



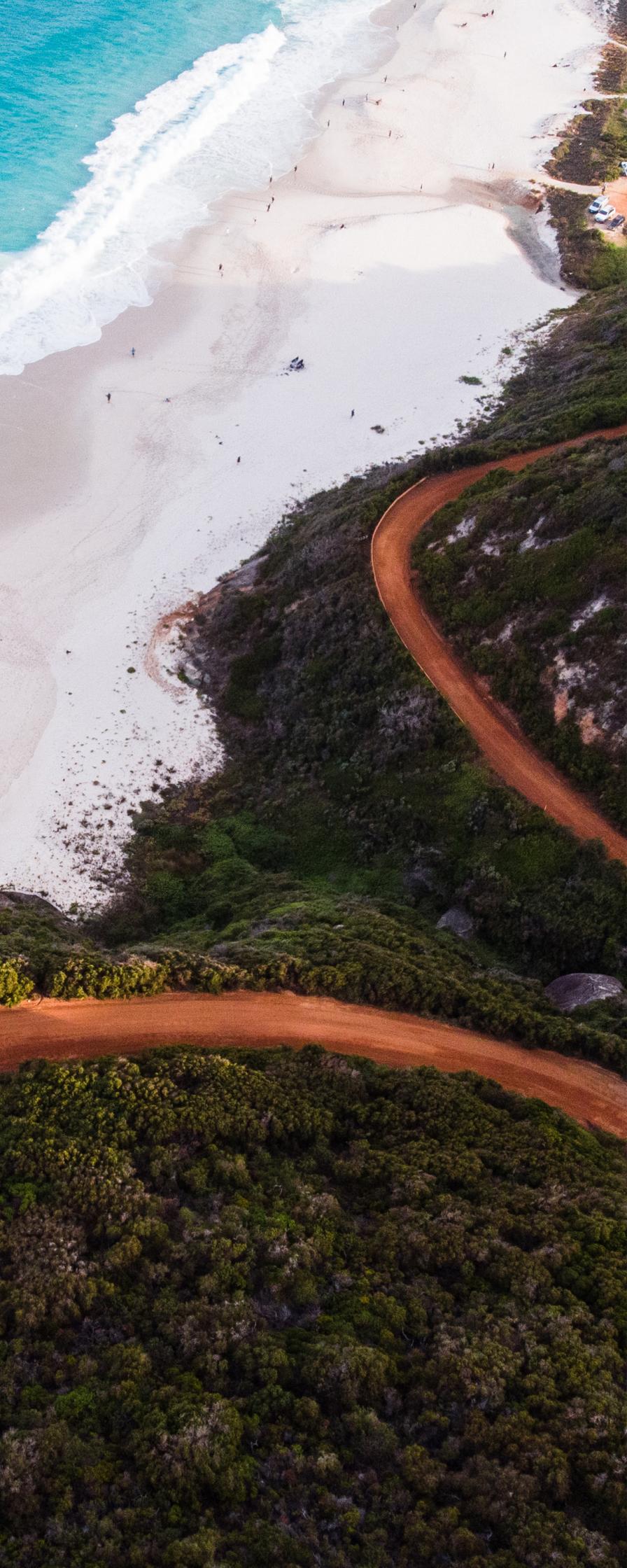
FULL DISCLOSURE

IMPROVING CORPORATE
REPORTING ON CLIMATE RISK



Investor Group on
Climate Change





The Investor Group on Climate Change (IGCC)

The Investor Group on Climate Change (IGCC) is a collaboration of Australian and New Zealand institutional investors and advisors, managing over \$2 trillion in assets under management and focusing on the impact that climate change has on the financial value of investments. IGCC aims to encourage government policies and investment practices that address the risks and opportunities of climate change.

www.igcc.org.au

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FOREWORD

Climate change is a systemic risk to the economy and a financial risk for investors' portfolios. Managing climate risk requires good data on material impacts, consistently reported to agreed industry standards and a clear articulation of the strategic steps being taken in response. Given the nature of the threats posed by climate change, it also requires a forward looking analysis of the potential scenarios likely to be faced by the company and potential financial impacts.

However, while the need for good disclosure on climate risks is now widely accepted, corporate reporting on climate change is not yet meeting investor needs.

And while the Task Force on Climate-related Financial Disclosures (TCFD) has provided a framework for company reporting, there remains significant room for improvement on the quality, comparability and investability of corporate climate reporting.

But what does good corporate climate change disclosure look like? What do investors need from reporting? And how are investors using the information produced by company reports to inform investment decisions and strategies?

IGCC undertook this project to better understand how Australian and New Zealand investors are using TCFD reporting, what they want to see more (or less) of from company TCFD reports and to identify the ingredients for effective reporting on scenario analysis.

Full Disclosure: Improving corporate reporting on climate risk captures the views of investors who are reading and using company reporting to inform investment decisions, manage portfolio level risk and set strategies for transitioning to net zero emissions.

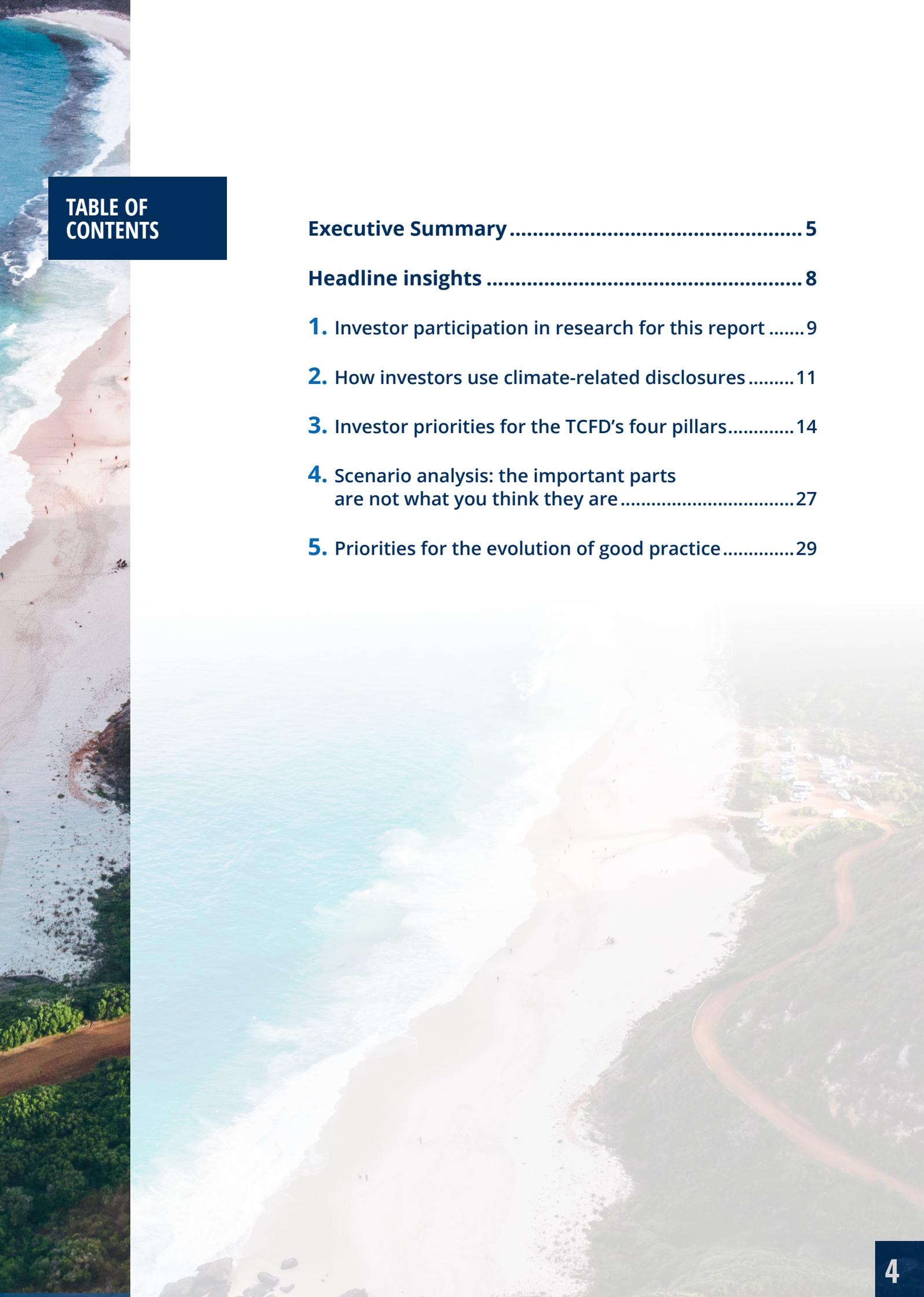
It sets out what investors expect from the next generation of climate reports, how investors are using corporate reporting on risk, strategy and opportunity and includes recommendations for strengthening disclosure against scenario analysis. The report provides insight on investor priorities for the four pillars of the TCFD, and uses contemporary case studies to identify the gaps in current practice.

Robust, useful and investable climate change reporting by companies is a vital tool for enabling investors to more effectively manage climate change-related financial risks and opportunities.

