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Paris Climate Summit:
Catalyst for further action?

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Policy Brief
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Summary

The Paris climate negotiations will seek to establish an agreement for a new common international framework which facilitates stronger domestic policies for limiting pollution. For the first time, this agreement will call for domestic actions from **all countries** – a critical step toward keeping warming below the 2°C threshold.

New external factors, not the negotiating process itself, will strongly determine the events that will unfold in Paris and the domestic actions that countries take.

International momentum is increasing

Climate change is no longer seen as solely an environmental issue. National governments, national security agencies, central bankers, institutional investors, health professionals, major global businesses and many others now regard climate change, and the global response to it, as a major strategic issue that must be managed. More and more countries have introduced policies to limit emissions. When the Copenhagen Accord was signed in 2009 there were over 420 climate change laws and policies at a domestic level. By the end of 2014 there were over 800. Critically, the energy sector is being transformed at a rapid rate. Renewable energy is now the world's second largest source of electricity.

All major emitters stepping up

Ahead of the Paris meeting, over 150 countries have put forward initial emissions reductions targets, covering nearly 90 per cent of global emissions.¹ These targets vary in their degree of strength and credibility, but they also show how meetings like Paris can increase global actions. Without the looming climate negotiations, many countries, including Australia, would not have felt pressure to put forward new targets and implement new domestic policies to achieve them. As a result, we're closer to avoiding 2°C than we would otherwise be.

Analysts suggest that achieving these targets would put the world on track to almost 3°C global warming.² This is a significant improvement on previous projections of global action, which put warming at 4°C or more. It still falls short of the less than 2°C limit. The targets also imply a significant acceleration of action to decarbonise high emissions sectors such as electricity. For example, these targets would see investment in renewable energy increase to become the world's dominant source of electricity by 2030.

Key criteria for an effective outcome

Any agreement negotiated will not fix everything. To help bridge the gap between current actions and avoid 2°C warming, an effective Paris agreement should meet three key criteria:

- 1 Is the agreement bankable?** Limiting global warming to less than 2°C requires trillions of dollars of investment in modernising and cleaning up the global economy. The Paris meeting can help catalyse this investment by sending strong signals to business and investors that governments will continually ratchet-up action towards the less than 2°C limit. This can be done by building into the new agreement an ongoing requirement for targets to be updated regularly and progressively strengthened. This would be accompanied by a regular 'stocktake' of global action where the targets and progress toward achieving them would be assessed internationally against the less than 2°C goal. Ideally, the agreement should also contain a clear statement that its long-term goal is to transition to a net zero carbon global economy well before the end of this century.
- 2 Does it build trust and accountability?** Trust is key to successful international climate action. Forward-looking countries are taking action to build zero emissions industries because they see it is in their economic interests (i.e. commercial innovation, modern industry sectors, improved air quality, greater energy security, etc.). However, greater global success can be achieved if the agreement includes credible rules and processes to ensure best practices are shared, and countries' actions are transparent and internationally accountable.
- 3 Is it fair?** The world's poorest nations are the most vulnerable to the impacts of climate change. They are often the most exposed to impacts, and have the least capacity to invest in zero carbon development and increased resilience. These countries have also contributed the least to carbon pollution. The Paris agreement can help these nations by providing a mechanism for predictable support to help them participate in zero carbon solutions and the management of climate change risks.

Scenarios for Paris

The Climate Institute has developed three possible scenarios for the outcome in Paris. Under none of these scenarios does the world do a u-turn post-Paris and start to pull investment out of the emerging global clean energy economy. The scenarios for Paris are:

- + **Catalyst:** Paris sends a strong signal that countries will accelerate action through time. This gives business and investors confidence to accelerate their own actions to limit emissions.
- + **Momentum:** The multilateral process supports the development of more robust and effective domestic actions through time. Countries implement more domestic policies to limit emissions and meet new targets.
- + **Patchwork:** The negotiations achieve a minimal result where Paris outcomes are vague or ill defined. Global investment in climate change solutions still continues, but it is concentrated in those countries that already see these industries as being at the heart of their long-term prosperity (e.g. the European Union and China).

How can Australia help deliver an effective outcome in Paris?

Australia has put forward a weak initial post-2020 target that fails tests of both scientific credibility and economic responsibility. The target is not consistent with meeting the globally agreed goal of limiting warming to less than 2°C. It will leave Australia with the highest per capita emissions and the most pollution intensive economy of all developed economies in 2030. For Australia to be playing its fair part in avoiding 2°C, the nation should reduce emissions by around 45 per cent by 2025, 65 per cent by 2030 and achieve net zero emissions before 2050.

Beyond advancing more credible targets and bolstering domestic policies to reduce pollution, Australia can do a number of things to help build a strong outcome in Paris.

Implement existing commitments:

- 1 **Provide climate finance:** In Lima, Australia made a welcome contribution to the Green Climate Fund of \$200 million. This is being delivered over four years and adds to previous climate finance contributions of \$599 million over the period 2010 to 2013. Australia needs to scale up its public finance contribution in line with the agreed goal for developed countries of providing US\$100 billion public and private finance by 2020. Assuming 50 per cent of the contribution comes from a range of public sources, this would equate to around \$1.5 billion by 2020.
- 2 **Ratify the second commitment period of the Kyoto Protocol:** At the 2012 Doha summit, Australia agreed to join the second commitment period of the Kyoto Protocol with bipartisan support. Here, Australia committed to targets in line with Australia's minimum target of 5 per cent below 2000 levels by 2020. Internationally, a firm unconditional commitment to ratify the second commitment period target would demonstrate Australia's confidence that its 2020 targets will be met.

Support progressive positions on key elements of the agreement:

- 1 **Support a strong improvement mechanism under the new agreement:** Australia should support improvement cycles for emissions targets that are five years in length and start before 2020.
- 2 **Support the inclusion of a long-term emissions goal in the agreement:** A 2050 goal would provide the community, including business, with more information on the global transition to a net zero emissions economy pathway and better facilitate long-term decision-making and investment. Long-term investment signals are essential to ensure investment in the technologies required to reduce emissions across the global economy.
- 3 **Support and actively help to establish accounting and reporting frameworks:** Australia can continue to play a constructive role by contributing policy proposals, expertise and resources to design the frameworks for building transparency and accountability into all areas of the agreement – emissions reductions, adaptation, and climate finance.

After the Paris climate talks, countries will need to build and strengthen their domestic policies to limit pollution. While a global agreement on climate change boosts the transition to a net zero carbon economy and helps countries work more collaboratively, ultimately it will be effective domestic policies that will keep global warming to well below 2°C.

Introduction

Catalyst for further action?

