CONFUSION TO CLARITY:
A plan for mandatory TCFD-aligned disclosure in Australia

Investor Group on Climate Change

CDP

PRI Principles for Responsible Investment

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The Investor Agenda is a common leadership agenda on the climate crisis that is unifying, comprehensive, and focused on accelerating investor action for a net-zero emissions economy. The founding partners of The Investor Agenda are seven major groups working with investors: Asia Investor Group on Climate Change, CDP, Ceres, Investor Group on Climate Change, Institutional Investors Group on Climate Change, Principles for Responsible Investment and UNEP Finance Initiative.
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CONFUSION TO CLARITY: A PLAN FOR MANDATORY TCFD-ALIGNED DISCLOSURE IN AUSTRALIA

1. Summary

1.1. CLIMATE DISCLOSURES CENTRAL TO MANAGING FINANCIAL RISKS

Effective disclosure is critical to managing the systemic financial risks associated with climate change. Credible climate risk disclosures are important for investors in managing long-term financial risk by ensuring sufficient data and information is available for them to effectively and efficiently manage and price climate risks across their portfolios. It is also a central tool for regulators to inform monetary policy, supervision and financial stability, by improving visibility of the system-wide implications of decarbonisation and climate change itself. **It is not just another tick box requirement for investors and companies.**

The absence of adequate information on climate risk and opportunities is already contributing to systemic financial stability risks and barriers to investment in low-emissions and climate resilient economic activity. This includes overvaluation of emissions-intensive activities, underpricing climate change risk and mispricing of assets. This results in poor decision-making and the misallocation of capital.

To support quality, decision-useful climate risk disclosures, the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) published a set of recommendations in 2017. The TCFD recommendations have received strong support from industry, governments and regulators, and led to a significant increase in the understanding and disclosure of climate risk. The Australian Government has welcomed the TCFD recommendations and encouraged stakeholders to carefully consider them. Additionally, company and superannuation trustee directors' must consider climate risk under existing Australian law.

1.2. VOLUNTARY APPROACHES ARE INSUFFICIENT

The quantity and quality of disclosures is currently inadequate for investors to effectively respond to and manage material climate risks and opportunities, and for governments and financial regulators to address systemic risks to financial stability.
Examples of disclosure gaps include:

- Limited disclosure of overall emissions footprints or reduction targets for Scope 3 emissions, there has been a low uptake of Paris Agreement-aligned scenarios
- Many companies in sectors with high exposure to transition risk do not disclose scenario analysis
- Limited transparency on the assumptions, signposts and inputs that drive scenarios
- Few companies provide meaningful disclosure on the physical risks of climate change
- Limited evidence of how these disclosures inform the real world strategic and capital allocation decisions being made by companies.

These gaps come despite evidence that businesses that provide robust climate-related disclosures have better access to capital as the number of investors committing to net zero emissions portfolios grow. Also best practice in climate risk and sustainability management benefits companies by improving risk management, enhancing financial performance and greater engagement with employees and customers.

Given the urgency of the climate threat and need for transparency, consistency and comparability of disclosures for informed and efficient asset allocation, and an orderly transition to net zero emissions, a voluntary approach to climate-related financial disclosure has proven to be insufficient.

1.3. PROVIDING CLARITY AND REDUCING REGULATORY BURDEN

G7 Finance Ministers and Central Bank Governors have stated their support for mandatory TCFD reporting requirements. Governments and financial regulators are already moving to consider and implement TCFD-aligned requirements. For example, in the European Union, Hong Kong, New Zealand, Singapore, Switzerland the United Kingdom, and the United States. Implementation is through a range of regulatory instruments including supervisory expectation, regulatory action and legislative measures. This is emerging at a significant pace and in over half of Australia's major trading partners. **While the precise manner in which jurisdictions will implement mandatory climate risk disclosure is an area to watch, it now appears largely a matter of when, not if.**

Region	Coverage	Regulatory instrument	Mandatory	Phase
New Zealand	Companies, Finance	Legislative	In part, with comply or explain function	Commence 2023
UK	Companies, Finance	Combination	Yes and in part	Committed; increased coverage over period 2021 to 2025
Hong Kong	Companies, Finance	Supervisory expectation and regulatory action	Yes	Committed, and no later than 2025
EU	Companies, Finance	Regulatory	Yes	Committed
Switzerland	Companies, Finance	Legislative	Yes	Committed
Canada	Companies, Finance	Recommended	Under consideration	Considering
Singapore	Companies, Finance	Combination	Yes	Expectation Implemented, Committed
Brazil	Finance	Regulatory	Yes	Committed
US	Companies, Finance	Executive Order	Under consideration (likely)	Considering (likely)

In line with global practice, Australia's financial regulators[1] have taken significant steps to understand and raise awareness about the financial nature of climate change risks and existing disclosure requirements under Australian law. The positions expressed in the regulatory guidance and other materials show that there is strong alignment between financial regulators regarding expectations for industry responses to climate risk. It is encouraging that these coordinated regulatory actions have increased industry awareness and understanding and management of climate risks.

Building on recent work of Australian regulators, setting clear, mandatory requirements will help to align regulation with industry expectations and global standards, and reduce existing burdens by reducing and streamlining decision-making by making it apparent what needs to be done. Clear regulatory expectations and mandated requirements for TCFD-aligned disclosure with additional guidance where needed, including in relation to scenario analysis and Scope 3 emissions, creates multiple economic benefits and helps to facilitate the efficient investment in low carbon and climate-resilient transition. Under the coordination of the Council of Financial Regulators this paper proposes the immediate steps that can be taken to clarify regulatory expectations and move towards mandatory requirements for consistent and comparable disclosures aligned to the TCFD recommendations in Australia.

Regulators are closely following progress of International Financial Reporting Standards (IFRS) Foundation establishing a Sustainability Standards Board that will focus first on developing a climate disclosure standard.[2] The proposed IFRS standard, built on the TCFD recommendations and supported by the International Organization of Securities Commission (IOSCO), would provide a consistent standard for inclusion of relevant material climate-related financial risk in financial statements, which would be subject to assurance requirements. **This global standard is expected to increase the breadth of jurisdictions mandating disclosures.**

Alignment of the reporting expectations across major jurisdictions considering mandatory regimes (e.g. with respect to minimum standards for required content, coverage, reporting period and timing to report) is important for companies subject to multiple regulatory frameworks. Such alignment will reduce the time and cost burdens and diversion of management focus, but most significantly underpin consistency and comparability of disclosed information for investors, regulators and other key stakeholders. However, **this should be considered proactively and iteratively, and is not a good reason to delay action.**

1.4. IMPLEMENTATION OF CREDIBLE MANDATORY CLIMATE RISK DISCLOSURE

These proposals recommend immediate next steps for implementing a Taskforce on the phase in of mandatory TCFD-aligned disclosure in Australia, updating existing regulatory guidance and publishing new guidance, including monitoring and reviewing the outcomes. Further detailed recommendations set out industry priorities for strengthening climate risk disclosure and further integrating TCFD-aligned climate-related risks into regulatory frameworks.

Proposals for immediate next steps

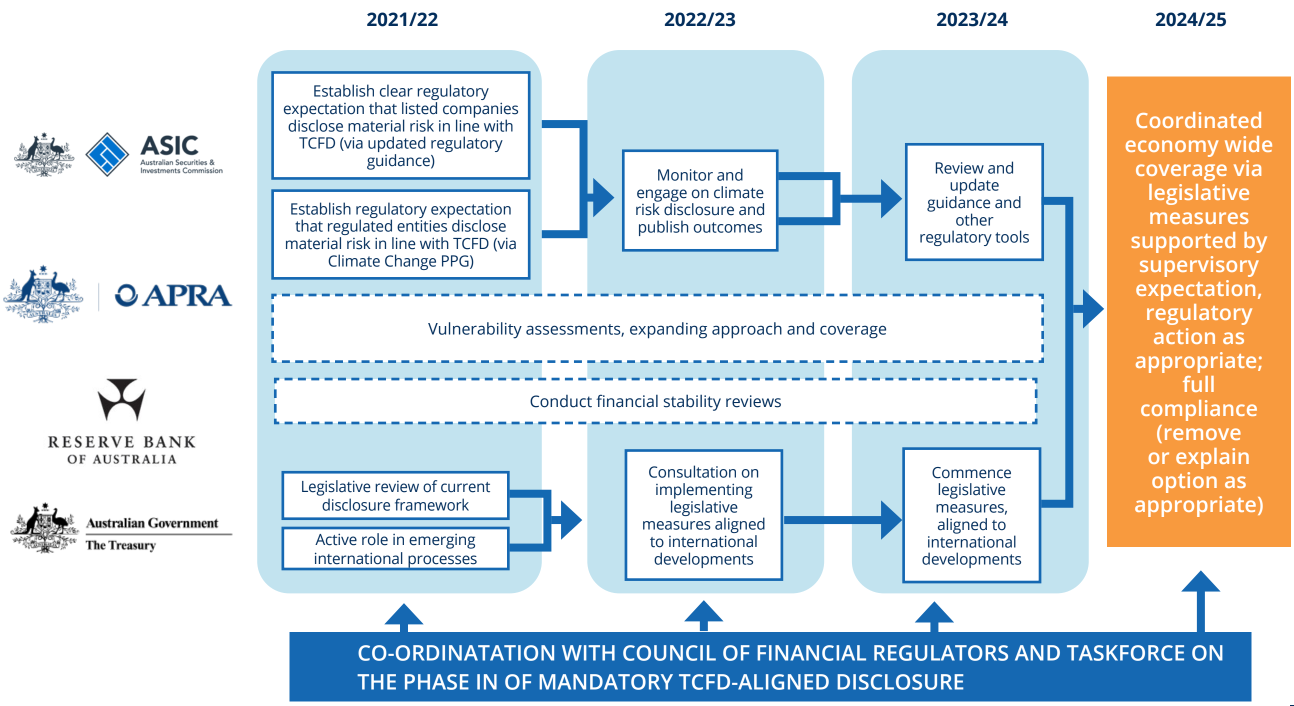
1. **Taskforce on the phase in of mandatory TCFD-aligned disclosure by 2024:** Globally, regulatory, investor and company climate-related disclosures are emerging very rapidly. Australia must keep pace. The current coordination under the Australian Council of Financial Regulators (CFR) provides a solid foundation to establish a joint taskforce of the Council of Financial Regulators to coordinate the phasing-in and mandatory reporting of climate-related risks and

mainstream climate-related disclosures in companies' audited financial statements. This was also a key recommendation of the Climate Change Authority in 2020. Key principles of the taskforce include participations by representatives from investors, businesses, the major accounting bodies and be open to broader consultation. The phase in should be complete by 2024.

2. In coordination with the Council of Financial Regulators:
   a. **ASIC** reviews existing requirements and guidance (including RG 247, RG 228 and Report 593) to ensure listed companies along with large non-listed companies and asset managers report according to the TCFD recommendations. Prioritise monitoring, awareness building and enforcement of management and disclosure requirements in relation material climate risk, and publishes results e.g. via Report 593 on a periodic basis.
   b. **APRA** establishes via its climate change financial risk prudential practice guide (PPG) a clear expectation that regulated entities publicly disclose material climate risk according to the TCFD recommendations and additional regulatory guidance.
   c. **Treasury** plays an active role in emerging international processes around the alignment of reporting and standard setting on the G20 and other multilateral and plurilateral forums. Establish a consultative forum with businesses, investors and civil society stakeholders to inject their views into Australia's formal position. Review existing legislative framework to identify the most efficient way to implement enforceable mandatory disclosure requirements for climate-related financial risk, together with the impact on society and environment originating from the reporting entity's activities, giving regard to international developments.

3. **ASX Corporate Governance Council** reviews and updates ASX Corporate Governance Principles and Recommendations 4th Edition (February 2019) to establish a best practice governance benchmark that ASX listed companies disclose according to the TCFD recommendations (which, in conjunction with Listing Rule 4.10.3, provide an "if not, why not" basis).

Steps towards mandatory TCFD-aligned disclosures - Timeline of proposed rollout by the CFR



Summary of detailed recommendations

1. **Clear mandatory signal**: Reporting requirements, starting with an 'if not, why not' approach, are transitioned to strict mandatory disclosure by 2024 at the latest.
2. **Coverage**: Mandatory disclosure requirements should apply to entities operating across the economy, the entire investment value chain and could be introduced via a phased approach initially covering Australian Securities Exchange (ASX) listed companies, beginning with the ASX 300 and large unlisted non-financial companies; and large financial institutions (including banking, superannuation, asset management and insurance).[3]
3. **Timing**: Coverage should be expanded over time. Given companies are the underlying players of financial markets, investors rely on as many companies disclosing as possible. Therefore, the transition from ASX300 companies only to all ASX-listed companies should occur in relatively quick succession (e.g. 1 year). Consideration should also be given to coverage of large unlisted non-financial companies as a matter of priority.
4. **Increasing standards:** Increase minimum expectations for climate-related reporting over time, through phased compliance periods, a step-by step approach to increasing quality of disclosures, clear expectations on governance, strategy, risk management, scenario analysis, metrics and targets, and establishing a review process to consider improvements in disclosure and further steps needed.
5. **Guidance to support and strengthen the quality of TCFD-aligned disclosures:** Australia's financial regulators and other relevant bodies develop further guidance to support and strengthen the quality of disclosures across governance, strategy, risk management and targets and metrics.

2. Introduction

2.1. CLIMATE DISCLOSURES CENTRAL TO MANAGING RISK

A lack of adequate information on climate risk and opportunities is contributing to overvaluation of emissions-intensive activities, underpricing of climate change risk and mispricing of assets. This results in poor decision-making and the misallocation of capital. In turn, this mispricing of assets and misallocation of capital creates systemic financial stability risks and barriers to investment in low-emissions and climate-resilient economic activities.