IGCC will continue to work with investors and companies to strengthen the quality and depth of company reporting on climate change.

Emma Herd

Chief Executive Officer
Investor Group on Climate Change



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REPORTING ON CLIMATE CHANGE FOR INVESTORS

Since the Task Force on Climate-related Financial Disclosure (TCFD) released its recommendations in 2017 ¹, there has been a rapid uptake and evolution in corporate reporting on climate-related risks and opportunities. Demand for effective climate-related disclosure continues to increase as investors, and increasingly financial and corporate regulators, look to company reporting to capture material climate-related risks and opportunities, and the company's strategic and operational response.

However, a significant gap remains between the information provided by companies and that required by investors. This report addresses that gap.

For the first time, the views of multiple major Australian and New Zealand investors have been brought together to define investor priorities for climate-related reporting. By giving reporting companies a better sense of what investors believe constitutes “decision-useful” or “investable” information, this report aims to improve the quality of corporate disclosures and thereby improve companies' approaches to managing climate-related risks.

INVESTORS WANT COMPANIES TO BETTER COMMUNICATE WHAT THEY ARE DOING ABOUT CLIMATE CHANGE

Investors want to understand how climate-related risk information translates into action. A common starting point for companies adopting the TCFD recommendations is to establish structures, processes, and analysis. However, these are valuable only when they then inform decision-making. To date evidence that companies are translating reporting into action is often absent in corporate climate disclosures.

For investors, the following features are critical:

- Discussion of how climate risk informs strategy and planning
- Evidence that the board understands climate-related risks
- Assessment of the impact (qualitative and quantitative) of actions taken to manage risks and capture opportunities, and evidence that actions are sufficiently well-defined, proportionate and strategic for the scale of the issues being addressed
- Evidence of performance within each of the above areas.

These are not optional inclusions; they go to the heart of the questions that investors are trying to answer: “How does this company retain and increase its value in the face of climate change and decarbonisation? And how well is it succeeding?”

INVESTORS WANT COMPANIES TO PROVIDE MORE EVIDENCE FOR THEIR CLAIMS

To gain confidence in a company's climate-related results and statements, investors seek to understand how these conclusions were reached, and what data underpins them. Many disclosures present assertions without providing much substantive supporting evidence, particularly with regard to the results of scenario analysis. Investors want to see:

- Evidence of relevant expertise among responsible executives and board members
- Discussion of relevant inputs and assumptions made in scenario analysis exercises, including selection of scenarios, technology assumptions and translation of inputs to company structure
- Disclosure of the assumptions underpinning a company's current business model and base case
- Granular reporting of scope 1, 2 and 3 emissions to provide insight into hotspots (material categories/locations).

If companies do not provide this information themselves, investors are increasingly likely and able to turn to external analysts to obtain it.

INVESTORS WANT COMPANIES TO SHOW HOW ALL THE PIECES OF THEIR DISCLOSURE FORM A COHERENT WHOLE

The TCFD framework allows companies to break down their responses to climate change over different facets of company management. The breadth of the recommendations means companies often break down their responses over successive years as well. However, individual elements should always contribute to a coherent and consistent approach. Investors are paying close attention to the following relationships:

- How risk and opportunity analysis is reflected in strategy and decision-making
- How decision-making is affected by targets
- How climate-related performance is reflected in remuneration.

INVESTORS EXPECT – AND WILL ADVOCATE FOR – ONGOING IMPROVEMENTS IN DISCLOSURE

Investors use corporate reporting as a springboard for engagement on climate risk. This will continue, and likely become more targeted, as familiarity with the TCFD framework grows, supporting tools and analytics develop, and financial regulators clarify their expectations and requirements.

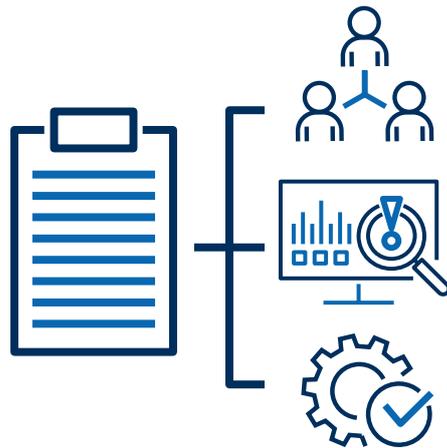
To better meet investor needs, investors expect the next generation of company reports on climate change to:

1. Demonstrate board, director and executive level skills and expertise on climate change
2. Report links between climate-related performance and executive remuneration
3. Demonstrate links between risks and opportunities identified and the company's strategic and organisational response
4. Extend reporting on emissions metrics and targets to scope 3 emissions, where material
5. Report on both transition and physical risks, costs and implications
6. Provide auditing and assurance of results.

Investor expectations for scenario analysis

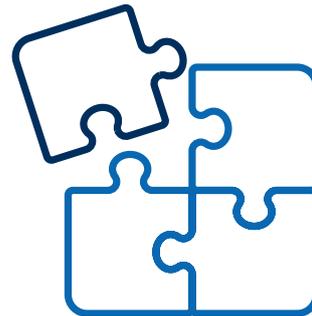
1. Apply credible scenarios drawn from commonly referenced sources to promote standardisation, and disclose the core input assumptions (e.g. technology costs, demand factors, carbon price, national emission reduction target assumptions and scope of portfolio analysis applied to)
2. If applying a bespoke scenario analysis model, disclose the input assumptions and variance to the standard set of assumptions (e.g. avoid black box disclosures)
3. Report scenario analysis impacts at both the company-wide and project/asset levels, and increase balance and credibility by reporting negative impacts
4. Report on the impact on company strategy and actions taken as a result of the scenario analysis, as well as the outputs of the analysis.

HEADLINE INSIGHTS



Investors want companies to provide more evidence for their claims. Supporting detail should be included for key aspects such as emissions footprints, senior figures' expertise and the assumptions underpinning a company's current business model.

Investors expect key aspects of scenario analysis to become more transparent. More detail should be provided on the analytical methodology and inputs used, the financial impacts at both company and project or asset levels, and the strategic responses to results.



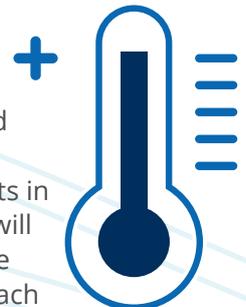
Investors want companies to show how all the pieces of their disclosure form a coherent whole. The links between risk and opportunity

analysis, targets, strategy and remuneration should be articulated and their mutual support for an overarching approach demonstrated.

Investors want to understand how climate-related risk information translates into action. Disclosures need to move beyond articulating their climate-related structures and analysis to explain how these inform decision-making and performance management.



Investors expect – and will advocate for – ongoing improvements in disclosure. Investors will continue to encourage companies to make each disclosure more decision-useful than the last, and will advocate for regulatory guidance to provide a rising minimum standard for climate-related reporting.



PART 1:

INVESTOR PARTICIPATION IN RESEARCH FOR THIS REPORT

In gathering investor insights for this report, IGCC undertook a two-step process: 1) IGCC developed a detailed survey to capture investor views of and priorities for climate-related financial disclosures. Twenty-five investor members of the IGCC participated in the survey in mid-June 2020; and 2) Over 50 investors joined a workshop to test the survey findings and their implications.

