastic temperature rise and catastrophic climate impacts that could undermine the foundations of our society, prosperity, and security. Both of the temperature limits in the Paris Agreement will be breached, either temporarily or indefinitely, if we do not rapidly change course. Without urgent and deep cuts to global climate pollution, there is a high chance (70%) that average warming for the entire 2025-2029 period will exceed 1.5°C, and the likelihood of a 2°C year is expected to increase dramatically over the coming years (WMO 2025b). The rate of global warming is now 0.27°C per decade and, without urgent efforts to cut climate pollution, we will overshoot the Paris Agreement's goal of holding warming well below 2°C in less than two decades (Forster et al. 2025). Climate change is accelerating and the risks are escalating at a much quicker pace than we previously thought (WMO 2025b).

We are currently heading towards a Hothouse Earth and catastrophic climate impacts that could cause widespread destruction and chaos.

The UN's latest assessment makes this glaringly obvious. It concluded that the

"current national climate plans fall miles short of what's needed to stop global heating from crippling every economy, and wrecking billions of lives and livelihoods across every country" (UNFCCC 2024).

It is in this context that countries are required to submit their 2035 target under the Paris Agreement later this year. It is another crucial moment to find strength and commitment to tackle climate change together and for all countries to do more to protect our collective future. The world's climate scientists are clear that very swift and significant steps taken now are vital to maintain a hospitable climate for human prosperity.

In setting a new target, each country is expected to demonstrate an increasing level of ambition compared to their previous target, as well as the principle of "common but differentiated responsibilities and respective capabilities".

"Differentiated responsibilities" refers to the relative contribution of different nations to the climate crisis. Australia is the 15th largest polluter in the world and one of the largest fossil fuel exporters, so Australia has benefited handsomely from climate pollution. In contrast, most nations in the Pacific have made a negligible contribution.

"Respective capabilities" refers to a country's ability to tackle the climate crisis, with wealthier countries having greater capacity to do so more quickly.

Image 2: Australia produces four to five times as much methane pollution as the rest of the world on a per person basis.



1.3 PROCESS FOR SETTING AUSTRALIA'S 2035 TARGET

Like countries world-wide, Australia is expected to submit our 2035 climate target, a Nationally Determined Contribution, under the Paris Agreement this year. The current target, to reduce Australia's climate pollution 43% on 2005 levels by 2030, was legislated in 2022.

The Climate Change Authority (CCA) has been charged with providing advice to the Australian Government on setting and achieving its 2035 target and is expected to report in the coming months.

The CCA has been tasked to consider:

- the science-related aspects of global emissions budgets, pointing to the overall level of emissions reductions required to hold warming to below 2 degrees;
- approaches to sharing global emissions budgets among nations;
- the extent and nature of international action to reduce emissions; and
- the economic and social implications of different emissions reduction goals for Australia

In 2024 the CCA released an issues paper 'Targets, Pathways and Progress' which considered a target range of 65-75% below 2005 levels by 2035.

The CCA will also advise on plans to help Australia meet its 2035 target, which will be crucial to ensure that the target can be achieved.

Like countries world-wide, Australia is expected to submit our 2035 climate target this year.

1.4 SETTING A SCIENCE-ALIGNED TARGET FOR AUSTRALIA

What is a science-aligned target?

A science-aligned target is grounded in the physical reality of the climate crisis and the risks we face. Importantly, the target for each individual country should be aligned with the broader global purpose of the Paris Agreement to hold temperature rise well below 2°C and to pursue efforts to limit to 1.5°C.

Scientists have conducted extensive analysis of a global carbon budget: the finite amount of climate pollution that can be released into the atmosphere and maintain a strong chance of staying below the Paris temperature thresholds. This carbon budget can be divided up between nations to determine fair contribution to global efforts to tackle the climate crisis.

A science-aligned target also means:

- prioritising genuine, deep reductions in climate pollution;
- applying economy-wide, without any sector or industry exclusions, and including all gases and aerosols; and
- > being precautionary, understanding that the future risks of the climate crisis are likely to be even more dangerous than we now know.

A science-aligned 2035 target

Australia was very late to developing a coherent national climate policy. While Australia's climate wars raged in the 2010s, global temperatures ticked progressively upwards and by the end of the decade, Australians were shocked with the scale and severity of the Black Summer fires.

In writing this report the Climate Council has commissioned Climate Resource to assess the global warming implications of an Australian 2035 target. This builds on previous work in May 2024 which can be found here (see Climate Resource 2024). The analysis uses the latest emissions data and shows what Australian 2035 climate targets mean for global average temperature risk.

Methodology: Projections of future warming are based on a probability of staying below a given temperature, or within a given temperature range. In the assessment, we have worked with two scenarios: the first a 67% probability of success in staying below the temperature rise identified; and the second an 83% probability of success in staying below the temperature rise identified. Other organisations have used a 50% probability of success when assessing likely temperature rise. The Climate Council does not include this because a coin toss chance of failure does not align with a precautionary approach identified in pursuing a sciencebased target. Other models also assume the use of technology that would draw carbon emissions out of the air and store them indefinitely; this technology would be a very welcome development, but it doesn't currently exist at scale and cannot be relied upon in assessing real and present risks. The full methodology and data can be explored in the Appendix.

The findings show:

- 1. The stronger Australia's 2035 target, the greater the chance we have of limiting climate harm.
- 2. The weaker Australia's 2035 target, the more exposed Australians are to escalating climate risks.
- An Australian 2035 target of -65% puts the world on track, with a two-thirds chance, of limiting global heating to 2.4°C.
- 4. An Australian 2035 target of -75% puts the world on track to heat by more than 2°C but likely less than 2.3°C, if other countries adopt the same per capita share of the remaining global budget from 2024 onwards.
- 5. The only science-aligned target available to Australia now is **net zero by 2035**.
- 6. Australia has a far higher-thanaverage level of per-capita emissions and we were late to tackling our climate pollution, so a science-aligned reduction curve is now steep.

Table 1: Projected peak global mean temperature resulting from Australian 2035 targets, assuming that other nations adopt the same per-capita share of the remaining global carbon budget.

Method for other countries adoption of	Australian 2030 target on 2005 levels	Australian 2035 target on 2005 levels	Per-capita emissions applied globally	Global cumulative CO ₂ emissions after 2020	Global temp rise (67% chance of staying below)	Global temp rise (83% chance of staying below)
Australian target			tCO ₂ eq/cap	GtCO ₂	[IPCC AR6 WG I °C relative to]	recent literature] pre-industrial
Equal per capita 2024:	-43%	-55%	228	1,736	2.53 2.46	2.78 2.67
Cumulative equal per	-43%	-65%	206	1,575	2.42 2.37	2.65 2.57
capita from 2024 onwards	-43%	-75%	183	1,414	2.31 2.28	2.52 2.48
	-43%	-85%	161	1,254	2.19 2.20	2.38 2.38
	-43%	Net Zero	127	1,012	2.02 2.07	2.19 2.24
	-75%	Net Zero	84	702	1.81 1.90	1.93 2.06

Understanding the table: The table is interpreted as follows, using the fourth row as an example. Applying Australian targets of -43% by 2030 and -85% by 2035 on 2005 emissions levels, each Australian can emit 161 tonnes of CO₂ equivalent. Applying that share of 161 tonnes to the global population,

we emit globally 1,254 Gt of ${\rm CO_2}$, which gives the world a 67% chance of limiting warming to 2.2°C (mid-point value of the IPCC AR6 Working Group I analysis from 2021 and 2023 that updates, revises and refines the same IPCC analysis).

BOX 1: WHERE IS THE 1.5 DEGREES SCENARIO?