In late November and early December this year, governments, business leaders, researchers and members of civil society will descend on Paris for the annual meeting of the UN's climate convention. This meeting will, for the first time, seek to establish an agreement for a new common framework for international cooperation which captures and facilitates stronger domestic policies for limiting pollution from all countries.

Compared to the last 25 years of international climate negotiations, the external environment around the Paris meeting is unique. In many regards it is these external factors, not the negotiating process itself, that will determine the events that will unfold in Paris and subsequent meetings.

Crucial external factors shaping the Paris outcome include:

- 1 Climate change is no longer seen as solely an environment issue:** National security agencies, central bankers, institutional investors, health professions, major global businesses and many others now see climate change, and the global response to it, as a major strategic issue that must be managed.³ Not a single major meeting of the G20, the IMF, the World Bank, global business leaders or defence officials now occurs where climate change is not discussed.⁴ There has been a growing appreciation of the risks that climate change presents and this has driven climate change into the mainstream of national planning processes among most major countries. That China has made addressing climate change and developing clean technology central to its national planning processes is but one example of this.
- 2 Global geopolitics have shifted:** Political engagement is occurring at the highest levels of government and across a range of ministries (e.g. foreign affairs, energy, industry, environment, finance). The United States' top foreign policy objective is for a successful outcome in Paris, and they are working closely with China in a range of bilateral forums. As many developing countries identify strong action from all major emitters as being in their national interest, the old developed and developing world divisions are being left behind. This has catalysed the splintering of the, traditionally unified, positioning of the Group of 77 (G77) and China group.⁵ Progressive voices from the small island states, Latin America and from Least Developed Countries (LDCs)⁶ are balancing and countering regressive voices from the Organisation of Petroleum Exporting Countries (OPEC)⁷ and the Like Minded Developing Country Group (LMDCs).⁸

3 More and more countries are introducing policies to limit emissions:

When the Copenhagen Accord was signed in 2009, there were over 420 climate change laws and policies at a domestic level. By the end of 2014, there were over 800.⁹ Eight out of ten countries have national renewable energy targets.¹⁰ According to the World Bank, about 40 nations have implemented or are implementing instruments to put a price on carbon.¹¹ The number of implemented or scheduled carbon pricing instruments has nearly doubled since 2012.¹² The successful implementation of domestic policies builds confidence that international targets can be achieved (See Figure 1 on policy developments in 2015).

4 The energy sector is being transformed at a rapid rate:

Renewable energy is now the world's second largest source of electricity.¹³ In 2013, renewable energy sources supplied 22 per cent of global electricity demand.¹⁴ 2013 was also the first year that more renewable capacity was built than fossil fuels and nuclear combined.¹⁵ Investment in renewable electricity has increased by 30 per cent since 2009.¹⁶ Over this period, more than US\$1.12 trillion was invested in renewable capacity.¹⁷ The cost of renewable electricity, has continued to fall rapidly. Since 2009, solar PV module costs have fallen 75 per cent and the cost of electricity from utility-scale solar PV by 50 per cent.¹⁸

5 Businesses are increasingly seeing climate change as a strategic issue that needs to be proactively managed:

Climate change is already having wide-ranging economic effects, which are expected to become more intense. There is a growing trend of investment managers, with long-term horizons or fiduciary duties, considering the effects of climate change on their members (See Box 2 on investor developments in 2015). Throughout 2015, a number of Australian businesses have released statements showing their willingness to take action on climate. The Australian Climate Roundtable brought business, investor, union, research, environment, and welfare groups together and released a statement encouraging Australia to do its bit on climate change.¹⁹ In September, leaders from AGL, BHP Billiton, GE, Mirvac, Santos, Unilever, Wesfarmers and Westpac Group published a statement that supports an effective Paris agreement outcome.²⁰

Regardless of the outcomes in Paris, these trends are now largely irreversible. The question for Paris is not how to get the world to address climate change, but how can a global cooperative framework accelerate it?

BOX 1: Zero – the only number that matters

Under the UN's Framework Convention on Climate Change's (UNFCCC) Cancun Agreements²¹ and Durban Platform for Enhanced Ambition,²² Australia joined more than 190 other countries and agreed to help avoid a 2°C increase in global temperature. They also recognised that short-term ambition needs to be strengthened to keep this goal within reach.

The world's most vulnerable developing countries, including the small island Pacific states, have called for this temperature goal to be strengthened. They contend 2°C of warming will result in climate impacts that they cannot adapt to, and that a 1.5°C threshold would be more appropriate. This stance was supported by an expert review conducted by the UNFCCC earlier this year. It found 2°C of warming cannot be considered as safe for many of the world's vulnerable communities. 2°C should be seen "as an upper limit, a defence line that needs to be stringently defended, while less warming would be preferable".²³

Our ability to stabilise the climate and avoid dangerous warming is largely determined by the total amount of pollution we put into the air to 2050. This concept is often referred to as the "carbon budget".

To stay within the global carbon budget, total emissions need to be reduced to zero (and below).²⁴ The Intergovernmental Panel on Climate Change (IPCC) and the UN Environment Programme (UNEP) have indicated that, to have a high chance of limiting warming to less than 2°C, global emissions should be reduced by 70-95 percent, on 2010 levels, by 2050, and to net zero emissions by 2060-80.²⁵ Under these scenarios, global emissions from industrial sectors, like electricity, reach zero around 2050.

