

AASB S2 REPORTING MATURITY IN AUSTRALIA: WHAT BUSINESS LEADERS NEED TO KNOW

Appendix: Scenarios are about more than what you think the future will look like

At close of business on 4 September 2026 a total of 659 ASX listed companies with a June year end had released their annual reports. These included AASB S2-aligned reports for 159 companies (including over 80 reports that were published by 21 August and which we used in our previous review). Of the 500 companies that did not release an ASRS report, 120 have indicated that they still need to publish their sustainability reports. We will continue to monitor the market to complete our dataset of publicly available reports.

In this article, we persist in our review of AASB S2 aligned reports based on the standard dataset extracted by our AI agent. We look at the sectoral results, and we take a deep dive into how companies are articulating climate materiality, how they are using scenarios and what climate models are most frequently used to inform disclosures.

SUMMARY

The results across the dataset are summarised in the table below. These continue to show that disclosure of Governance aspects is most comprehensive and have greatest clarity, and that the most challenging area for disclosure is Metrics and Targets.

TABLE 1 SUMMARY OF REPORTS AND RESULTS

Sector ¹	Average overall score	Average Governance	Average Strategy	Average Risk Management	Average Metrics and Targets
Manufacturing and Agriculture	80%	92%	79%	77%	72%
Mining and Metals	80%	93%	80%	78%	70%
Coal, Oil and Gas, Electricity Generation	83%	93%	84%	80%	76%
Finance and Insurance	74%	87%	73%	75%	62%
Property and REITs	78%	90%	75%	76%	71%
Utilities, Infrastructure and ICT, including Data Centres	82%	94%	80%	80%	74%
Consumer and Retail	77%	91%	75%	76%	65%
Public Sector, Government and Health Services	77%	93%	74%	76%	65%
Overall averages	79%	91%	77%	77%	69%

The Energy sector has the highest average overall score followed by Utilities, Infrastructure and ICT. Governance is the highest-scoring pillar in every sector. Metrics and Targets is the lowest-scoring pillar in every sector. Finance and Insurance has the lowest sector average,

¹ Number of reports: Manufacturing and Ag – 15; Mining and Metals – 25; Coal, Oil and Gas, Electricity Generation – 9; Finance and Insurance – 27; Property and REITs – 11; Utilities, Infrastructure and ICT (incl Data Centres) – 31; Consumer and Retail – 34; Public Sector, Government and Health Services – 7

followed by Public Sector, Government and Health Services at and Consumer and Retail. Energy has the strongest average results for both Strategy, Risk Management, and Metrics and Targets.

The pillar with the greatest range in scores is Metrics and Targets, this demonstrates that this is the area with most variability in disclosure completeness and quality. Governance and Risk Management have the smallest range of scores inferring the most uniformity in responses. The Energy sector has the smallest range of results across the four pillars implying greatest uniformity in completeness and quality of the reports across all the content. Finance and Insurance have the largest range of outcomes inferring the greatest difference in report quality across the sectors.

COMPARISON WITH PREVIOUS RESULTS

The clearest difference that we noticed in the dataset with the addition of the latest reports is that there is much stronger evidence of climate scenario analysis and resilience assessment as an area of leading practice.

In our previous research the dominant leading theme was governance maturity. Across sectors, we repeatedly saw board oversight, management accountability, governance structures and integration of climate into enterprise risk management highlighted. Scenario analysis was present, but the evidence was less consistent and was often seen as an emerging strength among the more mature reporters. In the more recent reports scenario analysis becomes a cohort-wide and more sophisticated strength. Companies are increasingly testing resilience under multiple climate futures, including the Australian dual-scenario requirement, rather than simply identifying climate risks.

It should be noted that Governance remains the **highest scoring and broadest strength across all research to date**, so we did not observe a change in Governance itself. The difference is the increased breadth, consistency and sophistication of **scenario-based resilience analysis**. In the more recent reports, we also saw greater evidence of external assurance, Scope 3 reporting and climate-linked remuneration, but these changes are less consistently demonstrated across all sectors than the scenario-analysis uplift.