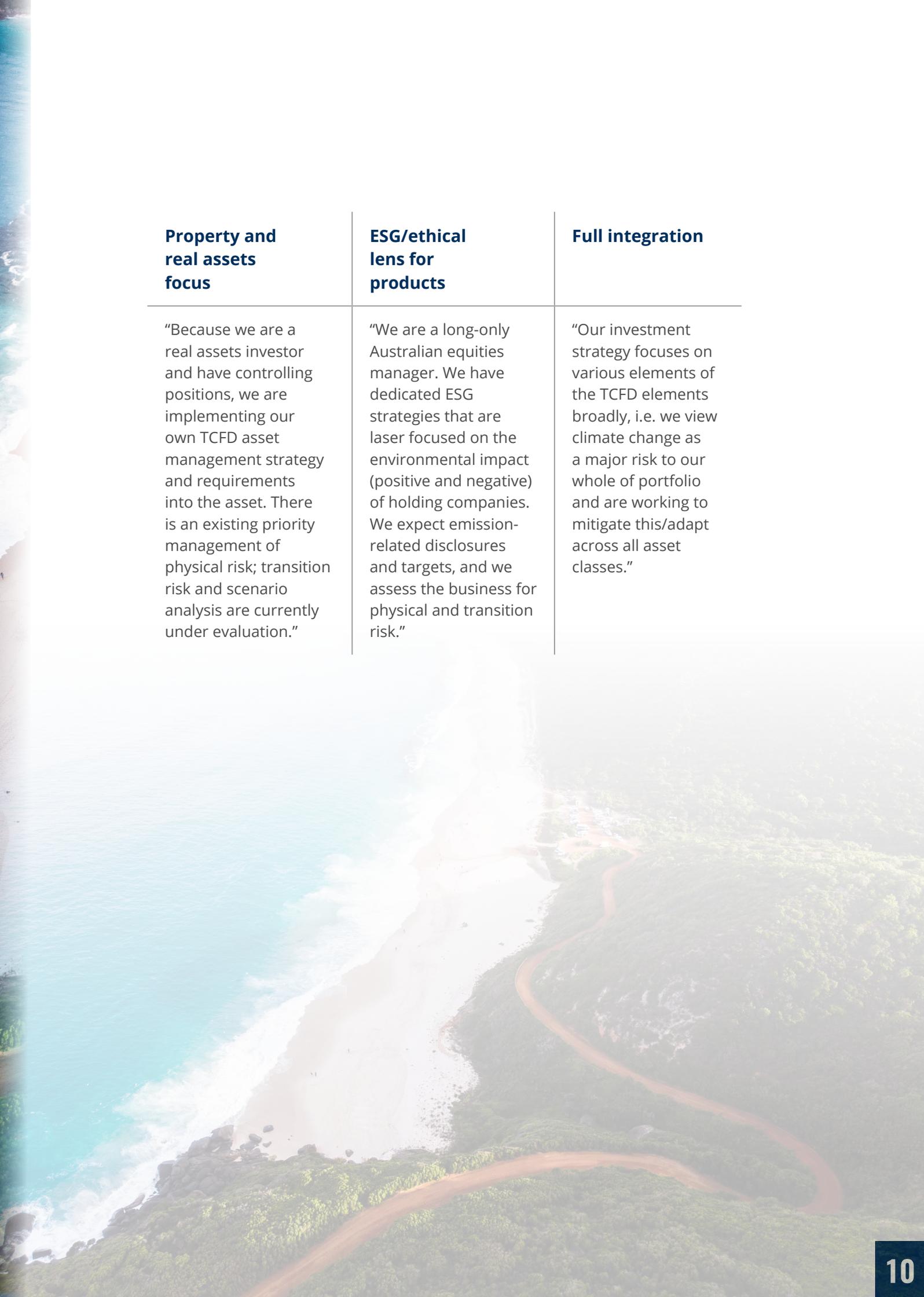
Just over half the survey participants represented asset/fund managers, with another third representing institutional investors. Most participants had an explicit ESG-related role (Figure 1). The overwhelming majority consider climate change a material financial risk in their investment analysis. Nearly half use climate disclosures on an ad hoc basis, and another 40 per cent use them on a daily or weekly basis.

Figure 1. Survey participants by investor category and investment function



Investor perspectives on climate-related risk tended to fall into three categories:

- Focus on property and real assets – management of physical and transition risks is built into asset management
- For use as an ESG/ethical lens in specific strategies – for example, products and services with climate credentials such as alignment with goals of the Paris Agreement or specified emissions targets
- Full integration into investment processes – aspects of climate-related risk were considered core elements of investment strategy.



Property and real assets focus	ESG/ethical lens for products	Full integration
<p>“Because we are a real assets investor and have controlling positions, we are implementing our own TCFD asset management strategy and requirements into the asset. There is an existing priority management of physical risk; transition risk and scenario analysis are currently under evaluation.”</p>	<p>“We are a long-only Australian equities manager. We have dedicated ESG strategies that are laser focused on the environmental impact (positive and negative) of holding companies. We expect emission-related disclosures and targets, and we assess the business for physical and transition risk.”</p>	<p>“Our investment strategy focuses on various elements of the TCFD elements broadly, i.e. we view climate change as a major risk to our whole of portfolio and are working to mitigate this/adapt across all asset classes.”</p>

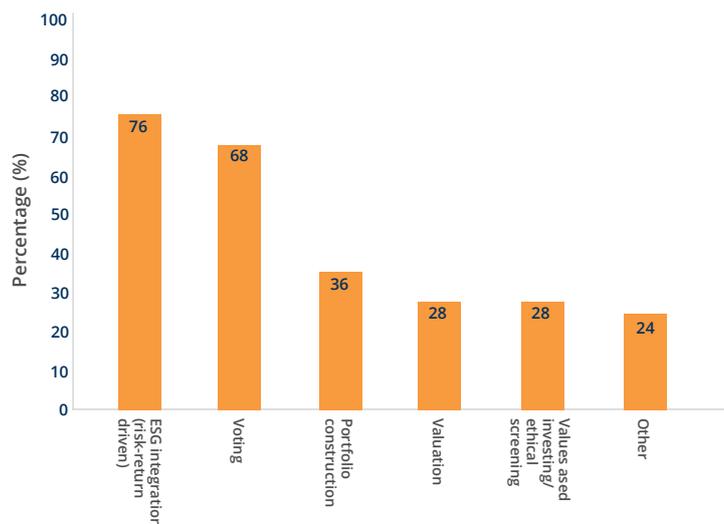
PART 2:

HOW INVESTORS USE CLIMATE-RELATED DISCLOSURES

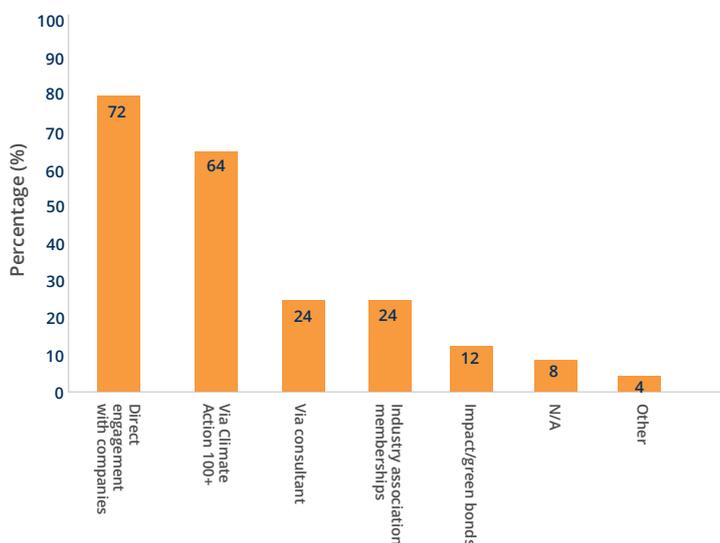
KEY USES OF CLIMATE-RELATED REPORTING

Most investors use disclosures for two overarching purposes – as a basis for engagement with companies (84 per cent of respondents), and as part of ESG integration (76 per cent). Some respondents noted that their uses of climate disclosures are in development or are expected to evolve, with one commenting: “Voting, basis for engagement is how we currently use it. But as it develops, I assume it will be used more for ESG integration, credit risk assessment, valuation, etc.” Other uses nominated included: “moving towards other [uses] as part of portfolio construction”, “investment manager monitoring”, “[assessment of] best in class”, “[identifying] opportunities in the low carbon transition” and “fund-wide climate reporting”.

Figure 2. Key uses of climate reporting (key uses)



Key uses of climate reporting (types of engagement activities)



Disclosures drive direct engagement with a very wide range of focus areas and questions

Engagement with companies takes various forms, including voting and engagement through proxy organisations such as Climate Action 100+. However, nearly three-quarters of investors engage directly with companies on climate-related risk. Information gained through engagement may not always make it into the public domain. This can allow companies to be more candid.

Survey responses bear out anecdotal comments from companies that investor questions on climate-related risk are very diverse. This reflects different investor types and priorities and, potentially, also variance in the level of sophistication of their climate change approach. Respondents provided the following examples of potential topics for engagement:

- Linking climate risk management responsibilities and remuneration metrics for relevant executives
- More challenging scenarios for analysis (e.g. consistent with Intergovernmental Panel on Climate Change (IPCC) scenarios for limiting temperature rise to 1.5°C) and comparison of Net Present Value (NPV) outcomes
- Monitoring of the realisation of analysed scenarios
- Detail of headlined risk mitigation actions
- Detail of strategy in light of scenario analysis
- Use of internal carbon pricing.

Ultimately, all investors are attempting to discern the nature of the potential financial risks posed by climate change and the effectiveness of the company's response.

A consideration of the workshop was for the potential for improved climate reporting to streamline engagement. To a large extent the adoption of TCFD recommendations by a company is likely to lead to an increase in investor engagement, because there is now a larger basis for meaningful discussion. Moreover, investors' different strategies and hypotheses inevitably lead to differences in their areas of focus.

However, areas of convergence in focus appear to be: companies' understanding of their risk exposure, the ability to benchmark against comparable peers, and for some investors, driving higher decarbonisation ambition. It is clear that climate-related disclosure marks the beginning of a deepening discussion rather than an alternative to it.

WHAT IS ESG INTEGRATION?

As defined by the Principles for Responsible Investment (PRI), this refers to the "explicit and systematic inclusion of ESG issues in investment analysis and investment decisions." ESG integration is practised with the purpose of lowering risk and/or generating returns. Only material ESG issues that are considered highly likely to affect corporate performance and investment performance are integrated into analysis and investment decisions.