The Reserve Bank of Australia concludes that 'climate change is exposing financial institutions, and the financial system more broadly, to risks that will rise over time and, if not addressed, could become considerable... Addressing these early will help to both mitigate the transition risks and reduce the scale of the challenge that physical risk poses to financial stability in future.'[4]

Effective disclosure is critical to managing the systemic financial risks associated with climate change. Credible climate risk disclosures are important for investors in managing long-term financial risk by ensuring sufficient data and information is available for them to effectively and efficiently manage and price climate risks across their portfolios. It is also a central tool for regulators to inform monetary policy, supervision and financial stability, by improving visibility of the system-wide implications of decarbonisation and climate change itself.[5]

To support quality, decision-useful climate risk disclosures, the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) published a set of recommendations in 2017. The TCFD framework and supplementary guidance is voluntary and designed to allow companies and other organisations to more effectively disclose climate-related risks and opportunities through their existing reporting processes. The TCFD recommendations centre on four core elements - governance, strategy, risk management and metrics and targets - and provide a foundation to improve investors' and others' ability to appropriately assess and price climate-related risk and opportunities. The TCFD framework categorises risks as physical risks and transition risks (Figure 1).

Governance
The organisation's governance around climate-related risks and opportunities

Strategy
The actual and potential impacts of climate-related risks and opportunities on the opportunities on the organisations's businesses, strategy, and financial planning

Risk Management
The processes used by the organisation to identify, assess and manage climate-related risks

Metrics and Targets
The metrics and targets used to assess and manage relevant climate-related risks and opportunities

Figure 1. Core elements of climate-related financial disclosures [6]

The TCFD recommendations have received strong support from industry, governments and regulators, and led to a significant increase in understanding and disclosure of climate risk. However, the quantity and quality of disclosures remain inadequate for investors to effectively respond to and manage material climate risks and opportunities, and for governments and financial regulators to address systemic risks to financial stability. Increasing climate-related litigation against governments, directors and trustees, globally and in Australia,[7] is further driving home the need to manage material climate change risks and opportunities.[8]

2.2. PROVIDING CLARITY AND REDUCING REGULATORY BURDEN

Given the urgency of the climate threat and need for transparency, consistency and comparability of disclosures for informed and efficient asset allocation, and an orderly transition to net zero emissions, a voluntary approach to climate-related financial disclosure has proven insufficient. Governments and financial regulators are already moving to consider and implement mandatory TCFD reporting requirements, including in the European Union, Hong Kong, New Zealand, the United Kingdom, Singapore, Switzerland and most recently the United States. Mandatory regimes are rapidly emerging in over half of Australia's top ten two-way trading partners.

Implementing mandatory requirements for TCFD-aligned disclosure across economies will help to address existing market failures and drive system-wide practices that ensure risks are properly managed and opportunities can be fully realised in a timely manner.

This briefing paper highlights recent developments in climate risk disclosure globally and in Australia and outlines why establishing mandatory disclosures beyond the existing regulatory framework makes regulatory and business sense. It then presents proposals for immediate steps for strengthening climate risk disclosure initially updating and clarifying regulatory expectations via regulatory guidance, ongoing monitoring, review and enforcement, and concurrently establishing a Joint Taskforce to review Australia's existing legislative framework and to examine the phasing in of a comprehensive and enforceable mandatory TCFD-aligned disclosure regime that is both consistent with international developments and fit for purpose for Australia.

The proposals communicate industry expectations and priorities for strengthening climate risk disclosure, including proposals for financial regulators to:

- Establish a clear regulatory expectation that relevant entities disclose climate-related financial risk according to the TCFD recommendations
- Develop a process for reviewing and improving the quality of reporting over time
- Develop further guidance to support TCFD-aligned reporting, including establishing more standardised scenario analysis, and reporting on material Scope 3 emissions

This briefing paper and proposals focus primarily on actions available to members of the Australian Council of Financial Regulators (CFR). However, this is not intended to discount the important role that the Government can and must play in this process.

3. Global and domestic developments

3.1. GLOBAL STATE OF PLAY

Globally, financial institutions, central banks and national financial regulators are warning of the financial risks of climate change and are requiring a proactive response from investors and companies to manage climate-related financial risks to support financial stability.[9] In setting out key recommendations to foster a resilient financial system the network of central banks, the Network of Central Banks and Supervisors for Greening the Financial System (NGFS),[10] highlighted the importance of disclosure and encouraged entities to disclose in line with the TCFD recommendations.[11] The NGFS considers that climate-related risk is within the mandate of central banks and supervisors to 'ensure the financial system is resilient to these risks'.[12]

The International Association of Insurance Supervisors has set climate risk as a key theme demanding heavy focus in its 2020-2024 Strategic Plan and Financial Outlook, recognising that 'insurers are exposed to both transition risk as institutional investors and physical risk from natural disasters through their underwriting, but can also be key agents in the mitigation and management of climate risk'.[13]

Recognising the importance of effective disclosure to inform monetary policy, supervision and financial stability, over 110 regulators and government organizations from around the world are public TCFD supporters, including the governments of Belgium, Canada, Chile, France, Japan, New Zealand, Sweden, and the United Kingdom (UK).[14] The Australian Government has welcomed the TCFD recommendations and encouraged stakeholders to carefully consider them.[15]

In a significant development in March 2021, the International Financial Reporting Standards (IFRS) Foundation, supported by International Organization of Securities Commissions (IOSCO), established a formal working group to accelerate convergence in global sustainability reporting standards with an initial focus on climate, through the further development of a prototype built on the TCFD recommendations.[16] This global standard is expected to increase the breadth of jurisdictions mandating disclosures.

Governments and financial regulators are moving to consider and implement mandatory TCFD reporting requirements, including in Canada, the EU, Hong Kong, New Zealand, the United Kingdom (UK), United States (US) and Switzerland among others. Significantly, G7 Finance Ministers (including the UK, the US, Canada, France, Germany, Italy and Japan) confirmed their support for 'moving towards mandatory climate-related financial disclosures that provide consistent and decision-useful information for market participants' based on the TCFD framework in a joint statement released 5 June 2021, and China has also signaled its support.[17] The table below outlines key features of the proposed approaches in several of these jurisdictions. Further information is included in Appendix A.

Table 1. Approaches to implementing mandatory TCFD requirements[18]

Region	Coverage	Regulatory instrument	Mandatory	Phase
New Zealand	Listed companies; large registered banks; licensed insurers; and managers of registered investment schemes[19]	Legislative measures;[20] reporting standard will be developed by External Reporting Board Regulators: Financial Markets Authority	In part, with comply or explain function	Committed; implementation in process, reporting due to commence 2023
UK	Listed commercial companies; UK-registered companies; large private companies; Limited Liability Partnerships (LLPs); banks and building societies; insurance companies; asset managers; life insurers and FCA Financial Conduct Authority (FCA)-regulated pension schemes; and occupational pension schemes[21]	Combination of supervisory expectation, regulatory action[22] and legislative measures;[23] Regulators: Prudential Regulation Authority (PCA), FCA, Government departments: Dept. for Work and Pensions, Dept. for Business, Energy & Industrial Strategy	Yes and in part (combination of comply or explain e.g. implemented FCA rule; and strict mandatory e.g. proposed mandatory climate-related financial disclosures for companies, commencing 2022	Committed; partially commenced for listed companies (FCA Rule 9.8) with increased coverage over period 2021 to 2025
Hong Kong	Companies and financial institutions	Supervisory expectation and regulatory action by financial regulators, via the Green and Sustainable Finance Cross-Agency Steering Group	Yes	Committed, building on requirements for listed companies commencing 2021 with complete coverage as soon as practicable and no later than 2025

Region	Coverage	Regulatory instrument	Mandatory	Phase
EU	Large companies (including listed companies, banks and insurance companies)	Regulatory revisions by European Commission via the Corporate Sustainability Reporting Directive (CSRD) (formally the Non-Financial Reporting Directive)[24]	Yes	Committed
Switzerland	Companies (including large banks and insurers)	Legislative measures to mandate adoption of the TCFD recommendations[25]	Yes	Committed
Canada	Companies and financial institutions	Canada's Expert Panel on Sustainable Finance key recommendations included defining and pursuing a Canadian approach to implementing the TCFD recommendations, and embedding climate-related risk into monitoring, regulation and supervision of Canada's financial system[26]	Under consideration	Considering; the Canadian Government and financial regulators are currently considering approaches to implement the expert panels recommendations
Brazil	Financial institutions	Central Bank committed to implement mandatory climate-related disclosures for financial institutions aligned with the TCFD recommendations by 2022.[27]	Yes	Committed, consultations on regulations recently completed

Region	Coverage	Regulatory instrument	Mandatory	Phase
Singapore	Companies and financial institutions (asset managers, insurers, banks)	Regulatory guidelines from the Monetary Authority of Singapore (MAS)[28] SGX consulting on requirements for companies to report in line with the TCFD recommendations[29]	Regulatory expectation not legally enforceable;[30] Mandatory requirements under consideration	Expectation implemented December 2020 Committed to further enforceable measures
US	Public companies and financial institutions	Executive order on climate-related financial risk directs US Treasury to work with the Financial Stability Oversight Council (FSOC) on climate-related reporting requirements;[31] Consultation by US Securities and Exchange Commission;[32] commentary US Treasury[33]	Under consideration	Considering; SEC and Treasury actively considering climate risk disclosure requirements

While the precise manner in which jurisdictions will implement mandatory climate risk disclosure is an area to watch, it now appears largely a matter of when, not if.

In order to minimise the burden for reporting entities and maximize the value of disclosure, the Task Force remarks in its 2020 Status Report that 'going forward, it will be important to bring more standardization to reporting requirements across different countries and jurisdictions'.

3.2. MANDATORY TCFD-BASED REPORTING FOR INVESTORS

In 2018, the UN-supported Principles for Responsible Investment (PRI) introduced TCFD-aligned indicators to its reporting framework, including reporting on four indicators of climate risks: governance, strategy, risk management, and metrics and targets. Reporting against the governance and strategy indicators became mandatory from 2020 for PRI investor (including both asset owners and fund managers) signatories (but still voluntary to disclose in this first year). From 2021, it will be mandatory to report and disclose against the strategy and governance indicators; the risk management, and metrics and targets indicators will remain voluntary.

Following the first year of mandatory reporting, PRI observed that making reporting mandatory for investor signatories has led to a substantial difference in the volume of investor TCFD-based reporting, noting 'it has likely driven investors to take steps towards implementing TCFD recommendations, starting with board/management oversight and strategic analysis'.[34] Key highlights include:

- 2,097 investors reporting, with USD $97 trillion in assets, in 2020. This represents a 3.5-fold increase, as a result of the mandatory reporting requirement, over the 591 investors who reported in 2019.
- 410 investors have opted to publish at least part of their responses to the TCFD-based indicators.
- Anonymous interpretation of the responses grouping signatories across four categories: Aware (1546 investors, 74 per cent), Building capacity (374 investors, 18 per cent), Responsible (142 investors, 6 per cent) and Strategic (41 investors, 2 per cent).[35]

For Australian and New Zealand investors, IGCC's strategic plan outlines its ambition for all members to implement a climate change policy and roadmap consistent with the goals of the Paris Agreement and to have commenced or have committed to reporting against the TCFD recommendations by 2022.[36]

3.3. INVESTOR ENGAGEMENT WITH COMPANIES

As part of managing their exposure to climate risk and identifying opportunities in the net zero emissions transition, institutional investors are also routinely engaging directly with major emitting companies about their climate change disclosure and response through a range of practices, organisations and initiatives (alongside conducting their own organisational disclosure).

For example, Climate Action 100+ is a global investor-led initiative that is engaging with 167 companies to seek greenhouse gas emissions reductions and climate disclosure, among other asks (15 focus companies are Australian-listed). The initiative now encompasses 575 global investors, responsible for over $US54 trillion in assets under management. In September 2020, Climate Action 100+ established a 'Net Zero Company Benchmark' to allow investors to track the publicly committed actions of major companies against the actions required for alignment with the Paris Agreement objective of limiting average global warming to 1.5°C above pre-industrial levels. As part of this benchmark, companies are publicly assessed on their disclosure practices through a series of sub-indicators detailed in Table 2. The first round of assessments was published in March 2021. While almost three quarters (72 per cent of the total) of companies assessed commit to align their disclosures with the TCFD recommendations and/or support the recommendations, only 10 per cent use climate-scenario planning that includes the 1.5°C scenario and encompasses the entire company.[37]

Table 2. Climate Action 100+ Net Zero Company Benchmark Disclosure Indicators

Disclosure Indicator 10 TCFD Disclosure[38]			
Sub-indicator 10.1 The company has committed to implement the recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD).		Sub-indicator 10.2 The company employs climate-scenario planning to test its strategic and operational resilience.	
Metric a): The company explicitly commits to align its disclosures with the TCFD recommendations OR it is listed as a supporter on the TCFD website.	Metric b): The company explicitly sign-posts TCFD aligned disclosures in its annual reporting or publishes them in a TCFD report.	Metric a): The company has conducted a climate-related scenario analysis including quantitative elements and disclosed its results.	Metric b): The quantitative scenario analysis explicitly includes a 1.5°C scenario, covers the entire company, discloses key assumptions and variables used, and reports on the key risks and opportunities identified.