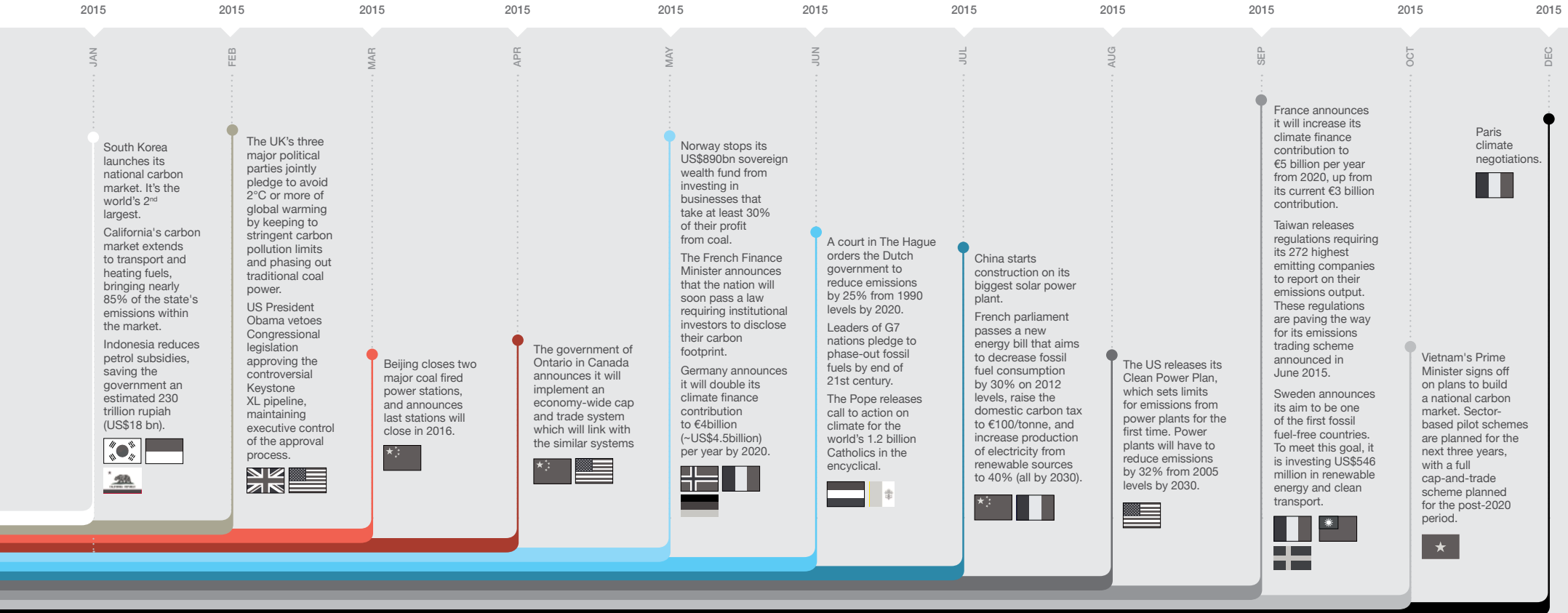
Throughout 2015, more and more organisations and companies have been recognizing that these strong and rapid emissions reductions are necessary. In June of this year, the Group of Seven (G7) nations agreed that "deep cuts in global greenhouse gas emissions are required with a decarbonisation of the global economy over the course of this century".²⁶ Later that month, the Australian Climate Roundtable put out a release stating that preventing dangerous warming, while increasing prosperity, will require the eventual reduction of net greenhouse gas emissions to zero or below. Internationally, companies have also been supporting a zero emissions goal.²⁷ In February 2015, a group of CEOs, including Unilever's Paul Polman and Indian industrialist Ratan Tata, called for a long-term global net zero greenhouse gas emissions goal for 2050.²⁸

“ This unprecedented scientific consensus [in the IPCC] concludes that, if we are to stabilize warming at 2 degrees Celsius, as the international community agreed to in 2009, we must achieve zero net emissions of greenhouse gasses before 2100.

Jim Yong Kim
President of the World Bank

Policy developments in 2015

Figure 1: Major international policy developments in 2015.



BOX 2: Money is moving

Throughout 2015, the financial sector has also been moving rapidly to protect against the risks posed by climate change. There are two broad categories of climate financial risk:

- + **Carbon risk:** This includes financial exposure to the risk of carbon emissions or carbon intensive assets being priced, regulated, stranded by technology, or incurring legal risk
- + **Climate impact risk:** Where assets are damaged or devalued as a result of climate change impacts.

Several unprecedented initiatives from companies, shareholders, and governments have raised the bar for investment that properly accounts for climate risk. They include:

- + **January:** Royal Dutch Shell investors pass a shareholder resolution requiring the company to report on whether its business plans were compatible with a 2°C world. A similar resolution was passed in April at BP with board support.
- + **April:** The Church of England Pensions Board pledges to stop making investments in any company where more than 10 per cent of its revenues are derived from coal or tar sands oil.
- + **April:** G20 member states unanimously agree to launch an inquiry into the fall-out faced by the financial sector as climate regulations make current investment pathways unviable. The inquiry will be carried out by the Financial Stability Board, an international body that monitors and makes recommendations about the global financial system.
- + **May:** One of the world's largest insurance companies, AXA, pledges to remove \$US559 million in coal investments from its portfolio by 2020 and to triple its investments in green technologies to \$US3.2 billion.
- + **May:** The French Finance Minister, Michel Sapin, announces that France will soon pass a law requiring institutional investors to disclose their carbon footprint. The measure is intended to help institutional investors to understand how their assets are exposed to climate change.
- + **June:** Norway's parliament agrees to ban the country's \$US890 billion sovereign wealth fund from investing in companies that base at least 30 per cent of their business on coal, either by revenue or output.
- + **July:** Aviva, the British insurance group with about £300bn in assets, said it may sell its shares in coal companies which cannot prove that they are serious about tackling climate change. Aviva also announced it would invest £2.5bn in renewable energy and energy efficiency over the next five years.

- + **September:** In California, the State Assembly passed a bill requiring its two state pensions funds to divest from companies that generate at least half their revenue from coal. The bill still needs to be signed into law by the Californian Governor.
- + **September:** The Governor of the Bank of England, Mark Carney, gave a speech warning that climate change could result in "huge" losses for investors. He also announced that the G20-affiliated Financial Stability Board – which he chairs – is considering establishing a Climate Disclosure Task Force, which would be a collaboration between industry, regulators, analysts and ratings agencies.
- + **September:** The Prudential Regulatory Authority (PRA), the UK's financial supervisor, published an initial risk assessment of the implications of climate change for the insurance sector. It identified "substantial challenge to the business model of insurers", not only because of climate impacts, but also due to the carbon risk to insurers' investment portfolios and through what the PRA calls "liability risks" – in which third-party liability claims are pursued over effects of climate change.
- + **October:** The UK Environmental Pension Fund, worth £2.9bn (AU\$6.3billion), announces it will divest 90 percent of its coal assets and 50 percent of its oil and gas stocks by 2020.

“The combination of the weight of scientific evidence and the dynamics of the financial system suggest that, in the fullness of time, climate change will threaten financial resilience and longer-term prosperity.

Mark Carney
Governor of the Bank of England

Path to Paris (+ beyond)

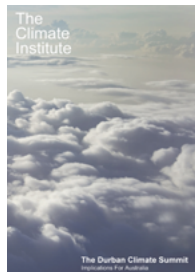
The path to Paris has spanned more than two decades, beginning in 1990 when governments agreed to develop the UNFCCC. This treaty was finalised in 1992. Since then there have been a number of advances, including the creation of the Kyoto Protocol in 1997. This saw a number of developed countries set emissions reduction targets for the period 2008-2012 and the subsequent implementation of global carbon trading markets. New Kyoto targets for the period 2013-2020, including Australian targets, were agreed in Doha in 2012.

