




POLICIES FOR A RESILIENT NET ZERO EMISSIONS ECONOMY



Investor Group on
Climate Change



The Investor Group on Climate Change (IGCC) is a collaboration of Australian and New Zealand investors focused on the impact that climate change has on the financial value of investments. The IGCC represents institutional investors with total funds under management of over \$2 trillion, and others in the investment community interested in the impact of climate change. IGCC members cover over 7.5 million people in Australia and New Zealand.

We aim to:

- Raise awareness of the potential impacts, both positive and negative, resulting from climate change to the investment industry, corporate, government and community sectors;
- Encourage best practice approaches to facilitate the inclusion of the impacts of climate change in investment analysis by the investment industry; and
- Provide information to assist the investment industry to understand and incorporate climate change into the investment decision.

We collaborate with similar investor organisations across Europe, North America and Asia through the Global Investor Coalition on Climate Change, the Climate Action 100+ and The Investor Agenda.

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IGCC also supports the Asia Investor Group on Climate Change (AIGCC).

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SUMMARY

Climate change is a systematic risk to investment returns, financial stability, communities and economies. The decisions that governments, investors, companies and individuals make today will have a material impact on the superannuation returns of millions of Australians and New Zealanders.

A managed transition to net zero emissions and actions to build resilience to the impacts of climate change will reduce the cost of climate change and open up investment opportunities. It will help ensure that when people retire they can do so with dignity.

Long-term investors have a critical role in delivering this more prosperous future and are increasingly changing their investment practices to align with a net zero emissions economy.

However, investors can't do this alone.

Governments have an obligation to implement policies that are credible, durable and predictable. This will reduce financial risks and encourage investment in low and zero carbon opportunities.

From an investor perspective, there are three core policy areas and specific actions that need to be prioritised by the Australian and New Zealand governments:

1. **Pathways to a net zero emissions economy:** Paris Agreement-aligned national emissions and economic strategies, durable policy frameworks and carbon pricing
2. **A managed energy sector transition:** The credible integration of climate change and energy policy, using public sector finance to crowd in private sector investment, and the implementation of strategies to support a just transition in the energy system
3. **Building resilient community and economies:** National climate change adaptation strategies and strengthened climate-related disclosure requirements for companies and investors.

The Investor Group on Climate Change will continue to work with governments and with investors to pursue a policy response that delivers a prosperous economy.

INVESTOR GROUP ON CLIMATE CHANGE: AN INVESTOR VIEW OF CLIMATE POLICY

AUSTRALIA AND NEW ZEALAND: CLIMATE CHANGE POLICY PRIORITIES 2019-2022

Pathways to a net zero emissions economy

- Align 2030 targets to 1.5-2°C Paris Agreement objectives
- Develop economy-wide strategies to achieve net zero emissions by 2050
- Implement durable policy frameworks to achieve net zero emissions (emissions policy embedded in Australia's national electricity laws)
- Strengthen market-based carbon pricing (Australia's Safeguard Mechanism, New Zealand Emissions Trading Scheme)

Manage the energy sector transition

- Align energy strategy and policy forecasts with the Paris Agreement objectives
- AEMO's Integrated System Plan is based on achieving net zero emissions electricity by 2050
- Public financing vehicles' (CEFC and NZGIF) mandates and activities accelerate private sector investment
- Independent statutory economic transition authorities are created to plan for an orderly transition

Build resilient communities and economies

- Regularly publish assessments of infrastructure, sectors and regions at risk from climate change
- Address systemic barriers to climate change adaptation
- Ensure adequate science funding and data provision for climate risk assessments
- CEFC and NZGIF facilitate private sector investment in climate change adaptation
- Embed climate change as a systemic financial risk into corporate and financial regulation and disclosure frameworks
- Develop and implement Sustainable Finance Roadmaps

RESILIENT NET ZERO EMISSIONS ECONOMIES

ACTING TODAY TO DELIVER PROSPERITY FOR THE LONG-TERM

Institutional investors have systemic exposure to climate change

Investors are exposed to systemic, climate-related physical, transition and litigation risks.

The systemic nature of these risks has been identified by financial regulators as requiring a strong and effective response. Reporting frameworks such as the G20 Financial Stability Board's Taskforce on Climate-related Financial Disclosures (TCFD) are being embedded into the regulation of the financial system around the world, including in Australia and New Zealand.¹

Institutional investors invest across the economy for the long-term and are exposed to the growing impact of climate change on the companies, industries, property and infrastructure assets they own.

Climate change risks can come directly through the impact of extreme weather on the airports, roads or electricity transmission assets they own or indirectly as climate change impacts the property market or wider economic conditions. This is called 'physical risk'.

Jane is 34 years old and she currently has around \$35,000 in her super fund. She represents an average superannuation holder in Australia. Jane and the rest of Australia's and New Zealand's superannuation holders currently have a bank of money valued at around \$2.75 trillion dollars. Institutional investors manage this money with a legal obligation to make sure Jane's and everyone else's retirement funds grow responsibly. At their core, super funds are seeking to ensure people retire with dignity.

Jane will probably retire in around 2050. Jane and other future retirees will either live in a clean, more resilient economy or one facing significant disruption from climate change and an unplanned transition to net zero emissions.

The decisions we make about climate change today will have a material impact on Jane's retirement funds and the society she lives in when she stops work.

This is why institutional investors engage on the issue of climate change.

Other risks and opportunities come from the steps taken to reduce emissions. This is called 'transition risk'. This includes regulatory shifts, technology disruption and changes in market demand for carbon intensive goods and services. For example, as the world continues to shift away from carbon intensive energy sources like thermal coal or other fossil fuels, resource and energy companies need strategies to manage this transition. As major investors in infrastructure and property, long-term investors also see major opportunities to deliver returns to their members by ensuring these assets are zero emissions, support the growth of clean energy and are resilient to climate change impacts.

Failure to properly anticipate and manage the physical and transition impacts of climate change is also creating new 'litigation risk'. Increasingly, investors are seeing and facing legal action on climate change, which presents new risks to investment.