CHALLENGES AND NEXT STEPS

Across corporate, financial, infrastructure, manufacturing and energy sectors, the reporting gaps remain remarkably consistent:

- **Limited financial quantification of climate impacts:** Companies identify climate risks and opportunities but often do not quantify impacts on revenue, costs, asset values, cash flows, capital expenditure, or enterprise value. This is the most pervasive reporting gap across all sectors.
- **Incomplete or insufficiently detailed transition plans:** Many companies disclose net zero ambitions and emissions reduction activities but do not provide a comprehensive transition plan with milestones, investment pathways, accountabilities, dependencies, and delivery measures.
- **Weak linkage between scenario analysis and business decisions:** Scenario analysis is commonly undertaken, but disclosures often stop short of explaining how results influence strategic planning, capital allocation, asset management, investment decisions, or financial forecasts.

- **Limited adaptation and resilience implementation detail:** Companies frequently describe adaptation measures and resilience activities but provide little information on adaptation CAPEX/OPEX, implementation timelines, prioritisation processes, or expected risk reduction outcomes.
- **Insufficient transparency of materiality and risk assessment methodologies:** Many companies state that climate risks are assessed for materiality but do not disclose thresholds, scoring criteria, decision rules, or the methodology used to determine which risks are material.

What these gaps indicate about overall reporting maturity is that most organisations have largely progressed through the "identify and assess" phase of climate reporting where governance structures are generally well established, climate risks and opportunities are being identified, scenario analysis is increasingly mature, and emissions targets are commonly disclosed. However, many organisations remain less mature in the "financial integration and execution" phase, attention needs to be paid to quantifying financial consequences, connecting climate analysis to strategic and financial decision-making, demonstrating delivery of transition plans, costing resilience and adaptation actions and providing evidence to support resilience conclusions.

The most common gaps are no longer about identifying climate risks; they are about demonstrating how climate analysis affects financial outcomes, capital allocation, transition delivery, and resilience investment decisions.

Based on these recurring gaps identified across the sectors, the most sensible next steps are the actions that move organisations from climate disclosure compliance toward decision-useful climate management. These are described in

Table 2.

TABLE 2 RECOMMENDED NEXT STEPS

Recommended next step	Why it matters
Quantify the financial impacts of climate risks and opportunities	The most common gap is the absence of quantified impacts on revenue, operating costs, CAPEX, asset values and cash flows. Quantification allows boards, investors and management to understand financial materiality and supports AASB S2 expectations.
Link scenario analysis directly to business planning and financial planning	Many disclosures describe scenarios but do not explain how they influence strategic decisions, investment decisions, budgeting, asset planning or portfolio management. Linking the analysis to decision-making makes disclosures more credible and useful.
Develop a detailed and credible climate transition plan	Many organisations disclose targets but not the pathway to achieve them. A transition plan converts ambition into action through milestones, accountabilities, investments, dependencies and progress measures.
Prioritise and cost adaptation and resilience measures	Adaptation actions are frequently discussed at a high level, but few organisations disclose implementation plans, investment requirements or expected resilience outcomes. Costing adaptation improves capital planning and demonstrates preparedness.
Improve transparency around materiality assessments and risk methodologies	Investors increasingly want to understand why risks were deemed material. Disclosing thresholds, assumptions and decision criteria improves transparency, comparability and confidence in the reporting process.

If a company had limited resources, the greatest uplift would come from focusing on:

1. Financial quantification of climate impacts,
2. Development of a credible transition plan, and
3. Integration of scenario analysis into strategic and financial planning.

These three actions directly address the most frequently observed gaps across sectors and would substantially improve the usefulness, credibility and decision value of climate disclosures.

HOW DO COMPANIES DEFINE THEIR OWN RESILIENCE?

Given our research showed increased need for focus on how companies integrate climate considerations into strategy, we decided to look into a number of strategy areas in more detail. The first item of interest was unpacking better how companies define their own resilience to the impacts of climate change.

We explore the details of these finding in Table 3.