The impact of this investor engagement, for example through Climate Action 100+, is becoming more apparent in major companies' reporting and response. For example, Wesfarmers recently presented divisional breakdowns of emissions in its regular ASX presentation, with Managing Director Rob Scott telling media: "…shareholders increasingly wanted to see actual evidence, which in the case of environmental targets means actual proof the company is cutting emissions, and the inclusion of the numbers in the results presentation does that."[39]

3.4. CLIMATE-RELATED FINANCIAL RISK DISCLOSURES IN AUSTRALIA

There are several irreversible trends beyond existing legislation that are already establishing an onus on companies and financial institutions to report on their emissions reduction commitments and other climate-related risks and opportunities. These include regulatory and legal opinion; investor engagement; and the emergence of disclosure frameworks such as the Task Force for Climate-related Financial Disclosures (TCFD) recommendations.

3.4.1. Regulatory framework, guidelines and recommendations

Company and superannuation trustee directors' must consider climate risk under existing Australian law. However, existing requirements do not capture climate risk disclosure aligned to TCFD recommendations and are not sufficient to promote robust, consistent and comparable disclosures.[40]

Duty of due care and diligence

In an important legal opinion published in 2016, Noel Hutley SC and Sebastian Hartford Davis concluded that company directors who do not properly manage and disclose climate risk may be liable for breaching their legal duty of due care and diligence under the Corporations Act.[41] For trustee directors covered by the *Superannuation Industry (Supervision) Act 1993* (SIS Act), Hutley SC concluded 'climate change risks can and should be considered by trustee directors to the extent that those risks intersect with the financial interests of a beneficiary of a registrable superannuation entity' and that, in some cases, it is incumbent upon a trustee director to consider the climate change risk in order to satisfy its obligations under the SIS Act.[42]

ASIC has recognised the conclusions of the Hutley opinion to be legally sound and consistent with its understanding of the current Australian law on directors duties.[43]

In a supplementary opinion published in 2019, Hutley SC and Davis noted that significant developments between 2016 and 2019 have likely elevated the standard of care that will be expected of a reasonable director, noting: 'Company directors who consider climate change risks actively, disclose them properly and respond appropriately will reduce exposure to liability. But as time passes, the benchmark is rising.'[44] A recent further supplementary legal opinion published in April 2021 noted that international and domestic developments such as those outlined in this paper are 'pertinent to a director's standard of care: they serve to emphasise the foreseeability and materiality of climate risks, together with the accelerating impact of responses to climate change on the economy'. It further highlights that the focus is now increasingly on *how* this duty is discharged, and considers circumstances in which greenwashing in relation to net zero commitments can constitute misleading or deceptive conduct.[45]

Material risk disclosure under Corporations Act

Directors of listed companies need to consider the requirements relating to operating and financial review (OFR) disclosures in annual reports under s299A(1)(a)(c) of the Corporations Act. The Australian Securities and Investment Commission (ASIC) considers that an OFR must include a discussion of climate risk when it is a material risk that could affect the company's achievement of its financial performance.'[46] ASIC's regulatory guide on effective disclosure in an OFR (RG247) notes that information relevant to the TCFD recommendations may be required to be included in OFR statements, and that where that information is not already required, directors may consider disclosing additional information through non-financial reporting, and that any separate disclosures should not be inconsistent with the company's financial statement. Depending on the circumstances, disclosure of climate risk may also be required by the law in other contexts, such as a prospectus or continuous disclosure announcement (e.g see RG228). In this context, ASIC expects that: 'Boards should ask if material climate-related disclosures have been made and updated where necessary and appropriate'.[47]

These requirements form the foundation of disclosure requirements for listed companies.[48] While ASIC recommends listed companies with material exposure to climate risk consider reporting under the TCFD framework, further steps are needed to establish clear expectations for assessing and disclosing material climate risk against the TCFD recommendations.

National Greenhouse and Energy Reporting scheme (NGERs)

Companies that are large emitters of greenhouse gases are also required to report their scope 1 and scope 2 emissions and energy consumption under the National Greenhouse and Energy Reporting (NGERs) legislation. This information is relevant to assessing carbon risk, and can be linked back to TCFD recommendations in relation to targets and metrics. Importantly however, NGERs reporting doesn't address 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. From an investment perspective, it also doesn't capture equity exposure to significant carbon holdings from lending or investing activities.[49]

The Australian Clean Energy Regulator proposes to implement a voluntary 'Corporate Emissions Reduction Transparency report' (CERT) for the 2020/2021 reporting cycle designed to help NGERs reporters show how they are meeting their emissions reduction goals.[50] This would show the voluntary emissions and energy targets of the corporation, progress towards those targets and the evidence including reported Scope 1 and scope 2 emissions, eligible units and certificates surrendered, and the 'net' Scope 1 position and renewable electricity percentage.

Widespread adoption of CERT reporting could help with the transparency of corporate climate disclosure practice that would better allow investors to assess the performance of companies as part of their portfolio and risk management decisions. However, the voluntary CERT is proposed for a specific objective linked to NGERs and is not intended to address many of the issues discussed in this paper. IGCC's submission to the Clean Energy Regulator on the CERT outlines specific comments on the benefits, issues and further considerations regarding the proposed CERT, including a recommendation that the Clean Energy Regulator communicate with Australia's financial regulators and others to ensure CERT and other reporting requirements remain relevant and do not become duplicative or misaligned with emerging developments on climate risk disclosure.[51]

3.4.2. Role of financial regulators and prudential regulation of climate risk disclosure

As members of the Council of Financial Regulators (CFR), ASIC, the Reserve Bank of Australia (RBA), the Australian Prudential Regulation Authority (APRA) and the Commonwealth Department of Treasury (Treasury) formed a working group on climate change to help ensure a coordinated response by these regulators to climate change risk.

The CFR's objectives are to promote stability of the Australian financial system and support effective and efficient regulation by Australia's financial regulatory agencies. In doing so, the CFR recognises the benefits of a competitive, efficient and fair financial system.[52] The CFR operates as a means for cooperation and coordination among member agencies, with formal regulatory or policy decision-making powers resting with its members under their respective acts. Each member of the CFR has different responsibilities in the Australian financial system, outlined in Appendix B.

Recognising the financial and economic significance of climate change, APRA, ASIC, RBA and the ASX have all published statements and/or specific regulatory guidelines and recommendations in relation to managing and reporting on climate-related financial risk (see Table 3 and Appendix C). This guidance includes encouragement for relevant entities to assess climate risk and report material climate-related financial risk in line with TCFD recommendations. Standard setting bodies and peak industry associations have also engaged widely with industry and published authoritative guidance to assist entities to comply with regulatory requirements and expectations.

Table 3. Regulatory action on climate-related risks in Australia (2017 – 2021)

Organisation	Public statements on climate risk	Updated guidance	Actions and responses from regulator/entity
Australian Prudential Regulation Authority (APRA)	Climate risk mentioned in several speeches[53, 54, 55, 56] Climate change survey results released in information paper[57]	Wrote to all regulated entities detailing position and activities on climate change[58] Increased scrutiny of banks, insurers and superannuation trustees[59] Released draft Prudential Practice Guide for Climate Change Financial Risks[60]	Enhanced supervisory action including climate change survey[61] Climate risk working group established under Council of Financial Regulators[62] Peer agency cooperation internationally[63] Vulnerability assessment of major banks[64]
Australian Securities and Investments Commission (ASIC)	Climate risk mentioned in several speeches and reports[65, 66]	Focussed on corporate governance and disclosure[67]	Monitoring adoption of reporting against the Task Force on Climate-related Disclosures (TCFD) recommendations across ASX 300[6869] Review of regulatory guidance[70] Climate risk working group established under Council of Financial Regulators[71] Peer agency cooperation internationally[72]

Organisation	Public statements on climate risk	Updated guidance	Actions and responses from regulator/entity
Reserve Bank of Australia (RBA)	Speech on climate change and the economy[73]	Supports TCFD as key framework for disclosures[74] Supported APRA and ASIC's guidance[75] Board tables climate risk for discussion at upcoming meetings[76]	Climate change included in Financial Stability Review[7778] Peer agency cooperation internationally[79] Vulnerability assessment of major banks[80]
Council of Financial Regulators (CFR) - APRA, ASIC, RBA and the Commonwealth Treasury		Established a dedicated working group[81]	Stocktake of member activities on climate risk[82]
ASX		Climate risks discussed in revised Corporate Governance Guidelines[83]	Amended guidelines and specifically highlighted climate risk management and disclosure in line with the TCFD[84]

These developments followed a significant inquiry and report on carbon risk disclosure conducted by the Senate Economics References Committee completed in 2016-2017, which provided six key recommendations to government, including that ASIC review its guidance to directors in relation to carbon risk, that the ASX Corporate Governance Principles and Recommendations are updated and that the government commit to implementing the TFCD recommendations where appropriate, and undertaking the necessary law reform to give them effect.[85]

In its response, the Australian Government welcomed the final report of the TCFD and encouraged stakeholders to carefully consider its recommendations. The government also suggested that ASIC should consider its high-level guidance on disclosure to ensure it remains appropriate, and encouraged the ASX Corporate Governance Council to 'continue to keep the Principles and Recommendations and the guidance materials under review to ensure it provides an appropriate framework to ensure the corporate governance of ASX listed entities remains best practice'.[86]

ASIC subsequently conducted a surveillance project examining climate risk disclosure by listed companies in Australia[87] and published further regulatory guidance on corporate climate risk disclosure. The ASX Corporate Governance Council also reviewed the ASX Corporate Governance Principles and Recommendations and published the 4th Edition in February 2019, which encouraged entities, for the first time, to consider and report upon any material exposure to climate change risk.[88]

In 2019/20 ASIC looked at a number of companies to assess how they were managing and disclosing climate-related risk, focusing on reporting by companies in line with TCFD recommendations.[89] ASIC observed both improvements and challenges similar to those reported via TCFD status report, and is in the process of following up with many of the companies considered in the review.[90]

In an article published in February 2021 ASIC also noted that 'ASIC has also written to several companies that had come to our attention as potential "laggards" in this area to remind them of their statutory obligations' with the aim to provide targeted guidance as companies commence their next reporting cycle.[91]

Since 2016, APRA has taken significant steps to understand and raise awareness about the financial nature of climate change risks, engaging in and publishing a series of important keynote speeches,[92] alongside ASIC and the RBA, conducting and publishing research[93] and issuing regulatory guidance.

APRA has recently issued a draft Prudential Practice Guide on Climate Change Financial Risks (Climate Change PPG) to assist regulated entities to comply with existing risk management and governance standards, and more generally sets out APRA's view on prudent practices in relation to climate change financial risk management. APRA's draft Climate Change PPG reflects the key themes of the TCFD framework (i.e. addressing governance, risk management, strategy (scenario analysis) and disclosure).

APRA is also leading work on a climate vulnerability assessment (CVA) together with the CFR. Beginning with five of Australia's largest banks (known as authorised deposit-taking institutions or ADIs) in 2021, the CVA will:

- Explore the potential financial exposure and macroeconomic risks to large ADIs, the financial system and economy from both physical and transition climate risks; and
- Assist APRA in understanding how the large ADIs might adjust their business models in response to different climate change scenarios.[94]

APRA has noted that the design of the CVA will reflect APRA's cooperation with international peer regulators.[95] The CVA may form a useful basis to further develop a robust and standardized approach to scenario analysis.

The positions expressed in the regulatory guidance and other materials published by members of the CFR show that there is strong alignment between financial regulators regarding expectations for industry responses to climate risk. It is encouraging that these coordinated regulatory actions have increased industry awareness and understanding and management of climate risks.

However, recognising that significant improvements are still required across key areas including modelling, stress testing and scenario analysis and, critically, disclosure of these activities,[96] and rapid international developments, investors welcome further efforts to address these issues and strengthen public disclosure.[97]

In its March 2020 report *Prospering in a low-emissions world: An updated climate policy toolkit for Australia*, the Climate Change Authority considered prudential regulation of climate-related risk and recommended that a joint taskforce of the Council of Financial Regulators, together with the major accounting bodies, examine the phasing-in and mandatory reporting of climate-related risks and mainstream climate-related disclosures in companies' audited financial statements.[98]

3.4.3. Status of company climate risk reporting in Australia

The TCFD framework has now become widely accepted as a minimum standard for companies exposed to climate change risks. Consistent with observations a global level,[99] recent analysis by the Australian Council of Superannuation Investors (ACSI) of climate risk disclosure by Australian ASX200 companies indicates that the quantity and quality of climate-related disclosure and management has significantly improved across these listed firms.

The number of ASX200 companies which have adopted the TCFD framework has jumped from 11 in 2017 to 60 in 2019 (see Figure 2) and more companies are also undertaking and disclosing scenario analysis and setting net zero emissions commitments and targets. Further, there is an emerging trend for companies to link transition risks into their asset impairment analysis. It is likely these trends have only accelerated in intervening years.