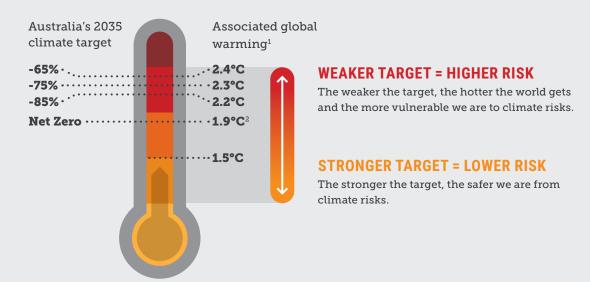
The last row in the table shows the only science-aligned Australian climate targets (-75% on 2005 levels by 2030, and net zero by 2035) that set an example (on a per-capita basis) of the world having a reasonable chance of keeping warming below 2°C. The IPCC's high overshoot (C2) set of scenarios include possible global pathways where the world temporarily exceeds 1.5°C by up to 0.3°C before returning to 1.5°C. However, it remains theoretical that global temperatures could be brought back to 1.5°C rise if this threshold is exceeded.

Australia does not have a 1.5°C aligned target as the reduction curve is now too steep to be realistic. This is the real consequence of acting too slowly and too late.

To make a stronger contribution to limiting global temperature rise, Australia can put in as strong a 2035 target as possible, support global efforts, and bring forward its net zero date. It should also strengthen its 2030 target.

Figure 1: The stronger the climate target, the safer Australians are from climate risks. Conversely, the weaker climate the target, the more vulnerable we become.





- 1 If the world were to follow Australia's lead on a per capita basis, based on a 67% chance of successfully limiting warming to below this level.
- 2 If Australia were to strengthen its 2030 target to -75% on 2005 levels and aim for Net Zero by 2035.

To protect Australians from the consequences of the climate crisis, Australia can also consider tackling its global carbon footprint, beyond our domestic pollution.

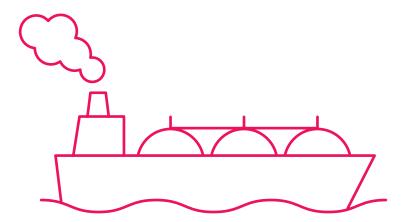
This can include:

- developing clean industries that contribute to global pollution reduction, i.e. developing green metals, cathode and battery manufacturing, sustainable shipping and aviation fuels;
- supporting developing countries in their transition through climate finance or other mechanisms; and
- reducing our exported climate pollution, particularly by not approving new or expanded fossil fuel projects.

A Nationally Determined Contribution under the Paris Agreement can include commitments beyond the 2035 target. Including these sorts of commitments in Australia's NDC would allow Australia to demonstrate action that is more closely science aligned.

Australia's contribution to global climate change includes the very large quantities of emissions produced when coal and gas exported from Australia are burned overseas. These exported emissions, which are more than double Australia's domestic emissions, are relevant when considering Australia's historical responsibility for climate change, and our share of the global emissions budget.

Each new project creates greater climate pollution in Australia as mine sites directly release large amounts of greenhouse gases. However, when Australia's fossil fuels are shipped overseas and burnt in other jurisdictions, these emissions are not considered under Australia's national climate target or reporting. Australia must work with trading partners to collectively move away from fossil fuels.



"Any climate pollution produced by burning Australian fossil fuels overseas are released into the same global atmosphere, where they become mixed, and affect the climate in a way as if they were burnt in Australia."

- Professor Will Steffen, Environmental Defenders Office (2018).

1.5 SNAPSHOT OF AUSTRALIA IN A 1.5°C, 2°C AND 3°C WORLD

In considering Australia's 2035 target, it is important to contextualise a decision within real world implications. In the previous section we described the likely global temperature rise that could result from various 2035 targets, if the rest of the world adopted the same approach as Australia. This section briefly canvases the implications of global temperature rise on Australia.

The impact of climate change today.

As the global climate has warmed, Australia is being hit hard. Where long-term global warming is currently about 1.3°C compared to the 1850-1900 baseline (WMO 2025a), Australia has warmed by an average of around 1.51°C since national records began in 1910 (CSIRO and Bureau of Meteorology 2024).

This increase in temperature is fuelling more frequent and intense extreme weather events, including extreme heat, heavy rainfall, coastal inundation, bushfire weather and drought. Many communities have now experienced back-to-back disasters that would have previously been considered a 1-in-50 year, or 1-in-100 year, weather event.

The economic and social cost of these disasters is enormous:

- > The 2019-20 Black Summer bushfires destroyed 3,000 homes and cost \$10 billion in financial impacts (Royal Commission into National Natural Disaster Arrangements 2020), the 2022 Great Deluge cost \$7.7 billion dollars in damage (Deloitte 2022), and deadly summer heatwaves reduce labour productivity by \$8.7 billion dollars every year (Zander et al. 2015).
- > Two million properties are already at medium to high risk from one or more climate hazards (Climate Council 2025). Insuring these homes and businesses is often already unaffordable or unavailable, and the insurance bill for extreme weather in 2025 has already passed \$1.8 billion dollars (ICA 2025).
- > Climate change resulted in the reduced profitability of Australian broad-acre farms by an average of 22% since 2000, and cropping has been hardest hit with a \$1.1 billion loss per year (ABARES 2019).

Climate-driven extreme weather events in Australia are already becoming more frequent and intense, with devastating impacts:

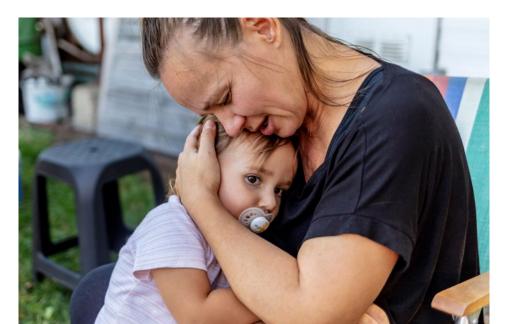


Image 3: The mental health of Australians is suffering as a result of extreme weather events, supercharged by climate pollution.

CLIMATE DISASTERS ARE IMPACTING AUSTRALIANS, OUR ECONOMY AND NATURAL ENVIRONMENT

Fossil fuel-driven extreme weather events in Australia are already becoming more frequent and intense, with devastating impacts.



Climate change has already made heatwaves more frequent, more prolonged and more intense, and these trends are set to continue over coming decades.
Reduced labour productivity during heatwaves already costs billions in Australia, at an estimated \$8.7 billion per year (0.3% - 0.5% of GDP) (Zander et al. 2015).

Bushfire conditions are now more dangerous than in the past, and the risk to people and property has increased. Climate change is making drought conditions in southwest and southeast Australia worse, with serious ramifications for people's health and the agriculture sector.

Overheating our oceans is super charging storms. We are now seeing more ferocious storms with higher wind speeds, more powerful waves and bigger deluges.

Many communities are now experiencing severe flooding with a regularity never experienced before. More rain is falling during extreme rainfall events than did in the past.

Image 4: Climate driven disasters are already deeply impacting Australians, our economy and the natural environment.



2002-2003

HEATWAVES

- 500 excess deaths were recorded in Melbourne and Adelaide.
- More than 3,000 reports of heat-related illness (QUT2010).
- Estimated direct financial losses: \$800 million, from disruptions to electricity and transport services, and emergency services costs.

2009

DROUGHT

Decreases in agricultural production due to drought resulted in a 1% fall in the Gross Domestic Product (GDP), which is equivalent to half of Australia's decline in annual GDP following the global financial crisis in 2009.

BUSHFIRE: BLACK SATURDAY FIRES

Claimed 173 lives and economic costs of around \$4 billion.

2011

STORMS: CYCLONE YASI

Cost the agriculture and tourism industries \$1.6 billion and \$600 million respectively.

2013-2014

HEATWAVE

Heatwaves cost approximately \$8 billion (roughly 0.33-0.47% of Australia's GDP).