TABLE 3 DEFINITIONS OF RESILIENCE

Basis of resilience assessment	How it was typically applied
Climate scenario analysis	Companies tested their strategies, business models, assets, portfolios and operations under multiple plausible climate futures, using the two scenarios as require by AASB S2. The analysis was used to assess whether the organisation could continue operating and delivering its strategy across short-, medium- and long-term horizons. Resilience conclusions were frequently qualitative, with limited financial stress testing.
Assessment of physical and transition risks	Companies assessed acute and chronic physical hazards, such as flood, extreme heat, bushfire, cyclone, drought, water stress and supply chain disruption, together with transition risks arising from policy, carbon pricing, regulation, technology, markets, customer expectations and financing conditions. Companies were concluded to be resilient where these risks were considered manageable through existing or planned responses.
Existing risk management capabilities	Companies relied on established enterprise risk management frameworks, risk registers, likelihood and consequence assessments, risk appetites, governance arrangements, monitoring processes and internal controls. The ability to identify, prioritise, escalate, monitor and manage climate risks through existing systems was commonly presented as evidence of resilience.
Adaptation and mitigation measures already in place	Resilience conclusions considered existing and planned responses, including asset and infrastructure upgrades, flood and heat controls, water management, insurance, emergency and business continuity arrangements, supply chain diversification, renewable energy procurement, energy efficiency, electrification and emissions reduction programs. However, implementation costs, adaptation CAPEX/OPEX and risk-reduction outcomes were not consistently quantified.
Financial materiality assessments	Companies considered whether identified climate risks and opportunities could materially affect revenue, costs, cash flows, financial position, financial performance, asset values, project economics, access to finance, cost of capital or enterprise value. Companies often concluded that they were resilient where impacts were assessed as manageable or

Basis of resilience assessment	How it was typically applied
	not currently material, although the supporting analysis and materiality thresholds were commonly qualitative.
Geographic and portfolio diversification	Companies considered whether exposure was spread across multiple locations, assets, business divisions, products, commodities, suppliers, customers, lending or investment portfolios and revenue streams. Diversification was treated as reducing dependence on any single exposed asset, geography, market or supply source, while concentrated exposures were recognised as a potential constraint on resilience.
Ability to adapt over time	Companies relied on management's capacity to adjust strategy, capital allocation, asset plans, technology, operations, sourcing, products and portfolios as climate conditions, regulation and markets evolve. Periodic reassessment of scenarios and risks, combined with organisational flexibility and financial capacity, frequently supported resilience conclusions even where future financial effects remained uncertain or unquantified.

We observe that, across the sectors, resilience was rarely demonstrated through a single test. Companies typically combined scenario analysis, physical and transition risk assessment, existing controls, adaptation measures, diversification and management's capacity to respond over time in defining their own resilience. The strongest disclosures connected these factors to specific strategic actions, capital allocation and financial effects. Less mature disclosures relied more heavily on qualitative conclusions that risks were manageable and that the organisation could adapt, without quantifying the financial limits, costs or thresholds of resilience.

WHAT METHODS DO COMPANIES USE TO DEFINE MATERIALITY?

We found that companies are typically using more than one approach to define material climate impacts. We list the recurring themes in these definitions in Table 4. This table presents and explains the themes identified, and highlights the percentage of the dataset that is using that approach. The themes overlap; many disclosures combined a prospects test, financial-effects test, enterprise-risk threshold and investor decision usefulness test. Enterprise risk frameworks were widely used to operationalise the materiality assessment, usually through likelihood and consequence ratings.

TABLE 4 CONSIDERATION IN MATERIALITY

Materiality definition approach	Typical wording / basis	Frequency of occurrence
Impact on prospects	Climate-related risks and opportunities were treated as material where they could reasonably be expected to affect the entity's prospects, strategy, business model, resilience, long-term viability, competitiveness or ability to create value over the short, medium or long term. This was the most common formulation and was generally aligned with AASB S2 and ISSB terminology.	92%
Impact on cash flows, financial position or performance	Climate matters were considered material where they could affect revenue, expenditure, profitability, cash flows, assets, liabilities, asset values, financial position, financial performance, project economics or enterprise value. Some companies referred directly to current or anticipated financial effects, while others	82%

