



Investor Group on
Climate Change

Senate Economics References Committee

Inquiry into carbon risk disclosure

Submission by the Investor Group on Climate Change

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1. Introduction and overview

The Investor Group on Climate Change (IGCC) represents Australian and New Zealand institutional investors with over \$1 trillion of funds under management, along with members of the investment community focused on the impacts of climate and energy issues.

IGCC members are invested across the Australian economy and are part owners of most of Australia's large companies. As managers of retirement savings and pooled investments we are concerned with the evident and increasing impacts of climate change on the global and Australian economies and the flow through impacts for future investment returns.

It is increasingly apparent that there is a global economic transition underway, aimed at reducing the emissions intensity of economic activity in order to stabilize global warming at less than two degrees Celsius below pre-industrial levels, and move towards a net zero emissions economy by the second half of the century¹.

Australia has a carbon intensive economy which is exposed to the regulatory, physical and market risks of climate change. Investors who are managing financial risk for the long term, need to be managing for climate change. Regulators need to have good visibility of the system-wide implications of decarbonisation and related dimensions of carbon risk. The Australian 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.

Some countries have begun introducing mandatory carbon risk reporting for business. More and more companies are voluntarily reporting on the carbon impacts across their business through a variety of mechanisms. Institutional investors are actively engaging with companies to better understand how climate change will impact their returns. The time is right for a stocktake of current practice to better understand how we are managing carbon risk across the Australian financial system and where the economic impacts sit.

The referral of this Senate Inquiry also follows the establishment of the global Task Force on Climate-related Financial Disclosure (TCFD), a year-long review of current global carbon risk disclosure practices which is taking place concurrently throughout 2016. Ensuring that the findings and recommendations of this inquiry are fed into the global process will ensure that Australia business reporting is in line with emerging global frameworks, and that Australia is not out of step with global best practice.

Overall, better collaboration between industry, investors and financial policymakers on long term carbon risk management will increase Australia's carbon competitiveness and resilience to the economic impacts of climate change.

We therefore welcome the opportunity to contribute to the Senate Economics References Committee Inquiry into carbon risk disclosure.

¹ The Paris Agreement states "well below 2°C and continue all efforts to limit the rise in temperatures to 1.5°C".

Summary of key observations and recommendations

Australia needs to be managing carbon risk as an economic and a financial risk and working to facilitate an economically efficient transition to a low carbon economy.

Carbon risk disclosure should be focused on ensuring that financially material carbon risks are adequately measured and disclosed to allow investors, the market and the wider community to assess impact and performance.

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.

For investors assessing company performance, key dimensions of carbon risk are chronically underreported, ill-defined, incomplete, immaterial, out of date or inconsistently disclosed.

IGCC believes that there are a number of opportunities to improve the quality of carbon risk disclosure in Australia.

1. Engage with industry to develop and promote a standard definition for 'carbon risk' for the purposes of carbon risk disclosure, incorporating policy, technological, market and physical risk dimensions.
2. Amend NGERs to include public disclosure of equity exposures above a materiality threshold and encourage the inclusion of complete emissions reporting in financial disclosures alongside emissions from global operations and interests.
3. Increase the granularity of current NGERs reporting to accommodate both financial risk and greenhouse gas data by reviewing the provisions for disclosing facility-level emissions reporting.
4. Amend NGERs to bolster Scope 3 emissions reporting and disclosure where it can be reasonably considered to be a financially material dimension of corporate carbon risk exposure.
5. Review the level of guidance provided under the Corporations Act for the reporting of carbon risk disclosure as a financially material risk reported in the OFR.
6. Facilitate policy and industry dialogue to determine meaningful climate risk metrics at an industry sector level, which are financially material for Australian corporations reporting against the Corporations Act.
7. Encourage business to include contextual and future focused carbon narrative alongside historical emissions performance data as a key part of effective financial disclosure.
8. Work with industry to develop an effective approach to measuring and reporting exposure to the physical risks associated with climate change, alongside regulatory and market risks.
9. Promote engagement between industry and financial regulators to develop guidance on definitions, materiality thresholds and approaches to carbon risk disclosure, including approaches for reporting Scope 3 emissions associated with fossil fuel reserves.
10. Promote engagement between industry and financial regulators to develop guidance for stress testing scenarios for BAU, 1.5°C, 2°C, and 4° C degrees of global warming.

While it remains appropriate for the Clean Energy Regulator to maintain oversight over the technical aspects of NGERs and emissions reporting, opportunities remain to clarify the role of financial oversight bodies and potentially designate a lead organisation.

The establishment of the global Task Force on Climate-related Financial Disclosure by the Financial Stability Board under the G20, provides an excellent opportunity for Australia to work collaboratively with fellow G20 bodies to ensure that corporate disclosure practices in Australian remain in line with global practice.

Finally, IGCC believes that it may be appropriate for Australian financial regulatory authorities to undertake a similar analysis as that undertaken by the European Systemic Risk Board looking at transition risk implications for system-wide financial stability in Australia.

1.1 Understanding climate change as an economic risk

In recent years, a significant shift has been occurring in how business and the financial community views climate change and the need to reduce greenhouse gas emissions. Specifically, carbon has moved from being seen as an environmental issue to being primarily understood as an economic risk. Whether physical, regulatory, market-driven or technological, climate change has financial implications and for business and investors - carbon has a bottom line impact.

1.2 Defining carbon risk

The term *carbon risk* has undergone a number of iterations over time as investors and the market have sought to clearly understand and articulate the dimensions of financially-relevant risk being assessed.