All of this means responsible investors need to act on climate change.

Globally, institutional investors are responding to physical and transition risks from climate change in a range of ways:²

1. **Investment practice:** Institutional investors are addressing climate change in their day-to-day investment practices. This includes integrating climate change into their investment mandates, reporting, portfolio analysis and decision-making; making investments in low carbon and climate resilient portfolios, funds and assets; and, phasing out investments in thermal coal.
2. **Corporate engagement:** Institutional investors are significant investors in, and owners of, many of the world's largest companies. Investors are increasing engagement with these companies to secure commitments from boards and senior management to take action to reduce emissions and disclose to investors their business plans to thrive in a resilient, net zero emissions economy.
3. **Public policy engagement:** Government policy provides the signals and incentives that direct the flow of capital across the global economy. Policy engagement by long-term investors is occurring because it is a necessary extension of their responsibilities and duties to deliver strong returns for their members. Credible, investable and durable policy frameworks put in place today can support strong investor and super fund holders' returns into the future.

This report focuses on the third pillar of investor action - public policy engagement. It sets out what institutional investors see as the key policy priorities for the Australian and New Zealand governments over the period 2019 to 2022.

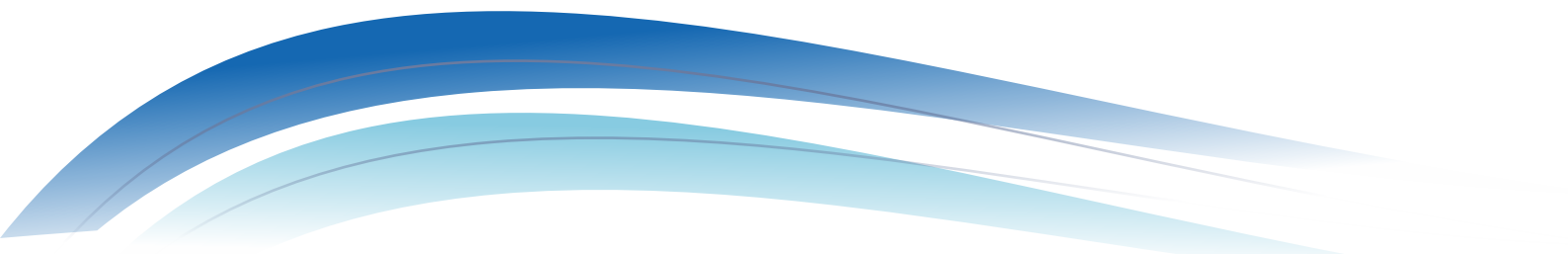


Figure 1: Investors are increasingly implementing strategies to address climate risk.³

Figure 1a Growth in proportion of Australian and New Zealand investors implement low carbon strategies.

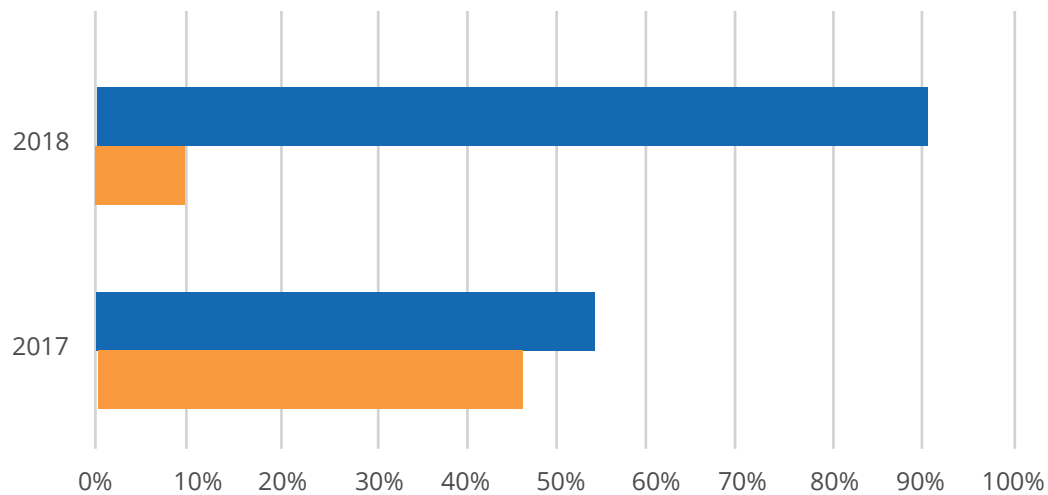
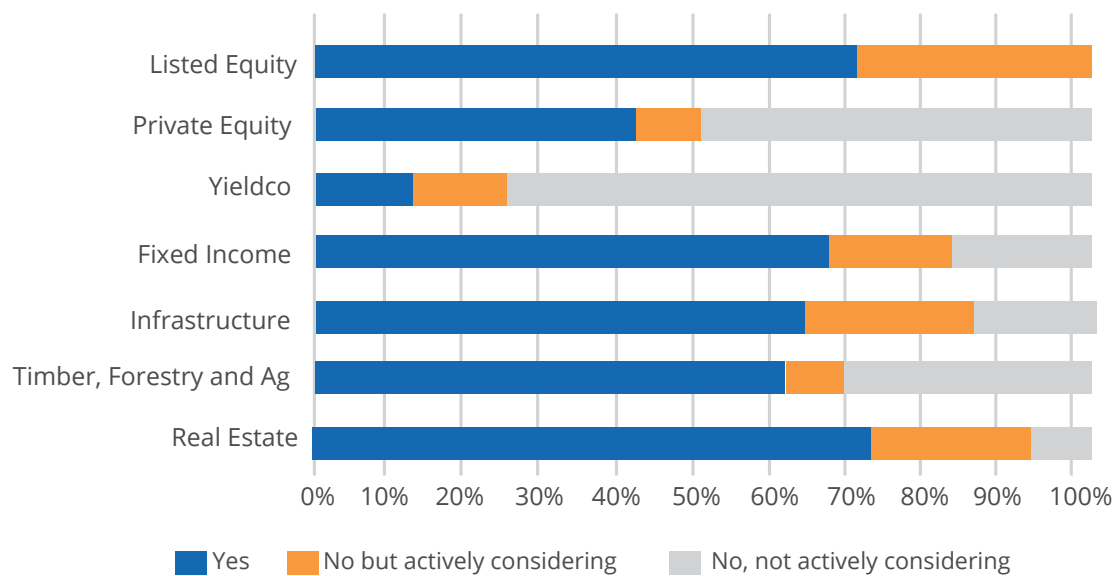


Figure 1b: Asset classes in which investors are currently active or considering green investments (2018)



POLICY MATTERS: REDUCING RISK AND CREATING OPPORTUNITY

To strengthen investor confidence, it is vital that governments deliver credible and continued support for action to achieve a net zero emissions and climate resilient economy.

