

Are you prepared for
the increasing investor
scrutiny on climate
risk disclosures?

Climate Risk Disclosure Barometer: Australia
2019



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Foreword

It is my pleasure to introduce the third edition of EY Climate Risk Disclosures Barometer: Australia. This paper provides a perspective on the state of disclosures from Australia's largest companies, in sectors exposed to the risks of climate change, and considers the extent to which Australian disclosures are in alignment with the Task Force on Climate-related Financial Disclosures (TCFD)'s Recommendations (the Recommendations).

EY 2018 Global Climate Change and Sustainability Services study on institutional investors demonstrated investors' growing appetite for information relating to the risks from climate change in order to make informed decisions. 48% of investors surveyed said they would immediately rule out an investment on the basis on climate risk disclosures; up 40% since the 2017 survey. And the vast majority of investors (92%) stated that climate risk disclosures would affect their investment decisions. Yet the findings in this report reveal that whilst Australian companies are responding to these demands through increased disclosures, there is still much room for improvement in the quality of those disclosures.

In 2018, for the first time, we published EY Global Climate Risk Disclosures Barometer which offers international comparisons and insights into leading

practice disclosures across the world. This report adds to these insights, by covering 175 of Australia's largest companies in highly impacted sectors. This year's Australian barometer shows that on average Australian companies are amongst global leaders in terms of coverage of the TCFD Recommendation, but there is still a need for improvement if companies are to meet the growing expectations of stakeholders.

We hope this report will inspire you to fully explore and disclose your company's climate risks and to identify and seize opportunities

Dr. Matthew Bell
EY Asia-Pacific Leader
Climate Change and
Sustainability Services

About this report

In June 2017, the TCFD, set up by the Financial Stability Board (FSB), finalised its recommendations on climate-related financial risk disclosures (the Recommendations). The Recommendations aim to improve organisational understanding of climate risks and opportunities, and their potential impacts, and thus reduce the risk of a systemic financial shock to the economy.

This report provides an annual snapshot on the alignment with the Recommendations across sectors in Australia likely to be highly impacted.

This report is intended to provide companies, regulators, investors, and stakeholders of all types with an understanding of the current state of Australian climate risk reporting. It also offers insights into the differences in reporting across sectors, and suggests areas of improvement, in the quality and coverage of climate risk disclosures.

TCFD recommendations

The Recommendations provide a reporting framework for climate risks and opportunities that can be integrated with current financial reporting disclosures. They define climate impacts in the following two distinct categories, which should both be addressed:

- ▶ **Transition impacts** reflect the risks and opportunities associated with changes in the economy, including growth impacts, sector re-weighting and other macroeconomic factors.
- ▶ **Physical impacts** impacts reflect the changes in the physical climate (e.g., altered rainfall amounts, intensities and timings) that may impact future business activities.

The Recommendations also provide specific guidance for certain higher-risk sectors in both the financial sector (e.g., banks, insurance companies, asset owners and managers) and other sectors (e.g., energy; transportation; material and buildings; and agriculture, food and forest products).

The adoption of the Recommendations are voluntary in most countries (although certain elements have been legislated in France). However, several national-level regulators and global investors have publicly supported the Recommendations, and are accelerating their adoption. The increasing level of shareholder activism in high-risk sectors is placing pressure on companies to pay closer attention to their disclosures on climate risks and opportunities, and familiarise themselves with the Recommendations.

Drivers

Adoption of the Recommendations by companies is being driven by both external and internal stakeholders. The rationale for companies to adopt the Recommendations varies between stakeholder groups.

Stakeholder group		Drivers	Actions	Examples
External	Investors	Concern about long-term value of investments	Shareholder Resolutions	An increasing number of questions have been asked at Annual General Meetings (AGM) relating to the impact that climate change will have on the business. Several of these resolutions requested improved disclosures relating to climate risk in alignment with the Recommendation. In 2018, a number of Australian companies faced this type of resolution including QBE Insurance Group, Origin Energy, Rio Tinto, Santos, and Whitehaven Coal.
		Reputational concerns	Divestment	The world largest sovereign wealth fund (Norges Bank) had previously divested from mining and power generation companies that derive 30% or more of their income or power from thermal coal. In March 2019, the Bank announced it will also divest from oil and gas exploration companies but would retain stakes in companies, such as BP and Shell that are developing renewable energy technologies. The policy has been introduced to avoid exposure to long-term asset commodity prices with volatility from climate risk.

Stakeholder group		Drivers	Actions	Examples
External	Investors	Concern about long-term value of investments Reputational concerns	Direct engagement with management	Blackrock, currently the world's largest asset manager, has continually pushed improved disclosures on climate risk and has encouraged companies to adopt the Recommendations. In his 2019 Letter to CEOs, Larry Fink, BlackRock Chairman and CEO, reiterated this view: "As wealth shifts and investing preferences change, environmental, social, and governance issues will be increasingly material to corporate valuations. This is one of the reasons why BlackRock devotes considerable resources to improving the data and analytics for measuring these factors, integrates them across our entire investment platform, and engages with the companies in which we invest on behalf of our clients to better understand your approach to them."
	Other	Reduce exposure of civil society to negative financial impacts relating to climate risk	Reports encouraging adoption	Australia's financial regulators, the Australian Prudential Regulation Authority (APRA), the Australian Securities and Investments Commission (ASIC), the Reserve Bank of Australia (RBA) have each spoken publicly about the systemic economic risks posed by climate change and highlighted an increased focus on the financial implications of climate change scenario analysis. In March 2019, RBA Deputy Governor, Guy Debelle emphasised in reference to the Recommendations that "both the physical impact of climate change and the transition are likely to have first-order economic effects."
			Legislation	The Senate Committee hearing on climate risk disclosure questioned the need for additional regulatory guidance driving momentum for more detailed regulatory guidance on carbon risk disclosure. Further government scrutiny is expected in the future should there be a change in Government. Internationally there is growing momentum to review the definition of "fiduciary duty" to explicitly require it to include environmental and social outcomes.
			Legal Action	Legal action have been taken by shareholders against companies for not disclosing a true and fair view of their financial statements by not including climate change risk disclosures in their annual report. For example, in July 2018 an Australian superannuation fund member filed suit against the member's superannuation fund alleging that the fund violated the Corporations Act 2001 by failing to provide information related to climate change business risks and any plans to address those risks. More legal action of a similar nature is expected as the impact from climate change increase.
		Financial accounting standards	In December 2018, the Australian Accounting Standards Board (AASB) and the Auditing and Assurance Standards Board (AUASB) released a joint statement on the integration of climate risks into financial statement materiality considerations: Climate related and other emerging risk disclosures: assessing financial statement materiality using AASB Practice Statement 2. While not mandatory, the AASB and AUASB expect that directors and preparers consider the materiality of relevant climate-related risks when preparing financial statements.	
Internal	Company directors	Personal liability if climate risk not addressed	Legal opinions on Director duties	An influential legal opinion prepared by Noel Hutley QC on Climate Change and Director Duties and commissioned by the Centre of Policy Development, concluded that Australian company directors "who fail to consider 'climate change risks' now could be found liable for breaching their duty of care and diligence in the future". This has made company directors more aware of the potential personal liabilities of not addressing climate risk. In 2019 this conclusion was reiterated, reemphasising the need for directors to take affirmative action to understand, manage, and disclose climate risks.
	Strategy team	Maintaining long-term business growth	Developing long-term business plans that include climate risk	A number of companies have released Climate Change Position Statements or equivalent reports. Sometimes these reports explicitly reference alignment with the TCFD. Typically, these reports outline the company's view on climate change (and the extent to which it is aligning its business strategy to deliver a less than two degrees global warming scenario), and then discusses the implications and proposed action plan to integrate this position into its long-term business plans.

Methodology

Research for this report assessed the extent to which companies had adopted the Recommendations based on publicly-available disclosures as at the end of March 2019. ASX200 companies and the 20 largest superannuation funds were filtered against sectors identified as most exposed to climate related risks.

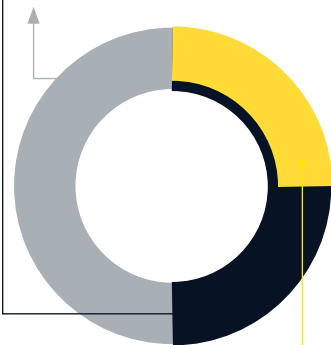
Scoring

Companies were scored on two different metrics, being the coverage and quality of disclosures.

Coverage

Companies were scored on the basis of the percentage of the 11 TCFD recommendations addressed by them. A score of 100% indicates that the company has addressed all the recommendations.

Companies that have no disclosures related to the core element.



Quality

Companies were given a rating (out of five) on the basis of the quality of the disclosure, expressed as a percentage of the maximum score should the company implement all 11 TCFD recommendations.

A score of 100% indicates that the company had adopted all the recommendations and the quality of the disclosure met all the requirements of the TCFD (i.e., gaining a maximum score of 5 for each of the 11 recommendations).

The quality of the disclosures was scored using the following scoring system:

- 0 – Not publicly disclosed
- 1 – Limited discussion of the aspect (or only partially discussed)
- 3 – Aspect is discussed in detail
- 5 – Addressed all features of the aspect in the disclosure

Structure of the analysis

A total of 175 companies were assessed. The breakdown of companies assessed by sector is provided in the table below.*

Table 1

	Global Climate Risk Disclosure Barometer	Sectors identified by TCFD as most exposed to risk	Number of companies reviewed
Financial services sector	Banks	Banks	7
	Insurance companies	Insurance companies	7
	Asset owners and managers	Asset owners** Asset managers**	31
Other sectors	Agriculture, food and forest products	Agriculture, food and forest products	15
	Energy	Energy	16
	Manufacturing	Materials and buildings**	20
	Buildings		18
	Mining		25
	Transportation	Transportation	11
	Retail, health and consumer goods	N/A	19
	Telecommunications and technology	N/A	6
Total			175

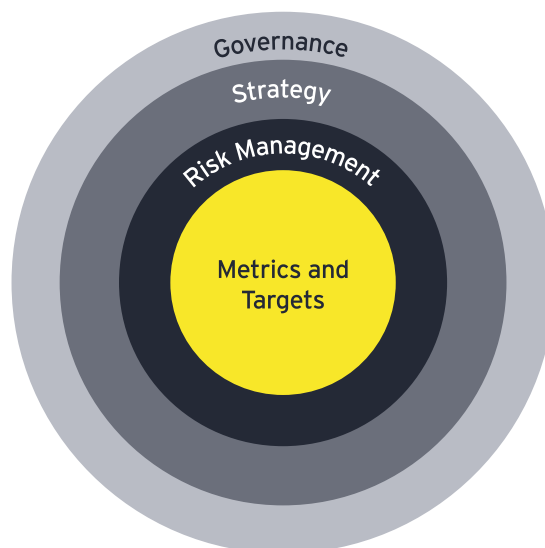
* As at March 2018

** For the purposes of this report, these sectors were re-grouped where distinctions between categories could not be easily determined (assets owners and managers) or where further sub-sector analysis was useful (materials and buildings).

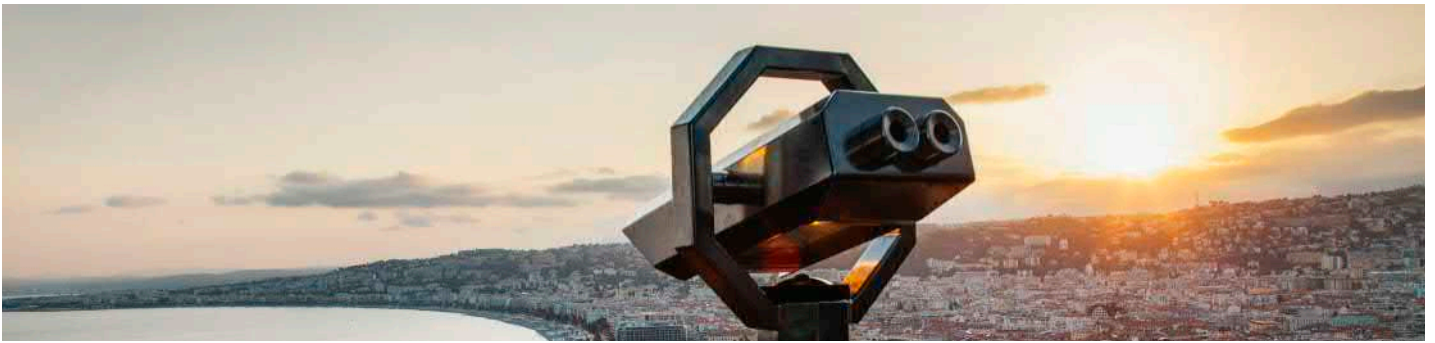
Within each sector, the analysis is presented under the four core elements that reflect how companies operate – governance, strategy, risk management, and metrics and targets (shown in figure above).