ESG integration is emerging as an important driver of climate risk-related analysis

Despite research findings² that much climate-related reporting is not “decision-useful” or “investable”, investors are increasingly using disclosures as an input to investment assessments. One respondent outlined an illustrative approach:

“When examining companies on these matters, we typically look at their level of risk exposure relative to peers, decarbonisation targets (whether they are company-wide or segment-by-segment) and how those targets are set, managed and overseen by the board. We also take into consideration the company’s level and quality of communication and engagement with shareholders.”

Two emerging benefits of reporting are:

- Some companies in high-risk sectors can show that they are low-risk relative to peers
- Better access to debt finance where climate credentials can reduce risk.

A common factor in both cases is that reporting is linked to decision-making and strategic positioning, rather than just the provision of information.

Investors are testing companies’ climate disclosures against external analytics

Disclosures are being consumed in an increasingly rich information environment. Investors are able to compare a company’s disclosure with the findings of external frameworks and analysis. Metrics used by providers of ESG indices, such as Sustainalytics³ and MSCI,⁴ and criteria such as those defined by the new EU Taxonomy for Sustainable Finance⁵ will also shape investor views of companies’ climate risk. Investors, like other financial actors, are also developing their own partnerships with research and advisory organisations to build internal capacity for assessment. While climate-related reporting is not yet mandatory in Australia, New Zealand regulators are implementing mandatory requirements⁶ - the absence of disclosure is no protection from scrutiny, and in fact is a signal in itself.

“ What’s also important is what companies are not disclosing, or what they haven’t thought about. This constitutes information about the broader strategic approach they are taking and is another aspect of broader risk. ”



PART 3:

INVESTOR PRIORITIES FOR THE TCFD'S FOUR PILLARS

Each of the four pillars of the TCFD recommendations (governance, strategy, risk management, and metrics and targets) focuses on a different aspect of climate-related risk management. In this section we examine within each pillar:

- Which elements are currently considered more important by investors and why. Elements were selected for consideration either because they are already commonly provided within corporate disclosures or because they were identified as a current or emerging priority
- Investor views on extracts from recent (2017-2019) disclosures that are typical of Australian company reporting under the TCFD recommendations. These were selected to illustrate general reporting tendencies, not to spotlight the specific companies chosen.

These case studies solely examined companies' approaches to reporting and disclosure, and do not include an analysis or assessment of any company's climate change or sustainability performance. These were selected to illustrate general reporting tendencies, not to spotlight the specific companies chosen.

3.1 GOVERNANCE

Investor expectations in this area are rising rapidly. There was unanimous agreement that "board and executive expertise and responsibility" are very important (76 per cent of respondents) or important (24 per cent).

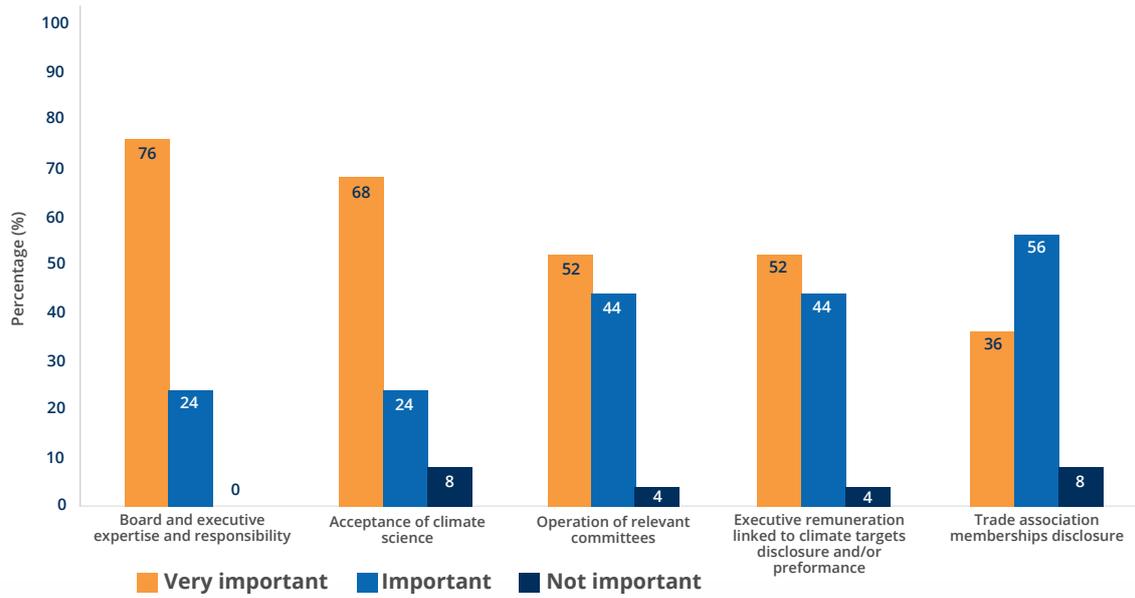
Investors feel that companies have made progress in clarifying their structures and processes regarding responsibility, and so are now shifting attention to companies' demonstration of expertise. As one investor commented, "[I have] no idea whether the committees have appropriate background and/or adequate expertise to provide oversight. This is an issue for most boards."

"Acceptance of climate science" was considered very important by 68 per cent and important by another 24 per cent, even though this is not an explicit requirement under the TCFD framework. It may be a "hygiene factor", such that failure to articulate a robust understanding of climate science suggests that a company is not really able to manage climate-related risk.

A well-established element of corporate disclosures - "operation of relevant committees" - was considered of equivalent importance to "executive remuneration linked to climate targets", a relatively rare component of current disclosures. Commentary indicated that remuneration links to climate-related performance are an aspect of increasing concern. As one survey respondent noted: "Although a remuneration link to climate targets is very important, we are giving companies time to adapt. This will become a more material requirement in the near future."

Trade association memberships were given the lowest priority but still considered important by a large majority, particularly when trade association positions appear to conflict with those of the company. In these cases investors consider it important for companies to explain what the purpose and benefits of the membership are and the extent to which they are influencing the association.

Figure 3. Investor ratings of elements of climate risk-related governance



GOVERNANCE CASE STUDY - WOOLWORTHS GROUP

An extract from Woolworths Group’s 2019 sustainability report (page 37, box titled “Climate change governance”)⁷ was shown to survey participants. The extract noted that Woolworths considers climate change to be a “critical, board-level strategic issue, with responses overseen by the board’s sustainability committee (SusCo) and defined within the sustainability strategy. SusCo comprises three directors and an independent chair, reports directly to the board and receives quarterly progress updates on the sustainability strategy. The extract also noted that Heads of Business Units and Business Areas are responsible for climate risk management within their units/ areas. The example of the facilities management team, which is responsible for operational emissions and energy management, was provided.



About two-thirds of survey respondents said that the extract did not provide enough information to meet their needs (Figure 4). Investors praised its “reasonable level of detail” and “clear and concise” content. However, they also identified as gaps:

- How the company ensures it has appropriate climate-related expertise
- Relevant expertise of sustainability committee members
- How each business unit identifies, assesses, responds, and manages climate risk
- Detail on reporting and responsibility structures – which executive members have responsibility, who reports to SusCo, how accountability is managed
- Whether and how remuneration is connected to climate-related risk management.

Uses to which the disclosure would be put included “to evaluate sustainability governance of the company”, and “inform our view of Woolworths’ valuation and risks to this valuation”.

Most investors considered the disclosure in line with average current practice, although a few believed it reflects best current practice, and one thought it below average. This may reflect variance among investor views of what constitutes good practice; however survey comments also indicated that many investors made allowances for progress from previous disclosures, performance relative to sectoral peers, or changes in expectations since the disclosure was made.

Figure 4. Are these elements covered with sufficient detail and appropriate focus for your key uses? Investor responses

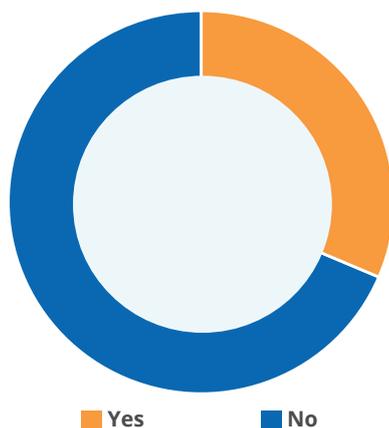
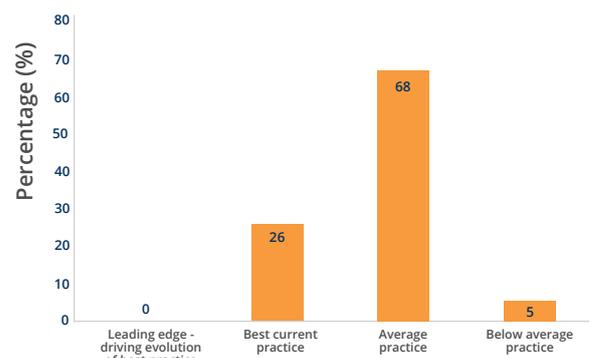


Figure 5. How does Woolworths’ disclosure of these elements compare with your understanding of current best practice?