Investors can't solve climate change alone; individuals, companies, communities and governments all have a role to play.

One of the most significant barriers impacting long term investment in zero carbon solutions is policy uncertainty.

Institutional investors have to make long-term returns on their investments. Lack of credible, durable and predictable policy frameworks means investors will either choose not to invest, invest in other countries where policy is more predictable, or charge higher risk premiums on investments to hedge against policy risk. Put simply, the absence of credible climate policy has a negative impact on the economy and investment decisions.

To build investor confidence, three core policy areas need to be prioritised:

1. **Pathways to a net zero emissions economy:** Paris Agreement-aligned national emissions and economic strategies, durable policy frameworks and carbon pricing
2. **A managed energy sector transition:** the credible integration of climate change and energy policy, using public sector finance to crowd in private sector investment, and the implementation of strategies to support a just transition in the energy system
3. **Building resilience and reducing risk:** national climate change adaptation strategies and strengthened climate-related disclosure requirements for companies and investors.

Each of these policy areas is detailed below and a supporting list of policy priorities for Australia and New Zealand is outlined on pages 17 and 18.

The market signal from the Paris Agreement

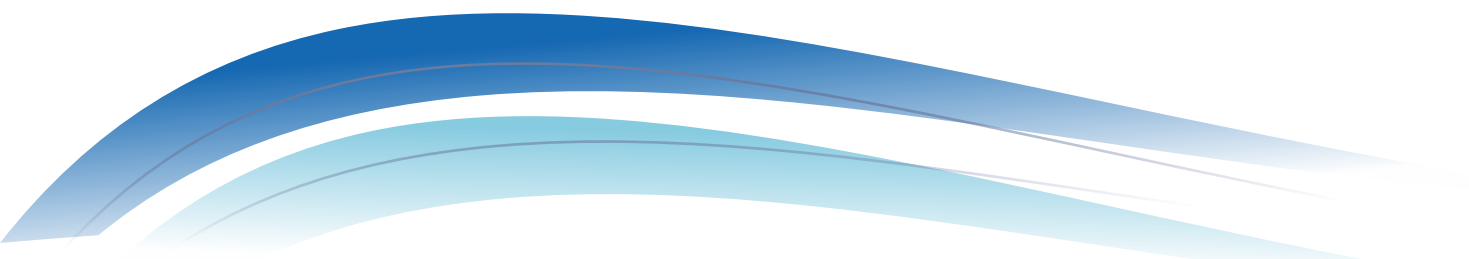
In 2015, the world's governments forged the Paris Agreement on climate change. The Paris Agreement is designed to be durable, long-term and, critically, to ratchet up action through time. This agreement sends a long-term investment signal on the future direction of government policy.

Core elements of the Paris Agreement are:

- The foundation of the agreement is its long-term objectives. Governments recognise that global warming of even 1.5°C would lead to severe consequences. Action to reduce emissions should be anchored in the goal of limiting warming to 1.5°C or well below 2°C (above pre-industrial era global average temperature). The agreement specifies that this requires achieving net zero emissions. The latest and best science concludes this needs to occur no later than 2050.
- Countries are required to implement stronger emission reduction targets every five years. These targets should be referenced to achieving the long-term objectives of the agreement. The first target update is due in 2020.
- Financial flows are to be aligned with the objectives of the agreement. This not only includes action to reduce emissions but also to build resilience to the impacts of climate change itself.

There is currently a gap between the objectives of the Paris Agreement and the domestic action governments are taking. This is of concern to long-term investors because climate change risks unprecedented impacts on the economy and the financial system. Recent economic analysis suggests that, conservatively, warming of 2.5-3°C could reduce global economic output by 15 per cent to 25 per cent and more than 30 per cent for 4°C warming.⁴ These economic impacts are material to the investment returns of long-term asset owners and their underlying superannuation holders.

Meeting the objectives of the Paris Agreement would substantially reduce the financial damage caused by climate change and reduce the cost of climate change adaptation measures. This requires credible emission reduction targets and a plan for achieving them.



Pathways to a net zero emissions economy

A short-term and incremental approach to climate policy development risks locking countries into inefficient and costly policy outcomes. Long-term, durable and market-based policy design can enable deep emissions reductions, a steady economic transition and open up new investment opportunities in Australia and New Zealand.

In both Australia and New Zealand, without policy intervention, emissions are projected to grow to 2030 (Figure 2). In contrast, to meet the long-term objectives of the Paris Agreement emissions in both countries will need to achieve net zero by 2050 at the latest. This gap between where we are going and where we are today is creating investment risk. Both countries are in effect building up an emissions deficit and the longer action is delayed the greater this deficit becomes.

Policies that credibly support achieving the Paris Agreement's goals will provide the private sector with greater certainty as to the rate and pace of change. A clear pathway to transition will, in turn, improve investors' ability to assess climate-related risks and opportunities, to measure and disclose portfolio exposure to the low carbon transition, and to further invest in opportunities to support the transition to a zero carbon, climate resilient world.

Critical to the investment decisions needed to limit warming to 1.5°C or well below 2°C is policy that is long-term, durable and includes market-based carbon pricing.