*** New sectors for 2018 EY report

Core elements of recommended climate-related financial disclosures



- ▶ **Governance** – The organization's governance around climate-related risks and opportunities
- ▶ **Strategy** – The actual and potential impacts of climate-related risks, and opportunities on the organization's businesses, strategy and financial planning
- ▶ **Risk management** – The processes used by the organization 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



Key trends and observations

As the urgency of climate change continues to be emphasised, businesses need to understand and respond to the impacts now

In October 2018, the Intergovernmental Panel on Climate Change (IPCC)'s Special Report on global warming of 1.5°C outlined that global warming is likely to reach 1.5°C within the next 12-30 years.¹ The report also highlighted that climate-related risk for natural and human systems are significant even at 1.5°C. Other forecasts have highlighted that the 1.5°C warming threshold could temporarily be exceeded within the next five years.²

Australia's climate is characterised by variability and extremes. CSIRO's *State of the Climate 2018* report outlines that Australia can expect to experience: further increases in temperature, with more extremely hot days, an increase in fire risk, high-intensity storms, and intense heavy rainfall. Australia's changing climate will be felt by businesses, affecting different parts of the economy, infrastructure, community and ecosystems. While the physical impacts of climate change are significant, businesses also need to understand the risks associated with transitioning to a low carbon economy. The risks of transitioning to a low carbon economy are currently viewed as more immediate risks to business.

Australia's financial regulators align backing disclosure of climate-related financial risk

Australia's main financial regulators have clarified their expectations that climate risk disclosures should be considered by Australian companies. In March 2019, the RBA completed the trifecta of Australian financial regulators promoting the disclosure of climate-related financial risk. The Council of Financial Regulators (CFR), comprising RBA, APRA and ASIC, has convened a working group to monitor regulatory developments in climate risk and promote efforts to improve risk management and disclosure.³

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We need to think in terms of trend rather than cycles in the weather. Droughts have generally been regarded (at least economically) as cyclical events that recur every so often. In contrast, climate change is a trend. The impact of a trend is ongoing, whereas a cycle is temporary ... The recent IPCC report documents that climate change is a trend rather than cyclical, which makes the assessment much more complicated. What if droughts are more frequent, or cyclones happen more often? The supply shock is no longer temporary but close to permanent. That situation is more challenging to assess and respond to.⁶

Guy Debelle

Deputy Governor, Reserve Bank of Australia

In December 2018, the Australian Accounting Standards Board (AASB) and Auditing and Assurance Standards Boards (AUASB) issued an advisory bulletin on the practicalities of disclosing the impact of climate-related risks that are material to financial statements. This included disclosing whether and how climate risks are reflected in the financial statements and if not, why not.⁴ The 2019 ASX Corporate Governance Principles and Recommendations, also included specific reference to climate risk and encourages entities to implement the Recommendations.⁵

1 Special Report: Global Warming of 1.5°C, Intergovernmental Panel on Climate Change (IPCC), 2018.

2 "Forecast suggests earth's warmest period on record", MET Office, 6 Feb 2019.

3 Financial Stability Review - October 2018, "Regulatory Developments". Accessed via <https://www.rba.gov.au/publications/fsr/2018/oct/regulatory-developments.html>

4 Climate-related and other emerging risks disclosures: assessing financial statement materiality using AASB Practice Statement 2, December 2018, AASB and AUASB. Accessed via: https://www.aasb.gov.au/admin/file/content102/c3/AASB_AUASB_Joint_Bulletin_13122018_final.pdf

5 Corporate Governance Principles and Recommendations, 4th Edition, ASX Corporate Governance Council, February 2019. Accessed via <https://www.asx.com.au/documents/asx-compliance/cgc-principles-and-recommendations-fourth-edn.pdf>

6 "Climate Change and the Economy", Speech, March 2019, Reserve Bank of Australia (RBA). Accessed via <https://www.rba.gov.au/speeches/2019/sp-dg-2019-03-12.html>

Companies should be prepared for climate questions and resolutions at Annual General Meetings

In the past year there has been an increasing number of resolutions raised at Annual General Meetings requesting improved disclosure relating to climate risk and companies positions on climate change and energy issues. In 2018, a number of Australian companies faced this type of resolution including QBE Insurance Group, Origin Energy, Rio Tinto, Santos, and Whitehaven Coal.

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Many shareholders are concerned about climate change. In addition to having an impact on people and the planet, climate change poses a real and immediate risk on investments and has broad and longer term effects on the global economy.

Both in Australia and overseas shareholders are taking action to get the companies they hold shares in to disclose the full extent of their involvement in fossil fuels and to start working towards a low carbon economy.⁷

Australian Centre for Corporate Responsibility

Directors duties and increasing litigation risk

An influential legal opinion prepared by Noel Hutley QC on Climate Change and Director Duties and commissioned by the Centre of Policy Development, concluded that Australian company directors “who fail to consider ‘climate change risks’ now could be found liable for breaching their duty of care and diligence in the future”. This has made company directors more aware of the potential personal liabilities of not addressing climate risk. In 2019 this conclusion was reiterated, reemphasising the need for directors to take affirmative action to understand, manage, and disclose climate risks.

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It is likely that a director who is uninformed as to the risks associated with climate change, or who makes no conscious decision or judgement on this issue in their consideration of corporate strategy, planning and risk management, or in their consideration of transactions coming before them for approval, would fail to discharge their duty of due care and diligence under section 180 of the Corporations Act. The board is required to inquire where information is not presented to them, and to seek advice on specialist and complicated issues. It is also likely that inadequate consideration of climate-related risks will breach the duty.⁸

Sarah Barker
Special Counsel, MinterEllison

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Climate-related risks (including physical, transition and litigation risk) present foreseeable risks of harm to Australian business. This requires prudent directors to take positive steps: to inform themselves, disclose the risks as part of financial reporting frameworks, and take such steps as they may see fit to take, with due regard to matters such as the gravity of the harm, the probability of the risk, and the burden and practicality of available steps in mitigation ... Company directors who fail to consider climate change risks now could be found liable for breaching their duty of care and diligence in the future ... a negligence allegation against a director who had ignored climate risks was likely to be only a matter of time.⁹

**Mr Noel Hutley SC and
Mr Sebastian Hartford Davis**
Climate Change and Directors' Duties

⁷ “Climate Change and the Economy”, Speech, March 2019, Reserve Bank of Australia (RBA). Accessed via <https://www.rba.gov.au/speeches/2019/sp-dg-2019-03-12.html>

⁸ Directors' Liability and Climate Risk: Australia - Country Paper, April 2018, Sarah Barker. Accessed via <https://ccli.ouce.ox.ac.uk/wp-content/uploads/2018/04/CCLI-Australia-Paper-Final.pdf>

⁹ “Climate Change and Directors Duties: Supplementary Memorandum of Opinion”, March 2019, Centre for Policy Development.

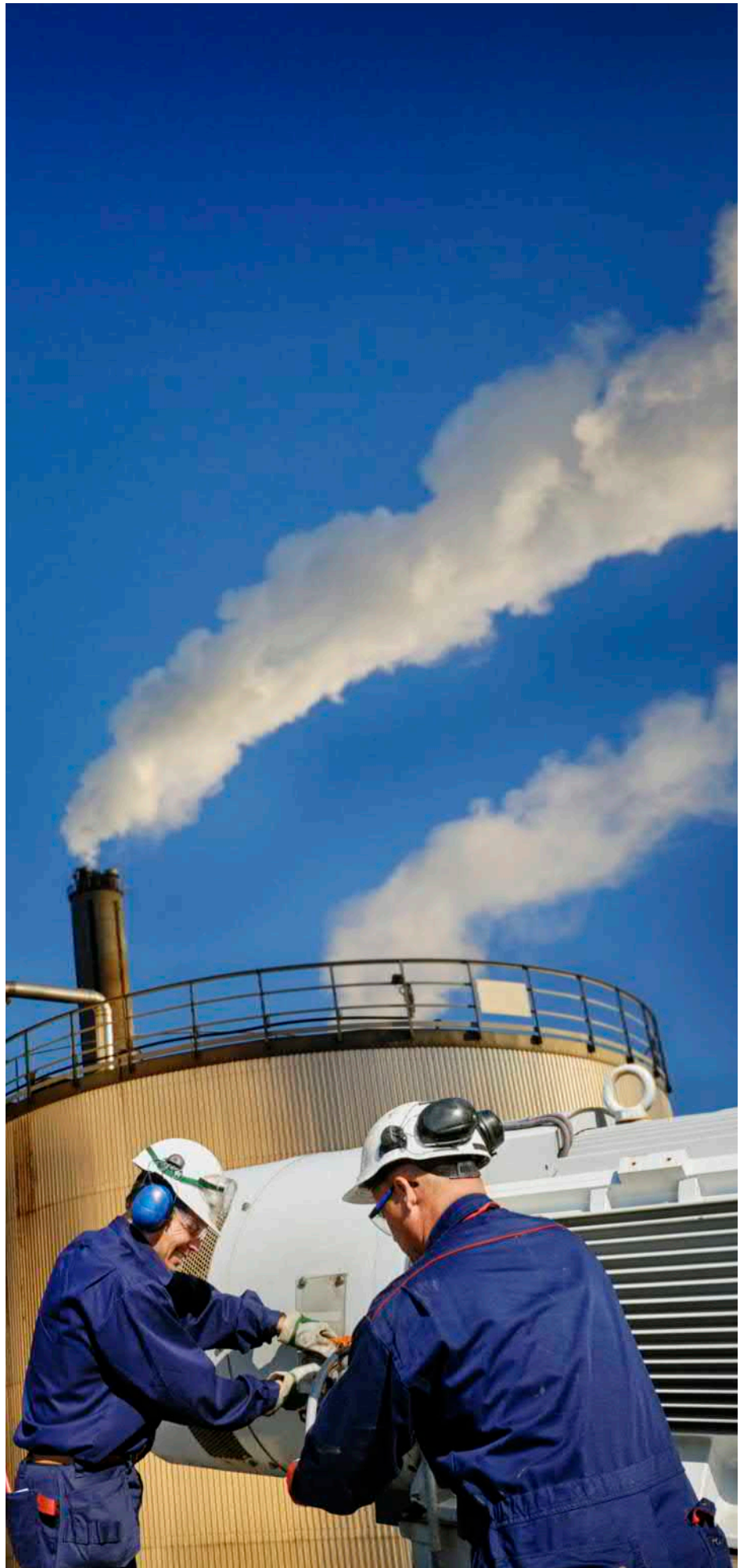
The climate risk disclosures of Australia's largest companies are amongst the world best. But we cannot be complacent: the global average is not good enough.

In 2018, for the first time, EY's climate risk disclosures analysis was expanded to cover more than 500 companies in 18+ countries and regions. This included the assessment of Australia's 30 largest listed entities. The Global Climate Risk Disclosure Barometer provides a global snapshot and allows comparisons across countries with varied regulatory drivers. This report dives deeper in to the Australian context for 175 of Australia's largest listed companies.