2019-2020

BUSHFIRE: BLACK SUMMER FIRES

- Over 24 million hectares were burnt.
- 33 people died and extensive smoke coverage across much of eastern Australia may have caused 429 deaths from smoke and respiratory problems.
- Over 3,000 homes were destroyed.
- National financial impacts are estimated over \$10 billion.
- Nearly three billion animals were killed or displaced.

2022

FLOODS

- Smashed many records for rainfall totals, wettest days and months on record, flood levels, and river heights.
- Queensland faced an estimated \$7.7 billion cost in social, financial and economic impacts because of record-breaking rainfall and floods.
- The City of Brisbane suffered \$1.38 billion in insured losses from this year's floods; higher than any other local government area in Australia.

2025

EXTREME WEATHER EVENTS

Insured losses have exceeded \$1.8 billion from claims to date (as of 2 July 2025), following three extreme weather events - the North Queensland floods in February, ex-Tropical Cyclone Alfred in March, and mid-North NSW and Hunter region floods in May 2025 (ICA 2025).

→ IMPACTS AT 1.5°C AND 2°C OF GLOBAL WARMING

The impacts amplify rapidly between 1.5°C and 2°C of temperature increase (see Figure 2).

DIRECT IMPACTS	1.5°C VS 2°C IMPACTS
EXTREME HEAT Global population exposed to severe heat at least once every five years	2.6X worse
SEA-ICE-FREE ARCTIC Number of ice-free summers	10X worse
SPECIES	1.5°C VS 2°C IMPACTS
SPECIES LOSS: VERTEBRATES Vertebrates that lose at least half of their habitat	2X worse
SPECIES LOSS: PLANTS Plants that lose at least half of their habitat	2X worse
SPECIES LOSS: INSECTS Insects that lose at least half of their habitat	3X worse
LAND	1.5°C VS 2°C IMPACTS
	1.9X worse
	1.9X worse 38% worse
Amount of Earth's land area where ecosystems will shift to a new biome OOO PERMAFROST	
Amount of Earth's land area where ecosystems will shift to a new biome O O PERMAFROST O Amount of Arctic permafrost that will thaw CROP YIELDS	38% worse
Amount of Earth's land area where ecosystems will shift to a new biome O O PERMAFROST O Amount of Arctic permafrost that will thaw CROP YIELDS Reduction in maize harvests in tropics	38% worse 2.3X worse

Figure 2: Every fraction of a degree matters: the impacts amplify rapidly between 1.5°C and 2°C of global temperature rise, and would have significant consequences for Australian communities, animals, ecosystems, and our economy. Source: Adapted from IPCC Special Report on Global Warming of 1.5°C (IPCC 2018).

The IPCC Special Report shows that the risks for both human and natural systems are lower if global temperature rise stabilises at 1.5°C. There are substantial increases in extreme weather events (e.g. extreme heat, heavy precipitation events and drought) between 1.5°C and 2°C. Impacts on landbased biodiversity and ecosystems are less at 1.5°C than 2°C, but overshooting the 1.5°C target could have irreversible impacts on some species and ecosystems.

Warm water coral reefs would lose a further 70-90% of cover at 1.5°C of warming, with devastating consequences for the Great Barrier Reef. However, at 2°C most reefs world-wide will die. Increased ocean acidity in a 1.5°C world would affect the survival, calcification, growth, development and abundance of a broad range of marine species, from algae to fish. However, the decline in marine fisheries is twice as bad in a 2°C world. Warm water coral reefs would lose a further 70-90% of cover at 1.5°C of warming, with devastating consequences for the Great Barrier Reef. However, at 2°C most warm water reefs world-wide will die.

Image 5: UNESCO's World Heritage Committee has warned again that the Great Barrier Reef could be listed as "in danger". Australia has been asked to submit an update report by February 2026 on the state of the reef, including the "full impacts" of a 2024 mass coral bleaching (ABC 2025).



Disadvantaged and vulnerable populations, such as the poor, the elderly and the young, and Torres Strait Islander and Pacific nation communities, will be disproportionately affected by warming of 1.5°C and beyond. Impacts of 1.5°C warming on global economic growth are larger than present-day impacts. A warming of 1.5°C will increase the challenges of adaptation across many sectors such as agriculture compared to present-day, but the adaptation challenges will be lower for 1.5°C than for 2°C warming.

The impacts we're already experiencing at 1.3°C of warming are early warning signs of the far more severe and widespread risks we face as temperatures rise towards 2°C and beyond.

Australia in a 3°C world

Australia at 3°C of global heating would be unrecognisable. The impacts that are likely to occur with warming beyond 2°C extend from very severe to catastrophic.

The recent Australian Academy of Science (AAS) report, 'The Risks to Australia of a 3°C Warmer World', describes in great detail our vulnerability to such a future, and the risks and costs that we would experience (Hoegh-Guldberg et al. 2021). The AAS report is a risk assessment based on peer-reviewed scientific literature.

Assessing what Australia might experience at 3°C or more of warming is based on a synthesis of multiple lines of evidence – observations of what is already occurring at well over 1°C global temperature rise, modelling future impacts, and assessing the evidence from historical and paleoclimate records. The report paints a dire picture of what life might be like if we don't achieve the Paris Agreement targets.

Image 6: Tropical Cyclone Yasi in 2011 was the biggest storm in Queensland's history, with more than 10,000 people moved from their homes and 1,000 homes significantly damaged AIDR 2025). Storms will become much more intense and destructive in a 3°C world threatening many more homes.



1. Impacts on health and well-being:

The serious threats to our health that are already occurring at a temperature rise of 1.5°C – bushfires, extreme heat, droughts, cyclones and storms, and torrential rains, flooding and hailstorms - will become much more intense and more frequent in a 3°C world, for instance the number of extreme fire days will likely double. For Australia, the latest research shows for every degree of global warming, we will experience about 7-28% more rain for hourly or shorter duration extreme rainfall events, and 2-15% more rain for daily or longer duration extreme rainfall events (Wasko et al. 2024). On this basis, Australia in a 3°C could experience 21-84% more rain for hourly or shorter duration extreme rainfall events, and 6-45% more rain for daily or longer duration extreme rainfall events.

A much hotter world will also exacerbate other, longer-term factors that can damage physical and mental health - such as ongoing decreases in cool-season rainfall in Southern Australia, with more time spent in drought, an increase in climate-sensitive infectious and vector-borne diseases, and the psychological impacts of economic hardships driven by a changing climate.

2. Australia's cities and towns in a 3°C world:

We are one of the most urbanised countries in the world, and worsening climate change brings multiple threats to our cities and towns. 50°C days would be a regular feature for those living in Sydney and Melbourne, putting our major cities' infrastructure and population under intense strain. A one-metre sea-level rise, possible by the end of the century, would put 160,000 to 250,000 properties at risk of 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.

3. Impacts on Australia's ecosystems:

At 3°C of global warming by 2100, oceans are projected to absorb five times more heat than the observed amount accumulated since 1970. Australian coral reefs would cease to exist in a 3°C world, along with the fishery and tourism industries that depend on it. This is true globally, with marine ecosystems that feed billions of people collapsing.

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.

4. Costs to Australia's primary industries - 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. Significant reductions are expected in oil seeds (-35%), wheat (-18%), fruits and vegetables (-14%), plant fibres (-7%) and other fibres (-11%).

Note: Data and a full set of references can be found in the Australian Academy of Science report by Hoegh-Guldberg et al. 2021.

1.6 TIPPING POINTS

Many future scenarios of global warming assume that the more CO₂ and other greenhouse gases we emit, the higher the Earth's temperature becomes. However, complex systems are typically not so straightforward. A growing body of research warns that the Earth System contains 'tipping elements', where slowly increasing pressure can cause an element to cross a critical threshold, leading to sometimes abrupt, non-linear and often irreversible changes (Lenton et al. 2008; 2019; Schellnhuber et al. 2016). These 'wildcards' could push the global climate into dangerous territory, even if human greenhouse gas emissions are eventually reduced or eliminated (Steffen et al. 2018; Lenton et al. 2019).