The chaotic Copenhagen summit in 2009 was the next major political milestone along the path. Many people saw this summit as a disappointment because it didn't lock countries into a legally binding international treaty, even though this was not the agreed aim of the conference. While not ideal, some positive outcomes did come from Copenhagen, including agreement that all countries keep warming well below 2°C.²⁹ Targets were also set for long-term and shorter-term climate finance contributions, and for the first time all major emitters, including the USA and China, committed to emissions limitation targets for 2020. Finance commitments included a commitment from developed countries to scale up public and private sector finance to US\$100 billion per year by 2020.

More importantly, following Copenhagen, domestic policies to control emissions spread rapidly across the world. Regulations on major emitting sources of pollution, carbon pricing, renewable energy targets and other domestic policies have taken root across most of the world's major economies.

Built on the foundations of the work that was undertaken in advance of Copenhagen, and on the agreements at the meeting, countries have continued to make progress since that time:

- + **Cancun, 2010:** For the first time, all major emitters agreed to have their emissions reductions commitments captured under the UN framework.³⁰ Additionally, countries agreed to establish the Green Climate Fund to assist with the transfer of money from donor countries to projects in developing countries. In Cancun, countries decided that all climate finance contributions need to be balanced between projects for emissions reductions and building resilience to climate change impacts (adaptation projects).³¹
- + **Durban, 2011:** It was decided that a new agreement would be established, to apply after 2020, that limits the emissions of all major emitters.³² This is the agreement that is being finalised in Paris.³³
- + **Doha, 2012:** The second commitment period of the Kyoto Protocol was agreed to.³⁴ Countries began developing a streamlined process and timeline to deliver the Paris agreement.³⁵
- + **Warsaw, 2013:** Countries agreed that the draft Paris agreement text needed to be defined in 2014 in order to allow for adequate negotiating time.³⁶ Critically, it also agreed that all countries that were able to do so would put forward their post-2020 targets well in advance of the Paris summit in 2015. A mechanism for loss and damage was also established here, the aim of which is to assist vulnerable countries with climate change impacts to which they cannot adapt.³⁷⁻³⁸
- + **Lima, 2014:** Lima established the framework for the information countries should include in their new post-2020 emissions targets.³⁹ This included an expectation that all countries show how their targets are a fair contribution to the less than 2°C goal. Countries also left Lima with a better understanding of what would be included in the Paris agreement, what form the agreement might take, and a strict work plan for the year ahead.⁴⁰



Policy Briefs for previous annual COP climate summits.

Post-2020 emissions reduction pledges

Throughout 2015, countries have been putting forward their initial post-2020 emissions reduction pledges. These are called Intended Nationally Determined Contributions (INDCs).⁴¹ One hundred and fifty eight countries have now put forward their targets to date, covering nearly 90 per cent of global emissions.⁴² All the post-2020 targets submitted this year are “intended”, initial or draft targets (see Figure 3).

Now targets will need to be submitted after the Paris negotiations, when governments ratify the new agreement. Paris will also seek to create a process to strengthen and update targets through time.

These targets vary in their degree of strength and credibility⁴³ (see section on Australia’s Role below for information on Australia’s post-2020 emissions reduction target) but they also show one of the benefits of meetings like Paris in increasing global actions. Without the moment of Paris on the horizon, many countries, including Australia, would not have felt pressure to put forward new targets and implement new domestic policies to achieve them. As a result, we are closer to avoiding 2°C than we would otherwise be (See Figure 2).

The targets also imply a significant acceleration in actions to transform high emissions sectors. For example, renewable energy would become the dominant source of electricity globally by 2030 (over 35 per cent global electricity generation).⁴⁴ Over the period from 2020-2030, low carbon sources would account for nearly 80 per cent of cumulative investment in electricity supply.⁴⁵

Figure 2: Bending the pollution curve.⁴⁶

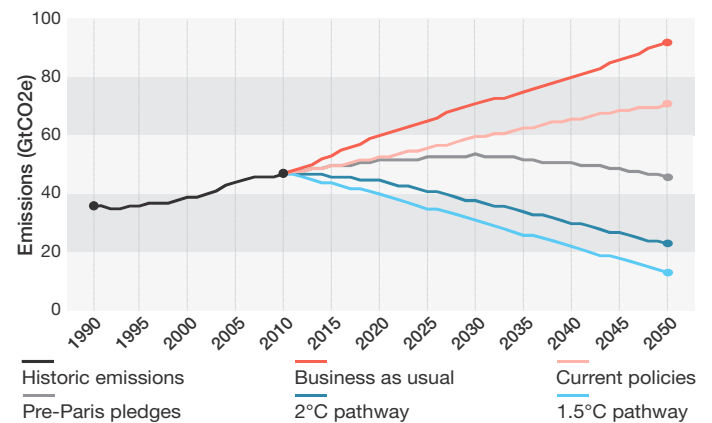
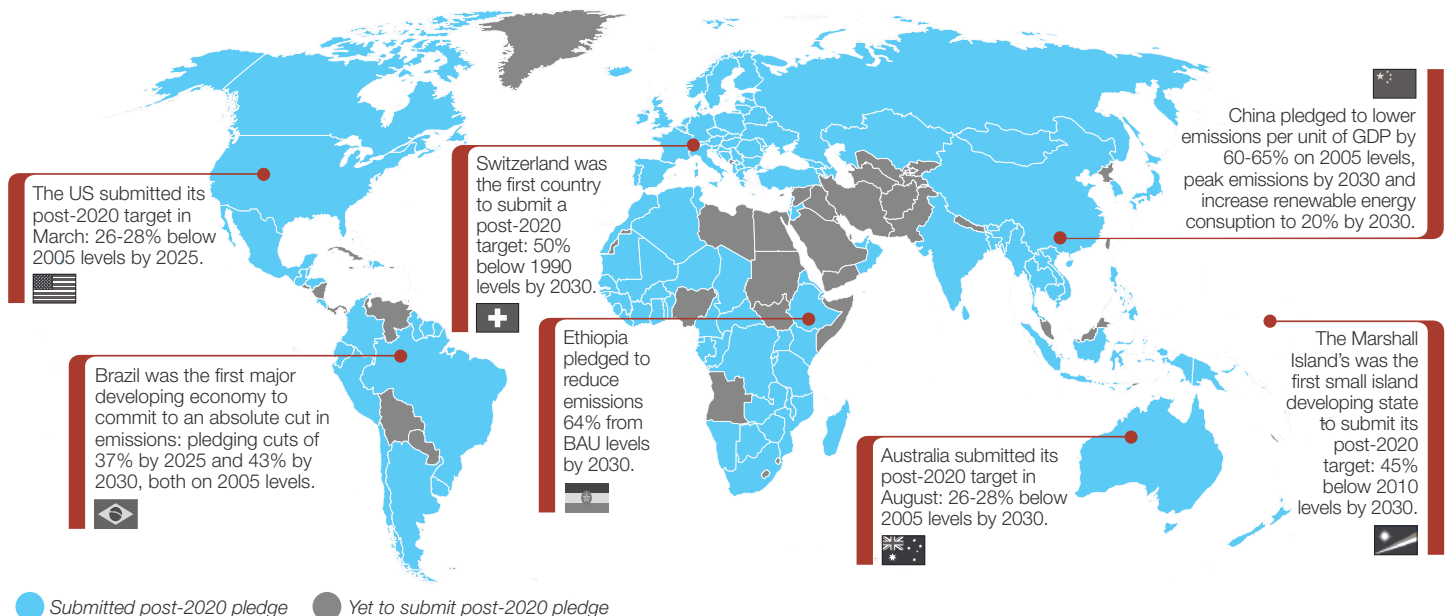


Figure 3: Nearly 90 per cent of global emissions are now covered by initial post-2020 targets.