It has variously included the regulatory and policy response to climate change, the cost impact of carbon pricing mechanisms, the market and technological changes deployed and the physical risk dimensions of climate change itself.

Today, the terminology employed by Governor Mark Carney of the Bank of England and the Task Force on Climate-related Financial Disclosure (TCFD) has become the cornerstone of recent and ongoing discussions on improving the quality of carbon risk disclosure. This focuses on Physical, Liability and Transition risks and applies the following definitions:

Physical risks: the impacts today on insurance liabilities and the value of assets that arise from climate and weather related events, such as floods and storms that damage property or disrupt trade, and expected changes to the frequency and severity of these events.

Liability risks: the impacts that could arise tomorrow if parties who have suffered loss or damage from the effects of climate change seek compensation from those they hold responsible. Claims could be years in the future, but still hold the potential to impact carbon extractors and emitters (and insurers) significantly.

Transition risks: the financial risks which could result from the process of adjustment towards a lower carbon economy. This includes changes in policy, technology and physical risks with the potential to drive a reassessment of values for a large range of assets as costs and opportunities emerge².

The materiality of each of these dimensions of carbon risk will vary from industry sector to sector. But a commonly understood and applied definitional framework for carbon risk is a critical first step to improving carbon-related financial disclosure.

Promoting a commonly understood and applied definition of *carbon risk* to be reported in the Australian context and which is consistent with current international terminology should be a key recommendation of this Inquiry.

1.3 The importance of good carbon risk disclosure

² [Speech](#): Breaking the Tragedy of the Horizon – climate change and financial stability. Mark Carney, Governor of the Bank of England. Delivered 29 September 2015.

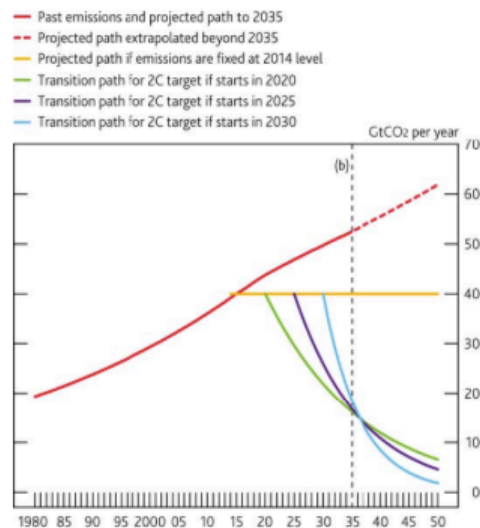
Climate change, and carbon risk, is a foreseeable financial risk. There are now clear international and national policy pathways, with probable market and technological implications and flow through physical risk impacts. Companies have the ability to assess likely scenarios and stress test their operations and their business strategy against these scenarios. Effective anticipation of likely scenarios and the subsequent business response will directly impact financial returns and differentiate the relative performance of companies within industry sectors. Investors increasingly want to see that analysis being done by companies they hold investments in, and the results discussed before they are prepared to invest new capital. A weak carbon risk management strategy can be priced into investment decisions in the same way a strong one can be invested against.

The market has the capacity to absorb the significant structural adjustments required to decarbonize the economy over time if there a reasonable level of carbon risk disclosure. Inadequate disclosure of carbon-related financial risks has the potential to lead to sudden movements of capital or the abrupt devaluation of significant assets with the potential to impact the broader market.

Transition risk, which as discussed above encapsulates the financial risks flowing from the move to decarbonize the economy, needs to be deeply understood in a dynamic manner over time at both the level of the individual transaction and on a portfolio basis. The rate and efficiency of transition also need to be assessed in terms of the implications for wider financial stability.

In February 2016, the European Systemic Risk Board (ESRB) commissioned the Advisory Scientific Committee report ‘Too Sudden Too late: Transition to a low carbon economy and systemic risk’³. The intent of the report was to examine the financial implications of various decarbonization scenarios underpinning the policy commitments made to address global warming through frameworks such as the Paris Agreement. Understanding the tipping point and steepness of the turn in emissions trajectories is the essence of transition risk.

Figure 1: Possible trajectories of carbon emissions, modelled on basis of using global ‘2°C carbon budget’ by 2100 (>66% of less than 2°C, emissions shown until 2050)



Source: Prudential Regulation Authority (PRA) (2015).
 Note: The historical growth rate in carbon emission is inferred from its 1970-2013 average; forward growth rates are based on PRA calculations using International Energy Agency (IEA) World Energy Outlook (WEO) 2013 projections and fixed at their 2035 level thereafter. The vertical line at (b) refers to the estimated date at which the carbon budget is expected to be exhausted if the flow of emissions were fixed at the current level (shown by the orange line). This estimate assumes that CO₂ emissions from fossil fuels, industrial processes and land use remain fixed.

³ European Systemic Board Reports of the Advisory Scientific Committee No 6/February 2016 [‘Too Sudden Too late: Transition to a low carbon economy and systemic risk’](#).

In summary, the ESRB report argued that even keeping global warming below 2°C will require substantial reductions in greenhouse gas emissions which can be quantified as a ‘carbon budget’. In order to achieve these reductions, economies must reduce their carbon intensity. Given current technology, this implies a decisive shift away from fossil-fuel energy and related physical capital.

In a benign scenario, the transition to a low-carbon economy occurs gradually, adjustment costs are manageable and the re-pricing of carbon assets probably does not entail systemic risk. In an adverse scenario, the transition occurs late and abruptly with costs correspondingly higher. This adverse scenario could affect systemic risk via three main channels: (i) the macroeconomic impact of sudden changes in energy use; (ii) the re-evaluation of carbon-intensive assets; and (iii) a rise in the incidence (and cost) of natural catastrophes.