- **Long-term:** The setting of ambitious, long-term emissions reduction targets and strategies is crucial for both creating investor confidence and allowing for a carefully planned and lowest cost transition. Australia and New Zealand should put forward national economic development plans which align to the goals of the Paris Agreement and move forward to a net zero emissions economy by 2050.
- **Durable:** Investors are seeking an integrated policy framework able to deliver a level of investment stability. With stable policy settings, that endure past one election cycle, investors will be better able to make long-term, low carbon investment allocations.

For example, the implementation of an integrated energy and climate policy in Australia's National Electricity Laws would be more durable than relying on government expenditure to invest in the electricity sector. This is because the removal of the policy would require agreement from all National Electricity Market governments and it is less subject to ad hoc government decision making.

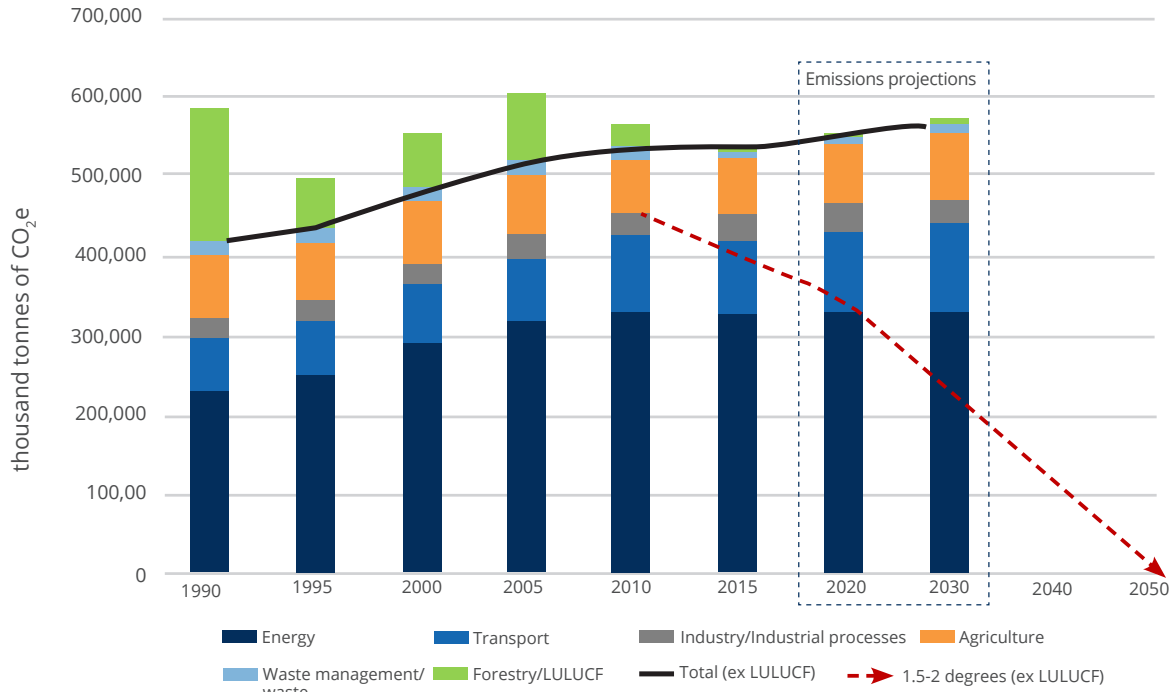
- **Market-based carbon pricing:** A suite of policy responses will be required to transition the economy. To ensure companies and investors are managing emissions in an efficient way this needs to include a price on carbon. Pricing carbon embeds climate risk into the lifeblood of investment decisions. If carbon is priced, the cost of pollution can't be ignored. Development of a carbon market that is transparent, liquid (many participants and free flowing trade) and focused on achieving net zero emissions will enable investors to better anticipate and plan for future carbon risks.

Overall, investors are more likely to invest on the basis of durable and transparent markets to reduce emissions than in companies and projects that are exposed to limited and one-off policy interventions.