What to expect from Paris

Paris will be effective if it sends a clear signal to business, investors and governments at all levels around the world that the transition to a net zero carbon economy is increasingly inevitable. In order to continue building momentum for this transition, Paris should, and can, produce a durable, flexible agreement that continually facilitates greater action from all countries through time.⁴⁷

Key criteria for an effective outcome:

The agreement is bankable

Limiting global warming to less than 2°C requires that trillions of dollars are invested in modernising and cleaning up the global economy.⁴⁸ The Paris meeting can help catalyse this investment by sending strong signals to businesses and investors that governments will continually ratchet-up action towards the 2°C limit.

This can be done by building an ongoing ratchet mechanism into the new agreement for new targets to be updated regularly and by ensuring each new target submitted is stronger than the previous one. This would be accompanied by a regular 'stocktake' of global action where the targets and progress to achieving them would be accessed internationally. These stocktakes and other

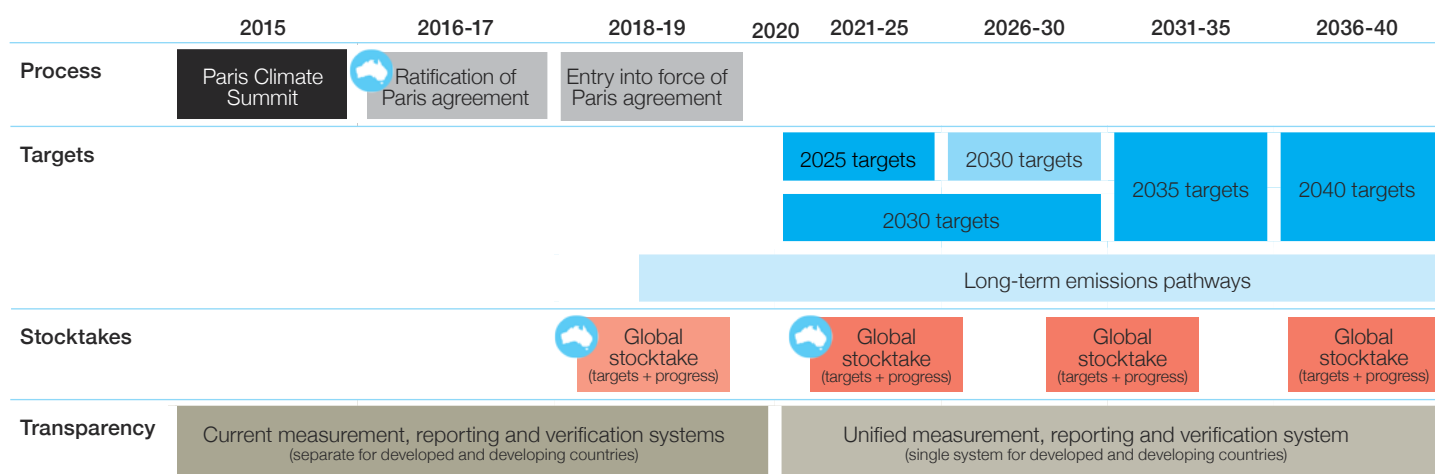
processes would create regular political moments where countries can step up action together. In some respects, the announcement of new post-2020 targets this year can be seen as the start of this process.

In Paris, it is important to achieve agreement for countries to update their targets every five years and to start this process before 2020.

Ideally, the new agreement should also make a clear statement that the long-term goal of the agreement is to transition to a net zero carbon global economy well before the end of this century. Paris can also promote the development of long-term emissions targets, at a national level, by encouraging countries to develop national longer-term emissions reductions plans.

The combination of shorter-term targets and a longer-term goal provides the community, including business, with a greater level of information on the global transition to a net zero emissions economy. This can better facilitate long-term decision-making and investment. Long-term investment signals are essential in order to ensure investment in the technologies required to reduce emissions across the global economy.

Figure 4: Indicative application of the Paris agreements.



 Indicates formal opportunities for Australia to announce credible post-2020 emissions reductions targets.

The agreement builds trust and accountability

Trust is key to international climate action. Forward-looking countries are taking action to build zero emissions industries because they see that it is in their economic interests (i.e. new innovation, modern industry sectors, low air pollution, greater energy security, etc.). However, greater global success can be achieved if the Paris agreement includes credible rules and processes to ensure countries' actions are visible and transparent, and that they are held accountable for the actions they commit to internationally, as well as at home.

To build transparency, all commitments must be put forward simply. They should not only include future targets, but also specify policies and programs that will be put in place to reach them. Transparency is also achieved when the commitments of countries are easy to compare, or in climate convention speak, when they're measurable, verifiable and reportable (MRV). An important goal within the negotiations should be a common framework for MRV that applies not just to emission reduction commitments, but also to adaptation and finance contributions. This can help build trust between countries, and therefore encourage greater action overtime.

The agreement is fair

The world's poorest nations are the most vulnerable to climate change impacts. At the same time, they have limited resources to invest in zero carbon development and increased resilience to climate change impacts. The Paris agreement can demonstrate fairness of actions by providing a mechanism for predictable support to countries least able to participate in zero carbon solutions or manage escalating climate change risks.

In 2009, developed countries agreed to mobilise public and private finance of US\$100 billion per year by 2020 to support low carbon development and adaptation in developing countries. Estimates by the OECD suggest that around US\$60 billion a year is currently being mobilised.⁴⁹ A key ingredient for an effective outcome in Paris is trust that the US\$100 billion will be delivered by 2020. Paris will also need to establish the framework for scaling up climate finance in the post-2020 period. For example, does the agreement outline that countries will regularly update their commitments to additional climate finance?