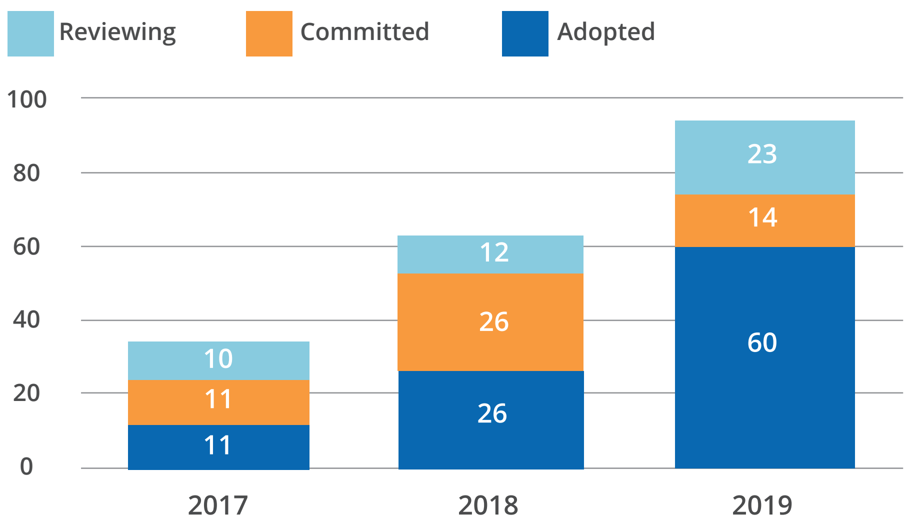


Figure 2. Level of TCFD adoption by ASX200 companies over three years[100]

However, gaps and challenges remain for both companies undertaking TCFD reporting and for investors in assessing how it relates to company strategy and the goals of the Paris Agreement, outlined below.[101]

Theme	Challenges and gaps
TCFD Adoption	• A number of companies still haven't adopted TCFD • Most disclosures are not being integrated into financial statements
Emissions reporting and targets	• Only 37 per cent of ASX200 companies have set emissions reduction targets and most are only short term • A lack of target setting in sectors where there is a material exposure to direct and indirect transition-risk • Limited disclosure of emissions footprint or reduction targets for Scope 3 emissions
Analysis of transition risk	• Low uptake of 1.5°C scenarios suggest many may be failing to stress-test their portfolios against sufficiently challenging and robust scenarios[102] • Many companies in sectors with high exposure to transition risk do not disclose scenario analysis
Comparability and transparency	• 35 different scenarios used by 32 companies • Insufficient disclosure of inputs and assumptions in bespoke analysis • Limited transparency on the assumptions, signposts and inputs that drive bespoke scenarios • Failure to disclose when assumptions in standardised scenarios were reduced or excluded • Provision of general, qualitative information that provides little insight for investors
Corporate strategy	• Limited linkages between how scenario analysis is informing company strategy
Company resilience	• Estimated financial performance under all scenarios may be unrealistic for several reasons: - Companies are not adequately accounting for physical climate risk, even in analyses that included limited policy action and extreme levels of warming, despite the widely acknowledged trade-off between the two types of risk - No quantification of downside risk - Questionable assumptions and inputs may be causing overly optimistic views of future cash flows under a 2°C, or below, scenarios
Physical risk	• Few companies provide meaningful disclosure on physical risk

Appendix D provides further detail on trends in company climate risk reporting, including improvements, challenges and investor priorities to ensure decision-useful disclosures.

3.4.4. Australian Sustainable Finance Roadmap

The Australian Sustainable Finance Initiative (ASFI) – comprising major banks, insurers, super funds, civil society and other stakeholders, published a roadmap in November 2020 that sets out an important plan to align Australia's financial system to support a thriving Australian society, a healthy environment and a strong and prosperous economy.

The Australian Sustainable Finance Roadmap provided a significant commitment from Australia's financial sector to address the challenges and threats that the financial system is facing in relation to climate change, biodiversity loss and rising inequality. It included 37 recommendations to strengthen Australia's financial system, including strong recommendations for TCFD reporting by financial institutions and companies and, importantly, a recommendation that financial institutions work with Australia's financial system regulators on an ongoing basis to embed sustainability into regulatory guidance and standards to drive system-wide practice. Appendix E summarises the roadmap's key recommendations related to disclosure.

These recommendations demonstrate a strong basis of support and demand for Australia's financial system regulators to implement mandatory TCFD-aligned reporting through a phased and iterative process, beginning with an 'if not why not' approach (often referred to as 'comply or explain') and transitioning to full compliance.

4. Case for mandatory TCFD-aligned disclosure

Confusion and lack of clarity in the market place discourages disclosures and increases reporting burdens on companies and investors. The market place and financial regulation is evolving very rapidly at an international level. Again this is creating market confusion.

Significant efforts have been made by financial regulators, standard setting bodies and leading companies and financial institutions to raise awareness about material climate risks and encourage relevant entities to use the TCFD framework to consider and disclose material climate risk and opportunities. Failure by directors and trustees to consider material climate risk is now considered a likely breach of fiduciary duty and OFR disclosure requirements under s299A(1)(a)(c) of the Corporations Act for listed companies. However, while the quantity of disclosures is improving, further efforts, signals and changes are required to ensure:

- Disclosures keep pace with best practice and obligations among our major trading partners
- Reporting is brought in line with industry expectations and user needs, and
- Standardisation across jurisdictions is considered.

Ultimately, despite significant progress, the current disclosure system is not delivering on the core needs of investors, nor the core mandates of the financial regulators to protect the stability of the financial system as a whole. To address these gaps many jurisdictions are now turning to mandatory regimes.

4.1. BENEFITS FOR COMPANIES

4.1.1. Decision making and strategic positioning

Regulatory standards and guidance requiring TCFD-aligned disclosure can provide a number of benefits for companies, including:

- **Market access:** Disclosure is a key element in maintaining the competitiveness of Australian companies within global markets. Mandatory TCFD disclosure regimes are rapidly emerging in over half of Australia's top ten two-way trading partners. Australia's top three export markets – China, Japan, and South Korea – all have set net-zero targets.[103] Similarly, the prospect of carbon border taxes in the United States, UK, Japan and the European Union could present further obstacles to Australian companies and financial organisations operating within those markets. Australian firms will be confronted with higher expectations for environmental disclosure from customers and authorities in these and other key markets. Mandatory TCFD-aligned disclosure will help identify companies currently showing climate leadership and position high-emitting companies to begin the transition towards low-carbon business models.
- **Better access to capital:** As the number of investors committing to net zero assets grows – with five of the largest institutional investors in Australia making net zero pledges in the second half of 2020[104] – companies that do not report climate data will face constraints on access to capital. Companies that report TCFD-aligned data through CDP already have 19 per cent greater access to capital105 compared to non-reporting firms. This advantage is likely to grow as ESG metrics assume greater prominence in investment decisions.

- **Superior performance:** In addition to securing access to key markets and sources of capital, following best practices in climate risk and sustainability management benefits companies in the shape of improved risk management, enhanced financial performance, and the greater engagement with employees and customers.[106] Companies following best practices in sustainability and reporting generally post higher returns, with companies releasing high quality sustainability reports regularly enjoy superior stock performance.[107] For example, data from STOXX indicates that companies on CDP's A List of top reporting companies have outperformed competitors by 5.3 per cent over a seven-year period.108 As such, linking executive compensate to ESG metrics is fast becoming the norm.[109]

A common factor across these benefits for companies is that reporting is linked to decision-making and strategic positioning, rather than just the provision of information.

4.1.2. Mandatory vs voluntary

Despite these advantages, in a world of competing priorities it can be challenging for entities to prioritise investing sufficient resources and attention towards voluntary reporting. Despite existing requirements many climate risk disclosures remain 'tick the box' exercises. Some executives may assume that if it was important it would be mandated, and therefore neglect to prioritise it in the absence of clear direction, even if they are being 'encouraged' to do so through voluntary measures. This may in part explain the gaps in adoption including for high risk sectors shown in Figure 3.

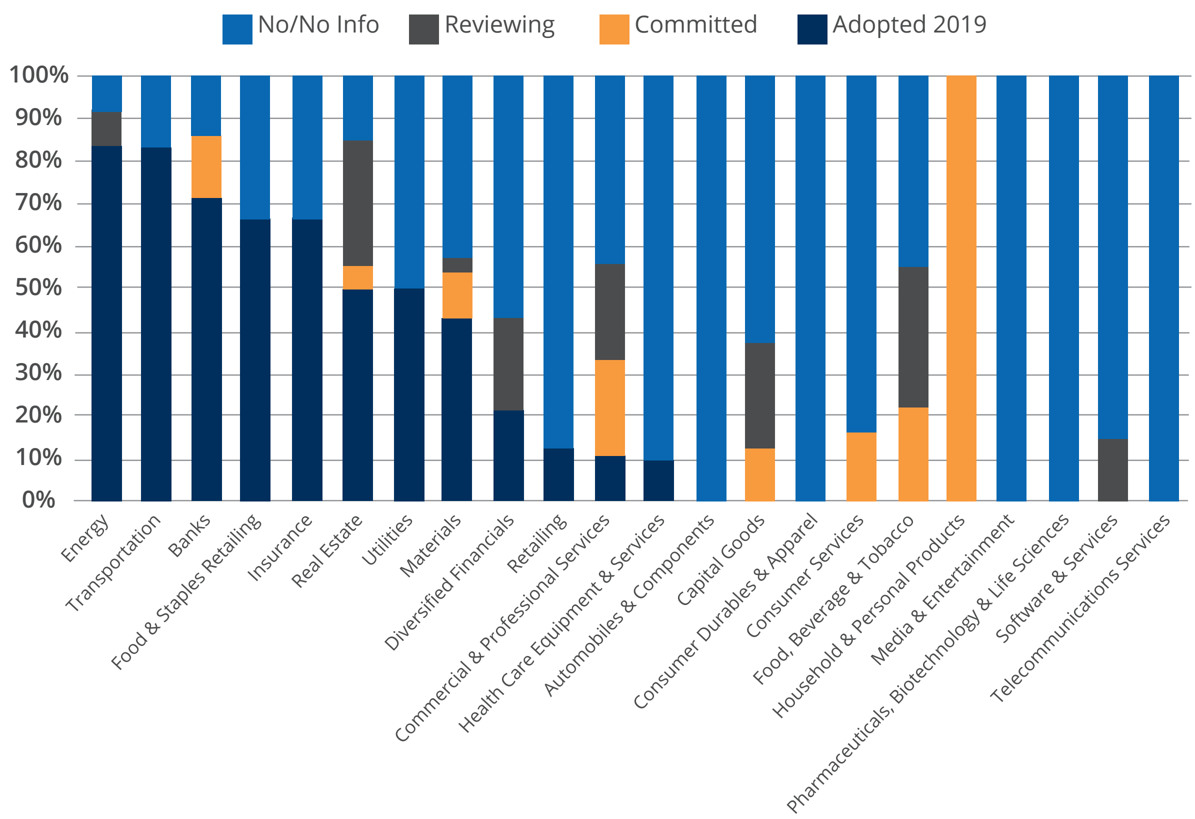


Figure 3. ASX200 TCFD Adoption by sector[110]

A lack of detail and standardisation on what must be reported can also be used as a scapegoat for lower performing companies to avoid addressing difficult questions and making adequate disclosures, increasing the likelihood of material risks being hidden until it is too late.

Further, despite many organisations adopting voluntary reporting measures, it is challenging to achieve sufficient standardisation for transparency and comparability under existing voluntary frameworks.

A mandatory regime would help to address these barriers for entities by:

- **Improving clarity around expectations**, allowing companies to plan and integrate considerations more easily as they have a clear set of expectations around reporting.
- **Providing a more level playing field**. Clear regulatory expectations and guidance that ensures widespread participation against a common framework removed barriers for smaller entities to participate and addresses issue of some corporations with high climate-related risk not report or not report sufficiently.

WILL MANDATORY APPROACHES DISCOURAGE INNOVATIVE PRACTICES?

As regulatory organisations take steps to implement stronger, mandatory disclosure requirements, the former Governor of the Bank of England, Mark Carney, suggested an iterative process of disclosure, reaction and adjustment is necessary for market standards to be comparable, efficient and decision useful.[111] In this process, it is feasible and appropriate to ensure some degree of flexibility in reporting to allow innovative practices to evolve and to identify best practices. A phased approach to implementing mandatory disclosure requirements would allow practices to continue to develop.

Further, trade-offs with respect to disclosure quality, consistency, market maturity and proportionality must be considered. However, these considerations should not delay action to raise the minimum regulatory expectations and establish a clear roadmap to strengthen the quality of scenario analysis and climate risk disclosures aligned with the TCFD recommendations.

Ultimately, phasing in mandatory disclosure will enable better data. And more participants will be able to ensure issues and innovation blocks can be identified and rectified. Delaying this process increases the risk of entities who may otherwise contribute towards innovative practices or bring issues to the fore simply not engaging.

4.2. COST TO BUSINESS AND PROPORTIONATE RESPONSE

Any costs imposed on businesses must be proportionate to the issue being addressed, and should not cause undue commercial burden. Reporting obligations should not impose undue costs, competitive disadvantages or other commercial burdens.[112]

High quality reporting is part of a robust governance process. Requirements for mandatory TCFD are not about 'box ticking' disclosure. Rather, it is part of ensuring best practice governance. Critically, setting clear, mandatory requirements will help to align regulation with industry expectations, and reduce existing burdens by reducing and streamlining decision-making by making it apparent what needs to be done. Nonetheless, it is important to ensure entities, particularly smaller entities, are not disproportionately or unnecessarily burdened.

Additional considerations in these proposals to ensure disclosure requirements are proportionate, include in the initial phase:

- Only including larger entities
- Use of the TCFD framework and allowing disclosures on a comply or explain basis, allowing greater flexibility, potentially lower implementation costs and for entities to improve disclosures over time. This is consistent with the principles-based approach of the ASX Corporate Governance Council recommendations, which provide flexibility for an entity to adopt alternative governance practices if its board considers those to be more suitable to its particular circumstances, subject to the requirement for the board to explain its reasons for adopting those alternative practices.[113]
- Alignment of the reporting expectations across major jurisdictions considering mandatory regimes (e.g. with respect to minimum standards for required content, coverage, reporting period and timing to report) is important for companies subject to multiple regulatory frameworks. Such alignment will reduce the time and cost burdens and diversion of management focus, but most significantly underpin consistency and comparability of disclosed information for investors, regulators and other key stakeholders. However, as noted above, this should be considered iteratively, and is not a reason to delay action.