The report concluded: “To quantify the importance of these channels, policy-makers could aim for enhanced disclosure of the carbon intensity of nonfinancial firms. The related exposures of financial firms could then be stress tested under the adverse scenario of a late and sudden transition.”

1.4 Key principles for effective carbon risk disclosure

The principles of effective carbon risk disclosure are comparable to any other kind of financial risk disclosure.

Key attributes of effective disclosure

Accuracy	Information reported is accurate and correct at the time of publication
Completeness	Information reported is balanced and does not omit information material to the needs of financial decision-makers
Materiality	Information reported includes all financially material data and analysis
Consistency	Information reported is replicable and able to be repeated year on year to ensure consistency over time
Comparability	Information reported adheres to industry standards to allow like-for-like comparisons and benchmarking on performance
Timeliness	Information and data is reported in a timely manner.
Auditable	Information reported is audited and assured to reasonable levels

Carbon risk disclosure should be focused on ensuring that financially material carbon risks are adequately measured and disclosed to allow investors, the market and the wider community to assess impact and performance.

2. Current and emerging international carbon risk disclosure frameworks

Carbon reporting has been developed over time through two primary channels; (i) greenhouse gas emission reporting frameworks; and (ii) ESG reporting frameworks.

National mandatory greenhouse gas emission disclosure frameworks have emerged principally for the purpose of measuring national emissions profile, usually for the purposes of international reporting protocols and policy frameworks (such as the Kyoto Protocol). In jurisdictions where no national or standardizes approach to emissions calculations are available and/or to complement existing reporting, the GHG Protocol has emerged as the widely applied generic standard. These data sets are used by investors for the purpose of understanding underlying carbon liability, the emissions intensity of facilities and operations and for assessment of current and potential carbon price exposure.

Investors have also played a pivotal role in driving the evolution of voluntary carbon reporting frameworks globally, intended to be integrated into financial reporting and disclosure. Back in 2006, an early global partnership of 14 leading institutional investors and other organizations representing trillions in assets, including IGCC, released the Global Framework for Climate Risk Disclosure to provide specific guidance to companies regarding the information they provide to investors on the financial risks posed by climate change.⁴

Many of these initiatives have emerged within or alongside Environment, Social and Governance (ESG) reporting frameworks, intended to facilitate investment analysis of dimensions of material risk not traditionally covered by financial accounting frameworks, such as human capital and diversity, brand and reputation, social license to operate, energy and eco-efficiency of operations or capacity to innovate.

In recent years, the breadth and scale of the climate change challenge, and a heightened understanding of the business implications, have driven the development of carbon disclosure specific reporting initiatives. Australian business, financial institutions and investors have played an active and integral role in the development and application of these initiatives.

The key reporting frameworks and initiatives are summarized below.

Framework	Description	More information
Global Reporting Initiative (GRI)	Founded in 1997, GRI is an international independent organisation that has played a key role in developing voluntary ESG and sustainability reporting standards and guidelines globally. Over 9000 organisations globally report using GRI.	www.globalreporting.org
IIRC International Integrated Reporting Council (IIRC)	Established in 2010, IIRC is a global coalition of regulators, investors, companies, standard setters, the accounting profession and NGOs. IIRC has developed an Integrated Reporting (IR) framework which aims to integrate sustainability into financial reporting in a more cohesive manner.	www.integratedreporting.org
GHG Protocol	Launched in 1998, the Greenhouse Gas Protocol is a multi-stakeholder partnership of businesses, non-governmental organizations (NGOs), governments, convened by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), a coalition of 170 international companies. The GHG Protocol develops internationally accepted greenhouse gas accounting and reporting standards for business and promotes their broad	www.ghgprotocol.org

⁴ [‘Global Framework for Climate Risk Disclosure’](#) and [‘Using the Global Framework for Climate Risk Disclosure’](#).

healthy indication of both the level of investor interest in carbon risk considerations as well as business preparedness to report on material risk issues and impacts. However, there is still substantial room for improvement in the quality of financially relevant carbon risk disclosure and key gaps remain.

Investor-led initiatives are also emerging, as institutional investors both seek to better understand their own embedded carbon risk and response to increasing community calls for greater disclosure on the part of super funds on what role their investments are playing in supporting the decarbonisation of the economy.

In 2015, investor groups collaborated to launch the Investor Platform of Climate Actions, an online platform aimed at capturing the wide range of climate change actions being undertaken by the global investor community. The Platform covers three primary action areas:

- Measurement (e.g. carbon footprinting of portfolios)
- Engagement (e.g. with fossil fuel and energy intensive companies)
- Reallocation (including investment in low carbon assets and shifting capital from emissions intensive activities).⁵

Finally, Australian banks are similarly supporting the development of disclosure initiatives such as the Australian Portfolio Carbon Working Group (see below) which are working to promote greater standardisation in reporting financed emissions for banks, following community and investor pressure for greater disclosure on material carbon risk.

Case study: Australian Portfolio Carbon Working Group

The four major Australian banks (ANZ, CBA, NAB and Westpac) have formed the Australian Portfolio Carbon Working Group, an informal, collaborative working group recognised by the United Nations Environment Program Finance Initiative (UNEP FI). The group came together following sustained investor and community pressure over the 2013/14 period calling for greater disclosure on lending exposure to carbon intensive energy sectors –often described as ‘financed emissions’.