Additionally, new measures need to be put in place to strengthen adaptation outcomes in all countries. Paris can deliver a streamlined process to help ensure that adaptation is central to national planning in all countries. This process should also ensure that information is provided to the international community to ensure global resources and attention can be focussed in the right places in the most vulnerable nations. This could be supported by developing a global adaptation package that brings together the necessary elements for building resilience to climate impacts. These include capacity building, technology and experience sharing, community networks and larger infrastructure projects like sea defences. It is also important that necessary finance for

Paris will not produce just the one agreement text. Rather, a package of outcomes will be produced that will include:

- + the Paris agreement itself
- + COP 'decisions' which will chart the next steps for developing the detailed rules that will underpin the implementation of the Paris agreement
- + possible political or ministerial declarations, for example, countries committing to increase climate finance contributions or phase out fossil fuel subsidies.

Hot-button political issues

The Paris meeting will likely see a range of issues publicly and privately contested. These will likely include:

- + **Legal character of emissions targets:** Some countries – or negotiating blocs like the Small Island Developing States – have a strong preference for the post-2020 targets to be internationally binding. But for other countries, like the US, there are domestic policy barriers to them signing up to legally binding targets internationally. There are mechanisms for the US to ratify the new agreement through Presidential Executive Order.⁵⁰ If the targets are internationally binding, the new agreement would need to go to a very hostile Congress before the US can ratify.

In reality, whether or not the new agreement is “legally binding” or not has become a distraction. We’ve seen this year that many countries, including large developing emitters like the US, China and Brazil, are taking action domestically to reduce emissions – even though they are not legally bound to.

The realpolitik of Paris will likely see the core of the new agreement will likely have legal force. Countries will be obligated to routinely put forward new, ever stronger, commitments and implement them at national level. However, the strength of these commitments will be determined by the individual country and they will not be embedded in the agreement itself.

- + **Pre-2020 actions:** The new agreement will steal the spotlight in Paris, but it only applies to the post-2020 period. However, the ambition of countries’ domestic actions for the pre-2020 period is an issue that will also be addressed at the summit. Developed nations are under pressure to live up to their existing commitments before developing countries agree to a new agreement that covers actions from all nations. In Paris, countries will be encouraged to do a number of things to enhance their ambition for the pre-2020 period. For example, developed countries that have not yet done so will be under pressure to ratify the second commitment period of the Kyoto Protocol (which covers 2013-2020). This is important because for those countries that have signed – like Australia – it provides sureties to the international commitment that 2020 targets will be achieved. More broadly, the US\$100 billion climate finance goal discussed above also falls into this area of concern. Developed nations still need to provide a clear pathway to how finance will be scaled up and how the US\$100 billion goal will be reached.

- + **Differentiation:** The perceived fairness with which the post-2020 agreement addresses differences between nations and “differentiates” parts of the agreement on that basis – if at all – will be a core political issue in Paris.⁵¹ Political and tactical battles between the developed and developing world on this issue are common in the climate negotiations and often get spotlighted by the media. In some cases, public debates around differentiation are either attempts to distract from countries’ lack of domestic action and/or their negotiating tactics.

There is no credible scenario where a successful outcome does not include commitments from all major emitters to limit their emissions. Countries will self determine the strength of their emissions reduction targets – which mean that, by nature, they are differentiated. As the new agreement will likely include provisions that prevent countries from backsliding, the type of target they put forward will need to be at least as strong as the previous one. The origin of climate finance – whether only from developed nations, or from any nation in a position to do so – and whether all countries are held to the same level of transparency requirements, are two examples of differentiation issues likely to emerge in Paris.

- + **Loss and damage:** Loss and damage is a relatively new concept. It comes into play when there are climate impacts that cannot be adapted to, such as loss of territory due to sea level rise. Even with strong emissions reductions and adaptation support, some loss and damage is unavoidable, especially in developing and vulnerable countries, because of the emissions already in the atmosphere. Recent major climate events, like major cyclones – and other impacts in developing nations – have driven this issue into the heart of the negotiating positions of many nations.

At the Warsaw climate summit in 2013, a mechanism was established to enhance action on this issue. The Warsaw mechanism has begun a dialogue on risk management and how permanent damages could be handled. For example, this could be done through regional insurance pools that allow countries to rebuild after catastrophic climate events. There is a big push from vulnerable countries to have loss and damage anchored in the new Paris agreement so that work on it continues after 2020.

Scenarios for Paris

Catalyst, momentum, fragmentation

While there has been lots of evidence in 2015 of countries putting in the hard work to give the highest possibility of an effective outcome, Paris will still involve some difficult negotiations. Success is not guaranteed.

The Climate Institute has developed three broad scenarios for the outcome in Paris:

+ **Catalyst:** In this scenario, Paris sends a strong signal that countries will accelerate action through time. This gives business and investors confidence to accelerate their own actions to limit emissions.

The politics of this scenario are dominated by effective ministerial engagement before and at Paris. Bridging proposals on the key political issues emerge from alliances of progressive countries from the EU, Latin America, and vulnerable nations. These options are backed up by the US. In this scenario, China moves early to differentiate itself from the LMDC group. Developed countries demonstrate clear commitments to pre-2020 action in areas such as climate finance.

Countries agree on clear, five year cycles for emissions reduction commitments. They articulate a long-term goal for the agreement, of zero emissions and below. This aligns with keeping warming well below 2°C. A unified system for reporting and accounting, and the robust principles that will underwrite this system, features in the core legal agreement. Clear and regular cycles for review and commitment are developed for climate finance and adaptation. Countries agree to scale-up finance contributions in a predictable and transparent way, post-2020. The supporting decisions to the Paris agreement will ensure that the first global stocktake occurs before 2020. This provides a work plan for how the details of review cycles and the transparent reporting framework will be developed and implemented.

This scenario will accelerate the implementation of a less than 2°C global economy and allow business and investors to clearly see the direction of travel to net zero emissions. The capital shift from high carbon to low carbon practices is catalysed, spurring further global action to reduce emissions.



A solar farm under construction in the remote Gansu province, China.

+ **Momentum:** In this scenario, the multilateral process continues to support the development of more robust and effective domestic actions through time.

The politics of this scenario are dominated by the US and China (sometimes called the G2), with the centre of gravity of the meeting defined by these two countries. While other nations position around the edges, most countries coast in the wake of the G2.

Countries agree to five year commitment cycles for emissions reductions, but fall short of articulating a clear long-term decarbonisation goal. High level principles for the development of a unified or robust accounting and transparency system are included in the agreement. Regular review and stocktake cycles are identified for adaptation and climate finance. The supporting decision text may or may not include a pre-2020 global stocktake, but does provide some clarity on a work plan for developing the details needed to implement the agreement from 2020.