The Intergovernmental Panel on Climate Change (IPCC) assessments have included estimates of the risk of breaching tipping points at increasing levels of temperature rise. These assessments have shown that these risks occur at lower temperatures than previously thought. When the IPCC first introduced the idea of tipping points over two decades ago, these 'large-scale discontinuities' were only considered likely if global warming exceeded 5°C. The most recent risk assessment shows that at a 1.1°C increase in global average, we had already entered a region of moderate risk of irreversible changes (IPCC 2018, 2019).

The risk of activating tipping elements increases as the global average temperature rises. While a 'global tipping cascade' is unlikely to be triggered at warming of 1.5°C, the risk rises as temperatures increase towards 2°C and beyond. While we still have a chance of avoiding a global tipping cascade at well below 2°C, it is likely that the risk rises sharply once global temperatures exceed 2°C above pre-industrial conditions.

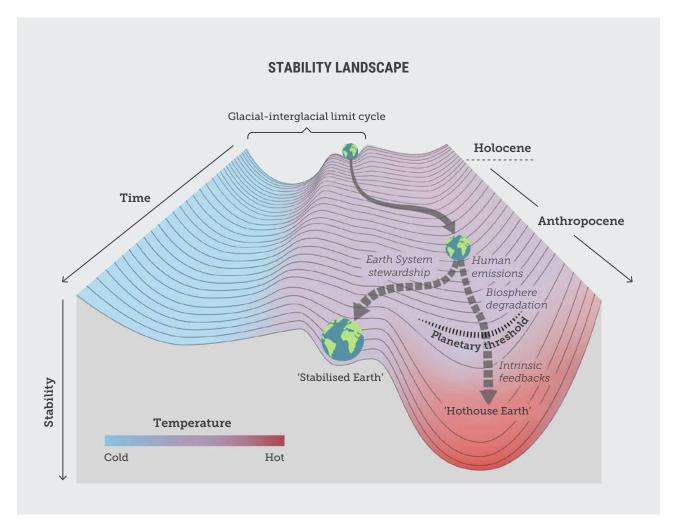
The projected temperature rise of 2.2°C to 3.4°C that would result from the current policies of governments around the world (Climate Action Tracker 2024) would push the climate into dangerous territory, with many tipping elements likely to be transgressed and a much higher risk of triggering a global tipping cascade.

This risk is presented in the form of a 'stability landscape' (Figure 3), a simple visual representation of a more detailed complex systems analysis (Steffen et al. 2018). The global tipping cascade is shown as a 'planetary threshold', the cliff in the stability landscape. Driving the Earth System onto a pathway that takes it over the cliff means that we are irreversibly committed to 'Hothouse Earth', equivalent to the IPCC high emissions (RCP8.5) scenario. The other pathway, equivalent to meeting the Paris Agreement long-term temperature goal, leads to 'Stabilized Earth'. Figure 3 shows the Earth System in 2020, poised at the fork in the road. We are at a critical point in the climate change challenge.

The analysis supports the case for a climate emergency. As emphasised by Lenton *et al.* (2019): "If damaging tipping cascades can occur and a global tipping point cannot be ruled out, then this is an existential threat to civilization. No amount of economic cost-benefit analysis is going to help us. We need to change our approach to the climate problem".

The risks of moving to a Hothouse Earth state underpin why action to arrest climate pollution in Australia and all nations is so critical. Stronger targets, and the action accompanying them, reduce the risks, while weak targets that allow more climate pollution increase those same risks.

Figure 3: A 'stability landscape' showing two potential pathways for the Earth System. Beyond the 'planetary threshold', a potential tipping cascade could take the trajectory of the system beyond human control and irreversibly towards 'Hothouse Earth'. Source: Steffen et al. 2018.



Already at over 1°C of global warming we are at risk of irreversible changes to the Earth system, with devastating consequences for humanity.

1.7 PROTECTING AUSTRALIANS FROM CLIMATE RISKS

When facing a challenge as grave and as far reaching as the climate crisis, the rational response is to do everything in our power to limit harm, and reduce the risks of a truly cataclysmic outcome. Too often our response ends up playing a high risk game: betting on a best-case scenario and ignoring the enormous gamble this takes with our collective future

The analysis in Section 1.4 shows the real risks of facing substantial global temperature increases and Section 1.5 shows the accompanying broad consequences for Australians.

We are now well aware of the current and future consequences of the climate crisis. We can map today the communities that will be at most risk tomorrow from all major climate hazards. In determining a 2035 target, the Australian Government will weigh up a range of factors, and one must be the economic and social costs of protecting communities.

For instance, if the Australian Government were to select a 2035 climate pollution reduction target of -65%, and other countries emitted at the same intensity per capita as Australia over this period, that gives a 67% chance of staying below global temperature rise of 2.4°C. In doing so, the Australian Government should also have an accompanying strategy and make significant investments to prepare and adapt for that world. What will the tourism and fisheries industries do in Queensland and Western Australia with the rapid decline, and ultimately destruction, of our major reefs which are already in motion? What is the plan for communities that are already experiencing back-to-back flooding disasters in the Northern Rivers?

Articulating the astronomical costs of trying to adapt to a disintegrating global climate underline the imperative of prevention rather than cure. A strong target, backed by effective plans to curb Australia's climate pollution, is a prudent strategy to minimise these risks.

When facing a challenge as grave and as far reaching as the climate crisis, the rational response is to do everything in our power to limit harm.

2. Achieving a strong climate target will drive economic opportunities for Australia

We're already making progress in Australia, with existing policies and efforts projected to cut climate pollution by almost 43% on 2005 levels by 2030 - a 13 percentage point improvement from our 2021 projections (DISER 2021; DCCEEW 2024). While faster emissions cuts are evidently required, this progress shows that targets play a significant role in creating the required momentum, especially when supported by credible policies and investment. Already, a 51% climate pollution cut is projected by 2035 with current policies alone (DCCEEW 2024). Australia can build on this momentum over the next decade to go further and achieve a strong target.

Image 7: The opportunity to build thriving green industries is before us, but seizing it requires clear-eyed vision and deep conviction.



2.1 FAILING TO TACKLE CLIMATE RISK HAS ENORMOUS COSTS

Achieving stronger climate targets will require more action across our economy to double down on what is already working, and build the clean industries of the future. Australian households and businesses will need to change the way they power themselves, make things, and get around. Australian governments will face changes to revenue sources as coal and gas exports decline, and new industries emerge.

These changes have a cost, but it is a cost that is outweighed by the significant economic costs which can be avoided by dealing with climate change, and mitigating as many of its substantial economic, welfare, and environmental impacts as possible.

Estimates of the cost of unchecked climate change vary widely. In Australia, unchecked climate change could cost the economy \$4.2 trillion over the 50 years to 2070, a 6% impact on GDP (Deloitte Access Economics 2020, escalated to 2025 dollars). Depending on the model of damage costs used, global estimates of the cost of climate change under current policies range from 1.3 to 13.1% of GDP by 2050, growing from 2.1 to 23.5% by 2100 (OECD and UNDP 2025).

Importantly, estimates of GDP impact to date likely underestimate the true cost of inaction, because of an inability to model catastrophic 'tipping point' impacts, which could lead to irreversible shifts in the climate and severe social and economic impacts (OECD and UNDP 2025). Given uncertainty in the full extent of potentially cascading climate impacts, there is a strong case to take a precautionary approach.

Nevertheless, estimates of the cost of acting on climate change in Australia are lower than all but the most conservative estimates of the cost of inaction (Verikios et al. 2024: Mariano, Verikios and Lu 2025; Garnaut 2008). The expected costs of reducing climate pollution have fallen significantly in recent years and are likely to keep falling, driven by rapid declines in renewable energy and technology costs. Conversely, the economic and social costs of climate impacts are now coming to fruition.