These emissions are classified as scope 3, or indirect emissions, which are not commonly or consistently reported by companies. However, for some industries, like finance, scope 3 emissions are of equal or greater significance than direct emissions from operations and electricity use.

The purpose of the Working Group is to share insights and alternative approaches that will enable financial institutions to measure and disclose their climate performance, with the aim of demonstrating how Australian banks will support the transition to a lower-carbon economy.

As of December 2015, all four major Australian banks have now begun disclosing financed emissions and the methodology they have used to calculate the emissions associated with financing activities in the energy sector. This initiative recognizes investor and community calls for greater standardization and consistency in reporting between the banks and is an industry-led push to drive greater comparability in carbon disclosure.

The outputs from this Australian working group will be provided to the global UNEP FI/World Resources Institute (WRI) Portfolio Carbon Initiative, which is a formal collaboration between international financial institutions and the WRI.

More information: http://www.ghgprotocol.org/Portfolio_Carbon_Initiative

⁵ <http://investorsonclimatechange.org>

2.1 Emerging mandatory reporting requirements in other jurisdictions

Around the world, a growing number of government bodies have begun introducing statutory requirements for the disclosure of environmental and other non-financial information. These generally require companies to disclose environmental information in the mainstream financial report and connect environmental performance with business strategy, performance and future profitability.

It is estimated that today, over 40 countries mandate emitters to provide GHG emissions-related data.⁶ The vast majority of these are focused on the technical underpinnings of operational greenhouse gas emissions calculations and reporting – not the financial risk implications. Some jurisdictions have begun to more explicitly integrate financial and greenhouse gas accounting frameworks.

On 15 April 2014, the European Parliament adopted EU Directive 2014/95/EU on the disclosure of non-financial and diversity information by certain large companies and groups⁷. The Directive, which applies to Public Interest Entities with more than 500 employees, requires companies to disclose information on policies, risks and outcomes relating to environmental matters (including greenhouse gas emissions), social and employee-related aspects, respect for human rights, anti-corruption and bribery issues. Member States are required to have supporting policy in place to implement the Directive by December 2016.

In 2015, France implemented the Energy Transition Law. Among a range of decarbonisation and energy related initiatives, it also includes provisions for enhanced carbon risk disclosure. Article 48 requires that all listed companies disclose in their annual report financial risks resulting from climate change and steps that the company is taking to mitigate these risks.

Banks and credit providers are required to disclose stress testing undertaken to review portfolio level carbon risk. Institutional investors are required to disclose how ESG and carbon factors are integrated into investment decision-making processes and how their investments are supporting national targets for decarbonisation. Implementation is a work in progress, but the steps taken by investors and companies to comply with these laws will likely shape carbon disclosure practices globally as investors develop approaches to compliance⁸.

In 2010, the U.S Securities and Exchange Commission (SEC) published interpretive guidance on existing SEC disclosure requirements as they apply to business or legal developments relating to the issue of climate change⁹. The guidance details disclosure requirements in response to changes in regulation, international accords, the impact of market change or business trends and physical risks arising from climate change.

In recent months there has been renewed community and investor pressure over the enforcement of the SEC guidelines, given recent changes in the Clean Power Plan, the Paris Agreement and a number of significant climatic events and the lack of corresponding increase in corporate reporting. A number of shareholder resolutions are currently underway calling for enhanced disclosure on corporate risk as per the SEC guidelines. A number of companies have also been pursued for making

⁶ World Resources Institute (2015) [Guide](#) for Designing Mandatory Greenhouse Gas Reporting Programs.

⁷ [EU Directive 2014/95/EU](#)

⁸ Article 174 Energy Transition Law. English translation and summary by [2 degrees investing](#).

⁹ [SEC Guidance Regarding Disclosure Related to Climate Change](#).

‘misleading claims’ as its public SEC filings did not align with internal financial projections on the economic impact of climate change policies (see case study below).

In 2013, the UK Government implemented the UK Companies Act 2006 (Strategic Report and Directors Report) Regulations 2013 to require that all UK incorporated companies with equity shares listed on London Stock Exchange Main Market, EEA regulated, NYSE or NASDAQ report greenhouse emissions in their Directors’ reports. This requires that total company emissions are included in the Directors Report (Scope 1 and 2 only), including global emissions not just UK emissions¹⁰.

A number of Exchanges have also stipulated requirements for the disclosure of nonfinancial information, including environmental disclosure. Singapore is currently in the process of implementing the Policy Statement on, and Guide to, Sustainability Reporting for Listed Companies (2001) for example, and the Johannesburg Stock Exchange in South Africa has published Listing Requirements for corporate governance disclosure also covering environmental performance.

To help promote a uniform corporate reporting framework, the World Federation of Exchanges issued guidance in November 2015 recommending that member stock exchanges incorporate a set of 34 ESG factors into their disclosure guidance for listed companies and offered advice on how to roll out enhanced sustainability disclosure. Suggested disclosure metrics include direct and indirect GHG emissions and carbon intensity along with a range of other environmental metrics¹¹.

The Task Force on Climate-related Financial Disclosures (TCFD) has included a comprehensive table of significant global carbon reporting frameworks in Appendix Two of the the recently released Phase 1 report¹².

Case study: Peabody

In November 2015, New York state authorities announced that they had reached a settlement with Peabody Energy after finding that the company’s ‘public statements on risks posed to the company by climate change violated state laws prohibiting false and misleading conduct in connection with securities transactions’. Peabody’s previous SEC filings had regularly denied that the company had the ability to predict the impact that potential regulation of climate change pollution would have on the firm’s operations.