Materiality definition approach	Typical wording / basis	Frequency of occurrence
	incorporated these considerations within broader prospects assessments.	
Enterprise risk framework threshold	Climate risks were assessed through existing enterprise risk-management frameworks using likelihood, consequence, severity, risk appetite, risk ratings, internal financial thresholds or escalation criteria. Risks exceeding the organisation's defined risk tolerance or risk-rating threshold were treated as material.	76%
Investor decision usefulness	Climate information was considered material where its omission, misstatement or obscuring could reasonably be expected to influence decisions made by investors, lenders, creditors or other primary users of general-purpose financial reports. This reflects the investor-focused decision-usefulness principle underpinning AASB S2 and ISSB reporting.	63%
Access to finance or cost of capital	Risks and opportunities were considered material where they could affect financing availability, borrowing costs, insurance availability, credit ratings, investor confidence, access to debt or equity capital, or the entity's overall cost of capital. This was commonly included within a broader financial-materiality definition rather than used as a standalone test.	38%

As an overall conclusion, we saw strong convergence around an enterprise value and financial materiality lens. The most common approach was to identify matters capable of affecting prospects and financial outcomes, then apply enterprise risk processes to determine their likelihood, consequence and priority. The remaining disclosure gap is that relatively few companies stated the actual numerical thresholds, scoring bands or decision rules used to determine when a climate risk became material.

We are seeing a **five-step** leading practice emerging from these disclosures:

4. Identify climate risks and opportunities through scenario analysis and risk assessment
5. Assess impacts on prospects, strategy, resilience and financial outcomes
6. Apply predefined materiality thresholds
7. Quantify material risks where possible
8. Feed results into strategy, transition planning, capital allocation and disclosure.

Framework elements requiring consideration are developing a standard materiality scoring framework, creating a quantifiable escalation trigger process, and documenting assumptions and decision rules. We expect this aspect of disclosure to mature significantly in the next reporting period.

HOW DO COMPANIES USE SCENARIO ANALYSES?

We have seen a number of approaches to how companies have been using scenario analyses to unpack the impacts of climate change on their business. We reviewed the entire dataset to build Table 5.

TABLE 5 HOW COMPANIES USE SCENARIO ANALYSIS

Purpose	How it was used
Identify material climate risks	Companies used lower-warming and higher-warming scenarios to identify, validate and prioritise climate related risks and opportunities across short-, medium- and long-term time horizons. Scenario results were used to assess how the likelihood, consequence and timing of risks could change and, in many cases, to inform climate or enterprise risk registers. In some companies, scenarios validated risks identified through other processes rather than serving as the initial identification method.
Assess business model resilience	Companies tested whether their strategies, business models, assets, portfolios, operations and value chains would remain viable under contrasting climate futures. Assessments considered exposed assets, operational dependencies, customer and commodity demand, supply chains, portfolio diversification, financial capacity, existing controls and management's ability to adapt. Most companies concluded that their businesses were resilient, but relatively few supported these conclusions with quantified financial thresholds or stress test results.
Assess physical climate impacts	Higher-warming scenarios were commonly used to evaluate acute and chronic hazards such as flooding, extreme heat, storms, cyclones, bushfires, drought, water stress, sea level rise and changing rainfall patterns. Companies assessed potential effects on assets, facilities, infrastructure, operations, workforce, supply chains, loan collateral, insured assets and service delivery. More detailed assessments used asset level hazard data, geographic exposure analysis and specialist physical risk modelling.
Assess transition risks	Lower-warming and Paris-aligned scenarios were used to examine policy and regulatory change, carbon pricing, energy costs, technology substitution, market transformation, customer preferences, emissions obligations, supplier decarbonisation, access to finance and investor expectations. Companies considered how these changes could affect costs, revenue, commodity or product demand, asset economics, competitiveness, financing and long-term business viability. Quantification of these effects was generally limited.
Support adaptation planning	Scenario outputs informed potential responses to physical risks, including infrastructure and asset upgrades, flood protection, cooling and ventilation, water management, insurance, emergency response, business continuity, supply-chain diversification, alternative sourcing and logistics planning. While adaptation priorities and actions were commonly identified, associated CAPEX, OPEX, implementation milestones and expected risk-reduction outcomes were rarely quantified consistently.
Inform transition planning and strategic responses	Companies used scenario findings to evaluate decarbonisation pathways, emissions targets, renewable-energy procurement, energy efficiency, electrification, fuel switching, supplier engagement, portfolio repositioning, technology investment and low-carbon opportunities. In stronger reports, the findings influenced strategic planning, capital allocation and formal transition pathways. In less mature reports, scenarios provided directional insight but were not translated into a detailed transition plan, costed capital pathway, budget or financial forecast.