Indeed, Australia's financial regulators acknowledge that climate change is now a central concern for our economy and financial stability (Climate Council 2019). As EY's Net Zero Centre states, "The costs of climate action are manageable and well known, while the impacts of failing to act are large, irreversible and persist for hundreds of years" (EY Net Zero Centre 2025).

The question Australia now faces is how to cut climate pollution as deeply and quickly as possible, while maintaining living standards and building a prosperous and strong future. To do so requires policy certainty, including a strong climate target, backed by clear policy and plans that deliver cuts to climate pollution, grow clean industries, and manage a phase out of inherently polluting ones especially coal, oil and gas extraction.

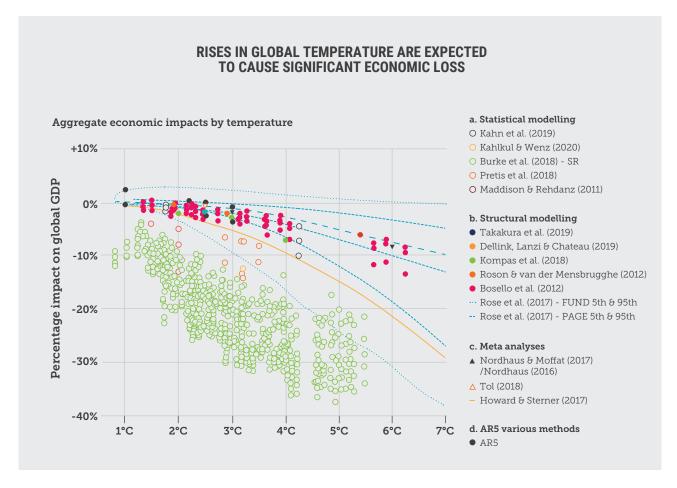


Figure 4: Rises in global temperature are expected to cause significant economic loss. Source: Adapted from IPCC (2022).

In Australia, unchecked climate change could cost the economy \$4.2 trillion by 2070.

2.2 REDUCING AUSTRALIA'S CLIMATE POLLUTION BY 75% AND **BEYOND IS ACHIEVABLE**

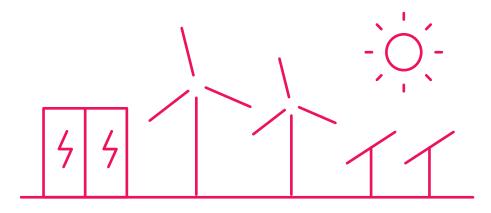
Several significant Australian-based research projects have demonstrated that deep cuts to climate pollution in the next 10 years are possible. Notable recent analysis includes:

- > The CSIRO's pathway to reduce emissions by 75% on 2005 levels by 2035 and reach net zero by 2040 (Verikios et al. 2024). Under this scenario, average real GDP growth from 2020 to 2050 would only be 0.03 percentage points lower than the net zero by 2050 scenario, a cost significantly less than the economic, social and health benefits of cutting emissions.
- > ClimateWorks Centre's decarbonisation modelling, which shows how Australia can reduce emissions by 85% by 2035, demonstrates that a stronger 2035 target is achievable (Climateworks Centre 2023).
- > Climate Council's Seize the Decade report, which shows that, by going all-in on technology already available, Australia could reach a 75% climate pollution cut this decade (Climate Council 2024). This suggests much more is possible by 2035, with further time available for technology development, the rollout of existing solutions (like batteries, electric vehicles and electrification), and the wider availability of zero-emissions fuels like green hydrogen and sustainable aviation fuels.

Australia already has many opportunities to cut climate pollution today at low – and in some cases, zero or negative - cost (Productivity Commission 2023). In the short term, seizing these opportunities to deliver early, genuine cuts to climate pollution is essential.

There are some parts of our economy where it's not yet possible or prohibitively costly to reduce climate pollution, including agriculture, air transport and making steel, cement and some chemicals. This underlines why it is important to cut climate pollution where technology is readily available, like electricity first and deeply, to allow time for further technological development in harder to address sectors.

Australia's next national climate target should be determined by both what is necessary, and what is possible. It is necessary to do everything we can to protect Australians from worsening climate harms, as is demonstrated in section 1 of this report. Research shows that achieving these cuts to climate pollution is increasingly achievable, and advancements in technology are rapidly expanding the scope and scale of what is possible.



Building toward science aligned policies

Given the steep downward trajectory to achieve science aligned targets, some will argue that the physical and economic challenges of meeting that target are too challenging from our current vantage point. Vested interest groups have traditionally focused on the difficulties of moving away from the status quo, rather than highlighting the opportunities that come with change.

At the Climate Council we argue that Australia should build toward a science aligned policy posture by:

- 1. Setting as strong a 2035 target as possible, supported by credible plans and investment to meet that target;
- 2. Anticipating the need to ratchet up that target as technology develops, by building in regular review opportunities;
- **3.** Bringing forward the date for net zero from 2050 to at least 2040;
- 4. Curtailing activities that are actively contributing to increased climate pollution, including approval of new coal, oil and gas projects;
- **5.** Developing costed policies to protect and relocate communities that are already facing significant climate risks, which will only escalate into the future; and
- 6. Making other contributions to global climate efforts to ensure global temperatures are held well below 2°C, such as building Australian industries that tackle global challenges.

2.3 TECHNOLOGY DEVELOPMENT IN THE NEXT DECADE CAN TAKE US EVEN FURTHER, AT EVEN LOWER COST

In recent years, climate solutions have been delivered at a speed and scale that has surpassed expectations. The last decade has seen incredible progress, with the cost of many climate solutions reducing dramatically. Governments globally have catalysed this development, with consumer incentives and investment in research and development supporting more rapid cost reductions and uptake – for example, of Solar PV (Ding et al. 2020). As the cost of these technologies reduce precipitously, their uptake has outstripped forecasts around the world. Once the economics changes, the world quickly follows.

There is no better example of this effect than solar PV electricity. Solar uptake has been chronically under-forecasted, globally and in Australia. Eight years ago, the Australian Electricity Market Operator, (AEMO) expected rooftop solar to generate 16 terawatt-hours in our main electricity grid (the National Energy Market, or NEM) by FY2025 (AEMO 2025). In fact, it provided over 26 terawatt-hours, 1.75 times more than forecast. This gap between expectation and reality represents over 5% of annual NEM demand (Open Electricity 2025).

Figure 5: Actual NEM rooftop solar generation has significantly exceeded AEMO's expectations over the last decade. **Source:** (*Open Electricity* 2025; AEMO 2025)

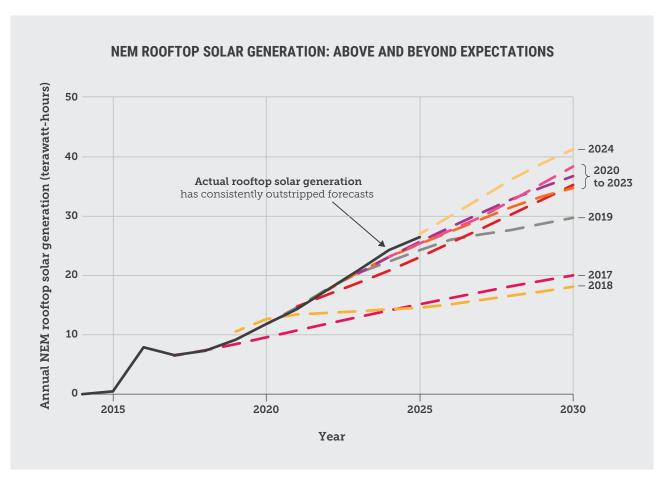
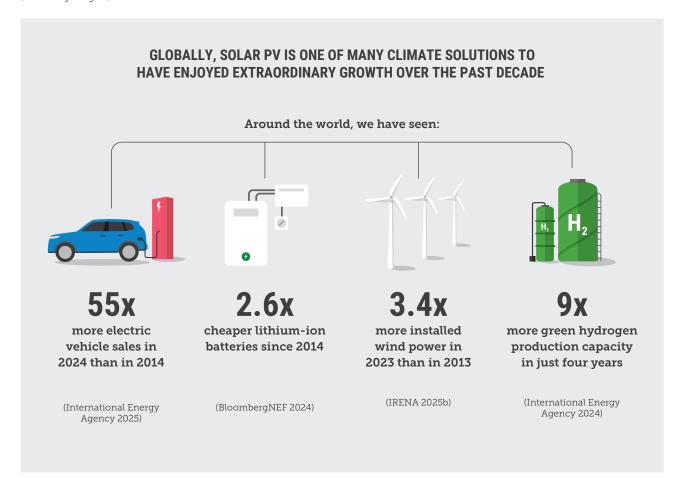


Figure 6: The deployment of climate solutions has grown exponentially over the past ten years. Source: Data from International Energy Agency 2025 (EVs), BloombergNEF 2024 (lithium-ion batteries), IRENA 2025b (wind power), IEA 2024 (Green hydrogen).