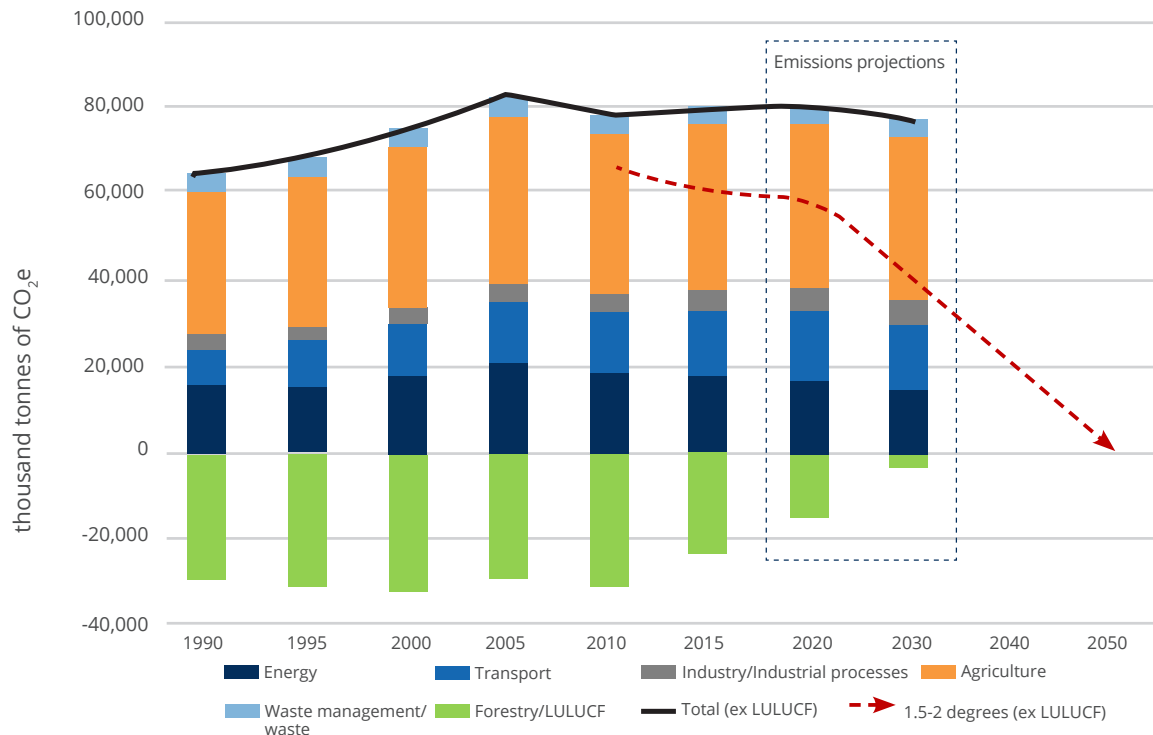


Figure 2: Australia's and New Zealand's emissions have been growing through time and are not on track to Paris Agreement objectives.⁵ This figure shows sectoral and national historic (1990-2015) and projected emissions for 2020 and 2030. This is compared to an emissions pathway consistent with achieving the objectives of the Paris Agreement.

Australia



New Zealand



Managing the energy sector transition

The transition of the energy system from high carbon to zero emissions has been coming for some time, is predictable and needs to accelerate if the goals of the Paris Agreement are to be achieved. Governments have a critical role in ensuring that this transition is undertaken in a managed way and supports the communities impacted.

The global energy system is undergoing a profound transition. Renewable energy supported by firming capacity is now the cheapest form of new generation in many countries, including Australia.⁶ Climate change policies implemented by key trading partners will also impact on Australia's and New Zealand's economic competitiveness. As key export markets set their own decarbonisation pathways this will flow through to energy exports in particular, with implications for communities, investors and the resource companies investors have a stake in.

To help manage this transition, investors support a policy approach which manages carbon, technology change and energy market considerations in an integrated manner.

It is no longer feasible to manage carbon emissions and energy policy in separate silos. Questions on how to integrate high levels of renewable energy into the market, managing the accelerated closure of ageing coal fired generators, the role of electric vehicles and the impacts for energy transmission infrastructure, are all part of the same policy conversation and must be managed together.

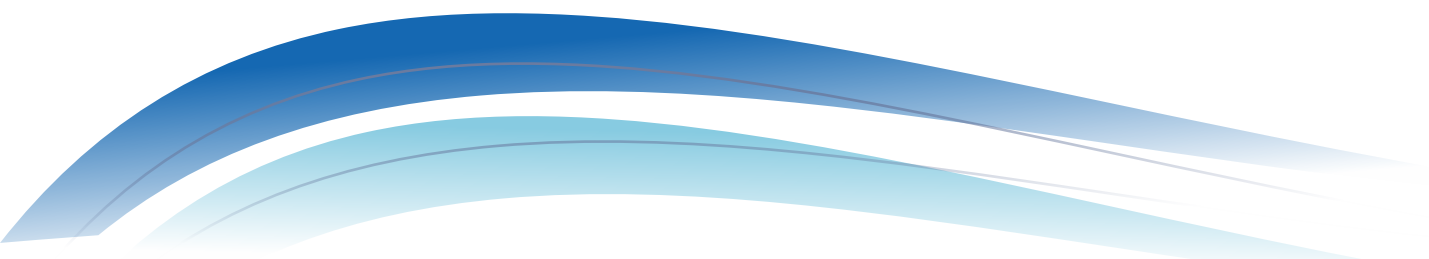
Governments need to adopt a policy approach which looks at all of the issues playing out across the energy sector and the major structural transformation currently underway in a coherent and strategic manner to achieve the best outcomes for investors, business and the community. This includes:

- **Align energy policy with the Paris Agreement:** Investments in the energy sector involve long-life assets like power stations and transmission infrastructure. Investors will not allocate capital to assets where they do not feel they can accurately price the carbon risk associated with the investment. Lack of regulatory certainty around energy and climate policy has been a key driver in the investment strike Australia has seen in the energy sector in recent years, as investors adopt a 'wait and see' approach to the reconciliation of energy and climate policy and politics.

Resolving investment uncertainty is more than just implementing durable policy frameworks. Policy in the energy sector must close the gap between current emissions trajectories and the objectives of the Paris Agreement. Integrated Paris Agreement-aligned climate and energy policy is key to closing the credibility gap for investors and unlocking new capital in the sector.

National and international energy forecasting bodies also have an important role to play, including Australia's Integrated System Plan and the International Energy Agency's (IEA) World Energy Outlook. As an independent and respected source of information on possible energy futures, these bodies play a critical role informing companies and financial markets. In turn, this materially impacts expectations for future investment returns for a range of fossil fuel and non-fossil fuel investments, thus influencing capital deployment.

Up to date and appropriate scenarios are important to institutional investors because they are increasingly using them to understand their own climate change risk exposure and inform capital allocation decisions.