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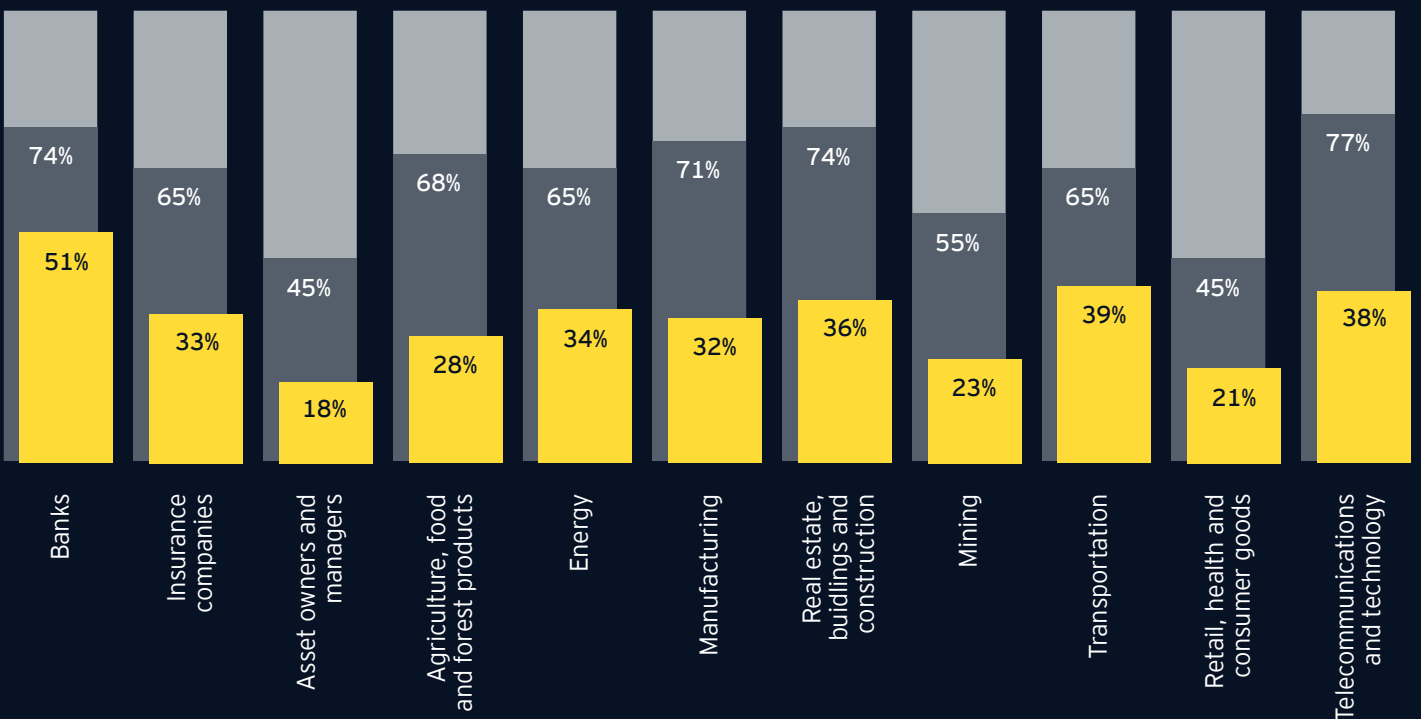
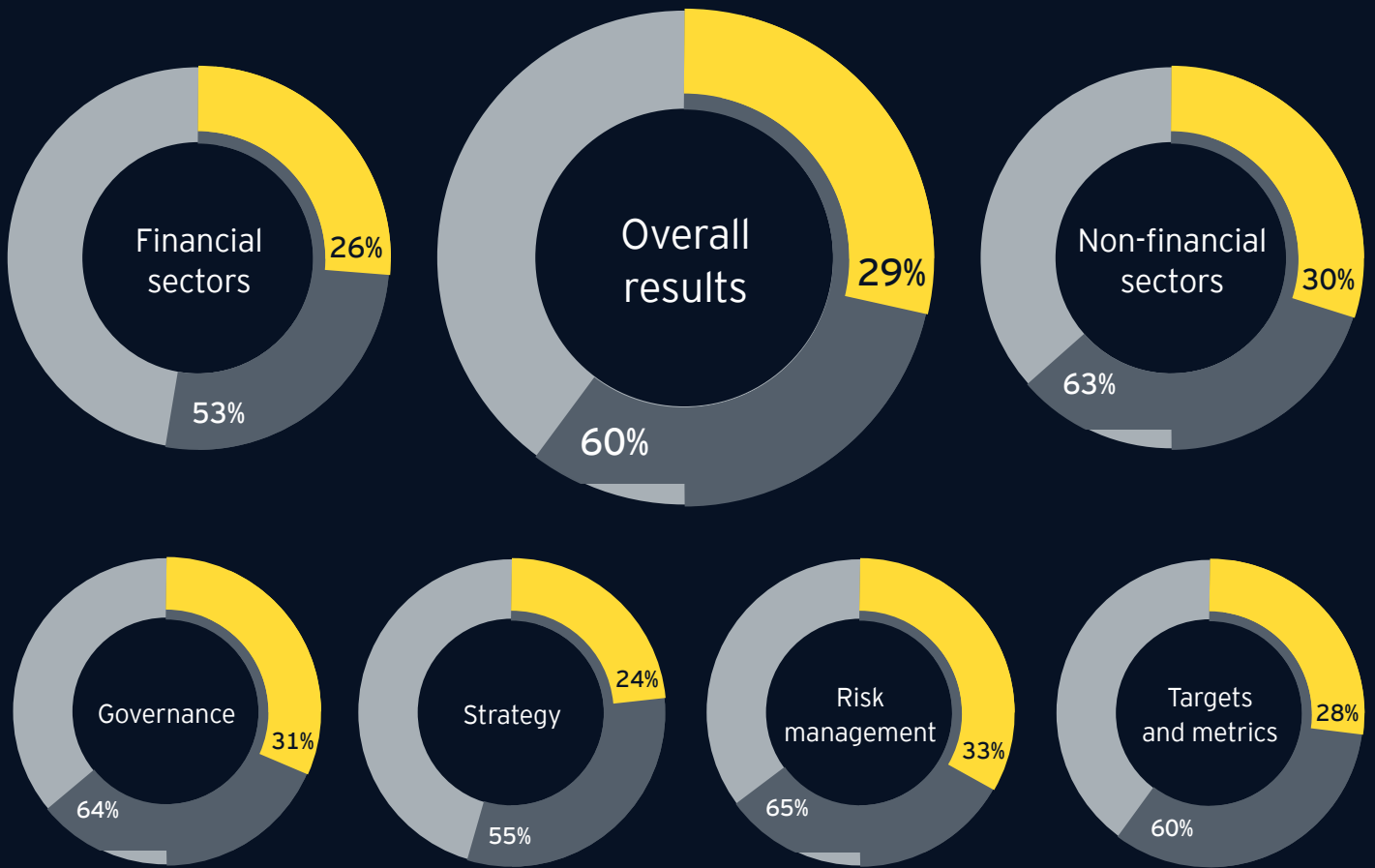
While we are seeing leadership on climate-related risk disclosures from Australia, this leadership is limited to only a few top performers. Across all sectors there is a considerable gap between top performers and laggards. With only incremental improvement observed in disclosures for 2018, we continue to see a large majority of companies lacking the depth in disclosures that investors are seeking. The release of AASB's and AuASB's joint bulletin on assessing financial statement materiality for climate-related risk disclosures has furthered the expectation on Australian companies to consider climate risk, not only in financial fillings but also in financial statements. This has drawn greater attention to climate risk from those in the executive charged with financial affairs as they begin to navigate the complexities of how to factor climate risk in to financial statements such as those relating to asset impairment and fair value.

Josh Martin
Senior Manager, EY

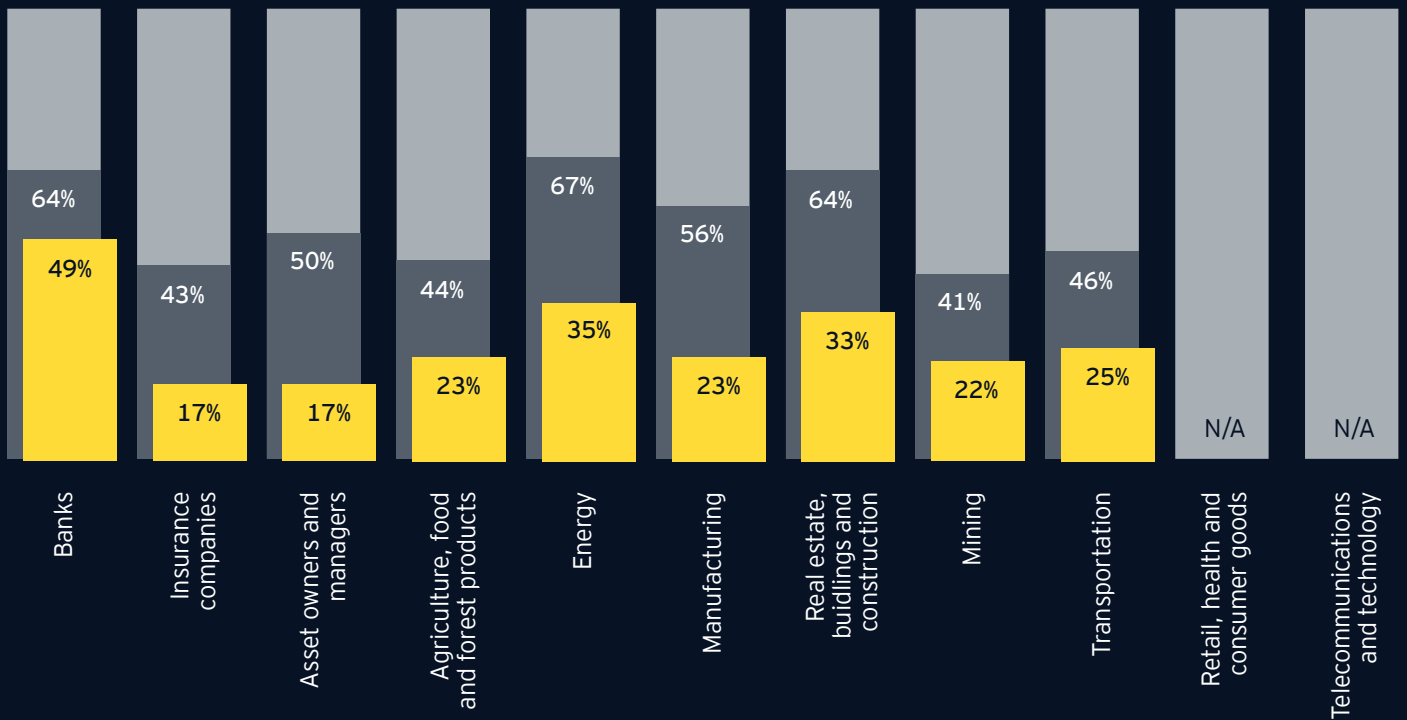
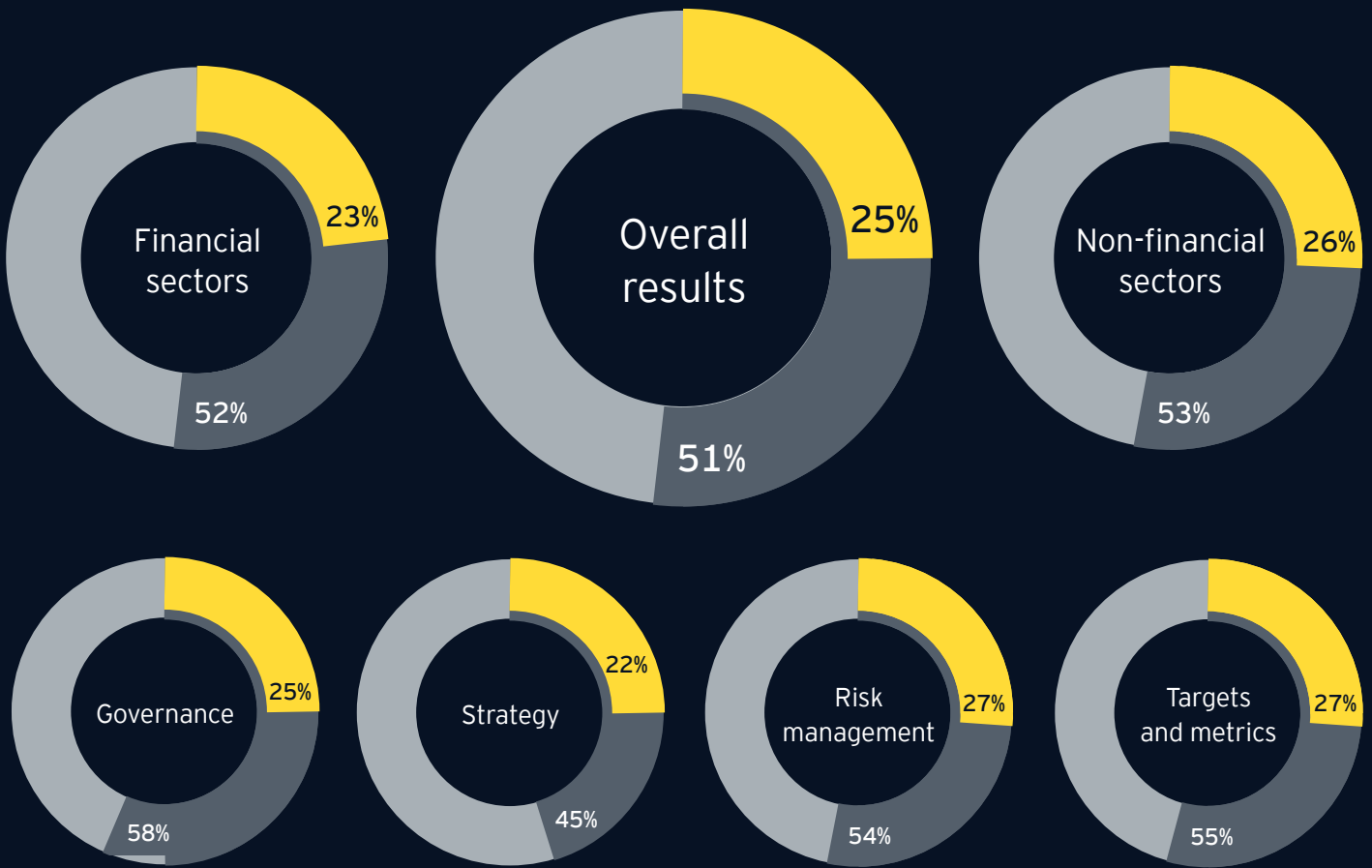


Key findings

2018



■ Coverage ■ Quality

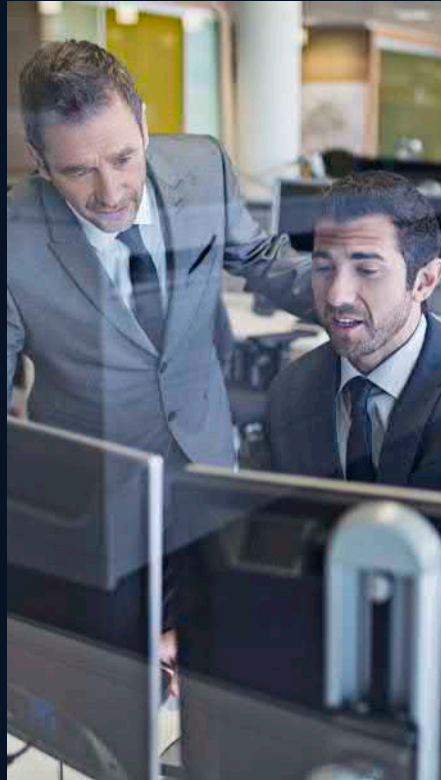


EY findings continue to expose the lack of depth in climate-related disclosures. There has been an incremental improvement compared to 2017, however there is room for improvement.