Across the benchmark, scenario analysis was primarily used as a risk assessment and strategic resilience tool, rather than a financial forecasting tool. Companies were generally able to identify how risks might evolve and consider whether the business could adapt, but many did not translate the results into quantified changes in earnings, cash flows, asset values, capital requirements or enterprise value.

It is not easy to extract leading practice in this area yet, indication that can be extracted from the reports are that leading practice is not simply conducting scenario analysis, but creating a clear line of sight from climate scenarios to financial outcomes, management actions and measurable business decisions. Across the sectors, many companies are strong at identifying risks and testing resilience, but relatively few fully integrate the results into strategy, capital allocation, asset planning and financial reporting. A pathway to leading practise could be:

scenario → exposure → financial effect → management response → capital allocation → measurable outcome

This progression would connect climate analysis more directly to the decisions boards, finance teams and investors need to make.

CLIMATE MODELS AND SCENARIOS USED

As many of the scenarios cited different climate models and scenarios, we gathered information that is typically included in the reports. A summary of our findings on which climate scenarios are used most frequently is included in Table 6. Sectoral details are available at the end of this document.

TABLE 6 CLIMATE MODELS AND SCENARIOS USED IN DISCLOSURES

Model family	Overall cross-sector pattern
IPCC reports and pathways	Very often used as the scientific basis for physical climate assessment.
NGFS scenarios	Often to Very often used, particularly for transition and macroeconomic analysis.
IEA scenarios	Very often used in Energy and Mining, and Occasionally to Often used elsewhere.
CSIRO and BoM	Often used for Australian physical risk localisation.
AEMO scenarios	Often used in Energy, Seldom or Not identified elsewhere.
NIWA	Often used by New Zealand infrastructure entities, but generally not identified in other sectors.
Specialist asset-level tools	Occasionally to often used, especially where companies own long lived or geographically dispersed assets.
Portfolio and financed emissions tools	Seldom to occasionally used, concentrated in Finance and Insurance sector as expected.
Company developed scenarios	Occasionally used overall, but more evident in Energy and Mining.

Across the dataset, companies very often rely on IPCC science and often use NGFS and IEA transition scenarios. Australian reporters often localise physical risk assessments using CSIRO and BoM data. More specialised tools, such as XDI, Jupiter, Climate Valuation, WRI Aqueduct, MSCI and ISS ESG, are used occasionally or seldom and tend to reflect the specific exposure profile of the sector rather than a broader reporting approach.

CONCLUSION

Australia now has more than 200 AASB S2 aligned reports available for publicly listed companies. This information set will be expanded further when the sustainability reports are

published for those companies who have not selected an integrated financial report. This serves as a wealth of knowledge both on how our economy is likely to respond to the increasing challenges presented by climate change, as well as to the global investor community who are looking to manage risks in their portfolios.

Climate disclosures are maturing fast. Anecdotally the mid-year reports show a step up in disclosure maturity from the calendar year reporters. The next article will contrast calendar year and financial year reports and unpack just how much disclosure has matured in six months.