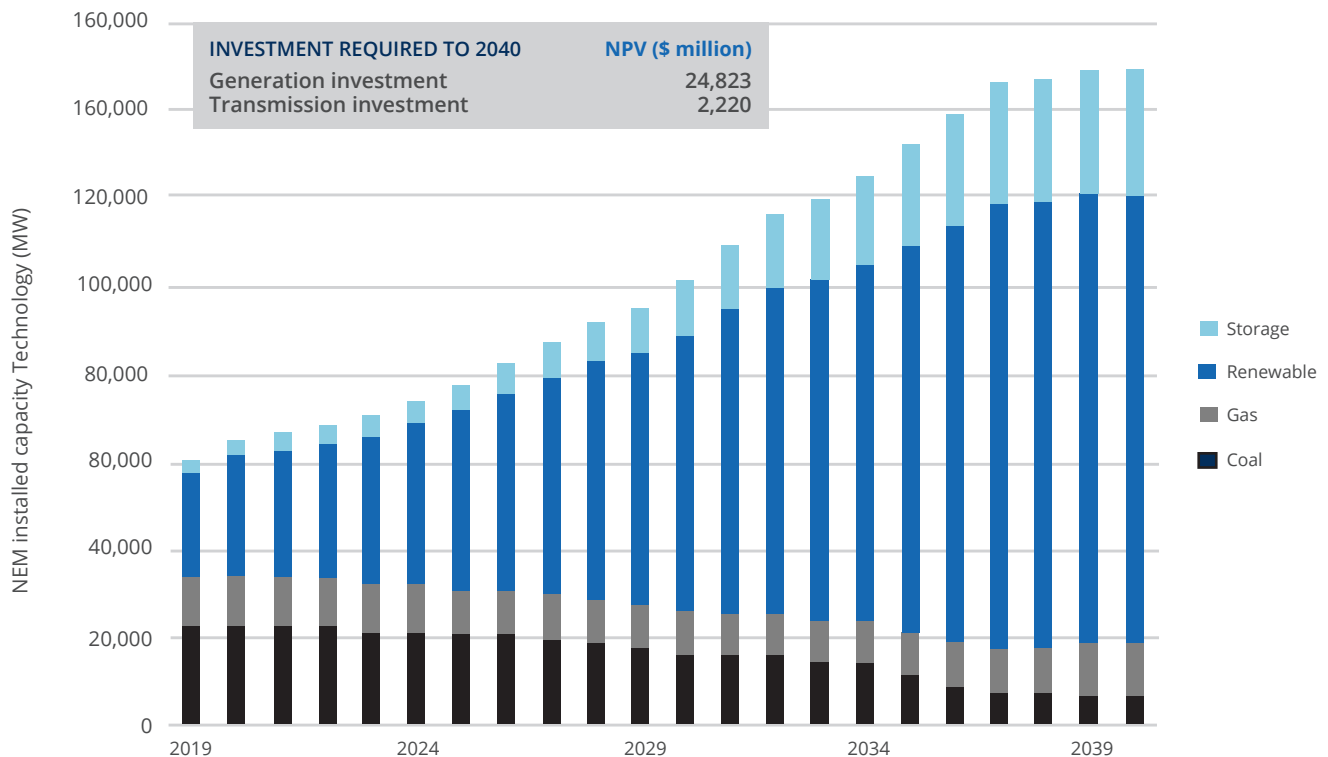
- **The role of clean energy public financing vehicles:** Designed well, public finance vehicles like the Clean Energy Finance Corporation (CEFC) in Australia and the New Zealand Green Investment Fund (NZGIF) can unlock private sector capital and accelerate investment in clean energy and energy productivity opportunities. These vehicles can facilitate the aggregation of smaller scale projects into investable opportunities, help finance zero carbon options in existing infrastructure projects, and reduce exposure to regulatory risk by supporting projects in the face of policy uncertainty.

A core principle of these vehicles should be to facilitate and crowd in private sector investment, not replace it.

- **Just transition:** The phase out of coal fired generation will continue. In addition, the future direction of the global thermal coal market could create longer term challenges for thermal coal mining and associated logistics. Climate change itself will disrupt industries like agriculture and tourism and impact on their economic viability. These changes will create challenges for individuals, communities, and the future economic development of regions.

Investors could be key to the revitalisation of impacted regional economies, providing the capital to support new industries, resulting in new jobs. But for investors to support regional transformation, there needs to be investable opportunities that will deliver both jobs and returns.⁷ This requires careful planning and the right bodies to implement the required policies.

Figure 3: Australia's national electricity market capacity to achieve ~50 per cent reductions in emissions by 2030 and net zero emissions by around 2050. To achieve this outcome around \$27 billion of investment in electricity generation and transmission is required by 2040.⁸



Building resilient communities and economies

Sophisticated investment tools are rapidly emerging to strengthen the resilience of infrastructure, the economy and our communities to the physical effects of climate change. Governments can help unlock adaptation investment through coherent national adaptation plans and by facilitating better disclosure of climate related financial risks.

The effects of climate change are already being felt in Australia and New Zealand. Science tells us that, if all of the commitments currently set under the Paris Agreement are implemented, the world is still on track for average global warming of over 3°C.⁹ Even achieving the objectives of the Paris Agreement would still see significant climate change impacts emerge over the coming decades.

The associated costs will be significant. Even when only considering a limited number of climate change impacts, projected economic impacts on Australia and New Zealand are over US\$117 billion and US\$4 billion a year with unmitigated climate change (Figure 4).¹⁰

The physical effect of climate change is increasingly recognised as a financial risk for investors, requiring the same levels of governance, oversight and active management as any other dimension of material financial performance.¹¹ Investors are developing tools and frameworks to help investors assess and manage physical climate risk at both the portfolio and the asset level.

However, there are a number of practical barriers to investing in and supporting climate change adaptation. Governments have a clear role in helping overcome these barriers to build more resilient communities and economies. These barriers include a lack of funding for basic climate science, coordination and clear accountabilities among the various levels of government on adaptation, no up-to-date national assessment of infrastructure, sectors and regions at risk to the effects of climate change, no indicative quantification of the investment required for adaptation, and no mandate for public finance vehicles (like the CEFC) to support investment structures for adaptation projects.