This is particularly evident in the area of strategy. Almost all sectors of the economy face major disruption from climate transition and climate impacts over the coming years. Yet the majority of companies are still not engaging seriously with these risks, or positioning themselves to take advantage of potential opportunities.

With investors paying increasing attention, this is likely to affect their reputation and valuation even before the impacts are fully realised. An example of this is Norges Banks' recent divestment announcement, which only resulted in the divestment of oil and gas companies that had not integrated climate solutions, such as renewable energy, in to their strategy. This type of action causes a short-term valuation change based on the company's strategic understanding of climate risks and opportunities.

Assessing climate-related risks and opportunities can be complex, and may require detailed analysis. However, disclosing information on climate change scenario planning not only addresses the TCFD recommendations, but also provides companies with new inputs into business strategy, and engages increasingly socially aware employees with the strategy, which in turn enhances internal capability and processes.



Most companies are not providing high quality disclosures aligned to the Recommendations

Consistent with the findings of *EY Global Climate Risk Disclosures Barometer* and last year's *Australia Climate Risk Disclosures Barometer*, this year's Australian analysis showed that roughly two-thirds of companies assessed have started to disclose climate change-related risks, with the average coverage score being 60%. However, the quality of the disclosures was relatively poor, with the average score being 29%.

Across each of the TCFD elements, results show that, on average, companies reported better on "targets" and "metrics" (mainly driven by reporting on Scope 1 and 2 greenhouse gas (GHG) emissions) and "governance." Disclosures relating to "strategy" and "risk management" were the least developed. Arguably, as these components are more complex, they require detailed analysis on how climate change will impact a business and how the business is responding.

Climate risk disclosure have not yet been incorporated within "financial filings."

The Recommendations ask for disclosures to be made in financial filings, alongside other financial disclosures. This element of the Recommendations is yet to be widely implemented.

Consistent with the findings of *EY 2018 Global Climate Risk Disclosures Barometer*, some companies did include their disclosures within the annual report as part of a discussion on the business strategy, as part of the directors' report or within the operating and financial review (which includes a description of the future prospects of the business). However, the overwhelming majority reported within non-financial reports, e.g. sustainability reports or Carbon Disclosure Project (CDP) reporting.

Despite the Recommendations, there are a number of reasons why most companies have not taken the step to include disclosures in their annual reports or directors' reports. The relative immaturity of processes to capture and report on climate change risks is likely one reason, as well as the difference in timeframes of traditional operational and strategic financial disclosures compared to the timeframes required to capture physical climate risks.

It can also be difficult to translate these risks into financial implications due to a lack of standards supporting robust and comparable measurement practices. However, shareholder resolutions, enforcement of listing rules and regulator focus are likely to force companies to change their current approach in upcoming reporting periods.

Incremental improvement in reporting

Australian firms are slowly responding to the Recommendations and steadily improving the quality of their disclosures. Our analysis reveals modest year-on-year improvement in quality of disclosures across sectors with an increase of 3% for both the financial and non-financial sectors.

However, there is considerable variability within sectors with some companies discussing all aspects of the Recommendations, whilst others are lagging behind, with no disclosures relating to any of the Recommendations.



Physical risk disclosures fall behind transition risk

Many companies identified transition risks that either directly impact their sector or the supply chains they rely upon. While analysis of transition risks is at a mature level, the same is not observed for analysis of physical risks. Modelling the potential impacts of physical risks to business is an inherently complex process.

A key issue with understanding the potential financial impacts of physical risks is that there is no standard yet to fully integrate these risks into valuation models, which traditionally heavily discount long-term financial impacts (e.g. Net Present Value models).

Aside from the inherently more complex modelling associated with scenario-based physical risk analysis, one of the key reasons for a more consistent consideration of transition risk is that the time-scales over

which companies and sectors are likely to feel the consequences are more immediate. Transition risks are generally associated with “mitigation” action, which by definition means actions taken to reduce the likelihood and consequence of future physical consequences. So, although in some sectors, companies have considered the physical implications of a changing climate.

The analysis identified, however, that the physical risks are not only overlooked in valuation models, but often completely omitted from forward-looking strategic and risk management disclosures, even in sectors where asset lives can reach 50 to 100 years. Physical impacts of climate change are key risks to many sectors over the long-term, and this lack of understanding and disclosure highlights a significant gap in the quality of current disclosures.

Reporting is exceeding meaningful analysis or action

Scenario analysis was mentioned in the disclosures of many of the larger global entities. Nevertheless, it was mostly in the context that they expected to conduct the analysis in the future. In other cases, no detail was given around the scenarios analysed or the results of the modelling. Several organisations also disclosed their support for a 2°C future, but did not state how their business aligned with the associated economic outlook. Where companies had undertaken detailed scenario analysis, generally, the scenarios only dealt with transition risks. These omissions reduced the scores for quality of strategic disclosures.

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For businesses and financial markets, [the] challenge is understanding the climate modelling and conducting the scenario analysis to determine the potential impact on their business and investments.¹⁰

Guy Debelle
Deputy Governor,
Reserve Bank of Australia

Will your business conform to a “wait-and-see” approach or will it look to benefit from disclosing climate-related risks and opportunities?

Climate risks are more complex and long-term in nature than most traditional business risks, and this has contributed to a lack of understanding and measurement of their potential impacts. If an organization does not have a clear understanding of the range and magnitude of the potential financial impacts from climate change, it may be increasingly detrimental to its financial performance. As divestment announcements and stakeholder action increases, a wait-and-see approach increases the risk short-term reputation damage and loss of value.

Annual report	[Yellow bar]				
Sustainability report	[Yellow bar]				
CDP response	[Yellow bar]				
Webpage on sustainability or climate change	[Yellow bar]				
Other	[Yellow bar]				

So, where to start?

Disclosing climate-related risks likely requires changes to the governance and risk assessment processes (as per the Recommendations). It also requires collaboration across sustainability, risk, finance, operations and investor relations business functions. It may take several reporting cycles for an organisation to be in a position to generate valuable information for management, investors and shareholders to help them make informed decisions. The earlier your company embarks on this journey and provides a platform to help educate directors and management about climate risks, the better positioned your company will be to engage with investors and shareholders on the impacts and opportunities for your organisation.

Mismatch between what investors want and what they get

EY 2018 Global Investor Survey found that investors are increasingly focusing on non-financial disclosures from companies to inform investment decisions. However, the Survey also showed that investors mainly relying on annual report for gathering information, while considering sustainability reports, corporate websites, or sustainability rankings produced by a third party.

This is not reflected where companies are disclosing information relating to the Recommendations. The analysis for this report showed that CDP Responses remained a primary source of detailed disclosure, alongside sustainability reports or stand-alone climate risk reports.

This year, more relevant information was found in Annual Reports but this was not yet the primary location of information relating to the way in which climate-related financial risk is managed by a company.

¹⁰ Climate Change and the Economy, Speech, March 2019, Reserve Bank of Australia (RBA). Accessed via <https://www.rba.gov.au/speeches/2019/sp-dg-2019-03-12.html>



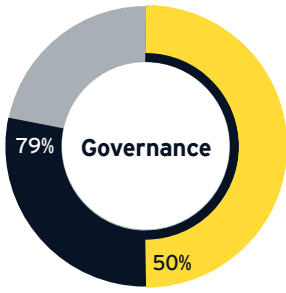
Banks

Sector overview

- ▶ The banking sector continued outperform the non-financial sectors particularly on the quality of disclosures. This reflects the sectors involvement with driving the deployment of the Recommendations.
- ▶ The four largest banks were the top performers. All four banks measured their financed emissions and conducted scenario analysis over their portfolios for transition and physical risks.
- ▶ The disclosure of physical risks improved compared to last year. In particular, the larger banks disclosed the methodologies and results from their physical risk scenario analysis further aligning disclosure with the Recommendations.
- ▶ There was minimal improvement from smaller banks which lowered the sector average. The disclosures from smaller banks were typically high-level and focused on managing the banks' operational impacts.
- ▶ None of the banks adopted risk mitigation strategies that specifically excluded any sector or companies from financing. However, they did adopt specific lending criteria for sectors at higher risk of the impacts of climate change. They also enhanced financing to lower risk and growth sectors and companies to facilitate an orderly and just transition to a low carbon economy. This approach is consistent with the views of the deputy governor of the Reserve Bank of Australia, which acknowledged in a recent speech on Climate Change and the Economy that financial stability will be "better served by an orderly transition rather than an abrupt disorderly one".¹¹

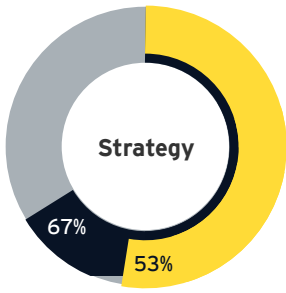


¹¹ Guy Debelle, Deputy Governor, Reserve Bank of Australia. (2019). Climate Change and the Economy. Accessed via <https://rba.gov.au/speeches/2019/sp-dg-2019-03-12.html>



Both the coverage and quality of disclosures for the banking sector were the highest scores for the sectors included in this Report.

Responsibility for the risk and opportunities of climate change were in most cases integrated into the function of the Board, executive leadership, and risk committees. Two of the larger banks set up a separate committee to focus on the specific challenges and opportunities of climate change. Responsibilities and processes around the Board’s oversight and management’s role were clearly articulated by most banks.



Most banks recognised that their financing activities are their most material risk and opportunities. Disclosure of both transition risks and physical risks were articulated. For transition risks, regulatory and demand changes impacting the power generation and mining sectors were highlighted as key risks for the sector. For physical risks, key risks commonly identified included a loss of productivity for the agriculture sector and increasing repair and replacement costs in the property sector due to changes in the climate. It was also common for opportunities to be identified around the financing of green growth sectors.

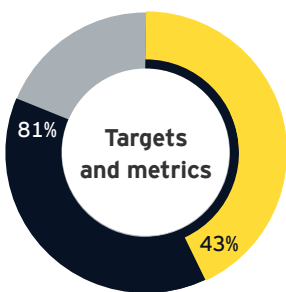
The larger banks conducted scenario analysis. Those that performed scenario analysis focused on the business lending and retail lending portfolios. The most notable improvement was the larger banks moving beyond scenario analysis of transition risks to include scenario analysis of physical risks. This was largely attributed to an industry-led pilot project on implementing the Recommendations under the United Nations Environment Program Finance Initiative.

The top performers attempted to quantify the impact of customers’ losses to their credit ratings and probability of default. However, it was acknowledged that gaps in the available data and refinement of the methodologies was required.



More banks disclosed their risk management practices compared to the previous year. Most banks developed a Climate Change Position Statement that was supplemented by a responsible lending and investing framework. A common theme was equal focus on managing the risks in lending to high-risk sectors (such as agriculture, power generation, mining), harnessing the opportunities by financing to green assets (including renewable energy, green buildings), as well as managing the risks from their own operations.

The larger banks disclosed the use of specific lending criteria for power generation and mining customers to manage their risk in these sectors. However, none of the explicitly exclude any high-risk sectors from financing. This was typically justified as facilitating an orderly and just transition towards a low carbon economy, as sudden withdrawals of financing for certain sectors could result in negative social and economic impacts on local communities dependent on these sectors.