4.3. INVESTOR EXPECTATIONS

4.3.1. Decision useful reporting

Robust and decision-useful climate change reporting by companies is a vital tool for enabling investors to more effectively manage climate change-related financial risks and opportunities. Investors use disclosures for two overarching purposes – as a basis for engagement with companies and as part of prudent risk management that incorporates ESG risk. Ultimately, all investors are attempting to discern the nature of the potential financial risks posed by climate change and the effectiveness of the company's response.[114]

While investors are observing progress, more needs to be done to improve transparency and ensure consistent, quality information to make it more useful for decision-making, risk assessment, portfolio management and company engagement. In particular, recent analysis[115] encompassing the views of over 50 investors from 22 organisations with more than $1.1 trillion in collective funds under management, observed:

- **Action**: Investors want to know how climate-related risk information translates into action. Disclosures need to move beyond articulating their climate-related structures and analysis to explain how these inform decision making and performance management.
- **Evidence**: Investors want companies to provide more evidence for their claims. Supporting detail should be included for key aspects such as emissions footprints and transition pathways, board, director and executive skills and expertise in climate change, and the assumptions underpinning a company's current business model.
- **Transparency**: Investors expect key aspects of scenario analysis to become more transparent. More detail should be provided on the analytical methodology and inputs used, the financial impacts at both company and more granular project or asset levels as appropriate, and the strategic responses to results.

- **Alignment**: Investors want companies to show how all the pieces of their disclosure form a coherent whole. The links between risk and opportunity, analysis, targets, strategy and remuneration should be articulated and their mutual support for an overarching approach demonstrated.
- **Ongoing improvement**: Investors expect and will advocate for ongoing improvements in disclosure. Investors will continue to encourage companies to make each disclosure more decision-useful than the last, and will advocate for regulatory guidance to provide a rising minimum standard for climate-related reporting.

4.3.2. Scenario analysis

Investor priorities for scenario analysis drawn from the same research detailed in the section immediately above include:

- Apply sufficiently challenging and robust scenarios, including a 1.5°C, a disruptive/delayed scenario and unmitigated warming scenario, drawn from commonly referenced transition and physical risk sources to promote comparability, standardisation and disclose the core input assumptions (e.g. climate impacts on GDP, technology costs, demand factors carbon price, national emission reduction target assumptions and scope of portfolio analysis applied to for example)
- If applying a bespoke scenario analysis model, disclose the input assumptions, and show comparisons and variance to the standard set of assumptions (e.g. avoid black box disclosures)
- Report scenario analysis impacts at both the divisional-wide and project/asset levels, and increase balance and credibility by reporting negative impacts
- Report on the impact on company strategy and actions taken as a result of the scenario analysis, as well as the outputs of the analysis.

4.3.3. Coverage of Scope 3 emissions

Importantly, effective risk management requires understanding and addressing risks throughout the company value chain including upstream and downstream. Therefore, investors expect companies to understand and act on their Scope 3 emissions where these emissions are a significant part of total company emissions across the company value chain, and/or where those emissions are central to the companies' portfolio (e.g. product emissions from the combustion of fossil fuels). A number of companies, including BHP and Rio Tinto, are now setting goals to reduce their Scope 3 emissions as a result of investor expectations. Further discussion of the importance of measuring reporting and acting on Scope 3 emissions is included in section 4.4 below.

4.3.4. Climate reporting in financial statements

Currently most climate risk reporting is occurring in non-financial reports. However, investors expect companies to discuss climate-related risks within financial statements to provide appropriate context for investment decision-making. Australian accounting standards state that qualitative external factors, including investor expectations, may make climate-related risks 'material' and appropriate for inclusion in financial statements, regardless of their numerical impacts.[116] The Australian Accounting Standards Board (AASB) considers that financial institutions[117] and non-financial sector entities, particularly fossil fuel based energy, transport, material and buildings, agriculture, foods and forest products are likely to assess that it is necessary to explain whether and how they have considered climate-related risk in their impairment assessments and how climate-related risks have affected other decisions made in relation to the recognition or measurement of items in the financial statements.[118]

While ASIC and APRA and the ASX Corporate Governance Principles and Recommendations 4th Edition encourage entities to consider reporting material climate risks in line with TCFD recommendations, this expectation could be clarified and strengthened in line with international developments. For example, by communicating an expectation that relevant entitles align disclosures with well-regarded international reporting frameworks (e.g. standards and frameworks set by the CDP, Climate Disclosure Standards Board, Global Reporting Initiative, International Integrated Reporting Council and Sustainability Accounting Standards Board) aligned to the TCFD recommendations. This step could be implemented relatively quickly and form part of the roadmap to transitioning to an enforceable mandatory regime through legislative measures and integration of a global climate disclosure standard, such as that proposed by International Financial Reporting Standards (IFRS) Foundation.

4.3.5. Emerging International Climate Disclosure Standard

Regulators in Australia and globally are closely following progress of the International Financial Reporting Standards (IFRS) Foundation, establishing a Sustainability Standards Board that will focus first on developing a climate disclosure standard.[119] The proposed IFRS standard, built on the TCFD recommendations and supported by IOSCO, would provide a consistent standard for inclusion of relevant material climate-related financial risk in financial statements, which would be subject to assurance requirements. This global standard is expected to increase the breadth of jurisdictions mandating disclosures.

4.4. ACHIEVING OBJECTIVES OF FINANCIAL REGULATORS

4.4.1. Supporting long-term financial stability

Internationally and in Australia financial regulators recognise that climate change is a core financial risk that entities must identify, manage and disclose. Regulators are further recognising that enhanced transparency on climate risks is a critical precondition for the effective pricing of such risks in financial markets, and appropriate market discipline for robust risk management,[120] and that the TCFD recommendations provide a useful foundation on which to develop regulatory standards and guidance.[121]

Common objectives of Australia's financial regulators under the umbrella of the CFR are to promote stability of the Australian financial system and support effective and efficient regulation by Australia's financial regulatory agencies. Importantly, mandatory TCFD-aligned disclosures would require that organisations provide decision-useful information to help promote:

- **Financial system stability** by:
  - Building awareness of climate-related risks and opportunities across the economy
  - Integrating assessment and management of these risks, opportunities and impacts
  - Informing investment decision and thereby improving market effectiveness through more efficient pricing and allocation of capital, empowering stewardship and driving economic change to support the transition to a lower carbon economy and resilience to physical climate risks
- **Competition and consumer benefits** by stimulating the development of green financial products – and competition between providers of these products – with flow on benefits for consumers.[122]

4.4.2. Need for further regulatory guidance

Requiring TCFD-aligned disclosures without further guidance may not be sufficient to ensure quality and decision-useful reporting.

To support quality reporting, consistency and comparability of information, it is useful for regulators to provide additional supporting guidance, where appropriate. Two key areas for further guidance discussed below include in relation to scenario analysis and reporting on Scope 3 emissions.[123]

Standardisation and regulatory guidance for scenario analysis

Given the variation in potential inputs and approaches, investors have minimal confidence that this will emerge voluntarily.

Recognising this, financial regulators can play an important role in establishing expectations and further regulatory guidance to ensure a robust scenario analysis process, achieve confidence in results and enable comparison with peers and progress over time. More comprehensive and standardised scenario analysis will also assist regulators to carry out and monitor vulnerability assessments and stress testing in relation to climate-related risk over time.

The following extract from recent guidance to pension scheme trustees on aligning with TCFD recommendations published by the UK Government in January 2021 provides useful commentary on the need to apply multiple scenarios that are plausible as well as sufficiently challenging.

WHICH SCENARIOS SHOULD TRUSTEES USE?

It is important to avoid relying on a single scenario (otherwise the analysis risks being interpreted as a prediction), and that the scenarios used are plausible, yet challenging. Firms should look to analyse their strategies over a range of scenarios which illuminate future exposure to both transition and physical climate risks and opportunities. Typically, this should include:

- **Orderly transition to Paris, 1.5ºC to well below 2ºC scenario** – Emission reductions start now and continue in a measured way in line with the objectives of the Paris Agreement and national governments' commitments to reduce emissions to net zero by 2050. Investors and companies face disruption from physical climate risks, yet these are much less severe than under a no transition scenario.
- **An abrupt or delayed transition, 1.5ºC to 2ºC** – Little climate action in the short term, followed by a sudden and unanticipated tightening of policy as countries rush to get on track with the Paris Agreement. The falling cost of the solutions may mean companies and investors face a double policy and technology shock.
- **No transition, 4+ºC scenario** – High impact lower probability climate impacts emerge sooner than anticipated, and/or a continuation of historic emission trends and a failure to transition away from fossil fuels. Physical climate risks are severe, and increase over time, causing widespread social and economic disruption.[124]

Important advances in scenario modelling that reporting entities should set as benchmarks include:

- **NGFS scenarios**: The scenarios published by the Network of Central Banks and Supervisors for Greening the Financial System (NGFS), which include options for examining a range of emissions pathways (including orderly vs disorderly transition), technology availability options, and physical impacts. As they are developed by central banks and supervisors, these scenarios will provide a benchmark for a wide range of players including financial firms, companies and policy makers to better understand how climate factors will drive changes in the economy and lead to financial impacts at national, sectoral, company and asset levels and for balance sheets. It is, however, important to bear in mind the limitations of NGFS chosen scenarios, the importance of including 1.5°C aligned alternative scenarios in addition to the reference scenarios, and the need to consider tail-end risks that may not be captured in reference scenarios that rely on central assumptions.[125]

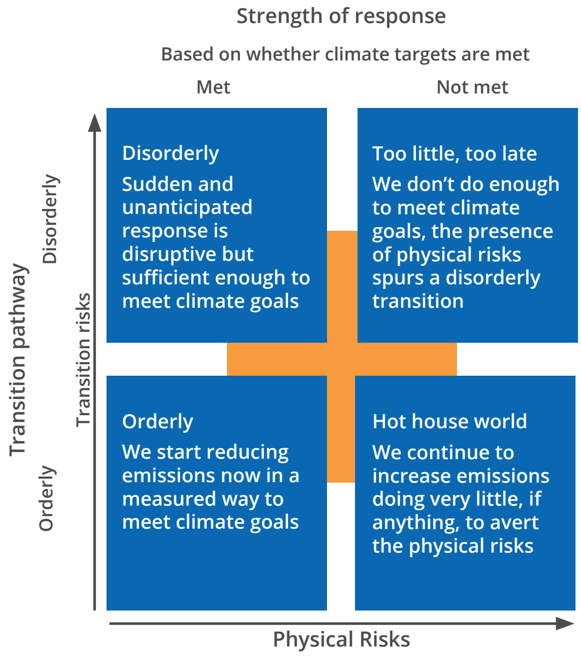


Figure 4. NGFS transition pathways and response based on whether climate targets are met[180]

- **TCFD guidance**: The Task Force has developed supplementary technical guidance on the use of climate-related scenario analysis to support the development of disclosures consistent with the recommendations.
- **Climate Measurement Standard Initiative (CMSI) financial disclosure guidance:** Developed through a finance industry-led initiative to supplement the TCFD recommendations and support aligned disclosures, sets out a voluntary process and recommendations for banks and financial institutions on applying scenarios for the purpose of assessing physical risk impacts for buildings and infrastructure.
- **The PRI's Inevitable Policy Response (IPR) research:** The IPR project forecasts a forceful, abrupt and disorderly policy response by 2025 due to delayed government action (Forecast Policy Scenario – FPS). IPR FPS provides an alternative scenario to the IEA as a business planning case for investors, corporates and regulators to consider. Investors should consider such a "disorderly" scenario when testing the resilience of their investment strategies under different assumptions because financial markets have not adequately priced-in the likely near-term policy response to climate change.

Further comprehensive guidance on best practices in conducting and reporting scenario analysis can be found in the CDP Technical Note on Scenario Analysis.[126]

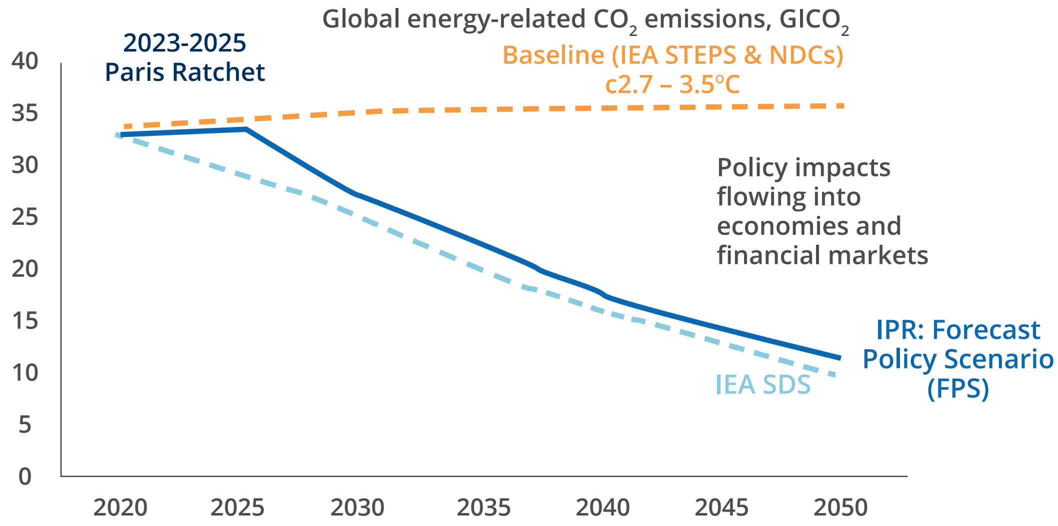


Figure 5. PRI Inevitable Policy Response: Forecast Policy Scenario (FPS)[127]

Significance of Scope 3 emissions

CDP's latest global supply chain analysis showed Scope 3 emissions[128] average 11.4 times greater than a company's direct emissions, and this ratio is higher in some sectors, including retail, hospitality, and manufacturing, energy and utilities.[129] Scope 3 emissions generally arise from two sources:

- Upstream value chain emissions, typically from the products the company purchases in order to produce their product. For example automakers may be affected by changing steel value chains in the transition towards green steel.
- Downstream value chain emissions, which typically relate to the end-use of products which create emissions. For example upstream oil and gas companies may face a downturn in demand for their product due to changing regulatory environments that accelerate the transition away from the use of fossil fuels. Financed emissions also fall into this category.[130]

Investors are interested in both types of Scope 3 emissions as both have implications for the overall valuation, product development and potential future financial performance of the company. For downstream emissions there is a significant risk of stranded assets from demand destruction and displacement due to changes in customer preferences and technology costs for lower carbon alternatives. Both types of emissions have the potential to be costly to abate for firms, or may require a transition to low or zero carbon products both upstream and downstream.