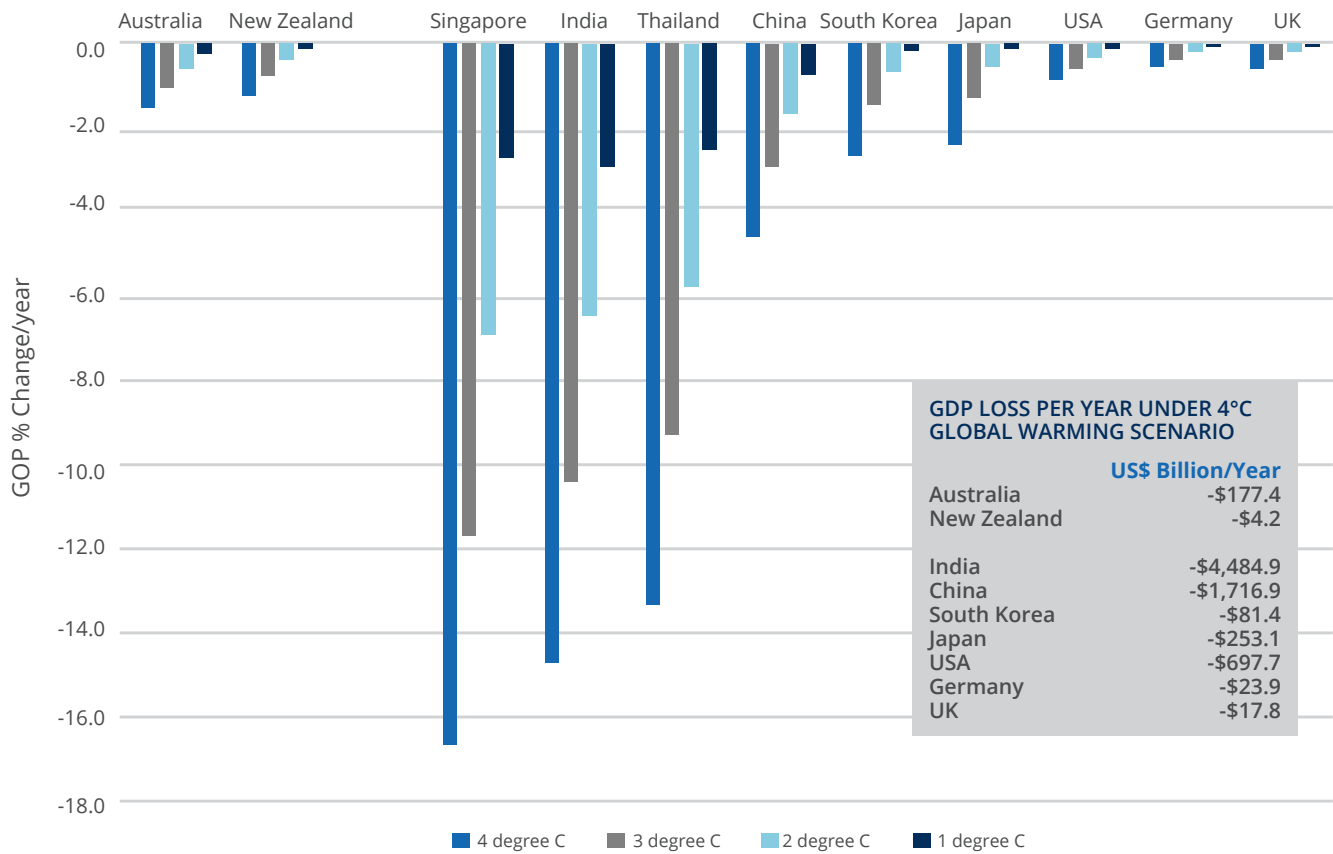
The challenges can be seen in Australia particularly. Many local councils have built the foundation of good adaptation plans. However, to fund projects such as seawalls they require funding. This could come from increasing council rates (which is extremely difficult), state or federal governments or investment from the private sector. State and federal governments have been reluctant to provide the level of funding for projects required. In Australia, this is hampered by the fact that Australia has not undertaken an up-to-date assessment of communities and infrastructure at risk from climate change so governments and investors have no visibility of where priority projects are and the scale of investment required.

Investors also find it difficult to invest in adaptation as individual projects are generally at a small scale and there are limited financial instruments available to them to generate a return on their investment, i.e. there is no way to monetise the benefits of investment in adaptation projects or to aggregate a number of projects into investable opportunities.

Governments do not need to start from scratch in developing robust national adaptation policies. Action like the development of Australia's National Disaster Risk Reduction Framework and the possible inclusion of adaptation in New Zealand's overall climate change governance legislation (the Zero Carbon Bill) provide solid foundations to build upon.



Figure 4: Australia, New Zealand and major trading partners: Overall economic impact of climate change from changes to agriculture, sea level rise and human health.¹² Major trading partners are also included as projected impacts on countries like Singapore and India are very significant and this would have flow on effects to Australia's and New Zealand's economies.



Building resilience through disclosure

Investors who are managing financial risk for the long term, need to be managing transition, physical and litigation climate risks. Regulators also need to have good visibility of the system-wide implications of decarbonisation and climate change itself. The community is increasingly engaging with superannuation funds to better understand the carbon footprint of and climate change risk in their super. Effective carbon risk disclosure integrated into business-as-usual financial reporting is the foundation of good risk management for all of these constituencies.

While existing emissions and financial reporting frameworks have proven to be useful building blocks in carbon disclosure, they no longer comprehensively serve the needs of investors who are seeking to understand and price the financial implications and effective management of carbon risk.

Investors are increasingly calling for greater take up of the industry-led Taskforce on Climate-related Financial Disclosure (TCFD) recommendations, developed under the umbrella of the G20's Financial Stability Board¹³.

Recent comments by financial regulators have also highlighted the need for better disclosure of climate-related financial risks. This includes the Australian Prudential Regulation Authority (APRA), Australian Securities and Investments Commission (ASIC) and the central banks of both Australia and New Zealand.¹⁴ All have highlighted and supported the need for improved financial reporting on climate change and application of the TCFD in mainstream financial reporting.

Standardised reporting on material climate change risks and opportunities must be embedded in mainstream corporate regulation. Overall, better collaboration between industry, investors and financial policymakers on long term carbon risk management will increase Australia's and New Zealand's carbon competitiveness and resilience to the economic impacts of climate change.



AUSTRALIA AND NEW ZEALAND: CORE POLICY PRIORITIES 2019-2022

Pathways to a net zero emissions economy

Make targets long-term and Paris aligned:

- Australia and New Zealand update and enhance their 2030 targets by 2020. These targets should be aligned with the objectives of the Paris Agreement and net zero emissions by 2050.
- Australia and New Zealand develop 2050 economy-wide strategies to achieve net zero emissions, by the end of 2020. This should establish a road-map for all sectors of the economy to contribute to achieving the overall emissions goal.

Durable policy frameworks:

- Australia: COAG Energy Council implements a market-based emissions reduction policy in the National Electricity Laws to achieve net zero emissions in the electricity sector by 2050.
- New Zealand: Both major political parties support a Zero Carbon Bill with an objective of economy wide reductions towards net zero emissions by 2050.

