ROAD TO RESILIENCE:

An investor action plan for an adaptive and resilient economy.

Physical Risk Strategy, 2023–25

August 2023

Investor Group on Climate Change

Acknowledgements

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About the Investor Group on Climate Change

The Investor Group on Climate Change (IGCC) is a collaboration of Australian and New Zealand institutional investors focused on the impact of climate change on investments. IGCC represents investors with total funds under management of more than $3 trillion in Australia and New Zealand and $30 trillion around the world. IGCC members' beneficiaries include more than 7.5 million people in Australia and Aotearoa New Zealand.

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Cover Image: A resident of Woodburn NSW returns to her flood-impacted house in March 2022. Many homes were still underwater eight days after the waters rose. Image by Olivia Katz.

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1. Road to Resilience: Strategy Overview

Road to Resilience outlines the vision, objectives and key activities that the Investor Group on Climate Change (IGCC) will undertake from September 2023 to December 2025 to support investors and other stakeholders in driving **economy-wide adaptation and resilience to the physical damages and disruption of climate change**.

The physical impacts of climate change will cost the Australian and New Zealand economies hundreds of billions of dollars in the coming decades, primarily driven by physical damage and loss of life arising from extreme weather events. Climate change is recognised as a systemic risk that can affect the stability of the financial system and the economy as a whole. It is therefore critical that physical and transition risks are considered jointly to avoid cascading risks as we decarbonise the economy.

Institutional investors are exposed to these physical risks directly and indirectly. Direct impacts may include damage caused by more intense and frequent extreme weather events and reduced productivity due to altered climate conditions. Indirect impacts may include disruptions to supply chains that interrupt business, more expensive or unavailable insurance and worse overall economic conditions.

Australia and New Zealand's unique exposure to physical risk, combined with both countries' scientific and emergency management expertise in natural hazards, means they are well placed to **provide international leadership on managing physical risk and building resilience**.

There are currently barriers to private investment in adaptation, particularly in high-risk regions. **Investors require a clear adaptation policy** based on credible risk information that leads to increased resilience and an acceptable level of residual risk now and into the future. The policy is required to avoid lower investment returns, stranded assets and capital flight.

Governments cannot bear this cost alone; proactive investment in adaptation and resilience is a necessity and an opportunity for institutional investors. Innovative financial mechanisms and public–private co-investments will also be required to avoid the costs of climate change falling on vulnerable people and communities.

> *'Road to Resilience' guides investors to effectively support a systemic response to the physical risks posed by climate change.*

The strategy revolves around four key objectives:

- **integrating physical risk** and resilience into existing climate-related activities,
- **developing a shared understanding** of physical climate risks among stakeholders,
- **advocating for investable policy** that proactively addresses climate risks and
- **mobilising private capital** into resilience and adaptation measures.

If achieved, these will help investors protect their beneficiaries from physical climate risk and take advantage of opportunities to build resilience and adapt.

Road to Resilience is the start of an ongoing conversation. It underpins a program of work that IGCC will deliver in its role of connecting, collaborating and advocating on behalf of investors.

IGCC members are encouraged to refine this strategy, take ownership of it and look for practical ways to implement and improve it within your organisation. IGCC will be doing similar throughout our workstreams. It is our hope that by working together on this complex problem, we can achieve the desired outcome of **driving urgent, economy-wide adaptation and resilience for the benefit of all beneficiaries and stakeholders**.

Target Outcome			
Investors are managing climate change's physical risks by driving urgent, economy-wide adaptation and resilience.			
Objectives			
1 **Integrate Physical Risk and Resilience** IGCC and investors integrate physical risk and resilience into existing climate-related activities.	**2** **Develop a Shared Understanding** Investors, companies, governments and communities develop a shared understanding of physical climate risks.	**3** **Advocate for Investable Policy** Policy proactively addresses physical climate risks and facilitates investment in adaptation and resilience.	**4** **Deliver Necessary Private Capital** Investors deliver private capital into adaptation and resilience, reducing damage and disruption from climate change.
Ongoing engagement with domestic, regional and international partners.			