Australians have enthusiastically taken up solar PV, as Figure 5 demonstrates. Globally, solar PV is one of many climate solutions to have enjoyed extraordinary growth over the past decade (Figure 6).

The key lesson here is our ambitions should not be limited by what we currently deem to be possible. Just as progress in renewable electricity outstripped all expectations over the last decade, progress in industrial decarbonisation and harder to abate sectors can far exceed our current projections over the next. By aiming high we are more likely to fulfil our true potential. The climate crisis demands that we do everything we can, everywhere we can, as fast as we can.

With affordability and availability of clean technology alternatives often exceeding market expectations, Australian climate policy must be shaped to both encourage and take advantage of the rapid growth of maturing technologies.

2.4 THE OPPORTUNITY TO BUILD THRIVING GREEN INDUSTRIES IS BEFORE US, BUT SEIZING IT REQUIRES CLEAR-EYED VISION AND **DEEP CONVICTION**

As the sunniest country in the world and one of the windiest (Climate Council 2015). Australia is forecast to have the world's third-cheapest renewable power by 2030 and 2050 relative to other regions. Our power is expected to be particularly cheap when compared to many of our neighbours and trading partners, including South East Asia, Japan, and other Asian nations (Graham and Havas 2023).

With this comparative advantage, combined with our ample land, world-class resources of metal ores and critical minerals, and our proximity to some of the world's fastest growing economies in East and Southeast Asia, Australia has an enviable set of advantages and opportunities.

The Australian Government has signalled its desire to seize this opportunity, with its Future Made in Australia plan backing 'superpower' industries to drive jobs and economic growth into the future, while helping other nations cut climate pollution at least cost. These industries include sustainable fuels, green steel, iron and aluminium, critical minerals processing, and green hydrogen.

The economic opportunity of these new industries is extensive.

- > The Superpower Institute has estimated that the market for Australian exports of zero-emission commodities could approach \$1 trillion per year by 2050 (The Superpower Institute 2024). Australia's clean exports potential is eight times greater than our combined annual coal and LNG export revenues, so seizing even a fraction of the potential market could see Australia's polluting exports entirely replaced.
- Accenture has estimated that Australia's green export opportunity could create over 400,000 jobs by 2040, growing the economy by \$100 billion per year (Accenture 2023). Notably, this includes more than 80 thousand jobs in renewables-related services, including engineering, ICT, and education, representing \$80 billion per year in economic value added by 2040.

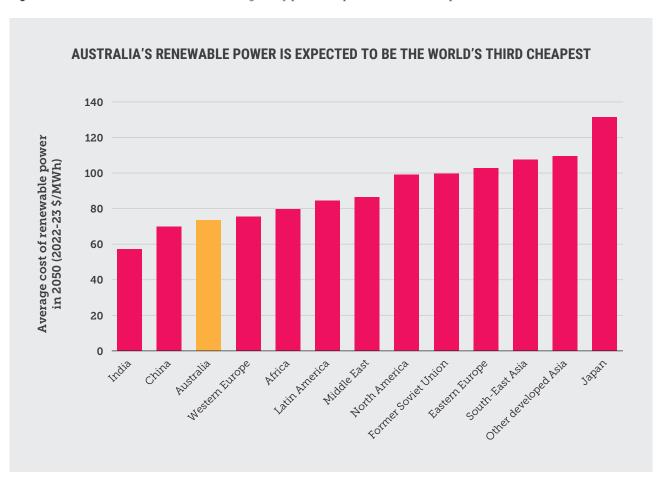
As Australia cuts climate pollution, growing new industries and supporting existing operators to decarbonise can ensure the jobs, government revenues and economic contribution of polluting industries is replaced. While Australia has all the ingredients to build a world-class green export industry, the success of our clean industries depends on a global commitment to ending climate pollution. For the sake of our own future prosperity, Australia should lead the way with our 2035 climate target.

Setting a strong, science-based target represents a clear-eyed view of Australia's future. It signals to investors and industry that we are committed to ending climate pollution

and, in doing so, building an internationally competitive industrial base that benefits all Australians. If the Australian Government backs this future, it creates a 'demonstration effect', treading a path for other investors, businesses, and nations to follow.

On the other hand, setting a weak climate pollution target is an equivocation, signalling a lack of conviction in our own plan to build the clean industries of the future. It would represent an each-way bet for our own success – and against it. Australia cannot afford to bet against ourselves; rather, now is the time to back the success of our clean economy by blazing a trail for real action at home and in partnership with other nations.

Figure 7: Australian renewables set to become globally price competitive. Source: Adapted from (Graham and Havas 2023).



2.5 DEALING WITH CLIMATE CHANGE MEANS DEALING WITH OUR FOSSIL FUEL INDUSTRY AND ITS POLLUTING EXPORTS

Extracting fossil fuels is a major contributor to Australia's climate pollution and a drag on our climate targets. Extracting coal, oil and gas represents 19% of Australia's climate pollution, and is only expected to reduce its pollution by 26% over the next decade - three times slower than the utilities sector, and half the pace of the rest of the mining industry (DCCEEW 2024). For Australia's target to be credible, it must be backed by a plan to phase out fossil fuel extraction, starting with an end to new and expanded projects.

But climate pollution in Australia is only part of the story. Because the majority of coal, oil and gas extracted in Australia is exported, far more climate pollution is released when these fuels are burned overseas. For every tonne released in Australia, the coal and gas industry 'exported' 12.8 tonnes of climate pollution overseas in 2023 (Climate Analytics 2024; DCCEEW 2025b). Including the impact of these exports, the industry represented 265% of Australia's total annual pollution.

Science-aligned targets cannot be achieved in Australia or globally without curbing fossil fuel emissions. Governments globally are on track to produce 110% more fossil fuels by 2030 than would be consistent with limiting global warming to 1.5°C (SEI, Climate Analytics, E3G, IISD, and UNEP 2023). Australia is among the world's largest exporters of both coal and liquefied natural gas (LNG), and our ongoing production and export of these fuels is fuelling climate change globally.

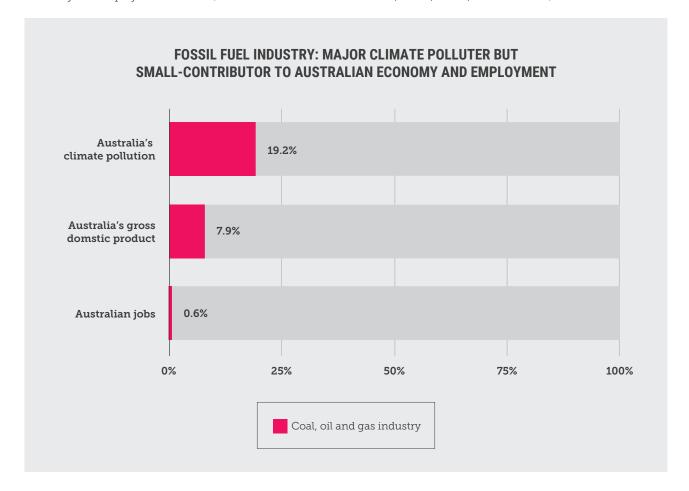
Despite being a major contributor to climate pollution in Australia and overseas, coal, oil and gas production is only responsible for 0.6% of Australia's jobs and 7.9% of our GDP (Australian Bureau of Statistics 2021, 2025b; DCCEEW 2025b).