Trends in emissions accounting indicate *incomplete data* is causing underestimates in Scope 3 emissions, with CDP's most recent analysis based on improved supplier emissions accounting suggesting Scope 3 emissions are more than double previous estimates.

The scale of indirect emissions which expose company value chains to significant risks and opportunities linked to international decarbonisation trends make Scope 3 emissions disclosure a key component of TCFD-aligned reporting, especially for certain sectors. The Science-based Targets Initiative (SBTi)[131] criteria provides a useful indicator for Scope 3 materiality, requiring companies to report indirect emissions and to include Scope 3 targets where indirect emissions account for over 40 per cent of total emissions.[132] In addition to demonstrating impact, these targets can be important to demonstrate management of transition risk and opportunities. All Australian companies with SBTi-validated targets contain Scope 3 commitments and about 75 per cent of global validated SBTs have a Scope 3 component.[133] The Climate Action 100+ Net Zero Company Benchmark, which is being used as a key tool to analyse the climate performance of 167 of the world's largest greenhouse gas emitters, has also embedded Scope 3 targets as a key part of its framework. In order to meet the benchmarks set by investors as part of this framework, companies need to set targets on those Scope 3 emissions that are considered to be highly material. For example, this includes product use for oil and gas companies and the processing of metals for diversified miners.

While the diffuse nature of Scope 3 emissions presents measurement challenges, for upstream emissions tools like lifecycle analysis and sustainable procurement initiatives can help to develop a complete Scope 3 footprint. For downstream emissions, companies can use climate scenario analysis to assess the potential impact of carbon constraints and interventions like regulation and policy on the demand for their product. Financial institutions can also use tools such as the Partnership for Carbon Accounting Financials (PCAF) Standard to measure and disclose financed emissions.[134] Assessing and disclosing downstream Scope 3 emissions can therefore be a prudent strategy for understanding climate risk and integrating transition pathways away from carbon-intensive activities for highly exposed sectors such as fossil fuel producers.

Mandatory disclosure requirements and clear regulatory expectations in relation to measurement and management of Scope 3 emissions, which align with emerging global standards over time, would help to address current supply chain data gaps and improve effective monitoring and management of material financial risks.

4.5. IMPLEMENTATION OF CREDIBLE REPORTING REQUIREMENTS

Building on global developments and recent work of Australian regulators, setting clear, mandatory requirements for climate risk disclosure in Australia will help to align regulation with industry expectations and global standards. Making it apparent what needs to be done will reduce existing burdens by reducing and streamlining decision making. Establishing a minimum standard to disclose against the TCFD recommendations, with additional supporting guidance where appropriate, including in relation to scenario analysis and Scope 3 emissions, creates multiple economic benefits and helps to facilitate the efficient investment in low carbon and climate-resilient transition. Strengthened supervisory expectations can be implemented relatively quickly and form part of the roadmap to transitioning to an enforceable mandatory regime through legislative measures and integration of a global climate disclosure standards, such as that proposed by IFRS Foundation.

SCOPE 3 EMISSIONS CASE STUDY - TRANSURBAN

Transurban, the multinational toll road operator based in Melbourne, provides an illustration of good current practice in measuring and reporting Scope 3 emissions.

The company reports on Scope 3 emissions associated with its operations in Australia and North America. Transurban publishes both a single gross emissions figure as well as a breakdown of emissions into each of the fifteen Scope 3 emissions categories specified in the Greenhouse Gas Protocol, a leading emissions accounting standard developed by the World Resources Institute.

For Scope 3 categories deemed not relevant – as in Category 14 on franchises, which are not a part of Transurban's business model – Transurban's CDP response contains an explanation indicating why. For each category deemed relevant, the company reports tonnage of CO2 equivalent emissions and specifies the method used to calculate emissions. Transurban also provides a qualitative explanation of the sources of emissions for each relevant category. This breakdown provides a profile of major sources of emissions – capital goods in case of Transurban, which account for some 64 per cent of all Scope 3 emissions.

In addition to reporting Scope 3 emissions figures, Transurban releases an assurance statement from KPMG verifying the reported emissions. This statement is appended to the company's sustainability and CDP reports. According to CDP's scoring methodology, the breadth, level of detail, and transparency in Transurban's Scope 3 reporting meets investor expectations and shows best practices in reporting.

Beyond measuring and reporting its Scope 3 emissions, Transurban shows how corporations can integrate Scope 3 emissions into business decisions. The company maintains a code of conduct which applies to all suppliers and features climate-related KPIs. Transurban has also recently set an emissions target with the goal to reduce Scope 3 emissions associated with capital goods by 55 per cent per million dollars in capital expenditure by FY 2030, measured against a 2019 base year. In June 2020, the target was validated by the Science-based Targets Initiative as consistent with a 1.5° pathway.

5. Proposals for implementing mandatory climate risk disclosure

These proposals recommend immediate next steps for implementing a Taskforce on the phase-in of mandatory TCFD-aligned disclosure in Australia, updating existing regulatory guidance and publishing new guidance, including monitoring and reviewing the outcomes. The proposals are supported by detailed recommendations setting out industry priorities for strengthening climate risk disclosure and further integrating TCFD-aligned climate-related risks into regulatory frameworks.

5.1. PROPOSALS FOR IMMEDIATE NEXT STEPS

1. **Taskforce on the phase-in of mandatory TCFD-aligned disclosure by 2024:** Globally, regulatory, investor and company climate-related disclosures are emerging very rapidly. Australia must keep pace. The current coordination under the CFR provides a solid foundation to establish a joint taskforce of the Council of Financial Regulators to coordinate the phasing-in and mandatory reporting of climate-related risks and mainstream climate-related disclosures in companies' audited financial statements. This was also a key recommendation of the Climate Change Authority in 2020. Key principles of the taskforce include participation by representatives from investors, businesses, the major accounting bodies and be open to broader consultation. The phase in should be complete by 2024.

2. In coordination with the Council of Financial Regulators:
    a. **ASIC** reviews existing requirements and guidance (including RG 247, RG 228 and Report 593) to ensure listed companies along with large non-listed companies and asset managers report according to the TCFD recommendations. Prioritise monitoring, awareness building and enforcement of management and disclosure requirements in relation material climate risk, and publishes results e.g. via Report 593 on a periodic basis.
    b. **APRA** establishes via its climate change financial risk prudential practice guide (PPG) a clear expectation that regulated entities publicly disclose material climate risk according to the TCFD recommendations and additional regulatory guidance.
    c. **Treasury** plays an active role in emerging international processes around the alignment of reporting and standard setting on the G20 and other multilateral and plurilateral forums. Establish a consultative forum with businesses, investors and civil society stakeholders to inject their views into Australia's formal position. Review existing legislative framework to identify the most efficient way to implement enforceable mandatory disclosure requirements, together with the impact on society and environment originating from the reporting entity's activities, giving regard to international developments.

4. **ASX Corporate Governance Council** reviews and updates ASX Corporate Governance Principles and Recommendations 4th Edition (February 2019) to establish a best practice governance benchmark that ASX listed companies disclose according to the TCFD recommendations (which, in conjunction with Listing Rule 4.10.3, provide an "if not, why not" basis).

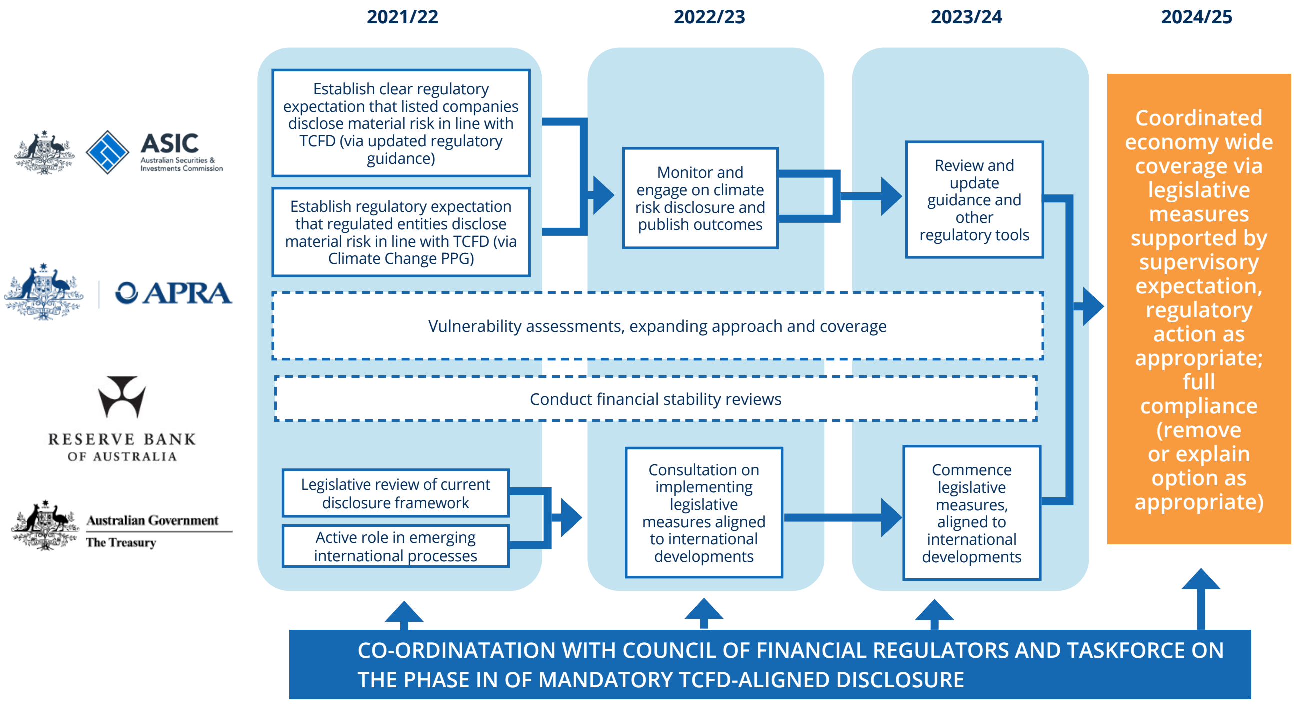


Figure 6. Steps towards mandatory TCFD-aligned disclosures - Timeline of proposed rollout by the CFR

This briefing paper and proposals focus primarily on actions by members of the Council of Financial Regulators and do not focus on the broader role of Government in this process. However, this is not intended to discount the important role that the Federal Government can and must play in this process.

5.2. DETAILED RECOMMENDATIONS

These recommendations address key disclosure expectations for each of the four focus areas - governance, risk management, strategy, and metrics and targets - as well as overarching principles that the **Taskforce on the phase in of mandatory TCFD-aligned disclosure** and its respective members should consider:

1. **Clear mandatory signal:** Reporting requirements, starting with an “if not, why not” approach, are transitioned to full mandatory disclosure for covered entities by 2024 at the latest.
2. **Coverage:** Mandatory disclosure requirements should apply to entities operating across the economy and could be introduced via a phased approach (see roadmap), including for:
    a. All Australian Securities Exchange (ASX) listed companies, beginning with the ASX 300 by 2022. The transition from ASX300 companies only to all ASX listed companies should occur in relatively quick succession (e.g. 1 year).
    b. Financial institutions (banking, superannuation, asset management and insurance), beginning with large financial institutions with either a minimum annual consolidated revenue of $100 million or greater than $1 billion in total assets under management, by 2022.
    c. Consideration should also be given to coverage of large unlisted non-financial companies as a matter of priority. For example, all Australian companies (including large unlisted companies) with a minimum annual consolidated revenue of $100 million (exempted where that company (Company A) is owned or controlled by an ASX-listed company that is required to report and that reports across its whole corporate group including Company A).

3. **Timing:** Coverage should be expanded as soon as practical over time in line with the proposed roadmap.

4. **Alignment:** Consideration should be given to promote alignment of reporting thresholds with equivalent climate disclosure thresholds in New Zealand and more broadly with key trading partners.