Definitions

Adaptation: The process of adjusting to actual or expected changes in climate to reduce or avoid climate impacts or exploit beneficial opportunities.[1]

Managed retreat: Purposeful, coordinated movement of people and assets out of harm's way.[2]

Physical risk: Physical risks resulting from climate change can be event-driven (acute) or longer-term shifts (chronic) in climate patterns. Physical risks may have financial implications for organisations, such as direct damage to assets and indirect impacts from supply chain disruption. Organisations' financial performance may also be affected by changes in water availability, sourcing and quality; food security; and extreme temperature changes affecting organisations' premises, operations, supply chain, transport needs and employee safety.[3]

Resilience: The capacity of communities, environments and economies to cope with a hazardous event or disturbance while maintaining their essential functions and structure.[4]

Sustainable development: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs (WCED, 1987) and balances social, economic and environmental concerns.[5]

Transformational adaptation: Changing the fundamental attributes of a social-ecological system in anticipation of climate change and its impacts.[6]

Transition risk: The risk that transitioning to a lower-carbon economy may entail extensive policy, legal, technology and market changes to address mitigation and adaptation requirements related to climate change.[7]

1 Department of Climate Change, Energy, the Environment and Water (2021), *National Climate Resilience and Adaptation Strategy*, https://www.dcceew.gov.au/climate-change/policy/adaption/strategy.

2 IPCC (2022), *Climate change 2022: Impacts, adaption and vulnerability*, https://www.ipcc.ch/report/ar6/wg2/.

3 Task-Force on Climate-Related Financial Disclosures (2017), *Recommendations of the TCFD*, https://fsb-tcfd.org/publications.

4 Department of Climate Change, Energy, the Environment and Water (2021), *National Climate Resilience and Adaptation Strategy*, https://www.dcceew.gov.au/climate-change/policy/adaption/strategy.

5 IPCC (2022), *Climate change 2022: Impacts, adaption and vulnerability*, https://www.ipcc.ch/report/ar6/wg2/.

6 IPCC (2022), *Climate change 2022: Impacts, adaption and vulnerability*, https://www.ipcc.ch/report/ar6/wg2/.

7 Task-Force on Climate-Related Financial Disclosures (2017), *Recommendations of the TCFD*, https://fsb-tcfd.org/publications.

2. Background: Why the Investment Community Needs a Physical Climate Risk Strategy

Institutional investors have a significant role to play in addressing physical climate risks. They control real assets and large sums of capital, and their investment decisions can greatly influence the economic and environmental health of our society. Indeed, the first objective of the Australian Government's *National Climate Resilience and Adaptation Strategy 2021–25* is to drive investment and action through collaboration.[8] However, there are huge barriers to investing in resilience that can only be solved by cooperation between government, communities, businesses and investors.

In that spirit of collaboration, IGCC has taken a step forward with *Road to Resilience*, a strategic framework to help the investment community deliver a coherent, industry-wide approach to physical climate risks and opportunities from 2023–25.

As disaster recovery costs skyrocket and climate tipping points loom, a comprehensive approach to physical climate risks is essential for several reasons:

- **Risk management:** Physical climate risks can have significant impacts on investment returns, yet processes to manage these risks are less developed than transition risks.
- **Financial stability:** Climate change is recognised as a systemic risk that can affect the stability of the financial system as a whole; therefore, it is essential for all institutional investors to take an industry-wide approach to these risks to support financial stability.
- **Alignment with regulations:** Governments and regulatory bodies worldwide are increasingly recognising the importance of managing climate risks and are implementing regulations that require financial institutions to assess and disclose their climate risk exposure.
- **Investor confidence:** Investors, stakeholders and the public are increasingly demanding transparency around how institutions are managing climate risks.
- **Shared knowledge and resources:** An industry-wide approach allows for shared learning and collaboration, leading to the development of best practices and more robust tools and methodologies for managing physical climate risks.
- **Driving sustainable investment:** A common approach to physical climate risks can lead to more informed investment decisions that prioritise sustainability and resilience, driving the transition towards a more sustainable and low-carbon economy.
- **Efficiency and consistency:** A common approach to assessing and addressing physical climate risks ensures efficiency and consistency in how institutions evaluate and manage these risks.

Image: Port of Melbourne handles more than one third of Australia's container trade and has 27km of waterfront. The Port's 2022 sustainability report committed to "Undertake climate risk scenario analysis" during FY23

8 https://www.dcceew.gov.au/climate-change/policy/adaptation/strategy.

3. Physical Climate Risks are Financial Risks

Global climate ambition is accelerating; however, limiting global warming to below 1.5 ˚C is insufficient to prevent significant physical damage caused by climate change. Immediate and decisive action is needed to mitigate and adapt to the impacts of climate change, particularly for countries like Australia and New Zealand, which face unique vulnerabilities due to their geographic and climatic conditions.