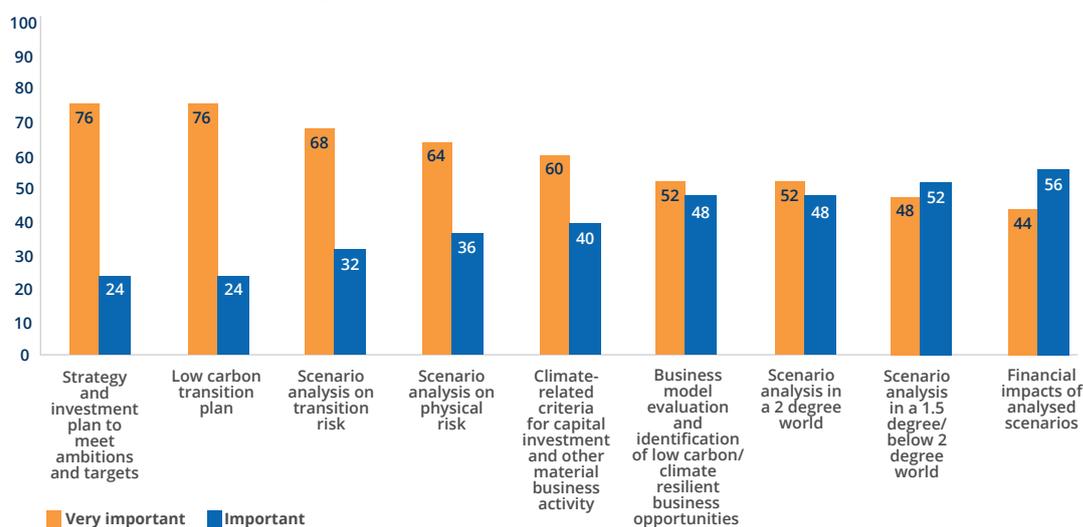


3.2 STRATEGY

Strategy is arguably the most important of the TCFD's pillars, but it is also the most complex. Relevant elements to be covered within a corporate disclosure range from scenario analysis against a range of futures, potential financial impacts and implications under each scenario, responses to these impacts and, ultimately, an explanation of how the company's strategy and decision-making mitigate the scenarios' negative impacts and capitalise on their opportunities.

All these elements are considered important, but investors give the final one the highest priority. Having a "strategy and investment plan to meet ambitions and targets" or a "low carbon transition plan" was considered very important by 76 per cent of survey respondents. However, as one workshop participant noted, "this is something companies tend not to do, or do only at a very high level".

Figure 6: What elements within strategy do you consider most important



To date, reporting against the TCFD's strategy recommendations has tended to focus on the scenario analysis component. (Investor views on scenario analysis are discussed in more detail in section 4). Investors consider scenario analysis important but, perhaps surprisingly, are less interested in company-reported financial impacts under analysed scenarios. This element was given the lowest priority (44 per cent considered it very important). This reflects several concerns:

- Financial impacts are often presented very selectively, with minimal quantification
- The underlying inputs and assumptions, and the process for their selection, are rarely provided
- Current publicly available scenarios have material weaknesses, and proprietary scenarios are opaque
- The financial impacts are a tool to inform strategy and should be used as such.

“ The disclosures need to look beyond financial analysis for determining business resilience. A financial analysis that throws out a lot of numbers risks becoming a once-off just to say that there is 'nothing to see here' - especially if the business makes the claim that they are resilient to climate change (without also announcing a major strategic overhaul). The key to climate change is recognising the uncertainty and disclosing how the uncertainty will be managed through monitoring and progressive changes to strategy. A financial assessment that lands on a potential change in NPV is the opposite of this. ”

What improvements do investors want?

Investor priorities for strategy disclosures emphasised different aspects of an overarching narrative- the importance of showing that climate change has been appropriately embedded into strategic decision-making:

- Defining criteria for decision-making derived from climate risk analysis, particularly with regard to capital allocation decisions that involve emissions-intensive activities
- Providing a credible plan to achieve targets. Investors want to see how short-term objectives and intermediate steps align with “more lofty ambitions decades into the future”
- Demonstration that senior management take climate change seriously.

Opportunities in climate change – the missing chapter or a misunderstanding of the true nature of the threat?

Climate-related reporting tends to be weighted much more toward risk management than opportunity capture. Three possible reasons for this were discussed at the workshop:

- The structure and framing of the TCFD, with its emphasis on managing systemic risk, naturally drives this focus
- Political sensitivities, whereby companies do not want to be seen to be promoting opportunities arising from climate change
- Companies do not really consider that deep decarbonisation and/or climate change is likely – because if they did they would more aggressively lean into strategies that maximise opportunities.

Many investors want not just to assess (and price) companies’ climate risk but also to facilitate achievement of the Paris Agreement goals, and therefore are highly interested in investing in opportunities presented by deep decarbonisation. Investors agreed that companies should bring more attention to bear on developing the opportunity aspects of their climate-related reporting.

STRATEGY CASE STUDIES – OIL SEARCH, SANTOS AND COMMONWEALTH BANK OF AUSTRALIA

Three extracts were provided to survey respondents, each covering different but overlapping groups of elements of the TCFD's strategy pillar. These were:

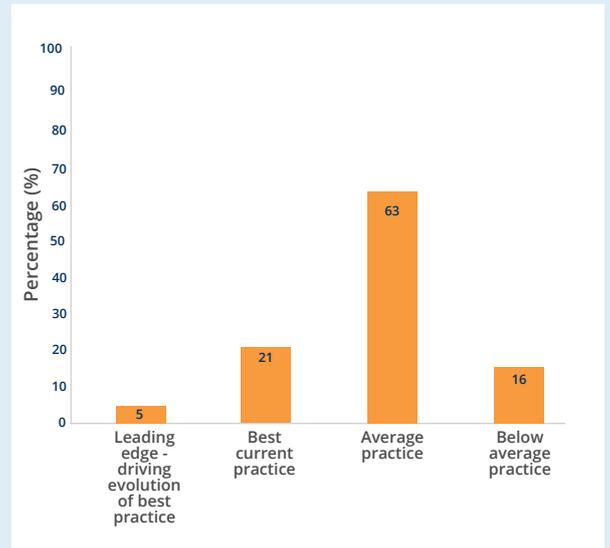
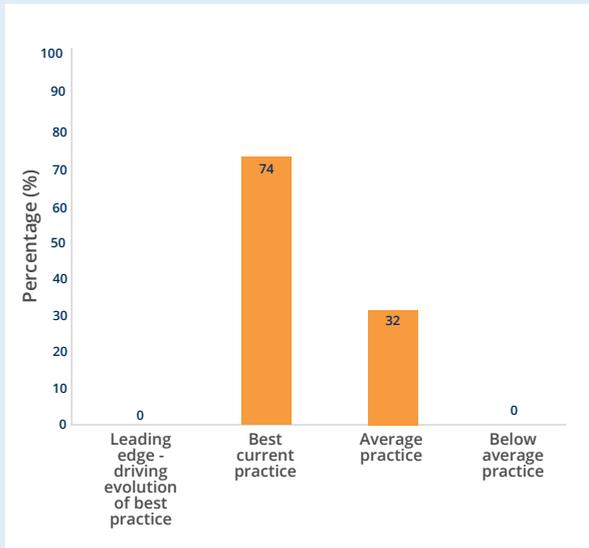
- Oil Search's 2017 'Climate Change Resilience Report', page 27.⁸ This summarised potential financial impacts to 2040 on selected Oil Search assets under three scenarios – the IEA's New Policies and 450 Scenarios (2016), and Greenpeace's 2015 Advanced Energy [R]evolution scenario. The impacts on NPV for three LNG assets were provided according to a qualitative scale that ranged from "positive impact on project economics" to "significant negative impact and project does not pay back investment". The latter impact was triggered only for one asset in one scenario; under the others the NPV impacts were broadly positive, although in four of the nine scenarios "returns are less than planned but asset is still economic".
- Santos' 'Climate Change Report 2019', pages 38-39.⁹ This extract discusses potential impacts to 2030 on Santos' pre-growth and growth portfolios under three scenarios from the IEA's Energy Technology Perspectives 2017: the Reference Technology Scenario (RTS), 2°C Scenario (2DS) and Below 2°C Scenario (B2DS). Santos notes that both portfolios "remain economically resilient under all three IEA scenarios". Significant carbon costs reduce valuation and earnings under the 2DS and the B2DS, and indicative impacts are presented in graphs without labelled axes. Santos notes that these impacts could be offset by "investment in emissions reduction across our portfolio and incorporating zero-emission products and services into our portfolio", and provides as examples of such activities already underway efforts to reduce fuel use through switching to renewable energy and installing heat recovery technology, a feasibility study into carbon capture, use and storage (CCUS), and investigating the potential for selling extracted CO₂.
- The 'Climate Strategy' section of Commonwealth Bank's 'TCFD report 2019' (also part of its annual report), page 57.¹⁰ This covers Commonwealth Bank's (CommBank) responses to the findings of its 2018 scenario analysis, which examined physical climate risk to its building insurance policies and home loan portfolio, and transition risks to its business lending portfolio and FirstChoice Australian Share Fund. Responses listed comprise support for sector-wide initiatives, such as through the Insurance Council of Australia's Climate Change Action Committee; incentivising mortgage customers to install solar panels and energy efficiency improvements; phasing out exposure to thermal coal mining and coal fired power generation, possibly by 2030; building internal capacity and working with external consultants to better understand and manage key aspects of climate risk.