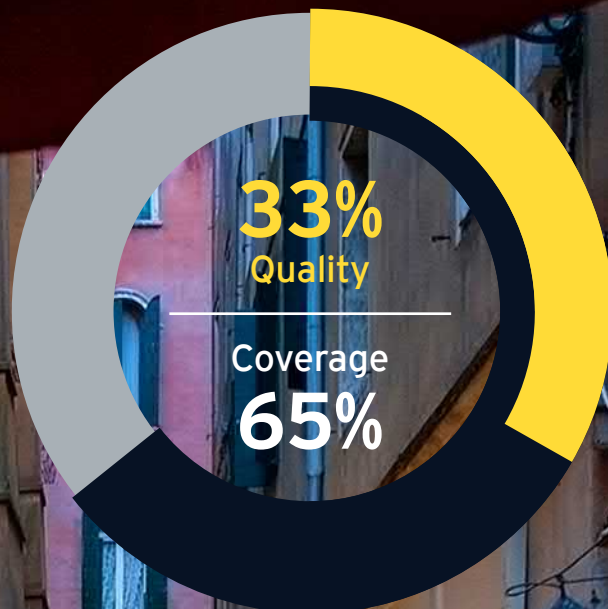
While six of the seven banks disclosed operational Scope 1, 2 and 3 GHG emissions, only the four largest disclose financed emission. Disclosure of financed emissions was typically combined with data on the bank’s lending exposure to perceived high-risk sectors from physical and transition risks as well as green assets to provide an approximate measure of climate risk.

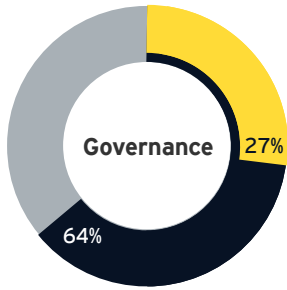
The number of banks that set targets had increased compared to last year. Common metrics and targets included green lending and financed emissions intensity.

Insurers

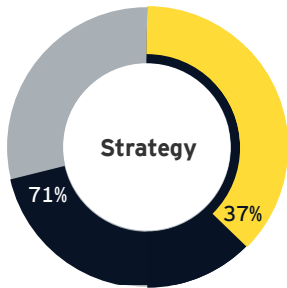
Sector overview

- ▶ Insurers faced greater scrutiny and pressure from shareholders and the media over the last year to disclose and address potential risks from climate change. The improvements in the overall score of the insurance sector this year reflected the growing commitment by insurers to address this challenge in response to the intensifying pressure.
- ▶ Several insurers moved from responses to CDP Climate 2018 to publish standalone Climate Change Action Plans. These plans included a comprehensive list of action statements, against which progress reporting was made on the status of implementation.
- ▶ Several insurers had adopted stringent risk management strategies by announcing an explicit withdrawal of support for the fossil fuel sector as means to manage transition risks.
- ▶ A limited number of insurers disclosed how they planned to manage physical risks. Disclosure of physical risks improved on the previous year. However, there is room for further improvement, particularly in consideration of the significant financial losses from extreme weather events over recent years.





Top performers provided more clarity over governance structures compared to last year by clearly defining the roles and responsibilities of the board, management and committees and how they function together. Two of the seven insurers assessed established a cross-functional Climate Change Working Group to implement their Climate Change Action Plans. However, three insurers described the management of climate risks in general terms as part of the overall sustainability governance. These same insurers performed poorly in other aspects of the Recommendations due to limited disclosures.



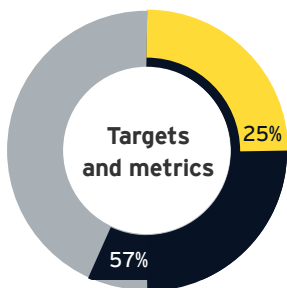
Commonly identified risks related to the insurer's underwriting and investment portfolios, and included the physical impacts of climate change on insurance claims and the impact of transition to a low-carbon economy on investments. The sector also identified opportunities around new revenue streams from the development of new products such as adjusted premiums for customers with green assets.

The insurance sector frequently performs scenario analysis and stress-testing to better understand their risk profile. However, disclosures on the application of scenario analysis and stress-testing for assessing the risks of climate change showed room for improvement. Three of the seven insurers assessed reported that scenario analysis was used but only provided limited detail over the methodologies and results of the assessment. Most insurers reported they would commence scenario analysis in the coming year. This was generally aligned with peers globally, given that the UNEP FI recently convened the TCFD pilot for insurers in November 2018. Two of the insurers assessed in this review are involved in this pilot.



There were major improvements in the sector's disclosure of risk management practices this year. Notably, the top performers published standalone Climate Change Action Plans. This was a separate report outlining in detail the ongoing and future actions to be undertaken. These action statements generally covered governance practices, risk management practices over the underwriting and investment portfolios, and over operational carbon emissions, and collaborative efforts with partners on climate change advocacy.

Several insurers disclosed an explicit withdrawal of support for the fossil fuel sector. Despite, disclosure of physical risks improving compared to the previous year, only a limited number of insurers disclosed how they planned to manage physical risks, leaving much room for improvement.



A limited number of insurers set robust targets and metrics for climate risks that were aligned to material physical and transition risks. Operational emissions were typically disclosed, however none of the insurers disclosed whether they monitored the carbon intensity of their underwriting or investment portfolios. There was no disclosure of targets and metrics specifically addressing physical risks.

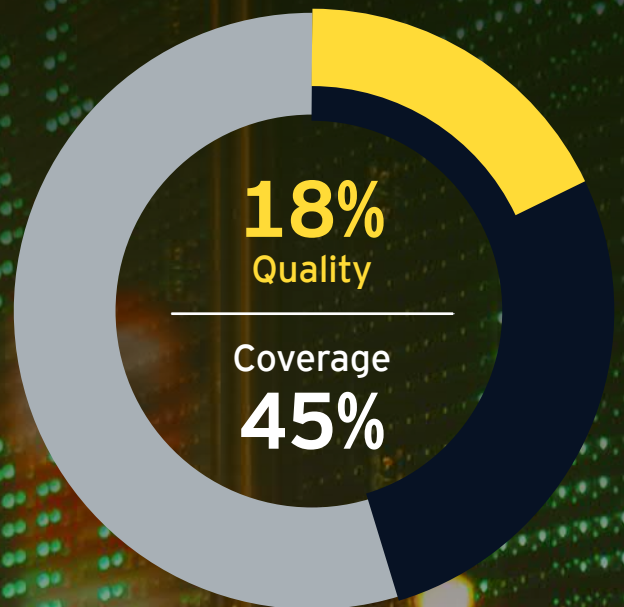
The lower coverage and quality scores for metrics and targets was recognised by insurers with the development of metrics and targets commonly listed as an action item in Climate Change Action Plans.

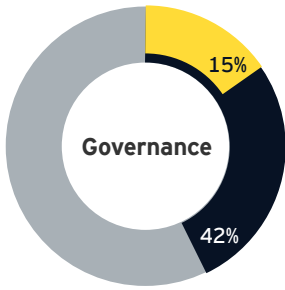
■ Coverage ■ Quality

Asset owners and managers

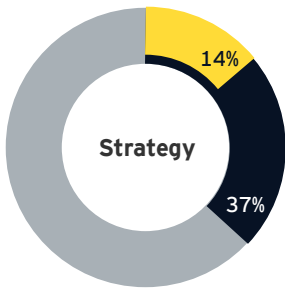
Sector overview

- ▶ Asset owners continued to focus on advocating for better climate-related disclosures from investee companies rather than progressing disclosures within the sector.
- ▶ Participation levels in the CDP Climate 2018 continued to be low with twenty-two companies not responding to CDP Climate 2018 and two companies that chose to make their responses private this year.
- ▶ Many asset owners and managers considered climate change as part of their broader ESG framework, but did not provide further discussion specific to the unique challenges of managing climate risk.
- ▶ Greater legal action is likely on the horizon if asset owners and managers continue with comparably poor disclosures to other sectors. The case of an Australian superannuation fund member filing a legal suit against his superannuation fund alleging that the fund violated the Corporations Act 2001 by failing to provide information related to climate risks and any plans to address those risks is an example the type of action that may become more common.





Governance of climate risks was typically integrated in to overall ESG governance. Climate risks were acknowledged as being more material to investee company sectors rather than to the asset owners' and managers' own operations. As such, disclosures around responsibility for managing climate risk and opportunities tended to focus on the activities of investment managers rather than operational risks. Reporting channels from investments up to the Board were not articulated well in disclosures in most cases.



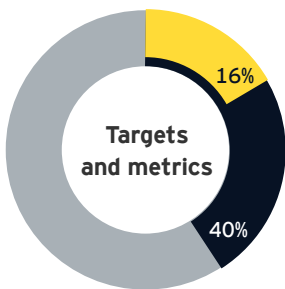
Risks associated with the transition to a low carbon future were disclosed in more detail than the physical risks of climate change. Many companies in the sector identified changing regulation that favours low carbon industries which impact investment portfolios, both from the perspective of the risk and opportunity linked to climate change.

Only one asset owner and three superannuation funds disclosed on the use of scenario analysis to assess the potential impacts of climate change to their business. A common issue identified was the difficulty faced by companies in obtaining reliable climate-related data and information from investee companies. The level of maturity within the sector on responding to the Recommendations is low comparatively to other sectors.



Many asset owners and managers mentioned they considered climate change as part of their broader ESG framework for investment due diligence, proxy voting and engagement with investee companies. However, most companies did not include deeper discussion of the specifics of climate risk management within their companies. These observations were similar to those made in the prior year.

Management of climate-related risks were often disclosed in relation to exclusions or negative screens for emissions intensive activities such as thermal coal or the energy sector more broadly. Disclosures around specific ESG funds targeting renewable and clean energy investments were also prevalent in public reporting, indicating both risk and opportunity management is implemented within the sector in relation to climate change impacts on investment portfolios.



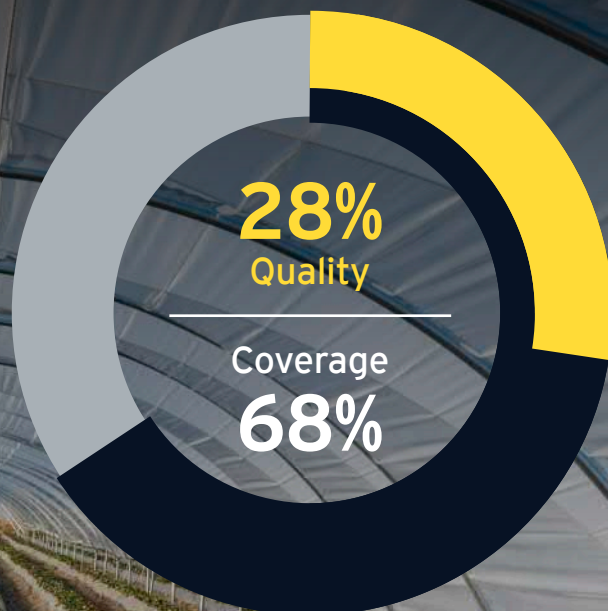
Asset owners and managers typically disclosed the carbon emissions of their own operations. Only a small number within the sector provided disclosures relating climate risks in the portfolio. Five companies disclosed the carbon footprint of their equity portfolios and compared the emissions intensity of their portfolio to the emissions intensity of globally recognised indices such as MSCI ACWI or S&P/ASX index. Top performers reported percentage holdings in either fossil fuels or renewable energy companies and calculated the carbon footprint of direct investments.

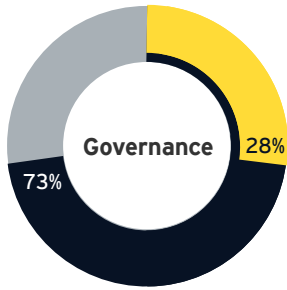
■ Coverage ■ Quality

Agriculture, food and forest products

Sector overview

- ▶ There was considerable improvement in the average coverage scores for the agriculture, food & forest products sector compared to the prior year. There was also a modest improvement in the average quality score.
- ▶ Two companies indicated publicly that they are in the process of assessing climate risk disclosures against the Recommendations and intend to improve disclosure in 2019.
- ▶ The quality of disclosures was highest for risk management, followed by targets and metrics, governance and strategy. While most companies have identified that they are exposed to climate-related risks and some have started measuring their performance against climate-related targets; significant improvement is required in the corporate governance of, and strategic response, to climate change.
- ▶ Most disclosures were made through either sustainability reports or annual reports, with only a third of companies providing disclosure through response to CDP Climate 2018. Of the five companies that submitted responses to CDP; two were not released to the public, contrary to previous years. The lack of access to these reports likely lowered the coverage and quality scores for the sector overall.

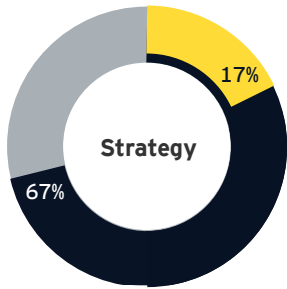




There was a considerable increase in the coverage of governance disclosures from last year, while the quality of governance disclosures had modest incremental increase.