Australia can and must be a world leader in adaptation and resilience. Climate change-fuelled extreme weather events are already causing cascading and compounding damage to the economy and cities, communities, infrastructure, supply chains and services in Australia. In a warmer world, Australia and the systems that investors rely upon will be confronted with escalating physical risks, including damage to ecosystems, disruptions in food production, increased pressure on cities and towns, and threats to human health and wellbeing. The IPCC has concluded that the scale and scope of compounding climate damages from around 2 ˚C of global warming put the capacity of Australia's institutions, organisations and systems to address the socio-economic damages of this level of climate change at 'high risk'.[9]

Even if warming is held to 1.5 ˚C, physical damage will be significant. Under the Network for Greening the Financial System, central banks have stated, 'For all scenarios and timescales, physical risks outweigh transition risks. Stringent mitigation in line with the Net Zero 2050 scenario will already be beneficial by 2050 and strongly reduces risks towards the end of the century. This also underlines the need to add investments on adaptation'. This statement highlights both the interconnectedness of physical and transition risks and the urgent need for long-term investors to assist policymakers in developing and implementing strategies to build resilience and adapt to the challenges ahead.

Representing institutional investors who collectively manage over $3 trillion on behalf of 7.5 million people in Australia and Aotearoa New Zealand, and $30 trillion globally, IGCC is committed to helping investors fulfil their fiduciary duty to protect their members' long-term financial wellbeing. This commitment involves addressing the transition risks associated with climate change and the chronic and acute systemic physical risks that could jeopardise investments and the broader economy. If these risks are not managed jointly, maladaptation and other perverse outcomes are likely.

The primary goal of this strategy is to provide guidance on how investors can effectively support a systemic response to the physical risks posed by climate change. By doing so, IGCC aims to contribute to the development of a climate-resilient economy that can withstand the adverse effects of global warming at the same time as seizing the opportunities that arise from innovative adaptation and resilience solutions. Implementing this strategy now will enable investors to anticipate and navigate the challenges ahead, ultimately safeguarding their portfolios and the interests of their beneficiaries. Additionally, a proactive approach to climate resilience will contribute to a more sustainable and stable financial system, benefiting both institutional investors and society as a whole.

Near Bermagui on the South Coast in NSW after the Black Summer Bushfires in 2020. Telstra estimates that 30% of their assets, which provide vital communications services across the economy, are currently exposed to at least one climate hazard. Image by Olivia Katz.

9 IPCC Regional Fact Sheet AR6.

4. Target Outcome

Investors are managing climate change's physical risks by driving urgent, economy-wide adaptation and resilience

The physical impacts of climate change will cost the Australian economy hundreds of billions of dollars in the coming decades, primarily driven by physical damage and loss of life arising from extreme weather events. There is mounting evidence that the economic impacts of physical climate risks will be larger than transition risks across all scenarios and time frames. As governments cannot bear this cost alone, proactive investment in adaptation and resilience becomes necessary and an opportunity for institutional investors. Innovative financial mechanisms and public–private co-investments will be required to avoid the costs of climate change falling on vulnerable people and communities. In the absence of these measures, the government risks becoming the insurer and investor of last resort.

Image: The main road to Upper Main Arm in the Northern Rivers, NSW cut by the floods. Locals devised a pulley system across the gaping hole to move small amounts of urgent supplies, including baby formula, into the hills. Image by Olivia Katz.

Institutional investors are exposed to physical risks directly and indirectly. Direct impacts may include damage caused by more intense and frequent extreme weather events or reduced productivity due to altered climate conditions. Indirect impacts may include disruptions to supply chains that interrupt business, more expensive or unavailable insurance and worse overall economic conditions. Australia and New Zealand's unique exposure to physical risk, combined with both countries' scientific and emergency management expertise in natural hazards, mean they are well placed to provide international leadership on managing physical risk and building resilience.

There are currently barriers to private investment in adaptation, particularly in high-risk regions. Investors require a clear adaptation policy based on credible risk information that leads to increased resilience and an acceptable level of residual risk now and into the future. Otherwise, as mandatory disclosure, regulatory pressure and/or competitive advantage drive more investors to assess the physical risk within their own portfolios, there is a growing risk of lower investment returns, stranded assets and capital flight.