5. **Increasing standards aligned with international best practice:** Increase minimum expectation for climate-related reporting over time, through:

   a. Phased compliance periods

   b. Step-by-step approach to increasing quality of disclosures

   c. Providing clear expectations on desired focus areas (governance, strategy, risk management, scenario analysis, metrics and targets)

   d. Establishing a review process to promote alignment of reporting expectations across jurisdictions implementing mandatory disclosure regimes and to consider improvements in disclosure and whether measures are sufficient, or further steps, such as legislative reform, are needed

6. **Guidance to support and strengthen the quality of TCFD-aligned disclosures:** Australia's financial regulators and other relevant bodies develop further guidance to support and strengthen the quality of disclosures across governance, strategy, risk management and targets and metrics, including specifically addressing:

   a. Governance: Disclosures should:

   - Demonstrate board, director and executive skills and expertise in climate change
   - Report links between climate-related performance and executive remuneration

   b. Strategy

   - Risk management plans and public disclosures should state how climate-related risk information translates into action. Disclosures need to move beyond articulating their climate-related structures and analysis to explain how these inform decision-making and performance management.
   - Show how all the pieces of their disclosure form a coherent whole. The links between risk and opportunity, analysis, targets, strategy and remuneration should be articulated and their mutual support for an overarching approach demonstrated.

   c. Risk management

   - Risk management processes should explicitly consider key aspects such as emissions footprints, board, director and executive skills and expertise in climate change, and the assumptions underpinning an entity's current business model. Supporting details for these key aspects should be provided in public disclosures.

   d. Scenario analysis

   - Guidance in relation to scenario analysis that sufficient detail should be provided on the analytical methodology and inputs used, the financial impacts at both company and project or asset levels as appropriate, and the strategic responses to results.

- Expectations in relation to scenario analysis include that:
    1. Uncertainty is not a reason to delay. The translation of very many inputs into a financial analysis is extremely challenging.[135] These challenges can be overcome through establishing clear expectations around when, under what conditions and how standards will evolve over time.
    2. Entities should apply credible scenarios drawn from commonly referenced sources to promote comparability, standardisation and disclose the core input assumptions (e.g. physical impacts on GDP technology costs, demand factors carbon price, national emission reduction target assumptions and scope of portfolio analysis applied to for example).
    3. Entities should apply a range of scenarios which explore exposure to both transition and physical climate risks and opportunities including scenarios which are challenging.
    4. Guidance should create an expectation that entities disclosure a disorderly transition scenario, such as *NGFS disorderly* and *Inevitable Policy Response (IPR) scenarios*, and include at least one 1.5°C (low overshoot) scenario and one 4+°C scenario, or explain in sufficient detail any alternative approaches taken (i.e. on an 'if not why not' basis).
    5. If applying a bespoke scenario analysis model, disclose the input assumptions, comparisons and variance to the standard set of assumptions (e.g. avoid black box disclosures).
    6. Companies assess the appropriate level to disaggregate reporting of scenario analysis impacts, for example at both divisional-wide and project/asset levels and explain why the approach taken is appropriate to achieve accurate, decision useful information taking into account investor's expectations, and increase balance and credibility by reporting negative impacts.
    7. Report on the impact on organisational strategy and actions taken as a result of the scenario analysis, as well as the outputs of the analysis.
    8. Entities should also consider guidance on best practices in conducting and reporting scenario analysis, such as the CDP Technical Note on Scenario Analysis and TCFD guidance.

e. **Metrics and targets**

- Report on both transition and physical risks, costs and implications. For example, quantification of physical risks should be disclosed and consider potential costs of asset damage as well as costs related to adaptation, such as capex to build in resilience to physical impacts.
- Extend reporting of emissions metrics and targets to Scope 3 emissions, where appropriate.

f. **Audit and assurance**

- Expectation that reporting entities provide auditing and assurance of results over time, and by no later than 2024.

APPENDICES

Appendix A: Regulatory developments towards mandating TCFD-aligned disclosure

New Zealand

The New Zealand Government has introduced legislation to make climate-related disclosures mandatory for listed companies, large registered banks, licensed insurers and managers of registered investment schemes.[136] The relevant reporting standard will be developed by New Zealand's External Reporting Board and will be developed in line with the TCFD recommendations. Covered entities will be required to make disclosures from 2023 on a comply or explain basis.[137] New Zealand's Reserve Bank supports these proposals for mandatory disclosure of climate risk 'as a tool that would inform monetary policy, supervision and financial stability'.[138]

UK

The UK Treasury has published a roadmap towards mandatory climate-related disclosures, prepared by a 'cross-government department and cross-regulator' taskforce established in 2019.[139] The roadmap sets out an indicative path towards mandatory TCFD-aligned climate-related disclosures across the UK. It covers seven categories of organisations: UK-registered companies; banks and building societies; insurance companies; asset managers; life insurers and FCA-regulated pension schemes; and occupational pension schemes. The roadmap is designed to present a coordinated approach across the economy. For UK listed companies, the UK Financial Conduct Authority (FCA) has introduced rules requiring premium[140] listed companies to state whether they have made disclosures about how climate change affects their business, consistent with the TCFD recommendations, and if not, why.[141] The FCA planned to consult in the first half of 2021 on extending the scope of these rules and also on introducing TCFD obligations for asset managers, life insurers and pension providers. The FCA intends to tighten the rules over time, moving from current 'comply or explain' to mandatory disclosure by 2025.[142] The UK Government also released in March 2021 proposals to require UK companies and Limited Liability Partnerships (LLPs) to disclose climate-related financial information in line with the four overarching pillars of the TCFD recommendations on a mandatory basis, to be implemented through statutory instruments and applicable for accounting periods starting from April 2022.[143]

The UK Department of Work and Pensions also plans to introduce requirements for pension funds to: Have in place 'effective governance, strategy, risk management and accompanying metrics and targets for the assessment and management of climate risks and opportunities'; and to disclose these arrangements in line with the TCFD recommendations.[144]

Hong Kong

Hong Kong's financial regulators, via the Green and Sustainable Finance Cross-Agency Steering Group, have committed to implementing mandatory TCFD-aligned reporting for companies and financial institutions 'as soon as practicable' and 'no later than 2025'.[145] This commitment builds on the existing requirements of listed companies to provide climate-related disclosures for financial years commencing on or after 1 July 2020, as well as initial steps taken with respect to banks and asset managers to introduce requirements in relation to climate-related financial risk covering four key elements: governance, investment management, risk management and disclosure, aligned with the TCFD recommendations.[146]

Canada

In 2019, Canada's Expert Panel on Sustainable Finance published a roadmap to mainstream sustainable and climate-related finance in Canada. Defining and pursuing a Canadian approach to implementing the TCFD recommendations, and embedding climate-related risk into monitoring, regulation and supervision of Canada's financial system, were among the Expert Panel's key recommendations.[147] The Canadian Government and financial regulators are currently considering approaches to implement the recommendations.

Canadian companies that receive COVID-19-related loans under the Large Employer Emergency Financing Facility (LEEFF) must publish annual climate-related disclosure reports. These reports must highlight how corporate governance, strategies, policies and practices will help manage climate-related risks and opportunities, and indicate how the company will contribute to achieving Canada's commitments under the Paris Agreement and goal of reaching net zero emissions by 2050.[148]

EU

The European Commission has recently completed its consultation process on proposed revisions to its Non-Financial Reporting Directive (NFRD), which includes proposals to bring the principles and content of the TCFD recommendations within the scope of the NFRD. The consultation report, published July 2020, noted that 71 per cent of respondents agreed that if there were to be common European non-financial reporting standards, it should incorporate the TCFD recommendations.[149]

Singapore

The MAS has published regulatory guidelines which set out the Authority's expectations on environmental risk management for asset managers, banks and insurers.[150] Published in December 2020, the guidelines cover: governance and strategy; research and portfolio construction; portfolio risk management; stewardship and disclosure of environmental risk information. The guidelines set a standard that financial disclosure is in line with well-regarded international reporting frameworks (e.g. standards and frameworks set by the CDP, Climate Disclosure Standards Board, Global Reporting Initiative, International Integrated Reporting Council and Sustainability Accounting Standards Board) such as TCFD recommendations; and that financial institutions should review their disclosures regularly to improve their comprehensiveness, clarity and relevance, taking into account generally accepted measurement practices and methodologies.

Switzerland

The Swiss Federal Council has directed authorities to prepare the binding implementation of the TCFD recommendations by Swiss companies in all sectors of the economy. The Federal Council is further advising companies to apply the TCFD recommendations now.[151] Swiss Financial Market Supervisory Authority (FINMA) is introducing disclosure obligations for banks and insurance companies based on the TCFD recommendations and designed to be principles-based, giving institutions flexibility when implementing them. FINMA noted all participants in its consultation fundamentally welcomed the clarification of disclosure obligations and deemed it appropriate to base these on the TCFD.[152]

Brazil

The Central Bank of Brazil launched its sustainability agenda in September 2020. Among the unveiled measures, the Central Bank committed to implement mandatory climate-related disclosures for financial institutions aligned with the TCFD recommendations by 2022.[153] The Central Bank recently completed consultations on proposed disclosure rules for social risk, environmental risk, and climate-related risk management by financial institutions. The new regulation will be subject to principles of proportionality that consider an institution's size and risk profile.[154]

US

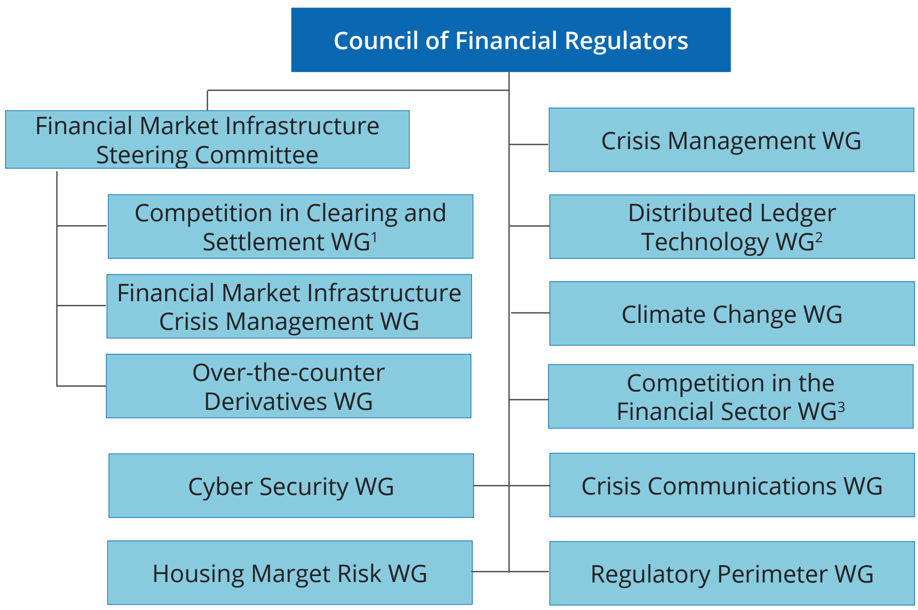
The US Securities and Exchange Commission (SEC) is currently reviewing its 2010 guidance on climate-related disclosures and is consulting on approaches to implementing new requirements.[155] The US Treasury has articulated significant concerns that the current financial reporting system is not producing the reliable, consistent, and comparable disclosures needed for investors to accurately compare climate-related risks and opportunities across companies.[156]

US Treasury will work with the SEC as part of its participation in international discussions to promote effective and consistent approaches to disclosure.[157] The President's executive order on climate-related financial risk issued in May 2021 is expected to push forward implementation of climate risk management and disclosure requirements across the US economy.[158]

Appendix B: Council of Financial Regulators and member roles and responsibilities

The Council of Financial Regulators (CFR) comprises APRA, ASIC, the RBA and Treasury. The CFR's objectives are to promote stability of the Australian financial system and support effective and efficient regulation by Australia's financial regulatory agencies. In doing so, the CFR recognises the benefits of a competitive, efficient and fair financial system.[159] The CFR operates as a means for cooperation and coordination among member agencies, with formal regulatory or policy decision-making powers resting with its members under their respective acts. Figure 7 below shows current CFR working Groups, including a climate change WG.

CFR Working Groups as at June 2019



1 Includes the ACCC but not APRA
2 Includes AUSTRAC
3 Includes ACCC

All groups include APRA, ASIC, the RBA and the Treasury unless otherwise noted

Source RBA

Figure 7. CFR Working Groups[160]

Each member of the CFR has different responsibilities in the Australian financial system, briefly outlined in the table below.