In all cases, a majority of investors thought each disclosure provided insufficient information on the strategy elements it covered. However, out of the two oil and gas companies, Oil Search's approach was preferred. Oil Search's disclosure was seen as "best current practice" by more than 70 per cent of respondents, with the remainder considering it "average practice". By contrast investors had mixed views on Santos's disclosure, with 60 per cent rating it average, 26 per cent "best" or "leading practice", and 16 per cent rating it "below average" (Fig. 7). Investors noted that advances in reporting and rising expectations influenced their rating. One commented, "Santos has been improving their disclosure on TFCO over recent years in a fast-evolving environment"; another that "although this is not what we consider best practice, this is generally average practice in the Australian market, where no numbers are disclosed on the financial impacts."



Figure 7. Comparison of investor ratings of extracts from Oil Search (left) and Santos (right)



Investors identified the following positive features of the Oil Search extract:

- Provision of project-level information, particularly with regard to expansion projects
- Clear heat-mapping of the range of potential impacts by project
- Use of the Greenpeace Advance Energy [R]evolution scenario. This is aligned with the Paris Agreement's 1.5°C goal and considered more challenging than the IEA's scenarios
- Provision of information on how climate risk would influence decisions.

Investors commented that Oil Search's disclosure is more decision-useful, as it is more granular, and can be used to help assess how climate risk is incorporated into decision-making. However, they noted the following gaps:

- No discussion of the scenarios' implications for overall financial performance
- No quantification of impacts
- No discussion of alternative strategies to mitigate transition risk impacts.

Investors praised the following aspects of Santos' disclosure:

- Inclusion of firm-wide impact and strategic implications
- A higher level of quantification than Oil Search, and depiction of relative performance under each scenario
- Provision of some decarbonisation responses.

The following weaknesses in Santos' disclosure were identified:

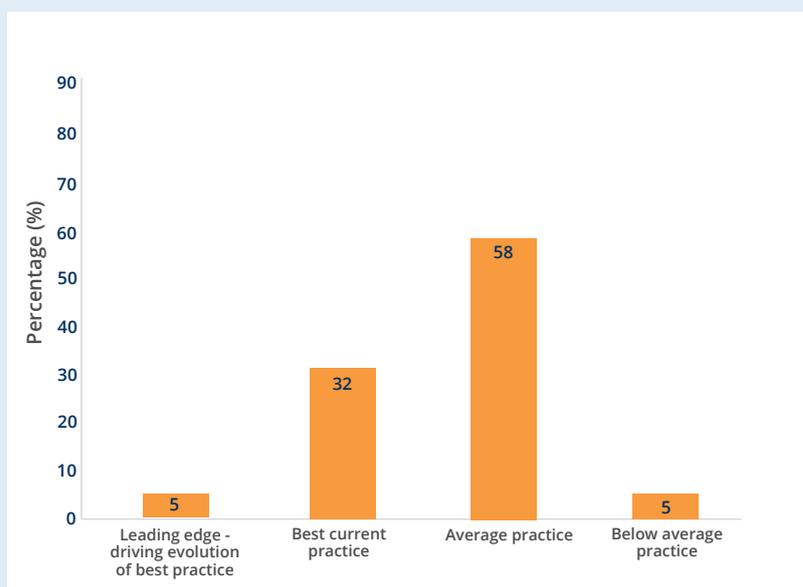
- No indication of the company's viability under a 1.5°C scenario
- No evaluation of broad business model
- No numbers provided, either for the financial impacts under each scenario or for the risk mitigation impact of Santos' nominated responses
- Reliance solely on IEA scenarios, without testing key assumptions within those scenarios (such as the roles of gas and carbon capture and storage)
- Insufficient basis for the view that the business is "economically resilient under all three scenarios".

“ While the disclosures are different, nevertheless we think the data is relevant as it allows us to identify and explore factors that can affect the valuation of Santos and Oil Search. In the end we perform our own independent analysis of the opportunities and risks within each of our covered companies and don't solely rely on that disclosure as discussed by each company. ”

“ Both disclosures nicely explain challenges that each business will face into the future. But neither of them makes me confident that the businesses have truly integrated climate change into their strategic decision-making. ”

As with the Santos extract, CommBank's extract describes how the company is responding to mitigate negative impacts revealed by the scenario analysis it undertook. Investors took a fairly positive view of CommBank's disclosure, with 37 per cent rating it as leading edge or best current practice, and only 5 per cent considering it as below average. One commenter said, "CBA rank well versus peers relating to their reporting. However, we note this is a fast-evolving topic and what they do today will be surpassed by others if they stand still."

Figure 8. Investor ratings of CommBank extract



Investors praised the following aspects of the CommBank extract:

- Clear identification of key risk factors and specific actions underway to mitigate these factors
- Evaluation of some aspects of the company's business model
- Commitment to reduce exposure to industries that are large greenhouse gas emitters.

Gaps and weaknesses that were identified included:

- Insufficient detail explaining how the commitments, products and analytical tools mentioned mitigate risk and what their associated costs and benefits are
- No identified green financing opportunities beyond household solar and energy efficiency
- Lack of clear targets.

As with Santos, and despite the major differences between the companies and their respective sectors, investors were concerned that CommBank's responses are not demonstrably proportionate or strategic, relative to the scale of the problem. One comment was that, "[the] disclosure might be ok but [the] initiatives themselves are weak for an organisation of CBA's scale and systemic importance"; similarly, of Santos one investor asked, "how will they decide which approaches to use and when? It seems like they intend to just keep doing what they are doing and bolt on a solution here and there".

“ More information is needed about the scale and urgency of the steps CBA is taking. Or perhaps I take this at face value and assume that CBA is not taking sufficient action. ”

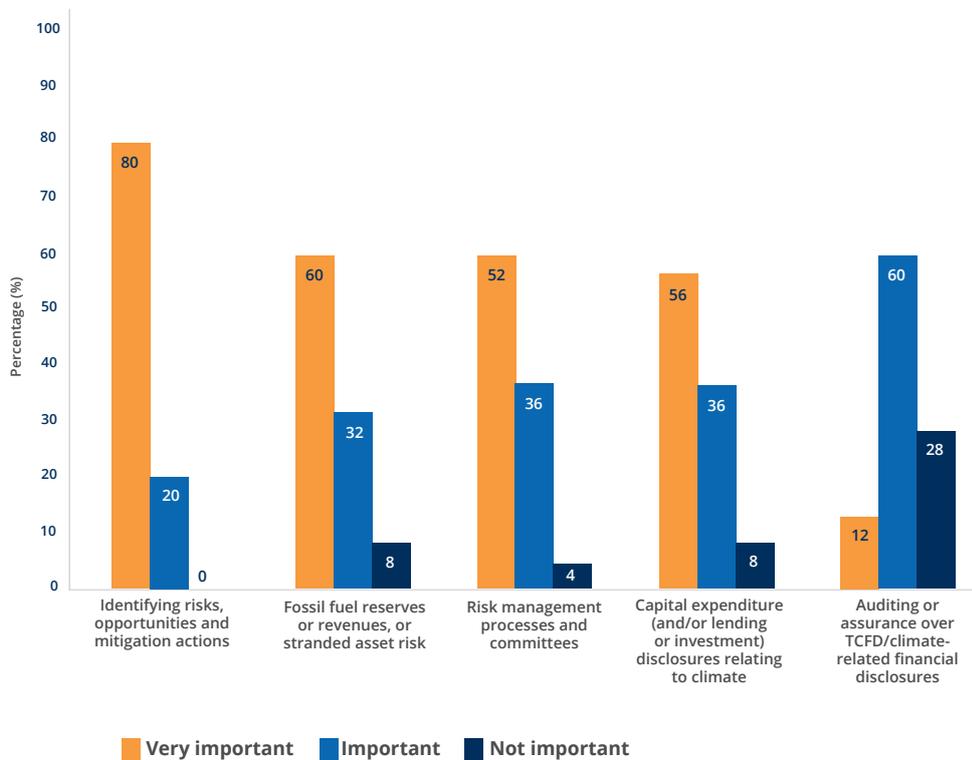
2.3 RISK MANAGEMENT

This pillar of the TCFD recommendations requires disclosure of processes to identify, assess and manage climate-related risks, and to ensure these efforts are integrated into broader corporate risk management. Across all four of the TCFD pillars, investors gave elements of risk management both the highest and lowest scores for “very important”. “Identifying risks, opportunities and mitigation actions” was considered very important by 80 per cent of survey respondents, while “auditing or assurance of disclosure” was considered very important by just 12 per cent, while 28 per cent thought it unimportant.

There was significantly less commentary from investors regarding the risk management pillar. However, one point that investors emphasised is the importance of providing an assessment not just of risks and opportunities but of the mitigation actions a company is taking, and the impact these have on the scale of residual risk.