Ten companies stated that their board and/or a board committee (e.g. audit, risk, sustainability committee) is responsible for overseeing climate-related risk and opportunities. Top performers described the relationship between management and the board and how climate-related risks, performance and progress on targets are reported to the board.

Only one company in the sector met all the Recommendations related to governance.



Coverage of strategy disclosures increased from last year, while quality of strategy disclosures decreased.

The coverage and quality of disclosures relating the resilience of strategy under different climate-related scenarios, including a 2°C or lower scenario, were not addressed well by the sector. Only one company described a climate change trajectory assessment it had undertaken and the likely impact on their product yields.

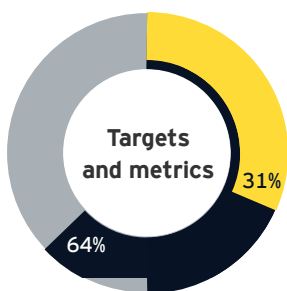
It will become increasingly important for companies in the agriculture, food & forest products sector to assess their resilience to climate change, especially as Australia continues to experience more frequent and severe drought and other impacts associated with, and exacerbated by, a changing climate.



The quality of disclosures on risk management were the highest for the section. Disclosures relating to the description of processes for managing climate-related risks were of a particularly high quality for the sector, reflecting the high risk the sector faces with changes in the physical climate such as prolonged and more frequent periods of drought.

Two companies met all the Recommendations for risk management, providing detailed disclosures on their climate-related risk identification and assessment processes and how this linked with their overall enterprise risk management system.

Companies that scored poorly often described their enterprise risk management system, but did not specifically mention climate-related risks. Another important, but often lacking aspect, was how companies determine the relative significance of climate-related risks in relation to other risks.



Coverage of targets and metrics disclosures increased from last year, while quality of disclosures remained consistent.

The quality of disclosures in relation to metrics used by companies to assess climate-related risks and opportunities in line with their strategy and risk management process were strongest within the sector. This demonstrates that companies in the sector are measuring their climate-related risks and opportunities. However, only seven companies had targets against which they were managing performance meaning there is room for improvement with in the sector for setting targets.

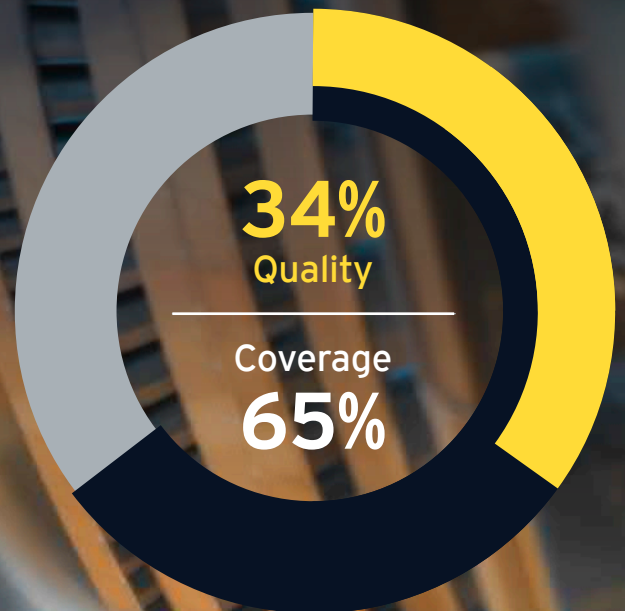
Three companies failed to disclose their Scope 1 and Scope 2 emissions and eleven companies did not disclose their Scope 3 GHG emissions. Ten companies disclosed the importance of measuring and managing their water consumption and intensity, a key climate risk exposure for the agriculture, food and forestry sector.

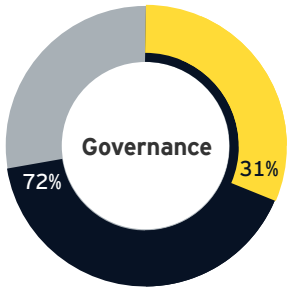
■ Coverage ■ Quality

Energy

Sector overview

- ▶ The average coverage and quality scores for the energy sector were consistent with last year. Within the sector there was enhanced disclosure made by several companies which was offset by the addition of two new companies to the sector that were not assessed last year, both of which performed well below average for the sector.
- ▶ Larger companies achieved significantly higher scores than their smaller peers, with average quality scores exceeding 60% for ASX50 listed companies. Many of these companies have been challenged by investor groups and NGOs to demonstrate the resilience of their business in a low carbon economy, which has led to more transparent disclosures including quantitative scenario analysis.
- ▶ Half the companies assessed submitted responses to the CDP Climate 2018, although two of these responses were not released to the public. Companies who did not respond or publish their CDP Climate 2018 report performed poorly in the disclosure scoring, with the exception of one company which released a stand-alone climate change report aligned to the Recommendations.
- ▶ Three companies have indicated publicly that they are in the process of assessing climate risk disclosures against the Recommendations and intend to improve disclosure in 2019.
- ▶ Most disclosures were made through either sustainability reports, stand-alone climate change reports or responses to CDP Climate 2018. Only one company included substantial disclosures within mainstream financial filings (annual report).

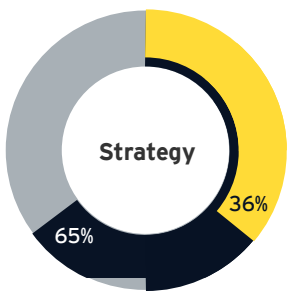




Coverage of governance disclosures fell slightly from the 2018 analysis, partly through lack of disclosures made by new entrants to the sector group and lower participation and disclosure to CDP Climate 2018. Those companies that did address governance recommendations improved the quality of disclosures, particularly in relation to management’s role in assessing and managing climate risks and opportunities.

For most companies, the sustainability, HSE or equivalent committee has oversight of climate-related issues, with one company also mentioning the role of their risk committee in reviewing and monitoring climate-related risks and opportunities as part of investment considerations and performance reviews.

Top performers described the relationship between management and the board and how climate-related risks, performance and progress on targets are reported to the board. Companies are still failing to report how management were informed about, or monitored, climate-related risks.



Two companies have integrated climate-related transition risk into their core business strategy, positioning their companies to lead Australia’s energy market transformation and prosper in a carbon constrained economy. These strategic imperatives are explicitly covered within annual reports and other mainstream financial filings.

Five companies stated they have undertaken scenario analysis, including a 2°C scenario, however one company only disclosed the generic impact of the scenarios on the broader market and not their business. Three companies disclosed the quantitative impact of a 2°C scenario (change to NPV). Two companies had not updated their scenario analysis within the last year, referring to historical analysis relying on out-dated data.

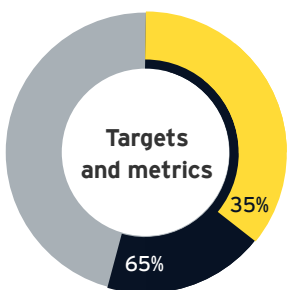
Overall, coverage of strategy recommendations did improve from the previous year’s assessment, with more companies making mention of climate-related risks and opportunities at a high level. Average quality scores were steady from last year, with most disclosures lacking detail.



Performance against risk management recommendations did not change materially from the previous year’s assessment. Often these disclosures were covered within responses to CDP Climate 2018, with non-responders scoring poorly.

Companies that scored poorly often described their enterprise risk management system, but did not specifically mention climate-related risks, and could not describe how their climate-related risk identification and management process was integrated into their overall risk management. Another important, but often lacking aspect is how companies determine the relative significance of climate-related risks in relation to other risks.

Companies that scored well included descriptions of how they make decisions to mitigate, transfer, accept, or control climate-related risks in detail.



Only two companies failed to disclose their Scope 1 and Scope 2 emissions, with half the companies assessed providing historical data for trend analysis. Six companies also disclosed their scope 3 emissions, which for most energy sector companies are the most material emissions across the value chain.

Emission reduction targets have been the focus of several shareholder resolutions recently raised to energy sector companies. This may have influenced the largest improvement across the Recommendations for the sector this year, with three companies establishing new targets, clearly stating the base year and time frames over which the target applies. This included one company which has set an accredited Science-Based Target in line with the Paris Agreement’s 2°C objective, comprising both a scope 1 and scope 2 target along with a scope 3 target, addressing the key climate-related risk around the transition to low or zero emissions energy.

Top performers also reported executive remuneration being linked to climate-related KPIs and/or targets, and the use of an internal carbon price, although the price was only disclosed by two companies.

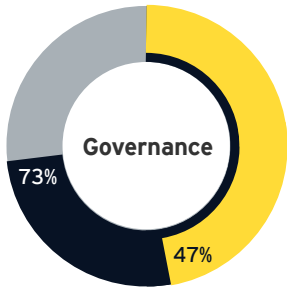
■ Coverage ■ Quality

Transportation

Sector overview

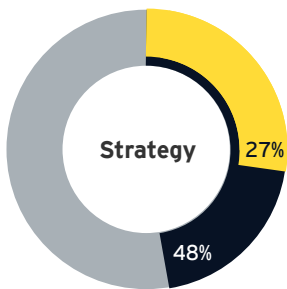
- ▶ The transportation section was found to be the highest performing non-financial sector for the quality of disclosures.
- ▶ The sector average saw an incremental improvement in the in both the coverage and quality of disclosures aligned to the Recommendations. However, there was variability within the sector. Half of the sector covered ten or more of the eleven The Recommendations, to varying degrees of completeness.
- ▶ One company received the top coverage and quality score, having undertaken and disclosed the results of its scenario planning analysis. It was noted that BlackRock had investments in the top performing companies in sector; perhaps reflecting BlackRock's interest in climate change risks and opportunities within its portfolio and vocal support for enhanced climate risk disclosures. At the other end of the spectrum, one company in the transportation sector had no publicly available disclosures relating to climate related risk.
- ▶ Most companies in the transportation sector had not responded to CDP Climate in 2018. However, those that chose to disclose via CDP were amongst the top performers in terms of the level of detailed disclosure.





The sector was roughly split in half, with the top performers having relatively detailed disclosures about the role of board and managements in relation to the assessment and management of climate-related issues and the other half having very limited quality of disclosures in this area.

Disclosures relating to governance of climate risk were typically found across the Annual Report, Sustainability Report, or Corporate Governance Statement. However, those disclosures that described the level of detail outline in the Recommendations were typically found in responses to CDP Climate 2018 or Sustainability Reports indicating that the level of detail required to properly respond to the Recommendations is not available in Annual Reports on their own.



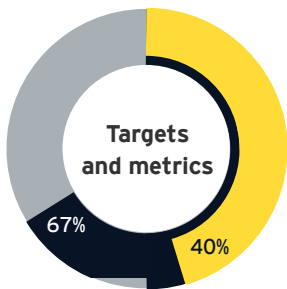
Despite the sector's strong overall disclosure performance, disclosures relating to the strategy component of the Recommendations were noticeably lacking for both quality and coverage with scores falling below the overall average.

Only two companies in the sector had disclosed the results of scenario planning. Consideration of the impacts of climate risk were largely qualitative. Impacts were rarely measured in dollars and where a cost range was disclosed the quantification method was unclear.



Coverage of risk management in disclosures was relatively high, with most companies including brief mention of how climate change is factored in to a multi-disciplinary company-wide risk framework, without no additional details in relation to targeted climate risk considerations. Typically risk management practices, if disclosed, were found in Sustainability Reports.

Companies that disclosed more detail on climate risk management processes offered insights into the way in which climate risk was considered, criteria used, and responsibilities across the business.



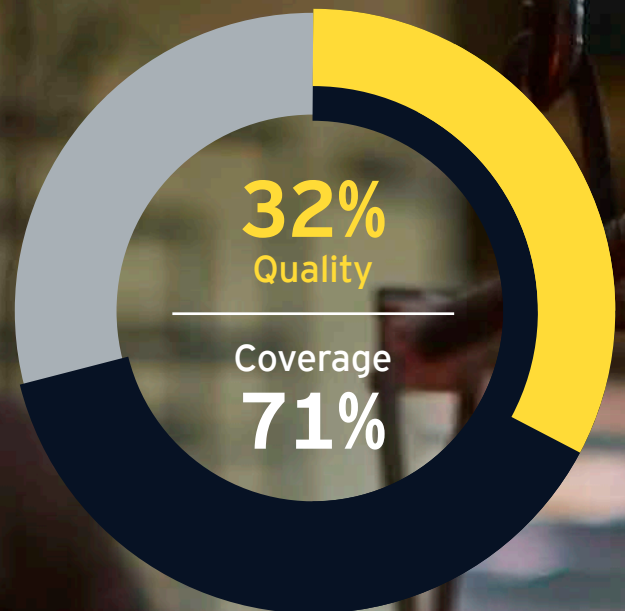
Companies typically disclosed Scope 1 and Scope 2 emissions, and in some cases Scope 3 emissions. The detail behind these metrics was not often disclosed. Limited information was available on the types of metrics recommended by the Recommendations for the transportation sector, such as total fuel consumed and percent renewable split out by transport type (road, airlines, marine, rail).