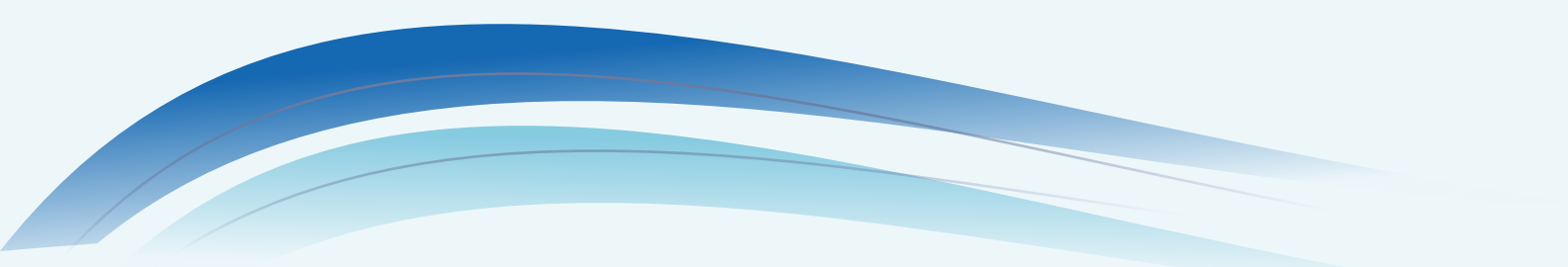
Market-based carbon pricing:

- Australia's Safeguard Mechanism is updated to become a baseline and credit emissions trading scheme and targets are set to align with the objectives of the Paris Agreement.
- The New Zealand Emissions Trading Scheme and future carbon pricing schemes are aligned with the objective of economy wide reductions towards net zero emissions by 2050.

Manage the energy sector transition

Align energy strategy with the Paris Agreement:

- COAG Energy Council agrees to implement a market-based emissions reduction policy in the National Electricity Laws to achieve net zero emissions in the electricity sector by 2050.
- Australian Energy Market Operator's (AEMO) Integrated System Plan central planning scenario is aligned with achieving net zero emissions electricity by 2050.
- Australia and New Zealand's long-term global energy market forecasts and policy scenarios are aligned to the objectives of the Paris Agreement. This includes using their influence to ensure intergovernmental agencies like the International Energy Agency do the same.



The role of public financing vehicles:

- Clean Energy Finance Corporation (CEFC) and the New Zealand Green Investment Fund Ltd (NZGIF) mandates and activities ensure public finance vehicles crowd in and accelerate private sector investment in climate change solutions.

Just Transition:

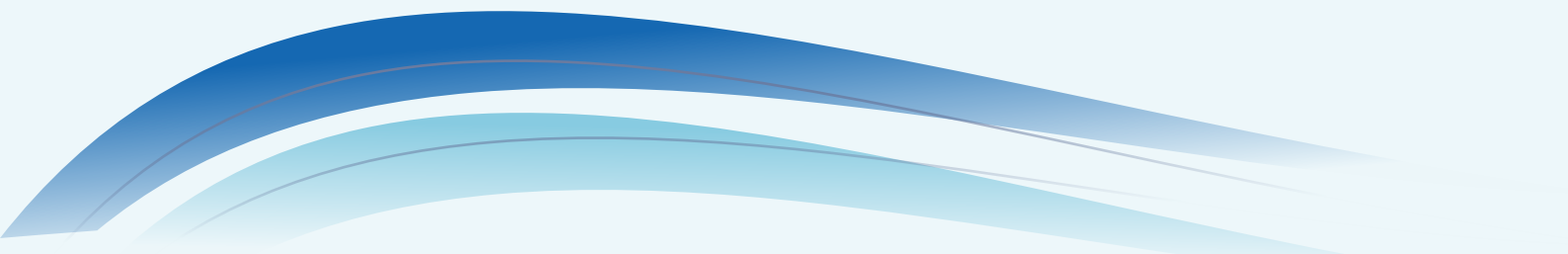
- Independent statutory economic transition authorities are created to plan for an orderly transition, including orderly fossil fuel plant closure and community transition planning and the development of labour adjustment packages for communities impacted by the transition from fossil fuels and physical climate change itself.

Build resilient communities and economies**Build national adaptation strategies:**

- The Australian and New Zealand governments regularly update and publish an assessment of infrastructure, sectors and regions at risk from climate change.
- Build out policy frameworks to address systemic barriers to adaptation, including ongoing support for Australia's National Disaster Risk Reduction Framework. Ensure climate change impacts are central to the strategy and implement the policy across relevant government jurisdictions.
- Ensure adequate funding is provided for the science and data required to undertake climate risk assessments, and national, state and local adaptation strategy is developed.
- CEFC and NZGIF mandates and activities ensure public finance vehicles facilitate private sector investment in climate change adaptation.

Enhance climate related financial disclosures:

- Embed consideration and treatment of climate change as a systemic financial risk into Australia and New Zealand's corporate and financial regulation and disclosure policy frameworks.
- Governments support the development of Sustainable Finance Roadmaps for Australia and New Zealand.



CONCLUSION

Meeting the challenge of climate change together

The future prosperity of Australia and New Zealand depends on the decisions we make in the next few years.

Climate change is already impacting on communities, investors, companies and the economy of both nations. Unmitigated climate change is a systemic risk to both Australia and New Zealand.

Global markets are turning to zero and low carbon opportunities. Institutional investors are aligning their strategies to support low carbon investments and engaging with the companies they invest in to work with them to do the same.

More can and must be done.

This will not be easy, but it is necessary. Institutional investors can drive significant change across the investment chain and the economy to ensure our members retire with dignity. However, there also has to be a partnership with government on this journey.

The policies outlined in this document are critical first steps to managing the substantial risks of climate change. They will also unlock multi-billion dollar investments in economic revitalisation and zero carbon modernisation.

Institutional investors are willing to play their part in building clean, resilient and prosperous communities and economies. We now need governments to do the same.

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