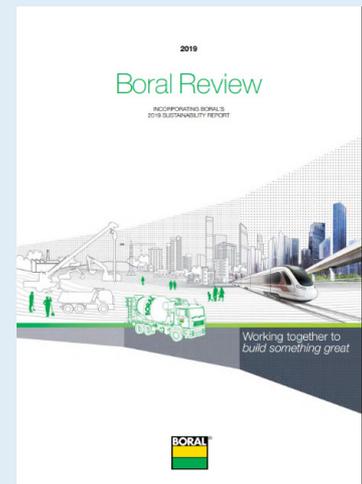
“ Assurance will be important but we are not ready yet. Not sure if auditors are well enough equipped or informed. ”

Figure 9. Investor ratings of elements of risk management



RISK MANAGEMENT CASE STUDY – BORAL

An extract from Boral's 2019 'Boral Review' page 36¹¹ was presented to survey participants. This discussed Boral's assessment of physical climate-related risks and the key mitigation measures the company is undertaking (the following page did the same for transition risks). Boral distinguished between acute and chronic risks, and discussed those considered "potentially significant" over the medium to long-term, defined as 10 or more years. Acute risks included property damage to operations, suppliers and/or customers; disruption to logistics or supply chain; and environmental damage resulting in fines or penalties. Boral's management of these risks includes maintaining diversity in operating networks, establishing business continuity plans and raw material supply continuity plans at key sites, and investment in stormwater infrastructure. Boral's chronic risks were: water scarcity increasing product costs, increasing frequency of rain-impacted days on customers' operations, and increasing hot days decreasing productivity and increasing energy costs. These are managed through water efficiency and re-use targets and operations and development of products that require less water to manufacture.



Unlike all the other assessed disclosures, this extract was considered by a majority of survey respondents to provide sufficient information. Investors praised these features:

- Clear definition of time horizons
- Clear articulation of a range of chronic and acute physical risks
- Provision of physical risk exposures and mitigation/adaptation actions.

Investors commented that the level of detail was more high-level than ideal. Key weaknesses identified were:

- Lack of scoping or quantification of the impacts of the risks
- Lack of detail regarding mitigation actions
- Mapping of risks by business units or share of assets/products affected.

Figure 10. Are these elements covered with sufficient detail and appropriate focus for your key uses?

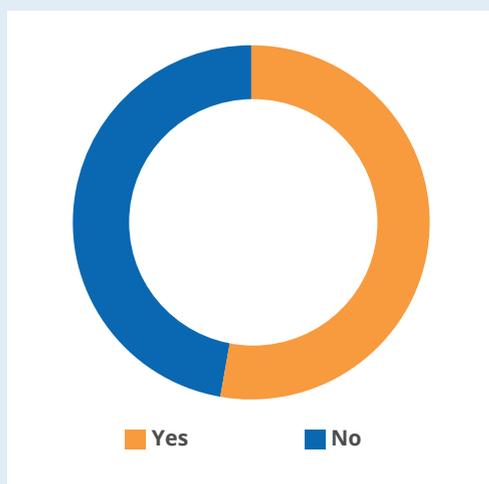
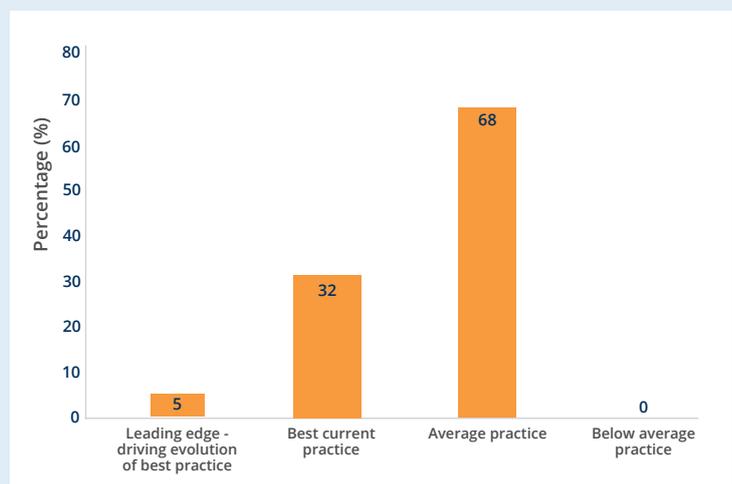


Figure 11. How does Boral's disclosure of these elements compare with your understanding of current best practice?



3.4 METRICS AND TARGETS

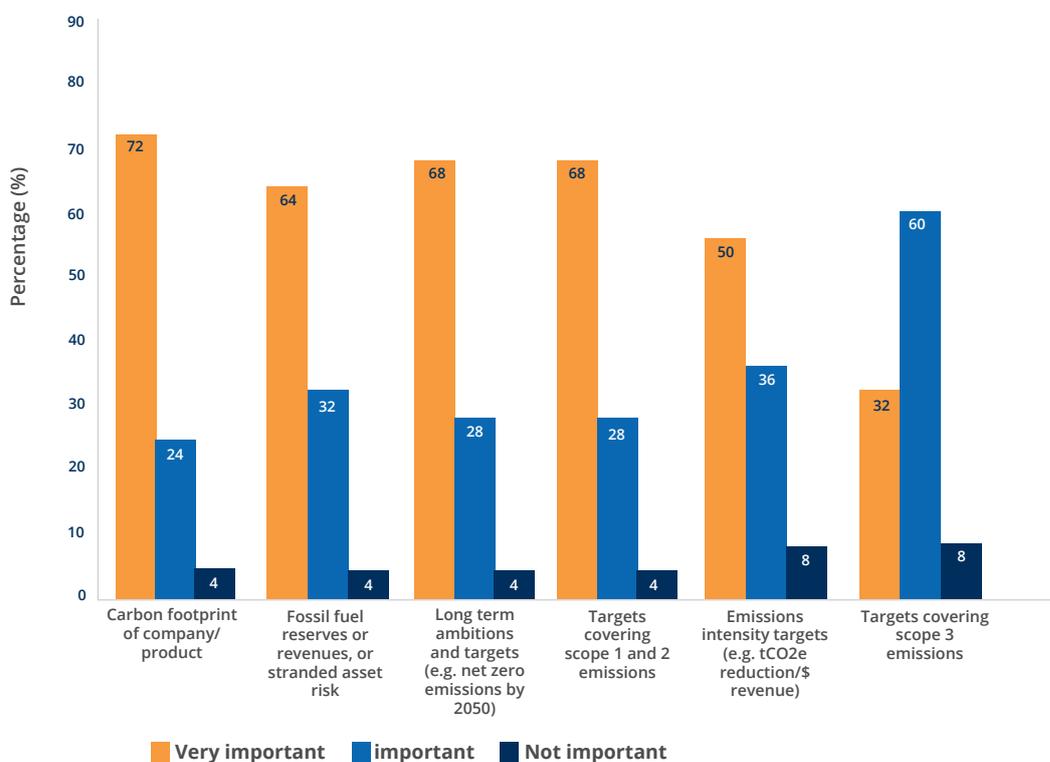
Climate-related metrics and targets are valued by investors for their comparability across companies. Key metrics investors use for comparisons with peers are:

- Emissions and emissions intensity of key projects and products
- Past performance in achieving emissions reduction
- Emissions reductions targets, preferably net zero targets. These should be supported by interim targets that create a plausible trajectory to decarbonisation by 2050.

Nearly three-quarters (72 per cent) of investors give the highest priority to disclosure of the carbon footprint of a company and/or its key products. Slightly fewer (68 per cent) consider long-term ambitions and targets (e.g. net zero targets) and targets covering scope 1 and 2 emissions very important.

Targets for scope 3 emissions were considered very important by only 32 per cent, but many investors commented that this reflects a view that scope 3 targets are very important only to some industries or companies. For example, for Rio Tinto the absence of scope 3 metrics or targets in its 2018 disclosure was criticised by multiple investors.

Figure 12. Investor ratings of elements of metrics and targets



TARGETS AND METRICS CASE STUDY – RIO TINTO

Survey participants examined an extract from Rio Tinto’s 2018 report ‘Our approach to climate change’, page 27.¹² This covered Rio’s scope 1 and 2 emissions since 2014 and tracked Rio’s progress to its 2020 target of reducing emissions intensity by 24 per cent from a 2008 baseline. Rio notes that it has consistently beaten its intensity targets since 2008 and has also reduced absolute emissions over that period by 43 per cent.

In response to a separate survey question, several participants also nominated Rio Tinto’s most recent climate disclosure¹³ as an example of leading practice on climate change reporting for the industry. This case study summarises comments on both Rio Tinto reports.

Just under 60 per cent of investors thought Rio’s 2018 extract failed to provide sufficient information on metrics and targets for their uses. Investors praised the provision of clear, labelled charts of both emissions intensity and absolute emissions. However, they noted the following weaknesses:

- Lack of metrics and target regarding scope 3 emissions
- Lack of detail regarding the sources of emissions reduction, so that the impacts of divestment, for example, could be considered separately from improvements in energy efficiency
- The 2020 target did not appear to be ambitious, particularly considering it had already been achieved several years earlier, and there was no way of assessing the adequacy of the target against, for example, a 2°C trajectory for the sector.