The investigation found that Peabody and its consultants in fact "made projections that such regulation would have severe impacts on the company". Peabody’s SEC filings and other public communications had also "provided incomplete and one-sided discussions" of the International Energy Agency’s projections related to future world coal demand, the investigation showed. Under the terms of the agreement, Peabody agreed to file revised Securities and Exchange Commission disclosures affirming that "concerns about the environmental impacts of coal combustion ... could significantly affect demand for our products or our securities".

In announcing the settlement, New York Attorney General Eric Schneiderman said: "As a publicly traded company whose core business generates massive amounts of carbon emissions, Peabody Energy has a responsibility to be honest with its investors and the public about the risks posed by climate change, now and in the future".

A similar investigation is now underway with Exxon. More information: <http://www.ag.ny.gov/press-release/ag-schneiderman-secures-unprecedented-agreement-peabody-energy-end-misleading>

¹⁰ DEFRA, [Environmental Reporting Guidelines](#): Including mandatory greenhouse gas emissions reporting guidelines, 2013.

¹¹ [WFE ESG Recommendation Guidance and Metrics](#) October 2015

¹² Phase 1 Report of the TCFD, [Appendix Two: Selected Disclosure Frameworks](#).

2.2 The role of the TCFD

At the request of the G20, the Financial Stability Board (FSB) has been examining the question of how the financial sector can better incorporate climate-related issues into decision-making by companies, insurers, investors and other important actors in the financial system.

In December 2015, the FSB formally established the Task Force on Climate-Related Financial Disclosures (TCFD), to be chaired by Michael Bloomberg. Members of the TCFD include capital providers, corporate reporters and business, accounting firms and rating agencies. The intent of the TCFD is to undertake an assessment of the current state of climate-related risk disclosures and to design a set of voluntary recommendations to help shape best practices for disclosure going forward.

The TCFD will undertake a year-long process of review, issuing the first draft report for Phase 1 on April 1, followed by a month-long consultation process¹³. This will summarize the culmination of scoping and analytic work undertaken to date and help shape its final, “Phase 2” report to be delivered to the FSB by the end of 2016. The final report will then set out specific recommendations and guidelines for disclosure by identifying leading practices to improve consistency, accessibility, clarity and usefulness of climate-related financial reporting.

It is vital that Australian corporate practice and practical experience is reflected in the global disclosure framework. This Committee Inquiry is timely, given that it provides a useful opportunity to run a parallel process of review to determine current Australian reporting practice and identify gaps to be addressed alongside emerging global disclosure recommendations.

Case study: Global Investor Coalition on Climate Change

The Global Investor Coalition on Climate Change (GIC) is a joint initiative of regional climate change investor groups: IIGCC (Europe), INCR (North America) and IGCC (Australia & New Zealand) representing over 300 long-term investors with more than \$30 trillion U.S. dollars of assets under management.

In late March 2016, the Global Investor Coalition sent a letter to the Financial Stability Board’s (FSB) Task Force on Climate-related Financial Disclosures (TCFD), requesting it focus on industries facing a high degree of climate risk, develop a framework to address significant gaps in current climate risk disclosure and increase its engagement with securities regulators and central banks alongside consideration of the effects of climate risk on financial stability. The GIC has called for a 5-part framework to be developed, which includes the following disclosures:

1. The company’s own GHG emissions, covering at least Scope I and II. Scope III is of relevance, particularly where the company’s products or services are carbon intensive.
2. Longer term business model resilience to climate change – this should provide a strategic appraisal of the vulnerability of the company’s business model to climate change and how it can mitigate risks and seize opportunities
3. The company’s investment in new research and development
4. The company’s public policy position on climate change and how this influences policy through lobbying activity, either directly or via other organizations
5. The governance of the company’s policy and approach to climate change, including relevant key performance indicators related to climate change

More information: <http://globalinvestorcoalition.org/see-gic-letter-tcf/>

¹³ The [Phase 1 draft report](#) was released on 1 April, and is open for consultation until the end of April.

3. Current carbon risk disclosure practices within corporate Australia

Carbon is disclosed in Australian corporate reporting through three primary frameworks:

1. The National Greenhouse and Energy Reporting scheme (NGERs)
2. The Corporations Act; and
3. The ASX Corporate Governance Principles and Recommendations.

The National Greenhouse and Energy Reporting (NGER) scheme, was established by the [National Greenhouse and Energy Reporting Act 2007 \(NGER Act\)](#). It provides a single national framework for reporting and disseminating company information about greenhouse gas emissions, energy production, energy consumption and other information specified under NGER legislation. Overseen by the Clean Energy Regulator (CER), the CER notes that the objectives of the NGER scheme are to:

- inform government policy
- inform the Australian public
- help meet Australia's international reporting obligations
- assist Commonwealth, State and Territory government programmes and activities, and
- avoid duplication of similar reporting requirements in the states and territories¹⁴.

Reporting is undertaken by entities producing more than 25,000 tonnes of CO₂e¹⁵ per annum at the facility level and 50,000 tonnes of CO₂e at the corporate level. Emissions are aggregated and reported only at the entity level, not the facility level. Emissions for which the entity has operational control only are required to be reported per entity. Only Scope 1¹⁶ and Scope 2¹⁷ emissions are prescribed under NGERs, Scope 3¹⁸ emissions are voluntary and excluded from the threshold determination. Energy production and consumption is also reported under NGERs. Designated generation facilities have additional reporting requirements.