Regulator	Roles and responsibilities
APRA	• Oversees banks, building societies, credit unions, general and life insurance companies, friendly societies and most of the superannuation industry • Responsible for the prudential supervision of individual institutions and for promoting financial system stability • Required to balance the objectives of financial safety and efficiency, competition, contestability and competitive neutrality, and in doing so is to promote financial system stability in Australia
ASIC Australian Securities & Investments Commission	• Australia's corporate, markets and financial services regulator • Functions under the ASIC Act include to: - Maintain, facilitate and improve the performance of the financial system and entities in it - Promote confident and informed participation by investors and consumers in the financial system - Administer the law effectively and with minimal procedural requirements - Enforce and give effect to the law - Receive, process and store, efficiently and quickly, information that is given to it and make information about companies and other bodies available to the public as soon as practicable

Regulator	Roles and responsibilities
RESERVE BANK OF AUSTRALIA	• Australia’s central bank • Duty to contribute to the maintenance of price stability, full employment, and the economic prosperity and welfare of the Australian people • Functions and activities include: - Setting the cash rate to meet a medium-term inflation target - Working to maintain a strong financial system and efficient payments system - Issuing the nation’s banknotes - Elected banking services to the Australian Government and its agencies, and to a number of overseas central banks and official institutions - Managing Australia’s gold and foreign exchange reserves
Australian Government The Treasury	• Central policy agency for the Australian Government • Seeks to improve the wellbeing of Australian people by providing high-quality policy advice to the Australian Government and assisting in the implementation of key policy initiatives • Responsibility for advising the Federal Government on financial stability issues and on the legislative and regulatory framework underpinning financial system infrastructure • This includes on policy process and reforms that: - Promote a secure financial system and sound corporate practices - Remove impediments to competition in products and services markets - Safeguard the public interest in matters such as consumer protection and foreign investment

Appendix C: Existing regulatory framework and key guidance for climate risk disclosure in Australia

PRIMARY LEGISLATION[161]

Reference	Description
Superannuation Industry (Supervision) Act 1993 (SIS Act)	• Section 52A(2)(c) Requirement that a Trustee Director must act in the best interests of "beneficiaries" • Section 52A(2)(b) Requirement that a Trustee Director must exercise due care, skill and diligence in relation to all matters affecting a registrable superannuation entity, and must comply with the "enhanced director obligations in relation to MySuper products" • Section 52A(2)(f) requirements regarding adherence to the investment covenant
Corporations Act 2001 (Corporations Act)	• Section 180(1) on the exercise of directors' duties • Section 299A(1) requires that a director's report contain information that members of the listed entity would reasonably require to make an informed assessment of the operations of the entity, and the business strategies and prospects for future financial years. • Section 1013DA Requirements for superannuation funds to disclose how ESG considerations are integrated into investment decisions • Section 710 requirements for retail investors (issuers and advisers) regarding prospectuses and other documents
National Greenhouse and Energy Reporting Act 2007 (Cth) (NGER Act)	Companies that are large emitters of greenhouse gases are also required to report their scope 1 and scope 2 emissions and energy consumption under the National Greenhouse and Energy Reporting (NGERs) legislation. Importantly however, NGER reporting doesn't address 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. From an investment perspective, it also doesn't capture equity exposure to significant carbon holdings from lending or investing activities.[162]

RULES, STANDARDS AND GUIDANCE[163]

Reference	Description
Companies	
ASX Corporate Governance Principles and Recommendations 4th Edition (February 2019), Recommendation 7.4[164 165]	Recommendation 7.4 provides that a listed entity should disclose whether it has any material exposure to environmental or social risks and, if it does, how it manages or intends to manage those risks. Commentary at Recommendation 7.4 notes: *'One particular source of environmental risk relates to climate change. This includes:* • *Risks related to the transition to a lower-carbon economy, including policy and legal risks, technology risk, market risk and reputation risk; and* • *Physical risks, such as changes in water availability, sourcing, and quality; food security; and extreme temperature changes affecting an organisation's premises, operations, supply chains, transport needs, and employee safety.* *Many listed entities will be exposed to these types of risks, even where they are not directly involved in mining or consuming fossil fuels. The Council would encourage entities to consider whether they have a material exposure to climate change risk by reference to the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures ("TCFD") and, if they do, to consider making the disclosures recommended by the TCFD.'*
ASX Listing Rules, rule 4.10.3[166]	Listing Rule 4.10.3 requires ASX-listed entities to benchmark their corporate governance practices against the Council's recommendations and, where they do not conform, to disclose that fact and the reasons why. This includes whether the company has followed recommendation 7.4 in relation to social and environmental risk, and giving consideration to material climate change risk and making disclosures recommended by the TCFD. The rule encourages listed entities to adopt the Council's recommended practices but does not force them to do so. It gives a listed entity the flexibility to adopt alternative corporate governance practices, if its board considers those to be more suitable to its particular circumstances, subject to the requirement for the board to explain its reasons for adopting those alternative practices.

ASIC - RG 247 effective disclosure in an operating and financial review (2019)[167]	This Guide published by ASIC is for listed entities and their directors. It sets out our guidance for directors on providing useful and meaningful information to shareholders or unit holders when preparing an operating and financial review (OFR) in a directors' report. RG 247.66 provides: *'Climate change is a systemic risk that could have a material impact on the future financial position, performance or prospects of entities. Examples of other risks that could have a material impact for particular entities may include digital disruption, new technologies, geopolitical risks and cyber security. Directors may also consider whether it would be worthwhile to disclose additional information that would be relevant under integrated reporting, sustainability reporting or the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), where that information is not already required for the OFR. Note: Climate-change-related risk disclosures in the OFR and in any voluntary disclosures (such as those recommended by the TCFD) should not be inconsistent.'*
ASIC RG 228 Prospectuses: Effective disclosure for retail investors (12 August 2019); s710 of the Corporations Act.[168]	ASIC RG 228 is a guide for retail investors (issuers and advisers) present prospectuses and other documents in a 'clear, concise and effective' manner and how to prepare prospectuses that satisfy the content requirements in s710 of the Corporations Act. This guide lists climate change risks as common risks that may need to be disclosed in an entity's prospectus and provides examples to consider.
Report 593 *Climate risk disclosure by Australia's listed companies*	Report 593 *Climate risk disclosure by Australia's listed companies* (REP 593) contains our observations and findings from a surveillance project examining climate risk disclosure by listed companies in Australia. It sets out some high-level recommendations relating to the consideration and disclosure of climate risk.[169]
(ARPA Regulated) Financial Institutions	
APRA Prudential Standard CPS 220 Risk Management[170]	This prudential standard requires an APRA-regulated institution and a head of a group to have systems for identifying, measuring, evaluating, monitoring, reporting, and controlling or mitigating material risks that may affect its ability, or the ability of the group it heads, to meet its obligations to depositors and/or policyholders. These systems, together with the structures, policies, processes and people supporting them, comprise an institution's or group's risk management framework.

Climate change financial risk prudential practice guide (PPG)	APRA climate change financial risk prudential practice guide (PPG) is expected to be finalised by the end of 2021.[171] This guidance is designed to assist entities in complying with their existing prudential requirements, including those found in Prudential Standard CPS 220 Risk Management. The PPG applies to all APRA regulated entities and aims to set out APRA's views on better practice and outline prudent practices in this area. The PPG aims to cover areas relevant to the prudent management of climate change financial risks, aligned with the recommendations of the TCFD, including aspects of governance, strategy, risk management, metrics and disclosure.
Prudential Standard SPS 530 Investment Governance (SPS 530); SPG 530[172]	Prudential Practice Guide SPG 530 Investment Governance (SPG 530) aims to assist a registrable superannuation entity licensee in complying with requirements in relation to the formulation and implementation of an investment strategy, including in relation to environmental, social and governance (ESG) considerations. APRA intends to update SPS 530 and SPG 530 in response to industry views outlined in the post-implementation review of the superannuation prudential framework published in April 2019.
Australian Accounting Standards Board 2018, Climate-related and other emerging risks disclosures: Assessing financial statement materiality using AASB Practice Statement 2[173]	The Australian Accounting Standards Board (AASB) and Auditing and Assurance Standards Board (AUASB) expect that directors, preparers and auditors will be considering APS/PS 2, when preparing and auditing financial statements. The AASB notes that 'Even though the guidance is not mandatory, it represents the IASB's best practice interpretation of materiality.' APS/PS 2 only applies to the financial statements and not to the other information contained in the annual report. This AASB guidance states that financial sector entities (banks, insurance groups, asset owners and asset managers) and non-financial sector entities (energy, transportation, material and buildings and agriculture, foods and forest products) determining material disclosures are likely to assess that it is necessary to explain whether and how they have considered climate-related risk in their impairment assessments, and how climate-related risks have affected other decisions made in relation to the recognition or measurement of items in the financial statements (see section 5).

Further Industry-led guidance	
Scenario analysis of climate-related physical risk for buildings and infrastructure: financial disclosure guidance. Technical report developed by the Climate Measurement Standards Initiative[174]	The Climate Measurement Standard Initiative (CMSI), a finance industry-led initiative, has developed a voluntary process and recommendations on applying scenarios for the purpose of assessing physical risk impacts for buildings and infrastructure. Published in September 2020, the CMSI financial disclosure guidance is designed to support the TCFD recommendation by providing banks and financial institutions with scientific and technical guidance on how to assess these climate-related risks. Firms involved included Westpac, National Australia Bank (NAB), QBE, Suncorp and the Commonwealth Bank while the scientific research came from the CSIRO Climate Science Centre, Bureau of Meteorology and leading universities.
ACSI and FSC, ESG Guide for Australian Companies (2015)[175]	This guide on ESG disclosure by companies is designed to complement the reporting requirements of other best practice guides such as the ASX Corporate Governance Principles and Recommendations, and other existing guides issued individually by The Australian Council of Superannuation Investors (ACSI) and the Financial Services Council (FSC).
Governance Institute Australia, *Climate change risk disclosure: A practical guide to reporting against ASX Corporate Governance Council's Corporate Governance Principles and Recommendations* (February 2020)[176]	This voluntary guide by the Governance Institute of Australia, published in February 2020, provides practical guidance to ASX-listed entities on disclosing climate risk in line with ASX Corporate Governance Council's Corporate Governance Principles and Recommendations, 4th edition.

Appendix D: Trends in company climate risk reporting, including improvements, challenges and investor priorities to ensure decision-useful disclosures

Theme	Improvements[177]	Challenges and gaps	Investor priorities[178]
TCFD Adoption	In 2019, 60 ASX200 companies had adopted the framework and 14 companies committed to disclose against the framework Over 56 per cent of companies from higher risk sectors have adopted TCFD There is an emerging trend for companies to link transition risks into their asset impairment analysis	A number of companies still haven't adopted TCFD Most disclosures are not being integrated into financial statements	All companies consider climate risk against the TCFD framework and disclose accordingly and as appropriate Companies discuss climate-related risks within financial statements to provide appropriate context for investment decision-making
Emissions reporting and targets	A majority (60%) of the ASX200 disclose the carbon footprint of their operations (Scope 1 & 2)	Only 37% of ASX200 companies have set emissions reduction targets and most are only short term A lack of target setting in sectors where there is a material exposure to direct and indirect transition-risk Limited disclosure emissions footprint or reduction targets for Scope 3 emissions	Link short- and long-term incentives to decarbonisation targets Consider and disclose on Scope 3 emissions

Theme	Improvements[177]	Challenges and gaps	Investor priorities[178]
Analysis of transition risk	Number of companies undertaking scenario analysis has significantly increased, from 18 to 32 in 2019	Few companies are using challenging and disruptive 1.5°C scenarios Low uptake of 1.5°C scenarios suggest many may be failing to stress-test their portfolios against sufficiently challenging and robust scenarios[179] Many companies in sectors with high exposure to transition risk do not disclose scenario analysis	Companies include challenging and disruptive 1.5°C scenarios All companies in sectors with high exposure to transition risk undertake and disclose scenario analysis
Comparability and transparency	Some companies are providing detailed scenario analysis disclosures covering enterprise and asset-level valuation impacts, and information about potential demand changes for products or commodities	Comparability of scenarios • 35 different scenarios used by 32 companies • Insufficient disclosure of inputs and assumptions in bespoke analysis • Limited transparency on the assumptions, signposts and inputs that drive bespoke scenarios • Failure to disclose when assumptions in standardised scenarios were reduced or excluded Provision of general, qualitative information that provides little insight for investors	Meaningful disclosures providing detailed descriptions of parameters used, main assumptions applied and most significant impacts on the business Analysis should include quantification of potential overall climate-related financial impact on businesses and large individual assets, as appropriate

Theme	Improvements[177]	Challenges and gaps	Investor priorities[178]
Corporate strategy	Increasing number of net zero emissions commitments and targets	Limited linkages between how scenario analysis is informing company strategy	Companies should disclose how their corporate strategy is informed by the analysis and explain how their actions and strategies are linked to a transition to a net zero emissions economy
Company resilience	Increasing sophistication in scenario analysis and disclosure	Estimated financial performance under all scenarios may be unrealistic for several reasons: • Companies are not adequately accounting for physical climate risk, even in analyses that included limited policy action and extreme levels of warming, despite the widely acknowledged trade-off between the two types of risk • No quantification of downside risk • Questionable assumptions and inputs may be causing overly optimistic views of future cash flows under 1.5°C or well below 2°C, scenario	Where companies fail to identify cash flow reductions under the applied scenarios, companies should examine a broader range of scenarios and test rigour of assumptions and inputs

Theme	Improvements[177]	Challenges and gaps	Investor priorities[178]
Physical risk	In 2019, 10 companies presented physical risk in a manner that suggested a robust internal analysis was being undertaken and a further 28 which provided some general physical risk disclosure	Few companies provide meaningful disclosure on physical risk	More in-depth analysis on what physical climate change risks would impact businesses and the frequency of them

Appendix E: The Australian Sustainable Finance Roadmap recommendations on climate risk disclosure

The roadmap makes important recommendations on climate risk disclosure, which sit within a broader suite of recommendations to integrate sustainability into practice. These include that:

- Financial institutions with annual consolidated revenue of more than $100 million report according to the Task Force on Climate-related Financial Disclosures (TCFD) recommendations by 2023 on an 'if not, why not' basis.
- All Australian Securities Exchange (ASX) listed companies, beginning with the ASX 300, report according to the TCFD recommendations by 2023 on an 'if not, why not' basis, and guidance is developed for ASX-listed entities to support TCFD-aligned reporting.
- ASFI, together with the Climate Measurement Standards Initiative (CMSI) and other stakeholders, develops guidance to support TCFD-aligned reporting by financial institutions and facilitates discussion on how these reporting practices can be developed and implemented.
- Sustainability reporting and assurance is mandated for listed entities and for unlisted assets (wholly owned by financial institutions).
- Financial institutions undertake scenario analysis and stress test the resilience of their organisation to physical and transition risks from climate change.
- Financial institutions work with Australia's financial system regulators on an ongoing basis to embed sustainability into regulatory guidance and standards to drive system-wide practice.

ENDNOTES

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