This scenario will allow business and investors to see the direction of travel for stronger action through time. The shifting of capital from high carbon to low carbon technologies continues to grow based on the currently articulated targets but capital movements begin to focus more on investments aligned with a global zero carbon economy that would help avoid 2°C.

+ **Patchwork:** In this scenario, the negotiations achieve a minimal result where Paris outcomes are vague or ill defined.

The politics of the meeting are dominated by negotiators. Engagement from leaders or ministers is limited or not effective. The public and private actions of regressive countries, from both the developed and developing world, poison the mood of the meeting. This weakens the opportunity for progressive nations within these groups to build bridges and advance stronger proposals on hot button issues. This situation is compounded by a perceived failure of developed nations to live up to current finance commitments.

Countries agree to update their commitments before they expire, but there is no unified approach to when targets are updated. The agreement falls short of articulating a clear long-term decarbonisation goal. Countries agree that a "robust" system for accounting and transparency should be developed, but fail to provide core principles that should guide the systems development in the legal agreement. The review and commitment cycles for adaptation and finance are either weak and unspecified, or not included at all. The decision text that accompanies the agreement includes a work plan for the period in advance of the implementation of the agreement in 2020. However, these arrangements leave wide scope for disagreement and delay in implementation of the post-2020 framework.

In this scenario, the shift of capital from high carbon to low carbon technologies continues, but the role of the UNFCCC in facilitating stronger action is diminished. Countries continue to take action domestically, but it is fragmented and concentrated in companies who see the competitive advantage of reducing their economic dependence on polluting industries (e.g. China, the EU).

Australia's role

Australia is the world's 12th largest economy.⁵² It is the 13th largest emitter.⁵³ And it is highly vulnerable to climate impacts. Australia also has a strong diplomatic core and is influential in key negotiating groups within the meetings. For example, Australia chairs the Umbrella Group, which includes the USA, Japan, Canada, Norway, New Zealand, Russia and Ukraine. Australia is also identified as a resource-based economy. If Australia can demonstrate its ability to significantly reduce emissions, this can provide reassurance to other resource-based economies, like Brazil and South Africa, that they can do the same.

Australia has put forward a weak post-2020 target that fails tests of both scientific credibility and economic responsibility. It leaves Australia trailing behind its international peers. In August, Australia submitted an initial target to the UN of 26-28 per cent below 2005 levels by 2030. The target is not consistent with meeting the globally agreed goal of limiting warming to less than 2°C. Additionally, the government, against international expectations, has not attempted to demonstrate how this target is consistent with this outcome. Applying this target, Australia will consume its maximum share of the global carbon budget by 2029. If other countries took the same approach, the world would warm by 3-4°C. It will also mean Australia, in 2030, will have the highest per capita emissions and the most pollution intensive economy of all developed economies (as demonstrated in Figure 5 below).

For Australia to be playing its fair part in avoiding 2°C, it should reduce emissions by around 45 per cent by 2025, 65 per cent by 2030 and achieve net zero emissions before 2050.⁵⁴

Comparing per capita emissions

In the wake of the target's release, the government claimed that "of all of the developed world countries, Australians and Australia will reduce emissions on the highest per capita basis".⁵⁵ It stated, "we will halve emissions per person in Australia over the next 15 years and that is more than any other major economy or any other comparable nation".⁵⁶

This claim, that Australia's per capita emissions reductions is greater than all developed countries, stands on shaky ground. To justify it, the government would need to compare itself to certain developed countries while excluding others, such as smaller countries like Switzerland. The UK's domestically legislated target has also been overlooked. If, as most international analysis does, you include the US' emissions reduction goal for 2050 in the calculation, as well as their 2025 goal, its per capita reductions become essentially the same as the government suggests for Australia.

Regardless, the target will still leave Australia with the highest per capita emissions of all developed economies in 2030.

Figure 5: Comparing developed countries minimum targets.

	Target consistent with 2°C?	Post-2020 annual rate of emissions reductions	Per capita emissions in 2030	Emissions intensity in 2030	Percentage change on 2005 levels	Percentage change on 1990 levels
Australia	Not consistent	-1.6%	16	198	-26%	-20%
Canada	Not consistent	-1.6%	14	190	-30%	+6%
European Union	Credible pathways exist	-2.6%	6	104	-34%	-40%
Germany	Credible pathways exist	-2.6%	7	88	-45%	-55%
Japan	Not consistent	-2.4%	8	134	-25%	-19%
New Zealand (excluding LULUCF)	Not consistent	-0.7%	11	189	-30%	-10%
Norway (excluding LULUCF)	Credible pathways exist	-1.5%	4	35	-18%	-40%
Switzerland	Credible pathways exist	-4.1%	3	31	-51%	-50%
United Kingdom	Credible pathways exist	-5.1%	5	72	-49%	-66%
U.S.	Credible pathways exist	-2.3%	11	113	-39%	-29%
Average (excluding Australia)		-2.5%	8	106	-36%	-29%

● Highest ranked developed economy ● Ranked in the lowest three developed economies ● Lowest ranked developed economy

Where Australia can help

Australia can do a number of things to help build a strong outcome in Paris. These range from implementing existing international commitments, through to announcing credible domestic policies and positions on the details of the Paris agreement.

Implementing existing commitments:

1 Provide climate finance: In Lima, Australia made a welcome contribution to the Green Climate Fund of \$200 million.⁵⁷ This will be delivered over four years and adds to previous climate finance contributions of \$599 million over the period from 2010 to 2013.

Australia's fair share of the US\$100 billion finance goal by 2020 is US\$2.4 billion per year, from both public and private sources.⁵⁸ Australia needs to scale up its public finance contribution in line with this goal. Assuming 50 per cent of the contribution comes from public sources, this would equate to around \$1.5 billion by 2020.

Contributions can be made through the Green Climate Fund or by way of bilateral agreements. They should prioritise the unique challenges of LDCs and SIDS. Additionally, Australia should examine innovative approaches to leveraging more private sector investment for mitigation and adaptation projects in developing countries.

2 Ratify the second commitment period of the Kyoto Protocol: At the 2012 Doha summit, Australia agreed, with bipartisan support, to join the second commitment period of the Kyoto Protocol. The importance of the second commitment period, which lasts from 2013 to 2020, is its role in brokering trust between countries as they negotiate the new agreement, which will apply to all.

Australia's minimum Kyoto target is in line with Australia's UNFCCC target of 5 per cent below 2000 levels by 2020. The commitment also includes reference to Australia's conditional targets of 15 or 25 per cent below 2000 levels by 2020.⁵⁹

A firm unconditional commitment to ratify the second commitment period target would demonstrate Australia's confidence internationally that its 2020 targets will be met. It would also give business and the government easier access to international carbon credits for use in meeting the target.