Road to Resilience **outlines the vision, objectives and key activities that IGCC will undertake from September 2023 to December 2025 to support investors and other stakeholders in driving economy-wide adaptation and resilience.**

This strategy aligns with IGCC's vision of a climate-resilient net-zero emissions economy and IGCC's 2022–2025 strategy, in which managing physical risk is a key priority. IGCC's members, as custodians of $30 trillion in assets, understand that to carry out their fiduciary duties, they need an economy that can handle the adverse effects of climate change. This requirement, in turn, will allow them to capitalise on opportunities from innovative solutions and contribute to a more resilient and sustainable financial system.

By taking collaborative action now, investors can better prepare for the future, protect their investments and safeguard the interests of their beneficiaries and the communities within which they operate.

5. Objective 1: Integrate Physical Risk and Resilience

IGCC and investors integrate physical risk and resilience into existing climate-related activities

Investors, companies and communities are already experiencing the impacts of physical risk. However, in IGCC's Net-Zero Survey 2023, 22% of investors have assessed physical risk across their whole portfolio (compared to 43% for transition risk), with only 9% having implemented a response to their physical risk exposure. Encouragingly, 54% of respondents were actively considering physical risk assessments; therefore, IGCC has a unique role in supporting its members in expanding their climate-related activities to include physical risk, which will increase the resilience of their investment portfolios and the communities they operate in, and bring them into line with international best practice.

To achieve this, IGCC will integrate physical risk and resilience across its three workstreams—Investor Practice, Policy and Advocacy, and Corporate Engagement—working to support investors with the knowledge and skills necessary for understanding and managing physical risks across their priorities and build our internal capacity to support to members' investment portfolios.

Key Results

- Capability and capacity:
    - IGCC prioritises building the skills and capacity to support its members to integrate physical risk across climate-related activities and shares these learnings with members.
- Multidisciplinary approach:
    - Key physical risk and resilience projects are supported collaboratively by one or more of IGCC's workstreams, both by IGCC staff and members of the workstream working groups.
- Accountability:
    - Each workstream will identify where they are accountable for the strategy.
- International best practice:
    - IGCC coordinates with international investor networks to bring international best practices to its members.
- Funded:
    - IGCC has a clear funding strategy to execute this strategy and continues to support investors on physical risk and resilience beyond 2025.

6. Objective 2: Develop a Shared Understanding

Investors, companies, governments and communities develop a shared understanding of physical climate risks

The impacts of physical risks are often complex, regional and interconnected, which means that effective management and adaptation must be collaborative, dynamic and multidisciplinary. An essential first step to achieving this is a shared understanding of the risks and impacts across all relevant stakeholders.

This objective is already being pursued through the development of international climate standards (e.g., the Task Force on Climate-Related Disclosures [TCFD] and the International Sustainability Standards Board [ISSB]) and methodologies (e.g., the Physical Climate Risk Assessment Methodology [PCRAM]), as well as nationally through financial-sector initiatives (e.g., the Australian Sustainable Finance Institute [ASFI], Climate Measurement Standards Initiative [CMSI] and Resilient Futures Investment Roundtable [RFIR]) and government processes (e.g., National Climate Risk Assessment [NCRA]). IGCC will support the development of these and ensure they are fit for purpose for investors. In addition, IGCC will support our members in developing the skills to understand and implement these standards and methodologies as necessary, such as when mandatory climate disclosures are implemented in Australia and New Zealand.

Beyond assessment and disclosure, a shared understanding of these risks will highlight adaptation priorities within Australia and New Zealand and determine where the injection of private capital is necessary and feasible. In turn, this will enable effective collaboration between investors, government and other relevant stakeholders.

Key results

- Capability building:
    - Investors have the capability and processes to identify and evaluate physical climate risk within their portfolios.
    - Investors can communicate this understanding to relevant stakeholders (e.g., government, corporates and beneficiaries).
- Engagement:
    - Investors effectively engage with relevant stakeholders on physical risk and resilience, including government, corporates, affected communities and beneficiaries.
- Data and methodologies:
    - Investors contribute to the development of relevant physical risk data and methodologies to ensure they meet investor requirements.
- Disclosure:
    - Investors disclose their material physical risks in line with mandatory and/or best-practice voluntary disclosure guidelines.