Data is reported for the financial year 1 July to 30 June and provided to the regulator by reporting entities by 31 October. The Clean Energy Regulator is required to publish all greenhouse gas emissions and net energy consumption reported under NGERs by 28 February each year, for the previous reporting (financial) year. This covers the names of all registered corporations and entities above reporting thresholds.

In 2014-15, 779 controlling corporations were registered under NGERs. The emissions data for just over 400 were reported in the Registered Corporations report for 2014-15¹⁹. Total reported emissions were around 322m tonnes of CO₂e. The top ten emitters produce just under half of all reported Scope 1 emissions and are predominantly from the energy generation sector reflecting the carbon intensity of Australia's energy supply. Around 60% of Australia's emissions are captured

¹⁴ About the National Greenhouse and Energy Reporting scheme (NGERs), [Clean Energy Regulator](#).

¹⁵ Greenhouse gases covered by NGERs include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulphur hexafluoride (SF₆) and specified kinds of hydro fluorocarbons and perfluorocarbons. These are normalized back to carbon dioxide equivalent (CO₂e) for reporting.

¹⁶ Scope 1 greenhouse gas emissions are the emissions released to the atmosphere as a direct result of an activity, or series of activities at a facility level.

¹⁷ Scope 2 greenhouse gas emissions are the emissions released to the atmosphere from the indirect consumption of an energy commodity (for example, from the use of electricity produced by the burning of coal in another facility).

¹⁸ Scope 3 emissions are indirect greenhouse gas emissions other than scope 2 emissions that are generated in the wider economy. They occur as a consequence of the activities of a facility, but from sources not owned or controlled by that facility's business. Some examples are extraction and production of purchased materials, transportation of purchased fuels, use of sold products and services, and flying on a commercial airline.

¹⁹ [Greenhouse and Energy Information 2014-15](#).

under NGERs, it does not include reporting from the agricultural sector, households or transport emission from private vehicles.

The NGERs scheme has traditionally had a relatively high compliance rate and has become a useful tool for assessing Australia's national emissions profile for the purpose of designing policy responses which appropriately target key areas of emissions production.

Under the Corporations Act, companies are also required to report compliance with particular or significant State or Federal environmental regulation. Section 299(1)(f) was introduced into the then Corporations Law with effect from 1 July 1998. It states that the directors' report for a financial year must "if the entity's operations are subject to any particular significant environmental regulation under a law of the Commonwealth or of a State or of a Territory - give details of the entity's performance in relation to environmental regulation."²⁰

In 2013, the Australian Securities and Investments Commission (ASIC) published its most recent guide for listed entities and their directors on providing useful and meaningful information to shareholders or unit holders when preparing an operating and financial review (OFR) in a directors' report. Regulatory Guide 247 (RG247) also includes reference to 'environmental or sustainability' risks with the potential to impact a company's financial performance, and provides some guidance on how to effectively discuss these risks and impacts.

RG247 explicitly states "An OFR should include a discussion of environmental and other sustainability risks where those risks could affect the entity's achievement of its financial performance or outcomes disclosed, taking into account the nature and business of the entity and its business strategy"²¹.

Finally, the ASX Corporate Governance Principles and Recommendations section 7.4 states that "a listed entity should disclose whether it has any material exposure to economic, environmental, and social sustainability risks, and, if it does, how it manages or intends to manage those risks".

However, while these frameworks have proven to be useful building blocks in carbon disclosure and have played a pivotal role in supporting the development of Australian corporate reporting on environmental risks, 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.

3.1 Issues and considerations for investors

Current emissions reporting is designed to meet policy objectives first and foremost. Data is reported for the purposes of national greenhouse gas emission reporting and national policy commitments. Therefore, accounting considerations are framed around requirement to avoid double counting, capture key emissions and understand total aggregated emissions at the entity, state and national level. This is perfectly reasonable and suitable for the needs of policymakers.

However, investors and other assessors of carbon as a financial risk dimension, are looking for different performance aspects of carbon risk disclosure than those currently provided by NGERs. Investors and the market are seeking to unpack emissions liabilities and carbon profiles for specific investments at the facility or infrastructure level, as well as for the purposes of equity investments at the corporate level. Investors also want to know the emissions and potential risks to a company's

²⁰ Corporations Act s.299 (1) (f).

²¹ Australian Securities and Investments Commission (ASIC), [Regulatory Guide 247](#): Effective disclosure in an operating and financial review, March 2013. (RG247.63)

investments outside Australia, which in some cases is actually where the majority of emissions may reside.

In assessing carbon risk, investors are seeking to understand what transition risks, physical risks and potentially the subsequent litigation risks are associated with a company and what steps that entity is taking to mitigate those risks and competitively position themselves relative to their industry and their peers.

Investors prioritize completeness of the emissions profile of the corporate entity for the purposes of understanding carbon risk, including equity exposures and emissions for which the corporate has operational control. Investors are also looking to understand indirect carbon risk exposure embedded in the company's broader value chain, supply chain or fossil fuel reserves, for example, as represented by Scope 3 emissions.

Current NGERs data is not sufficiently granular or comprehensive for financial risk assessment, while current financial reporting requirements do not provide specific guidance on how companies should be overlaying emissions data reporting requirements set out under NGERs with financially material disclosure to provide the complete picture to the market on carbon risk embedded across their operations and how they are managing it.

This is leading to a proliferation of direct corporate engagement programs, additional information requests, shareholder resolutions and corporate surveying as investors seek more direct means of securing additional carbon disclosure.

Both investors and companies undertaking carbon risk disclosure would benefit from a review of disclosure requirements and additional guidance on how to streamline, standardize and improve the effectiveness of financially-relevant carbon risk disclosure.