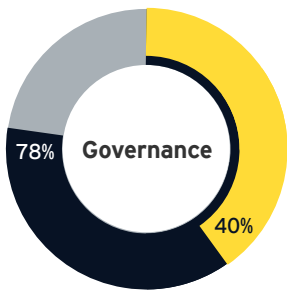
Again, the sector was roughly split in half, with the top performers having relatively detailed disclosures about metrics used, describing the boundary and methodology, and well as some disclosure of historical trend analysis. The other half of the sector reported a limited number of climate-related KPIs but not to the level of detailed recommended in the TCFD guidance.

Manufacturing

Sector overview

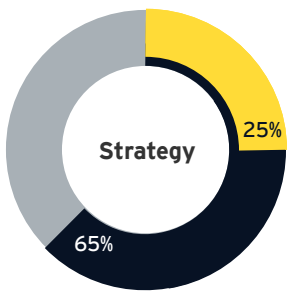
- ▶ Disclosures made by the manufacturing sector companies (generally categorised in the materials, chemicals and construction sector in the 2018 analysis) improved both in coverage and quality. This resulted from significant progress made by five companies, as well as more modest improvements by nine other companies. Only one company failed to make any disclosures in relation to the the Recommendations.
- ▶ For most companies, coverage scores were high, with thirteen out of the twenty companies assessed achieving coverage scores above 90%. The average coverage score was brought down by four companies who failed to cover more than one of the Recommendations.
- ▶ No manufacturing companies achieved scores above 80% for quality, indicating that even the leading companies for the sector are still on the journey towards reporting in accordance with the Recommendations.
- ▶ Only eight companies responded to CDP Climate 2018, including one company that did not allow their response to be published. These companies generally outperformed non-responders. Companies that responded to CDP Climate 2018 also tended to provide better disclosures through other channels such as sustainability reports.
- ▶ Australian companies achieve a higher coverage score than the sector average within EY global analysis, and approximately the same score for quality, demonstrating a comparable awareness of the Recommendations as their global peers.





The quality of governance scores improved significantly compared to last year, with four companies substantially expanding their disclosures to achieve very high-quality scores. Coverage scores also improved, with all but four companies providing some disclosures in relation to board oversight and management responsibility for climate risk.

Top performers used various reports to communicate their detailed governance approach, some relying on CDP Climate 2018 responses while others used their sustainability report as their primary means of communication. Companies relying only on their annual report were generally able to cover both governance recommendations, but not in the detail required for quality disclosures. Four companies failed to provide any information in relation to the governance recommendations.



While most companies provided some limited discussion in relation to the Recommendations for strategy, few provided sufficient information to address aspect in detail, with only three companies achieving a quality score of over 50%.

Disclosures were commonly sourced from CDP Climate 2018 responses, however the top performer in relation to strategy disclosures did so through their sustainability report.

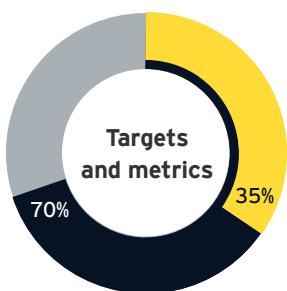
Disclosures in relation to the resilience of the organisation's strategy under different climate-related scenarios, including a 2°C or lower scenario, were the weakest of all the Recommendations. Two companies have identified and described scenarios they will use for analysis, but are yet to complete and publish the outcomes of the assessment.



Coverage and quality scores in relation to risk management improved compared to last year, but few companies are fully addressing any of the Recommendations for risk management. Seven companies achieved quality scores of over 50%, while five companies failed to provide any disclosures. All top performers included risk management disclosures within CDP Climate 2018 reports.

Only one company described how they determine the relative significance of climate-related risks in relation to other risks, along with their process for prioritising climate-related risks and opportunities.

Many companies reported they identified, assessed and managed climate-related risks as part of a multi-disciplinary company-wide risk framework, without any specific or targeted process in relation to climate risk.



Both coverage and quality improved compared to last year's scores, although still slightly lower than the global averages for the manufacturing sector.

Disclosure of Scope 1 and Scope 2 emissions was high, with only three companies not reporting any data on their greenhouse gas emissions profile. Six companies also reported their material Scope 3 emissions. Some companies failed to disclose the methodologies used in calculating their emissions, and/or did not provide any historical data to allow trend analysis.

Other metrics commonly reported by top performers included energy and water use and waste generation. Two companies described how metrics have been incorporated into remuneration policies.

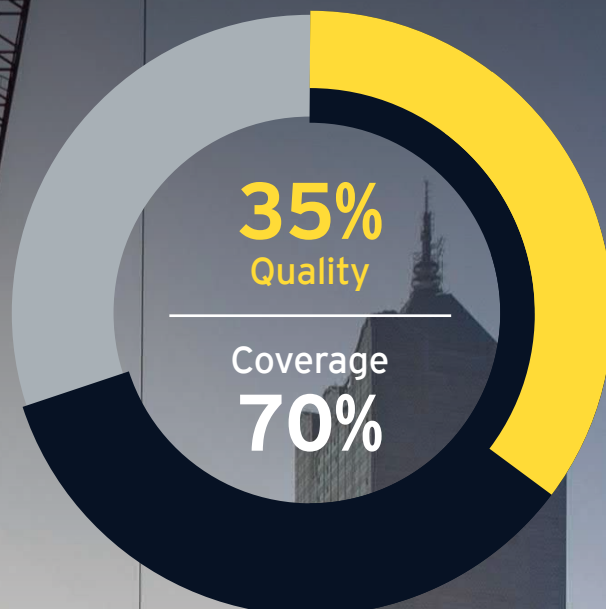
Manufacturing companies typically established emission reduction targets compared to many of the other sectors, with almost half of the companies assessed found to have either an absolute reduction target, an emissions intensity target or both. Most of these companies reported progress against targets. No companies provided any commentary on the strategy behind their targets or how these targets would help manage climate-related risks or opportunities.

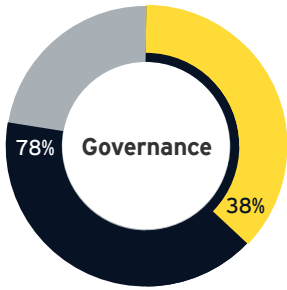
■ Coverage ■ Quality

Real estate, buildings and construction

Sector overview

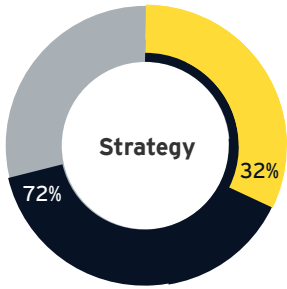
- ▶ The average coverage score and average quality scores for the real estate, buildings and construction sector had a modest incremental improvement compared to last year. The sector led the way on coverage of disclosures matching the Banking sector for the top spot. However, there was considerable variability among the eighteen companies assessed with twelve companies scoring greater than 80% and three companies scoring below 30%. The quality of disclosure within the sector was consistent with the observation made across all sectors that the quality of disclosure was poor.
- ▶ Companies that scored highest on coverage and quality were typically those that had Blackrock and/or Vanguard within their top five substantial shareholders suggesting pressure from investors vocal on climate risk is driving better coverage and quality of disclosures within the sector.
- ▶ Only one of the eighteen companies assessed made disclosures in relation to the financial implication of climate risks. This included how climate risks could impact revenue under certain climate scenarios but did not go as far as to detail how those risks might impact the measurement of fair value across its asset portfolio.
- ▶ Australian companies achieve higher coverage and quality scores than the sector average within EY global analysis, highlighting a better awareness of TCFD requirements compared to their global peers.





The majority of companies disclosed their climate-related governance with only three companies not providing disclosure of governance practices. Both the coverage and quality of disclosures relating to governance had a modest improvement compared to the prior year.

The companies that did disclose included a description of the board's oversight of climate-related risks and opportunities. Top performers produced detailed descriptions of the roles and responsibilities of individual board members and additional information about the process and timeliness of reporting climate risks and opportunities to top management's consideration. More than a third of companies also described management's responsibilities regarding monitoring of climate risks and opportunities. Top performer disclosed how their governance practices are strongly tied to identifying and nurturing opportunities for both commercially viable and emerging technologies.



There was only a slight improvement in disclosures relating to strategy. Similar to last year, the majority of companies identified climate-related risks and opportunities as being material for their operations, customers and communities. However there was not much improvement on disclosures relating to the process for determining materiality and in relation to the consideration of climate scenarios. The top performers identified risks such as energy security and rising energy costs, energy and carbon pricing, and climate and energy regulations and standards. Risks identified to a lesser extent were extreme weather events (floods, heatwaves etc.), impacting fair value, insurance costs and insurability; and cost increases linked with carbon-intensive construction materials.

Only one company undertook scenario analysis. The improvement on prior year was a move from qualitative outputs to quantitative financial output such including the impact on company revenue.

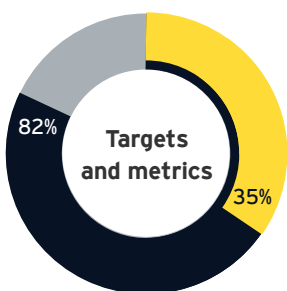
Transition risks associated with a move to a low carbon economy were given greater consideration by companies than the physical risks of a changing climate again this year. However, more companies acknowledge and identified the physical risks of climate change compared to the prior year. The focus on transition risks by many companies were strongly linked to strategic opportunities such as delivering energy and carbon cost savings, generating onsite renewable energy and outperforming building regulations. In many instances these opportunities were disclosed in relation to not only environmental performance by also better financial outlook.



The greatest improvement in disclosures for the sector was those in relation to risk management, particularly with regard to coverage of the Recommendations. There was also an improvement to a lesser extent in the quality disclosures.

The average sector quality score for risk management within the Real Estate, Building and Construction sector was lowered by a lack of companies responding to CDP Climate 2018. Seven companies declined to respond to CDP Climate 2018 and two were not released to the public which is where disclosures on approach to risk management are typically provided in detail, including how climate risk identification and assessment is linked to company-wide approach to risk management.

The top performer for the sector provided considerable detail within its CDP Climate 2018 report on the approach to assessing both physical and transition risks. This included the use of the Representative Concentration Pathways (emissions pathways) from the Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report and Deep Decarbonisation Pathways Project to assess physical risks and transitions risks using scenario analysis. This detailed analysis also quantified the risk of lost revenue for the business.



While there was an improvement in the coverage of disclosures the quality of disclosures remained steady at 35%. Notably, there was a lack of disclosure on metrics related to the resilience of asset portfolios to the physical risks of climate change. This is linked to the sector's relative maturity of considering physical risks compared to the progress that has been made with transition risks and opportunities.

Nearly all companies reported their Scope 1 and Scope 2 emissions and a smaller number also included Scope 3 emissions. Many companies also disclosed sector specific metrics such as the National Australian Building Environment Rating Scheme (NABERS) and Green Star ratings, and in many cases also the Green Real Estate Sustainability Benchmark (GRESB).

Both absolute and energy intensity targets were adopted by most companies which are useful for managing transitions risks. Top performers also demonstrated support for the Green Buildings Council of Australia's (GBCA) Climate Positive Roadmap that sets targets for all new buildings to be emissions-neutral by 2030 and existing buildings by 2050.

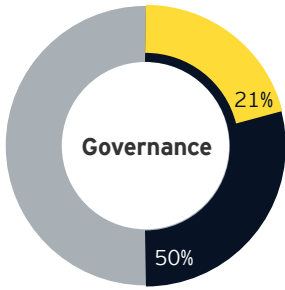
■ Coverage ■ Quality

Mining

Sector overview

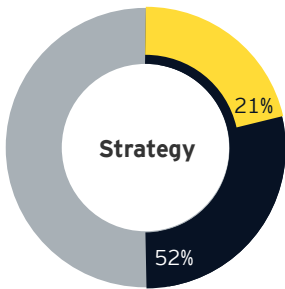
- ▶ The mining sector disclosures were characterised by extremes in performance, with three companies achieving average quality scores above 80% and six companies found to be disclosing no information in relation to climate risk.
- ▶ While the average coverage score improved compared to last year, the quality score was steady. Modest increase of disclosure were noted for eleven companies, generally consisting of limited discussion of aspects were previously there had been no disclosures.
- ▶ The top performers included disclosures within mainstream financial filings (annual reports) with additional detail, particularly in relation to scenario analysis, provided in stand-alone climate change reports.
- ▶ Disclosures by other companies were most often made through sustainability reports and responses to CDP Climate 2018. Nine companies did not publish a sustainability report, limiting the channels through which climate risk considerations could be communicated.
- ▶ Participation in CDP Climate 2018 declined this year, with thirteen companies not responding, and a further four companies participating but choosing not to make their response public.