7. Objective 3: Advocate for Investable Policy

Policy proactively addresses physical climate risks and facilitates investment in adaptation and resilience

Proactive adaptation policies enable investment in a safer, more resilient future. These policies should be developed collaboratively with the private sector and should aim to incentivise investment in initiatives that enhance adaptation and resilience. For example, this could take the form of tax benefits, grants or regulations that create demand for sustainable business practices and climate innovation.

Redirecting capital towards strategies and technologies at the speed and scale required for climate adaptation and resilience will support an economy that is better equipped to cope with the changes ahead. We must also foster an environment that encourages innovation and industry, providing a fertile ground for solutions that we have not yet imagined.

Ultimately, the policy landscape should embrace a sense of urgency around climate change's physical risks while simultaneously creating opportunities for those ready to adapt. By aligning policy goals with the reduction of climate risks and incentivising proactive measures, we are taking concrete steps towards a more resilient future.

Key results

- Collaboration:
  - Investors are collaborating with governments on relevant physical risk and resilience issues.
- Advocacy:
  - Physical risk is being considered in all relevant policy areas.
  - Investors are advocating for policies that increase the resilience of high-risk regions.
  - Investors are advocating for clear resilience targets and goals from governments to ensure Australia and New Zealand remain attractive destinations for national and international private capital.
  - Investors are advocating for policies that incentivise investment in adaptation and resilience; for example, an expansion of Clean Energy Finance Corporation's (CEFC) remit to include adaptation and resilience.
  - Investors continue to advocate for credible disclosure standards, including all material direct and indirect physical risks.
- Disclosure:
  - Investors disclose their physical risk advocacy and encourage companies they invest in to do the same.

8. Objective 4: Deliver Necessary Private Capital

Investors deliver private capital into adaptation and resilience, reducing damage and loss from climate change

The scale and speed of the physical impacts of climate change mean that significant resources will be required to adapt and build resilience. As this cannot be achieved solely through public funding and government initiatives, private capital is essential.

Institutional investors, with their experience managing complex risks, diverse portfolios and long-term investment horizons, are ideally positioned to fill this need. In addition, there is increasing pressure from various stakeholders to consider foreseeable risks, such as climate change, in business strategy and capital allocation.

However, investing in climate resilience is not merely a matter of corporate social responsibility; it also provides an opportunity for value creation. By shifting sufficient private capital towards initiatives focused on adaptation and resilience, investors can secure their established assets, unlock new investment opportunities and safeguard the long-term financial wellbeing of their beneficiaries.

Key results

- Capital flight averted:
    - Australia and New Zealand do not experience significant capital flight from regions with high physical risk.
- Investment vehicles:
    - Public–private partnerships and investment vehicles exist with mandates to drive investment in climate-resilient infrastructure and services.
- Capital flows:
    - The ratio of investment in disaster resilience, compared to recovery, increases.
    - Investment in asset-level climate adaptation and resilience increases.
- Linking investment returns with real-world outcomes:
    - Increased transparency around the economic and social outcomes of investment in adaptation and resilience.
- Increased financial stability:
    - Increased stability and sustainability of the financial system are measured by a combination of GDP, natural capital, inflation, fiscal deficit, trade deficit, interest rates, employment levels, income inequality and cash flows.

9. Conclusion

The *Road to Resilience* strategy aims to guide investors as they navigate systemic physical climate risk, with a focus on driving urgent, adaptive and resilience-building actions.

The strategy outlines four key objectives: integrating physical risk and resilience into existing climate-related activities, developing a shared understanding of physical climate risks among stakeholders, advocating for investable policy that proactively addresses climate risks and mobilising private capital into resilience and adaptation measures.

Beyond risk management, a significant opportunity lies before us. The global economy needs to adapt to the reality of a rapidly changing climate. This is an opportunity that Australia and New Zealand are well-placed to take advantage of. Conversely, if we fail to consider physical risk and resilience jointly with transition risk, we run the risk of further entrenching maladaptation.

With *Road to Resilience*, IGCC has set forth a path for collaboration between government, investors, industry and community to address the risks and opportunities of physical climate risk and resilience. This is the start of an ongoing conversation. It underpins a program of work that IGCC will deliver in its role of connecting, collaborating and advocating on behalf of investors.

IGCC members are encouraged to adapt this strategy, take ownership of it and look for practical ways to implement and improve it within your organisation.

By working together on this complex problem, we can drive the urgent, economy-wide adaptation and resilience that is necessary for all beneficiaries and stakeholders.

Image on preceeding page: Byron Hinterland NSW, Australia | Image by Olivia Katz

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