In its 2019 disclosure, Rio presented a commitment to reach net zero emissions by 2050, and 2030 targets to reduce emissions intensity by 30 per cent and absolute emissions by 15 per cent. These targets were derived from marginal abatement cost curves developed for Rio’s operations. Rio also provided an assessment of scope 3 emissions from its role in the aluminium and steel value chains and announced a range of partnerships to facilitate reduction of scope 3 emissions.

Investors praised these aspects of the disclosure, particularly its leading work on abatement cost curves and how its targets position the company both operationally and strategically.

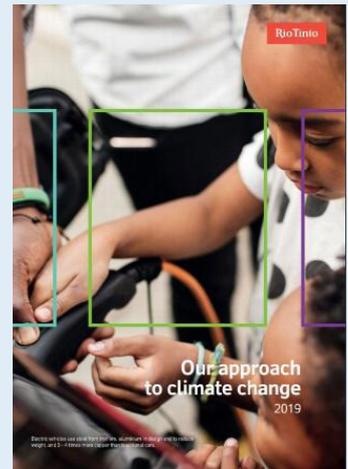


Figure 13. Are these elements covered with sufficient detail and appropriate focus for your key uses?

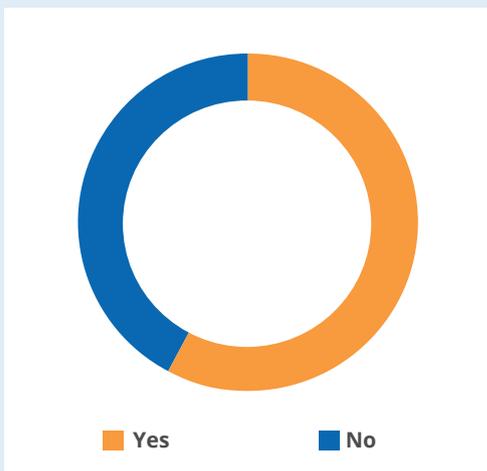
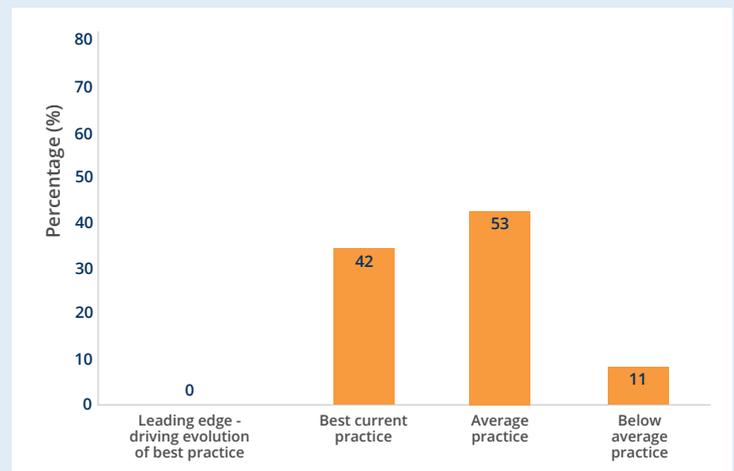


Figure 14. How does Rio Tinto's disclosure of these elements compare with your understanding of current best practice?





PART 4:

SCENARIO ANALYSIS: THE IMPORTANT PARTS ARE NOT WHAT YOU THINK

Scenario analysis has received significant attention from companies, but investors remain dissatisfied with the results. This section discusses investor perspectives on the analytical decisions required to undertake scenario analysis. For commentary on how investors want to see scenario analysis used to inform company decision-making, refer to section 3.

Investors want to understand the decisions that underpin a company's scenario analysis

The purpose of climate risk-related scenario analysis is to examine the range of potential impacts to an organisation under different climate futures. As recommended by the TCFD, these should include at least one scenario where global temperature rise is limited to 2°C or less.

Investors want a better understanding of the process by which companies analyse their resilience to climate-driven scenarios for several reasons:

- To take a view on the robustness of reported results of the exercise
- To understand how companies are thinking about their climate risks
- To understand how companies are responding to identified risks and impacts to enable comparability across companies of scenarios and reported mitigation actions.

The inputs affect the results, and are not transparent enough

In developing climate risk scenarios, some parameters are widely understood to be key drivers of results. A scenario's assumed rise in global average temperature, for example, will require greater decarbonisation efforts if it is lower and imply increasing physical impacts if it is higher. Other parameters are less visible but can influence the results significantly. These include:

- *Characteristics of the selected scenarios, models or datasets.* For example, the IPCC's combinations of global emissions trajectories (RCPs) and socioeconomic development options (SSPs) can be run through five different integrated assessment models, each with its own idiosyncrasies. Similarly, physical climate risk in Australia could be examined through eight global climate models (GCMs). A swing factor particularly relevant to Australia is gas demand in Asia, for which scenarios from different sources produce very different projections
- *Technology availability and costs.* Assumptions regarding the use of carbon capture and storage, and/or carbon dioxide removal technologies can have significant implications for the amount of fossil fuels able to be consumed within a given emissions constraint. Similarly, assumptions regarding clean technology development affect the calculated costs of decarbonisation, as do the interactions between projected fuel prices and projected carbon prices

- *Definitions of emissions constraints.* The IEA claims that its Sustainable Development Scenario is consistent with the Paris Agreement's 1.5°C goal. Others strongly disagree. Australia's national emissions reduction target is 26-28 per cent below 2005 levels by 2030, but the Paris Agreement expects countries to strengthen their targets every five years. What should an emissions trajectory to 2050 based on current policy look like? Another aspect that is examined in scenarios such as the UN Principles for Responsible Investment (PRI) Inevitable Policy Response is the potential for decarbonisation efforts to be delayed, then sudden and disruptive¹⁴
- *Mapping of results to company structure.* Whether results are reported at the project or asset level, for a business division, or across the firm as a whole, affects investors' ability to assess their relevance and significance. This is made even more difficult when companies provide non-quantified results.

For these reasons, investors support companies using publicly available scenarios and datasets. Public scenarios have weaknesses; but bespoke scenarios are opaque and prohibit comparison. Where bespoke scenarios are developed and applied, transparency on the assumptions and relationship to existing scenarios is even more critical.

Investor priorities for standardisation and regulatory guidance

Investors are seeking regulatory guidance and requirements to ensure a robust scenario analysis process and achieve confidence in results and enable comparison with peers and progress over time. Given the variation in potential inputs and approaches, investors have minimal confidence that this will emerge voluntarily. Important advances in standardisation that investors want companies to understand and use include:

- The release of scenario sets from the Network of Central Banks and Supervisors for Greening the Financial System (NGFS), an international group of financial regulators that includes the Reserve Bank of Australia and Reserve Bank of New Zealand. The NGFS scenarios include options for examining a range of emissions pathways (including orderly vs disorderly transition), technology availability options, and physical impacts
- Recommendations from the Climate Measurement Standards Initiative. Within Australia, the finance sector has developed a process and recommendations on applying scenarios for the purpose of assessing physical risk impacts.

This should not preclude companies from doing both standardised scenario analysis and bespoke exercises for their own strategy development.

Investors want companies to be explicit about the assumptions within their current business model

Investors want companies to be explicit about the assumptions underpinning their base case or current business strategy. This has implications for both short and medium-term investments as well as likely implications for valuations should the pathway shift to a different scenario. It also provides insight into the kind of climate future the company is directly contributing to - "Would like companies to more clearly disclose their assumptions of the world their business strategy is being designed for".



PART 5:

PRIORITIES FOR THE EVOLUTION OF GOOD PRACTICE

INVESTORS EXPECT – AND WILL ADVOCATE FOR – ONGOING IMPROVEMENTS IN DISCLOSURE

Investors have used corporate reporting disclosures as a springboard for engagement on climate risk. This will continue, and likely become more targeted, as familiarity with the TCFD framework grows, supporting tools and analytics develop, and financial regulators clarify their expectations and requirements.

To better meet investor needs, investors expect the next generation of company reports on climate change to:

1. Demonstrate board, director and executive level skills and expertise in climate change
2. Report links between climate-related performance and executive remuneration
3. Demonstrate links between risks and opportunities identified and the company's strategic and organisational response
4. Extend reporting of emissions metrics and targets to scope 3 emissions, where material
5. Report on both transition and physical risks, costs and implications
6. Provide auditing and assurance of results.

Investor expectations priorities for scenario analysis:

1. Apply credible scenarios drawn from commonly referenced sources to promote standardisation and disclose the core input assumptions (e.g. technology costs, demand factors carbon price, national emission reduction target assumptions and scope of portfolio analysis applied to for example)
2. If applying a bespoke scenario analysis model disclose the input assumptions and variance to the standard set of assumptions (e.g. avoid black box disclosures)
3. Report scenario analysis impacts at both the company-wide and project/asset levels, and increase balance and credibility by reporting negative impacts
4. Report on the impact on company strategy and actions taken as a result of the scenario analysis, as well as the outputs of the analysis.

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