3 Boost pre- and post-2020 ambition: The conditions the government has set for strengthening Australia's pre-2020 target have already been met and the Climate Change Authority has recommended that it be increased to 19 per cent below 2000 levels.⁶⁰ Australia should therefore move to the higher end of its pre-2020 reduction target range of up to 25 per cent reductions on 2000 levels by 2020. As outlined above, Australia should also strengthen its post-2020 emissions target and establish a pathway to net zero emissions by 2050.

Supporting progressive positions on key elements of the agreement

4 Support a strong improvement mechanism under the new agreement: Australia should support review and improvement cycles that are five years in length, and that start before 2020.

5 Support the inclusion of a long-term emissions goal in the agreement: A 2050 goal would provide the community, including business, with a greater level of information on the global transition to a net zero emissions economy pathway. It would also better facilitate long-term decision-making and investment. Long-term investment signals are essential to ensure investment in the technologies required to reduce emissions across the global economy.

6 Support, and actively help to establish, accounting and reporting frameworks: Australia can continue to play a constructive role by contributing policy proposals, expertise and resources to the design of the necessary accounting frameworks for building transparency and accountability into all areas of the agreement – emissions reduction, adaptation, and climate finance.

BOX 3: Bolster domestic policy

Targets set the goal, but not the means, of reducing emissions. Domestic policies are required to curb pollution. Australia's existing domestic policies are not capable of achieving even the current, inadequate post-2020 target. The Emissions Reduction Fund (ERF) and Safeguard Mechanism, as currently designed, will only account for a sliver of the required reductions (Figure 6).

The ERF uses a taxpayer funded reverse auction process to contract companies to deliver emission reductions on a pay for performance basis. The safeguard mechanism sets emission baselines for companies with facilities that emit more than 100,000 tonnes annually (about 140 organisations, responsible for 50 per cent of Australian emissions). However, there are several ways in which these baselines actually allow emissions to rise. Analysis of these measures by Reputex estimates that emissions covered by the safeguard mechanism could rise by 20 per cent by 2030.

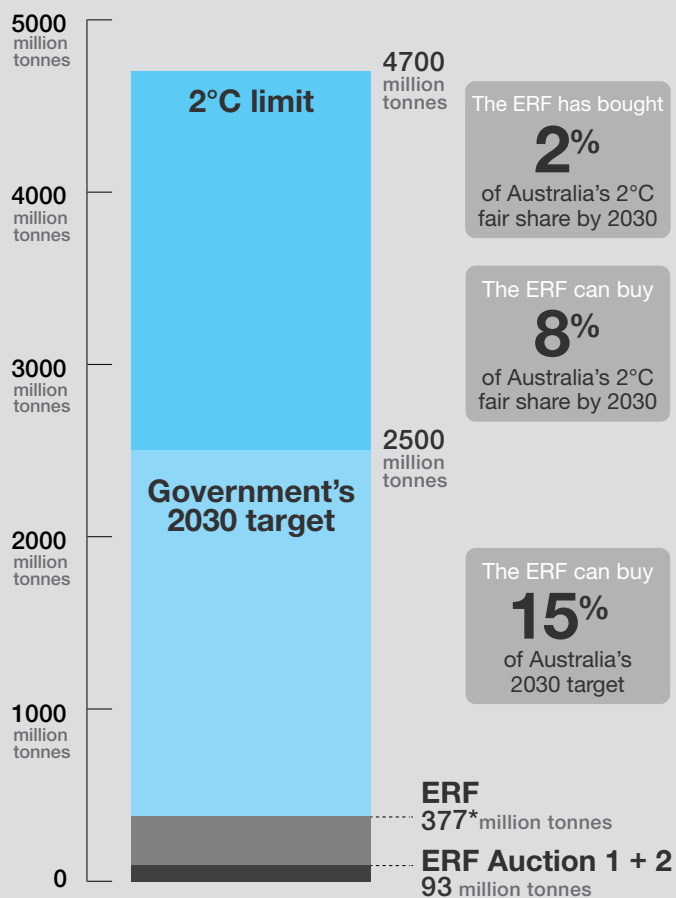
To achieve emissions reductions consistent with the less than 2°C goal, Australia urgently needs a stronger, broader policy framework capable of reducing national emissions to net zero or below. Recently, the government has begun working to establish regulations to phase down super greenhouse gases used primarily in refrigeration (HFCs). It has also established a ministerial process to develop "world's best" vehicle standards. These are welcome, but insufficient steps.

An essential element of achieving net zero emissions is the decarbonisation of the electricity sector before 2050. This requires both a phase out of high carbon coal-fired generators, and a phase in of renewable or near zero carbon power. The Climate Institute recommends that the government implement a regulated and planned phase out of coal generators consistent with a near zero emission electricity system before 2050.

Australia's energy efficiency framework has some excellent policies, but is riddled with holes. Energy performance standards apply to some products, but not others. Energy use disclosure requirements apply to some buildings, but not others. And some sectors have no binding standards at all. In Australia, private and heavy vehicles are a rising source of emissions that could be significantly reduced through efficiency or emissions regulations. Standards, similar to those already operational in most G20 nations, would significantly improve the energy productivity of the Australian vehicle fleet while reducing carbon pollution. In an encouraging move, the government has announced processes to investigate vehicle standards and develop a broader national energy productivity plan.

The government could strengthen the safeguard mechanism to improve its effectiveness and ensure major emitters play their part in reducing national emissions. This could be done by setting emission baselines at levels consistent with the pollution reductions needed to reduce emissions to zero by mid-century, and by removing pollution reductions exemptions that currently exist within the scheme.

Figure 6: Contribution of the Emissions Reduction Fund to Australia's 2030 target and Australia's fair share of the 2°C limit by 2030.



* based on average price from ERF Auction 1 and 2, and announced expenditure to 2030 of \$4.95 billion.

Beyond Paris

After the Paris climate talks, countries will need to start to build and strengthen their domestic policies to limit pollution. While a global agreement on climate change boosts the transition to a net zero carbon economy, and helps countries work more collaboratively, it is effective domestic policies that will keep global warming below 2°C.

The international process will continue after Paris, with the Paris agreement itself not coming into force until 2020. Countries will continue using this international process to transparently share their targets and domestic efforts and to work across borders to help both developed and developing countries adapt to climate impacts. Critically, countries will also use this process to pressure laggards to lift their game and pull their weight in global efforts.

At home, countries, including Australia, will focus on how they reach, not only their 2025 and 2030 targets, but how they will transition to a zero carbon economy in the long-term. The ultimate test for the government is whether it has policies that facilitate this transformation.

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