Given its substantial domestic and international pollution impact, cutting Australia's fossil fuel production and exports is essential to deal with climate change. Curbing Australian fossil fuel exports can increase global prices, encouraging the use of renewable options. It also substantially increases Australia's international credibility, providing a stronger foundation to negotiate offtake agreements for clean commodities or agreements to phase out fossil fuels.

The writing is on the wall for coal, oil and gas, with successive international agreements strengthening commitments to move away from polluting fossil fuels. At COP28 in December 2023, as part of the first ever "Global Stocktake" of the Paris Agreement, nearly 200 countries agreed to "Transitioning away from fossil fuels in energy systems, in a just, orderly and equitable manner, accelerating action in this critical decade" and to "Phasing out inefficient fossil fuel subsidies...as soon as possible" (UNFCCC 2024b). This historic commitment underscores the need for countries to align their climate targets with these goals.

In addition to this consensus statement, Australia has also recognised that the global production and use of unabated fossil fuels must decrease significantly by 2030 to achieve the goals of the Paris Agreement (Department of Foreign Affairs and Trade 2024). Australia's 2035 climate target and new NDC should reinforce this commitment, by outlining a clear plan and timeline to phase out fossil fuel use, production and exports, and end all fossil fuel subsidies — such as the taxpayer funded diesel fuel rebate.

Figure 8: Coal, oil and gas extraction is a major cause of climate pollution, but makes far weaker contributions to our economy and employment. Source: (Australian Bureau of Statistics 2021, 2025a, 2025b; DCCEEW 2025)



Cutting Australia's fossil fuel production and exports is essential to curbing climate change.

2.6 IN AN UNCERTAIN WORLD, DEMONSTRATING CERTAINTY CAN **BENEFIT AUSTRALIA**

The world today is extremely uncertain. Conflicts in Ukraine and the Middle East combined with a resurgence in protectionist trade settings - first and foremost by the Trump Administration – are reshaping the global economy. Treasurer Jim Chalmers has noted these headwinds, telling the National Press Club. "this is the fourth economic shock now in less than two decades, a near permanent state of upheaval" (Chalmers 2025). While global uncertainty represents a headwind for our economy, clear and consistent domestic policy settings can improve Australia's global standing and encourage greater investment in the clean energy, industries and transport we need to cut climate pollution.

The Trump Administration's decision to cut support for renewable power, electric vehicles and other climate solutions only strengthens the case for decisive climate action by other nations. The United States' policy u-turn has created opportunities for other nations to attract significant investment, talent and equipment which will no longer be welcomed by the Trump Administration. Initial analysis suggests that over A\$100 billion in investment could be diverted from the US to other nations with strong climate policies (Net Zero Industrial Policy Lab 2024).

Trading partners, businesses, and global investors know that Australia is committed to reducing climate pollution, with an existing 'net zero by 2050' target, and consecutive electoral mandates for faster action on climate change. Setting a strong 2035 climate target is an act of policy certainty: Australia's intention is clear, now our immediate timeline can be, too. As investors face significant geopolitical and economic uncertainty, policy certainty in Australia can deliver dividends. As EY Net Zero Centre report states, "National emissions targets give businesses clear policy signals, supporting cost-effective action, reducing risk, and ensuring nearterm investments in long-lived assets do not lock in emissions that must be offset later" (EY Net Zero Centre 2025).

In a global race to develop renewable power and green industries, Australia has a lot to gain by demonstrating conviction.



As investors face significant geopolitical and economic uncertainty, policy certainty in Australia can deliver dividends.



A strong climate target is important to build Australia's credibility with Pacific nations

Pacific Island countries have long identified climate change as their number one security threat⁶ and have worked tirelessly to ensure that global efforts align with what the science tells us is necessary for their survival.

As Australia aspires to host COP31 in genuine partnership with the Pacific, our credibility hinges on whether our 2035 target is adequate to safeguard the region's future.

The Pacific faces an acute combination of escalating and compounding impacts from climate change, including accelerating sea level rise, increasingly destructive cyclones, and damage to the marine ecosystems upon which Pacific livelihoods and economies depend.

"A triple whammy of accelerating sea level rise, ocean warming and acidification is imperilling Pacific Islands, which face growing threats to their socioeconomic viability and indeed their very existence because of climate change."

- WMO 2024.

Through years of determined advocacy, the Pacific has played a vital role in shaping the world's response to climate change, including securing key elements of the Paris Agreement, and ensuring greater global recognition of climate change as a security threat (Morgan et al. 2024).

Adopted in 2018 by all members of the Pacific Islands Forum, including Australia, the Boe Declaration on Regional Security reaffirmed "that climate change remains the single greatest threat to the livelihoods, security and wellbeing of the peoples of the Pacific" (Pacific Islands Forum 2018). These words have been echoed in many subsequent Pacific declarations.

Every fraction of a degree of warming beyond 1.5°C substantially increases the dangers for the Pacific, and the entire world, particularly given the growing likelihood of crossing perilous tipping points in the climate system.8 The existential climate threat is unfolding amid intensifying strategic rivalry in our region, with Australia and its allies having to navigate China's growing presence and influence (Sora et al. 2024).

Australia has a strong desire to remain the region's main development partner and security partner of choice. However, in the words of Australia's Foreign Minister, we are now in a state of "permanent contest" for this position (Wong 2024). With the US an increasingly unreliable ally under President Trump, Australia faces the need to work even harder to shore up its position.

The recent decision to extend Australia's largest fossil fuel project – the North West Shelf gas project - has once again brought our climate credentials into question in the eyes of the region (Pacific Elders Voice 2025).

As we pass the midpoint in this make-orbreak decade for climate action, we can be certain that Pacific leaders and civil society are watching the Australian Government's decision on our 2035 climate target closely.

A 2035 climate target that aligns with science - and a strong plan to get there - will boost Australia's global reputation and reassure Pacific nations that we are taking their number one security concern seriously. Anything less risks eroding one of our most important relationships, ceding strategic power and influence, and undermining the region's future.

"As Australia prepares its bid to co-host COP31, there is a unique opportunity to demonstrate regional climate leadership by aligning its national targets with the urgency we face in the Pacific and supporting pathways away from fossil fuel dependency."

- Dr. Sivendra Michael, Permanent Secretary for Ministry of Environment and Climate Change, Fiji Government.7

⁷ Statement made following Prime Minister Anthony Albanese's re-election: https://fossilfueltreaty.org/australian-election

Even at today's level of warming it is possible that we have crossed tipping points for the Greenland ice sheet. West Antarctic ice sheet and tropical coral reefs. At warming of between 1.5°C and well below 2°C - that is, within the Paris Agreement temperature goal - these and some other tipping points, including widespread and abrupt thawing of permafrost, become not merely possible but likely (Armstrong McKay et al. 2022).

Conclusion

The choices we make today will shape the climate future of every Australian. The evidence presented in this report is stark and urgent: climate change is accelerating, its impacts are deepening, and current global efforts including those by Australia – remain dangerously inadequate.

We are living in a world that is 1.3°C hotter than the pre-industrial era, and that additional heat is driving increasingly ferocious extreme weather and profound threats to lives and livelihoods. The difference between 1.5°C and 2°C of warming is not marginal - it is existential, particularly for vulnerable communities, natural ecosystems, and sectors critical to Australia's economy and way of life.