While governance is one of the better covered aspects for most sectors, this is not the case for mining and metals. Disclosures in relation to governance saw little improvement from last year, with around half the companies analysed still providing no disclosures in relation to the Board oversight or management’s role in relation to climate risk.

The top performers provided extensive detail within annual reports, including interactions between the Board and management, the Board’s role in the climate risk management process, how performance against targets is monitored and reflected in senior executive and leadership remuneration, and the frequency of meetings and interactions. These companies also clearly articulated the management process for monitoring and reviewing current and emerging climate-related issues.



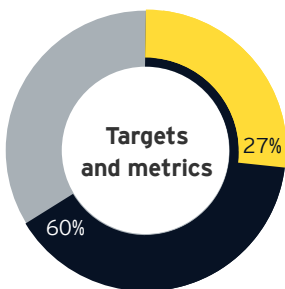
Approximately half the companies in the mining sector listed climate risks and opportunities, most often in their CDP responses. The top performers also set a timeframe for each risk or opportunity, and estimated the potential impact and likelihood. Companies participating in CDP Climate 2018 scored better in this aspect, with nine non-participating companies providing zero disclosures in relation to strategy.

The three top performers have developed long-term scenarios to test the resilience of the portfolios under various settings including a 2C scenario, communicated through stand-alone climate change reports which are referenced by sustainability and annual reports. Eight other companies make limited mention of resilience in a low carbon economy.



Performance across the Recommendations for risk management tended to mirror that of strategy, with the same companies performing well or providing no disclosures across this aspect. Similarly, companies that did not participate in CDP Climate 2018 typically scored poorly, particularly those that did not produce a sustainability report, further limiting channels through which information could be disclosed.

On average, companies performed best in relation to describing their process for identifying and assessing climate related risk, but some were unable to further describe their process for managing the identified risks. Only the top performing companies adequately described how their processes for identifying, assessing, and managing climate-related risks are integrated into the organisation’s overall risk management.



Mining sector companies performed best in relation to targets and metrics, in particular, disclosure of Scope 1 and Scope 2 emissions, with eighteen out of twenty-five companies providing data and most also specifying the methodology used to calculate emissions. The majority of these companies provided historical data to convey trends in emissions. Only the top performers disclosed Scope 3 emissions data.

Disclosures in relation to other metrics used to assess climate related risks and opportunities were not as strong, with some references to energy and water. The better performing companies noted the use of an internal carbon price, and some also described how performance metrics had been incorporated into remuneration policies.

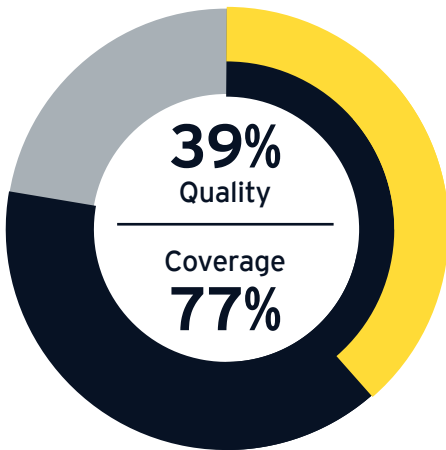
Six companies provided some detail of targets set by the organisation and reported performance against these targets, a small increase from the previous year’s analysis. Only three other companies mentioned even considering setting targets to manage climate-related risks and opportunities.

■ Coverage ■ Quality

Non-key TCFD sectors

Despite the focus on certain sectors, the Recommendations provide general guidance for organisations of all types and sectors. Two sectors were included in this report that were not identified by the TCFD as most exposed to climate risk, which are: telecommunications, and retail, health and consumer goods. These sectors were included in the analysis because of their importance to the general public and presence in the ASX200.

Telecommunications



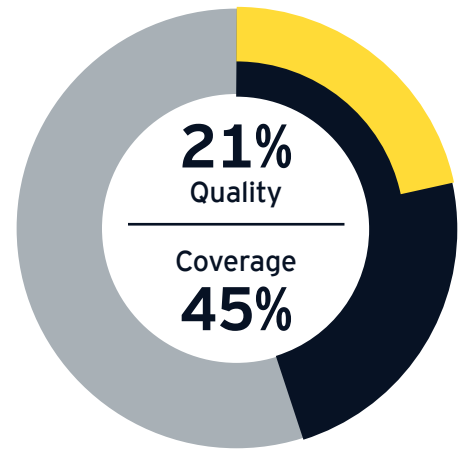
Telecommunications has emerged as a leading sector globally in response to climate change. This is likely due to a number of reasons:

- ▶ The sector has large and rapidly growing companies that are significant users of electricity, and are increasingly exposed to media attention and reputational risk. The community expects these companies to be leaders in technology and to be driving innovation in areas, such as energy procurement. As such, climate change is expected to be a material issue for this sector.
- ▶ The sector has large physical networks, with wide geographical spread, that are exposed to extreme weather events. EY analysis shows this sector is already disclosing that the increase in extreme weather events is having an impact on their assets. Disruption to services can be expensive and have a huge impact on customers, especially during severe weather events where demands on communication services may peak.
- ▶ This sector is also positioning itself to be part of the solution as the economy transitions to a low-carbon future. The economy will digitalise using the technologies created by this sector, which will reduce emissions from transport and logistics. This means understanding climate change is integral to the strategies of these companies.



Our analysis found for the Australian telecommunications sector, the coverage of the Recommendation in public disclosures were amongst the best. As with most sectors, there remains considerable room for improvement in terms of the quality of disclosures. Although, compared to EY Global Climate Risk Disclosures Barometer, on average the Australian telecommunication sectors' disclosures were found to be less detailed than global average of their telecommunications peers. The two largest Australian telecommunications companies assessed had higher than average quality disclosure with some of the smaller companies with very limited disclosures constraining the sector's overall score.

Retail, health and consumer goods



Retail, health and consumer goods sectors, as we refer to it here, includes global pharmaceutical and retail companies. Although these companies don't produce huge volumes of direct emissions, they have been grouped together and included in the analysis of this report as they have complex supply chains that are exposed to both physical and transition climate change risks. These companies are also responsible for maintaining the consumer reputation of leading brand names, and increasing their exposure to sustainability issues, including climate change.

The overall quality of this sectors' climate risk disclosures were amongst Australia's weakest. Only four companies in the sector had detailed disclosures relating to more than one of the TCFD's eleven Recommendations. Given the diversity and complexity of the supply chains in this sector it is likely companies are exposed to be exposed to some level of climate risk as well presented with opportunities from climate change.

■ Coverage ■ Quality

What next?

Climate risks are more complex and longer-term in nature than most traditional business risks, and this has contributed to a lack of understanding and measurement on their potential impacts.

As discussed earlier, if an organization does not have a clear understanding of the range and magnitude of potential financial impacts from climate change, this may be increasingly detrimental to its financial performance.



So, where to start?

Disclosing climate-related risks likely requires changes to the governance and risk assessment processes (as per the Recommendations). It may require several years for an organization to be in a position to generate valuable information for investors and shareholders to help them make informed decisions. The earlier your company embarks on this journey and provides a platform to help educate directors and management about climate risks, the better positioned your company will be to engage with investors and shareholders on the impacts and opportunities for your organization.

Companies that seek to understand their climate risks exposure can ask themselves the following questions.

What are the biggest emission sources in my value chain?

What are the incentives, instruments or indicators that can help me align my strategy with the 2°C road map (e.g., internal carbon price on CAPEX and OPEX, and company-specific targets)?

What are my stakeholders' expectations in terms of climate footprint and carbon performance (e.g., lead the development of low-carbon products and services, or disclose information required by investors)?

What type of climate risks is my business exposed to in the long run?



How will my products and services be affected by carbon policies and targets? What are the right anticipation and adaptation strategies?

Are the international climate policies and national commitments integrated into my business strategy, supply chain or sourcing strategy?

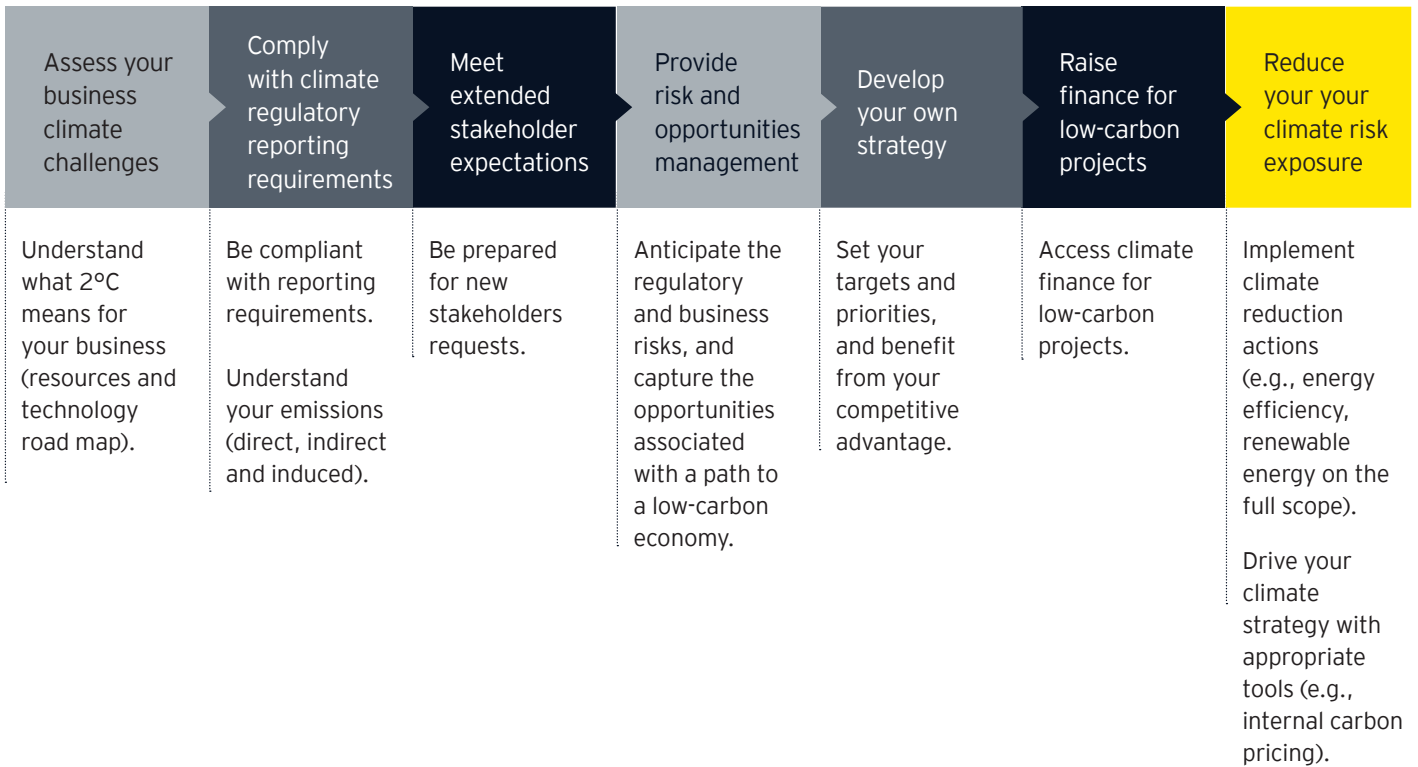
What is the potential exposure to new regulations (e.g., carbon taxation or carbon pricing)? What assets are at risk (e.g., supply chain, products or activities) and in which geographies?

Are some of my products or activities at risk regarding the 2°C road map? How can I turn this into a competitive advantage?

EY Climate Change and Sustainability Services (CCaSS) teams can help organizations as they aim to be ready for a below 2°C economy with initiatives to:

- ▶ Assess their exposure to climate-related risks
- ▶ Build forward-looking scenarios
- ▶ Disclose the information required by stakeholders
- ▶ Build future-proof strategies in countries of operation
- ▶ Take advantage of low-carbon market opportunities

EY teams can provide assistance to businesses as they develop and implement their climate risk strategies. There are many steps to this process, starting with understanding your risks and monitoring your impacts through developing and financing your strategy to expand the opportunities.



Why EY

EY multidisciplinary teams combine our experience in Assurance, Tax, Transactions and Advisory services with climate change and sustainability knowledge across industries. We have experience of working on climate and energy issues with governments, industrial corporations and investors. We are a leading provider of climate risk disclosures and green bond services, having worked with some of the largest emissions intensive and asset owners globally.

EY professionals are involved in industry groups leading the way on climate disclosures and green finance, such as TCFD and the Climate Bond Initiative, where we are an approved verifier. The involvement in these important drivers of climate action means that we have an understanding about the expectations of investors, and the process organizations have to go through to integrate climate change strategy into their business.

EY teams' knowledge and broad range of skills, such as data analytics and project financing, and sector-specific experience means that we can tailor the services and teams to your requirements to help you address your organization's climate change challenges.

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