3.2 Gaps in current approaches to reporting.

For investors assessing company performance, key dimensions of carbon risk are chronically underreported, ill-defined, incomplete, immaterial, out of date or inconsistently disclosed.

There is currently not a common understanding or definition for the parameters and components of financially-relevant 'carbon risk' for the purposes of disclosure. The two most common approaches include adopting a compliance based approach to emissions reporting (using NGERs) or incorporating a broad-based climate change position statement into ESG or sustainability reporting. There are a limited number of companies who have effectively embedded financially-relevant carbon risk disclosure into financial reporting in a meaningful way.

Emissions data itself is frequently incomplete from a financial risk perspective. NGERs reporting requirements only specify Scope 1 and 2 data at the corporate level where the reporting entity has operational control. Scope 3 emissions are rarely reported. Yet for some sectors—notably the financial sector and some manufacturing industries—Scope 3 emissions are far more significant than Scope 1 and 2 emissions.

Emissions associated with significant or material equity exposures need to be reported. The majority of current carbon disclosure solely covers direct emissions for which an entity has operational control, as per the provisions under NGERs. There are significant gaps in the reporting of emissions associated with equity exposures. From the investor perspective, equity exposures to significant carbon holdings also pose a significant financial risk and should be incorporated into reporting.

In a recent report on the challenges for investors in assessing carbon risk in equity portfolios, AMP Capital noted that “...a company’s exposure from an operational perspective can be very different from an ownership or equity perspective. In the same way investors are interested or exposed to the profit from an ownership or equity perspective, investors are only interested in the ownership or equity exposure of greenhouse gas emissions”²².

Emissions data needs to be sufficiently granular to allow for adequate assessment of the differentiated risk and performance of individual assets within the same industry. IGCC has argued since 2007, that facility-level reporting of emissions should be published under the NGERs framework. This would bring Australian emissions reporting in line with other jurisdictions such as Canada²³. While industry concerns about the commercially-sensitive nature of disclosure at the facility level should be acknowledged, the key commercially sensitive issue is the cost of energy and this is not disclosed. In addition, it should also be noted that the National Pollutant Inventory already publishes facility level data in Australia for other emissions data points on the same facilities.

There are significant issues regarding the timeliness of reported emissions data. NGERs reporting requires data for the financial year July to June. Not all corporate entities have July to June financial reporting years, therefore reported emissions often lags or is out of step with financial reporting. CDP disclosure, the dominant voluntary disclosure initiative, frequently relies upon national reporting frameworks meaning supplementary data and disclosure is rarely reported in line with financial accounting timelines. The lack of timeliness in reported data means that any discussion on the business or strategic response to performance is usually out of sync with both real-time performance and current regulatory or policy implications, hindering the ability of financial markets to accurately assess value at risk or the efficacy of the strategic response.

Carbon disclosure across corporate reporting is inconsistent and performance therefore cannot easily be compared or benchmarked. A recent report by KPMG reviewing carbon reporting across the top 250 companies in the world, notes that “there is a lack of consistency in carbon reporting from the world’s largest companies, making it almost impossible to accurately compare one company’s carbon performance with another.” The report also found that 1 in 5 large companies in high carbon sectors such as chemicals, mining, industrials, metals and manufacturing and construction and materials globally do not report on carbon at all. Australian carbon disclosure requirements need to be consistent with, and seek to actively encourage, comparable global reporting.

Current emission reporting tends to focus on historical performance data, rather than effectively bring together emissions performance, strategic implications and the tactical business response. Investors are looking for appropriate levels of contextualization, that allows for a narrative discussion of the business implications alongside the emission performance data. This is in line with recommendations and guidance for best practice corporate governance and standard financial reporting requirements.

Even if emissions reporting were complete and uniform, these disclosures cover only one part of the spectrum of carbon risk. It is unusual to find robust company reporting on the risks from the physical impacts of climate change, such as sea level rise, increasing storm severity, increased incidence of floods, droughts and heat waves, while these risks are much more widely distributed than the risks associated with emissions. For some sectors these risks are quite financially significant, and have

²² AMP Capital, [Greenhouse Gas Emissions: Risks and Challenges for Portfolios](#). January 2016.

²³ Government of Canada, Greenhouse Gas Emissions Reporting Program, [Reported Facility Greenhouse Gas Data](#)

already begun to shape behavior for insurance and reinsurance companies, for example, and for financial institutions, property and infrastructure.

The voluntary approach to carbon disclosure beyond compliance based emissions reporting for emitters, means that companies frequently do not explicitly address the structural implications for their industry of economy-wide decarbonisation. Very few companies have begun to assess or disclose the competitive implications for their business of international and national policy commitments to limit global warming to two degrees Celsius, and to move to a net zero carbon economy by the second half of the century. This has significant transitional risk implications for investors seeking to understand how decarbonisation scenarios will play out across industry sectors and how well companies are positioned.

Investors need public disclosure and comprehensive methodologies for two-degree stress testing, alongside a range of decarbonisation scenarios. This involves publishing scenarios against which companies have tested their current and future potential portfolios, the range of carbon prices used, the impact on each scenario on demand, supply and price, the margin impact and the effect on strategy (capital expenditure plans, portfolio composition and R&D for example). This gap is particularly acute for utilities, oil and gas companies and other fossil fuel based companies.