Australians are already on the frontlines. In 2025 alone, communities have faced back-to-back flooding, marine heatwaves devastating iconic reefs and marine life, and deepening drought threatening food production. The financial toll is immense and growing, with insured losses already exceeding \$1.8 billion in the first half of this year alone. If climate pollution continues unchecked, climate disasters are projected to cost Australia \$94 billion annually by 2060, while 1.3 million properties will become uninsurable by the end of the century.

This crisis demands a bold, science-aligned response. Australia's 2035 climate target will be a defining decision. New analysis makes clear that to have a strong chance of contributing to holding global heating well below 2°C, Australia must reach net zero by 2035. This is not just a matter of environmental stewardship – it is a matter of national interest, safety, and global responsibility. Our late start and fossil fuelheavy economy mean we now face a much steeper reduction curve. But delay only increases the cost, risk and disruption ahead.

Weak targets are not a neutral choice, they are a direct commitment to escalating disasters and harm. A 2035 target of 65% or less locks in catastrophic consequences: widespread coral death, extreme heat in our cities, further loss of insurable properties, and intensified climate-driven disasters. Advocates of such pathways must be prepared to explain how they would manage the resulting dislocation, and economic destruction. By contrast, the strongest possible target would protect Australians, build economic resilience, and align us with our international obligations.

There is also immense opportunity in acting decisively. A strong 2035 target would provide investment certainty and unlock Australia's potential as a clean energy and technology powerhouse. With the right policy settings, green exports could generate nearly \$1 trillion a year by 2050 and support over 400,000 new jobs. At the same time, stronger climate ambition is crucial to Australia's credibility and security in the Pacific, where rising seas and climatedriven instability pose existential threats to our neighbours.

Finally, to truly safeguard Australians, we must extend our impact beyond our borders. That means supporting global climate action through green innovation, clean exports, and international climate finance. It also requires confronting the reality that the climate pollution from Australia's exported fossil fuels is among the world's most significant. Phasing out these exports, starting by ending approvals for new and expanded coal, oil and gas projects, is an essential step to protect Australians and uphold our responsibility in the global fight against climate change. In setting Australia's Nationally Determined Contribution this year, under the Paris Agreement, the Australian Government can include commitments beyond the 2035 target. Committing to a fossil fuel phase out and supporting global efforts would allow Australia to demonstrate action that is more closely science aligned.

Australia now stands at a crossroads. The 2035 target is more than a number: it is a statement of who we are, what we value, and what kind of future we are willing to fight for.

> Weak targets are not a neutral choice, they are a commitment to escalating climate disasters and harm.

Image 8: Globally, solar PV is one of many climate solutions to have enjoyed extraordinary growth over the past decade.



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Appendix

RESEARCH UPDATE - GLOBAL WARMING IMPLICATIONS OF AUSTRALIAN 2035 TARGETS (IF OTHERS ADOPT THE SAME PER CAPITA SHARE OF REMAINING BUDGET)

Summary:

Absent a net-zero option, and accepting Australia's 2030 target of -43% on 2005 levels, there is no 2035 Australian target that sets an example (on a per-capita basis) that the world can follow for a reasonable chance of keeping warming within 2°C, let alone 1.5°C. Australia must therefore aim as high as possible, support global efforts, and bring forward its net-zero date. It could also consider strengthening its 2030 target.

Background:

In May 2024, Climate Resource assessed the global warming implications of Australian 2035 emission reduction targets of 65% to 75% on 2005 levels as considered by the Climate Change Authority in its April 2024 Issues Paper 'Targets, Pathways and Progress'. We found that if the world were to follow Australia's lead (on a per-capita basis), we would face a best-estimate warming of 2.3°C (see Climate Resource 2024). This RESEARCH UPDATE refreshes the analysis and expands it to a wider range of emissions targets.

Results:

Projected peak global mean temperature resulting from Australian targets, if other nations adopt the same per-capita share of the remaining carbon budget.

Table 2: Projected peak global mean temperature resulting from Australian 2035 targets, assuming that other nations adopt the same per-capita share of the remaining global carbon budget.

Method for other countries adoption of Australian target	Australian 2030 target on 2005 levels	Australian 2035 target on 2005 levels	Per-capita emissions applied globally	Global cumulative CO ₂ emissions after 2020	Global temp rise (best- estimate or 50% chance of staying below)	Global temp rise (67% chance of staying below)	Global temp rise (83% chance of staying below)
			tCO ₂ eq/cap	GtCO₂	[IPCC AR6 WG I recent literature] °C relative to pre-industrial		
Equal per capita 2024:	-43%	-55%	228	1,736	2.32 2.28	2.53 2.46	2.78 2.67
Cumulative equal per capita from 2024 onwards	-43%	-65%	206	1,575	2.23 2.20	2.42 2.37	2.65 2.57
	-43%	-75%	183	1,414	2.13 2.12	2.31 2.28	2.52 2.48
	-43%	-85%	161	1,254	2.04 2.05	2.19 2.20	2.38 2.38
	-43%	Net Zero	127	1,012	1.90 1.93	2.02 2.07	2.19 2.24
	-75%	Net Zero	84	702	1.72 1.78	1.81 1.90	1.93 2.06

Understanding the results:

The table is interpreted as follows, using the top row as an example. Applying Australian targets of -43% by 2030 and -55% by 2035 on 2005 emissions levels, each Australian can emit 228 tonnes of CO₂ equivalent. Applying that share of 228 tonnes to the global population, we emit globally 1,736 Gt of CO₂, which gives the world a 50% chance of staying below 2.32°C; a 67% chance of staying below 2.78°C (according to the IPCC AR6 Working Group I analysis from 2021); or a 50% chance of staying below 2.28°C; a 67% chance of staying below 2.28°C; a 67% chance of staying below 2.46°C; and an 83% chance of staying below 2.67°C (according to scientific literature from 2023 that updates, revises and refines the same IPCC analysis).

Methods and assumptions:

The full methodology is detailed in the original report. We apply the same methods using a linear trajectory between Australia's 2030 target, the 2035 target, and Australia's net-zero 2050 target. Since the original analysis, updates have been made to reflect more recent data on emissions (Australian, global, aviation and maritime) and population. The original report detailed three ways to calculate Australia's 'fair share' of global emissions. Here we include only the most globally defensible - that is, a 'cumulative equal per capita' method applied from 2024 onwards.

Analysis and conclusions:

An Australian 2035 emissions reduction target of 55% on 2005 levels and net zero by 2050 puts the world on track for peak warming of at least 2.3 to 2.7°C (above pre-industrial levels), if the rest of the world adopts the same per capita share of the remaining global budget from 2024 onwards. This reduces to 2.1 to 2.5°C for a 75% target. Even a target of 85%, in this scenario, has the world on track for 2 to 2.4°C. Only a 2035 target of net zero puts the world within reach of 2°C of warming (or 1.9 to 2.2°C). This is because Australia has a far higher-than-average level of percapita emissions. Alternatively, if Australia were to strengthen its 2030 target to -75% on 2005 levels and aim for net-zero in 2035, and the world were to follow suit on a per-capita basis, we could limit warming to 1.7 to 2.1°C. In the context of Australia's also high level of historical emissions, there is an ethically sound argument that Australia's 2035 target must be as strong as possible in ratcheting up on its 2030 target, and there should be a focus on assisting other countries to decarbonise more quickly; while seeking to move forward the Australian 2030 and net-zero target dates.

Analysis by Climate Resource www.climate-resource.com

The Climate Council is a fearless champion of the climate solutions that Australia needs. People power got us started and we are proudly community-funded and independent.

The Climate Council acknowledges the Traditional Owners of the lands on which we live, meet and work. We wish to pay our respects to Elders, past and present, and recognise the continuous connection of Aboriginal and Torres Strait Islander peoples to land, sea and sky. We acknowledge the ongoing leadership of First Nations people here and worldwide in protecting Country, and securing a safe and liveable climate for us all.

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