While companies have begun to look at approaches for undertaking this kind of scenario analysis²⁴, there is a role for Government authorities to play in providing guidance on reasonable assumptions and scenario pathways to reduce the risk of self-selection leading to favorable outcomes as pathways are selected which best suit current strategy or minimize impacts. Standardization of scenario setting would also reduce costs for companies looking to undertake this kind of stress testing. These same scenarios could also be applied at an economy level by regulatory authorities to assess which decarbonisation pathways have implications for financial stability across the system.

3.3 Opportunities for improving the quality of disclosure

IGCC believes that there are a number of opportunities to improve the quality of carbon risk disclosure in Australia.

1. Engage with industry to develop and promote a standard definition for 'carbon risk' for the purposes of carbon risk disclosure, incorporating policy, technological, market and physical risk dimensions.
2. Amend NGERs to include public disclosure of equity exposures above a materiality threshold and encourage the inclusion of complete emissions reporting in financial disclosures, alongside emissions from global operations and interests.
3. Increase the granularity of current NGERs reporting to accommodate both financial risk and greenhouse gas data by reviewing the provisions for disclosing facility-level emissions reporting.
4. Amend NGERs to bolster Scope 3 emissions reporting and disclosure where it can be reasonably considered to be a financially material dimension of corporate carbon risk exposure.
5. Review the level of guidance provided under the Corporations Act for the reporting of carbon risk disclosure as a financially material risk reported in the OFR.
6. Facilitate policy and industry dialogue to determine meaningful climate risk metrics at an industry sector level, which are financially material for Australian corporations reporting against the Corporations Act.

²⁴ BHP Billiton published a [Climate Change: Portfolio Analysis](#), which looked at the potential portfolio implications for BHP Billiton of the transition to a two degree world and published analysis against a range of carbon price scenarios.

7. Encourage business to include contextual and future focused carbon narrative alongside historical emissions performance data as a key part of effective financial disclosure.
8. Work with industry to develop an effective approach to measuring and reporting exposure to the physical risks associated with climate change, alongside regulatory and market risks.
9. Promote engagement between industry and financial regulators to develop guidance on definitions, materiality thresholds and approaches to carbon risk disclosure, including approaches for reporting Scope 3 emissions associated with fossil fuel reserves.
10. Promote engagement between industry and financial regulators to develop guidance for stress testing scenarios for BAU, 1.5°C, 2°C, and 4° C degrees of global warming.

4. Australian involvement in the G20 Financial Stability Board discussions on carbon risk impacts for financial stability

The establishment of the global Task Force on Climate-related Financial Disclosure by the Financial Stability Board under the G20, provides an excellent opportunity for Australia to work collaboratively with fellow G20 bodies to ensure that corporate disclosure practices in Australian remain in line with global practice.

The TCFD will play a defining role over the next 12 months in shaping future global carbon disclosure practice. It is vital that the interests of Australian business are represented in these discussions. In addition, Australian authorities have a great deal of value to add in applying the lessons learnt from both emissions and financial reporting frameworks implemented to date.

Looking to the future, the G20 will remain a central forum for discussion for wider financial system stability issues and impacts arising from climate change and the market and regulatory response. It remains vital that Australia is an active and engaged partner in these deliberations.

5. Current regulatory and policy oversight of carbon risk disclosure across government agencies

Currently emissions data is reported through the Clean Energy Regulator and the Department of the Environment, while traditional financial regulatory oversight bodies such as ASIC, APRA and the RBA have oversight over financial reporting and system-wide financial risk implications, including participation in the G20 FSB taskforce.

While it remains appropriate for the Clean Energy Regulator to maintain oversight over the technical aspects of NGERs and emissions reporting, opportunities remain to clarify the role of financial oversight bodies and potentially designate a lead organisation.

IGCC believes that there is a broader opportunity to promote engagement between industry and financial regulators aimed at developing guidance on carbon risk definitions, materiality thresholds and approaches to carbon risk disclosure, including approaches for reporting Scope 3 emissions associated with fossil fuel reserves. IGCC would also support engagement between industry and financial regulators to develop guidance for stress testing scenarios for BAU, 1.5°C, 2°C, and 4° C degrees of global warming and the market response to better understand potential risk pathways.

Finally, IGCC believes that it may be appropriate for Australian financial regulatory authorities to undertake a similar analysis as that undertaken by the European Systemic Risk Board looking at transition risk implications for system-wide financial stability in Australia.²⁵

6. Conclusion

Many observers could be forgiven for asking “Why are investors and capital markets so fixated on carbon risk disclosure at the moment?” The answer lies in the fact that currently there is a fundamental gap between the science, the policy and the economics of climate change. This gap will either be bridged suddenly and abruptly or gradually and deliberately. The role of financial regulators has frequently been to play the role of bridge builder. Investors are also key agents in promoting a smooth and efficient transition to a low carbon economy.

Disclosure is the oil in the engine of the financial system. Better quality carbon risk disclosure provided in a more uniform and timely manner will allow investors to accurately assess how effectively business is managing carbon risk and strategically positioning for global economic decarbonisation.

It will also help to reduce the likelihood of an abrupt transition to a low carbon economy and allow markets to flex and adjust. This will strengthen financial system resilience and promote more sustainable economic outcomes for all members of the community.

Business and investor-led voluntary reporting initiatives have proliferated over the last ten to fifteen years. Following the finalization of the Paris Agreement in December 2015, the time is now right for a stock take of carbon risk disclosure practices and the deployment of some tactical interventions to ensure that financially-material and relevant carbon and emissions information is being properly disclosed to the market and integrated into traditional financial reporting frameworks.

²⁵ European Systemic Board Reports of the Advisory Scientific Committee No 6/February 2016