CLIMATE MODELS, SCENARIO FAMILIES AND SUPPORTING DATASETS USED IN ASRS REPORTING

Additional detail on sectoral use of climate models and scenarios

Climate model, scenario or dataset	Detail and principal use	Consumer and Retail	Energy	Finance and Insurance	Utilities, Infrastructure and ICT	Manufacturing and Agriculture	Mining and Metals	Property and REITs	Public Sector, Government and Health
IPCC Assessment Reports, including AR5 and AR6	Scientific foundation for climate projections, warming assumptions and physical-risk analysis. Used to assess heat, flood, drought, bushfire, cyclone, rainfall change, water stress and sea-level rise.	Often	Very often	Often	Very often	Often	Very often	Often	Very often
IPCC Representative Concentration Pathways, including RCP2.6, RCP4.5, RCP7.0 and RCP8.5	Concentration pathways used mainly to model physical hazards under lower and higher warming conditions.	Often	Often	Occasionally	Often	Often	Often	Often	Often
IPCC Shared Socioeconomic Pathways, including SSP1-1.9, SSP1-2.6, SSP2-4.5, SSP3-7.0 and SSP5-8.5	Socioeconomic and emissions pathways used for low-, moderate- and high-emissions futures and longer-term physical-risk assessments.	Occasionally	Occasionally	Often	Often	Often	Often	Occasionally	Occasionally
NGFS scenarios	Orderly, disorderly and limited-transition scenarios,	Very often	Very often	Very often	Very often	Often	Often	Often	Often

Climate model, scenario or dataset	Detail and principal use	Consumer and Retail	Energy	Finance and Insurance	Utilities, Infrastructure and ICT	Manufacturing and Agriculture	Mining and Metals	Property and REITs	Public Sector, Government and Health
	including Net Zero 2050, Below 2°C, Delayed Transition, Divergent Net Zero, Fragmented World and Current Policies. Used for carbon prices, macroeconomic effects and transition-risk analysis.								
IEA Net Zero Emissions by 2050, NZE	Rapid decarbonisation scenario used to test energy and commodity demand, policy change, technology deployment, carbon costs and net-zero implications.	Often	Very often	Occasionally	Often	Often	Very often	Often	Often
IEA Announced Pledges Scenario, APS	Tests a future in which announced government climate commitments are implemented. Used for policy, transition and commodity-demand assumptions.	Not identified	Often	Not identified	Occasionally	Occasionally	Often	Occasionally	Occasionally
IEA Stated Policies Scenario, STEPS	Reflects stated and implemented policies and is commonly used as a less ambitious transition pathway.	Occasionally	Very often	Occasionally	Occasionally	Occasionally	Very often	Occasionally	Occasionally

Climate model, scenario or dataset	Detail and principal use	Consumer and Retail	Energy	Finance and Insurance	Utilities, Infrastructure and ICT	Manufacturing and Agriculture	Mining and Metals	Property and REITs	Public Sector, Government and Health
IEA Sustainable Development Scenario, SDS	Lower-emissions energy-system pathway used to assess energy demand, technology transition and decarbonisation implications.	Not identified	Occasionally	Not identified	Not identified	Not identified	Occasionally	Not identified	Not identified
IEA Current Policies Scenario, CPS	Limited-policy pathway used to assess continuing emissions-intensive demand and greater long-term physical exposure.	Not identified	Occasionally	Not identified	Not identified	Not identified	Occasionally	Not identified	Not identified
AEMO scenarios, including Step Change	Australian electricity-system pathways used for grid transformation, electricity demand, renewable deployment and domestic transition assumptions.	Not identified	Often	Not identified	Occasionally	Not identified	Not identified	Not identified	Not identified
CSIRO climate projections	Australia-specific projections for temperature, rainfall, drought, bushfire, flood and other physical hazards.	Often	Often	Occasionally	Often	Often	Often	Often	Often
Australian Bureau of Meteorology, BoM	Historical observations and Australian climate information used to establish hazard baselines and	Often	Often	Occasionally	Often	Often	Often	Often	Often

Climate model, scenario or dataset	Detail and principal use	Consumer and Retail	Energy	Finance and Insurance	Utilities, Infrastructure and ICT	Manufacturing and Agriculture	Mining and Metals	Property and REITs	Public Sector, Government and Health
	support physical-risk analysis.								
Climate Change in Australia, CSIRO and BoM	Combined Australian projection resource used for site-level analysis of future heat, rainfall, drought, flood and extreme weather.	Occasionally	Occasionally	Not identified	Occasionally	Occasionally	Often	Occasionally	Occasionally
NIWA climate projections	New Zealand climate science used for rainfall, flood, drought, temperature and sea-level-rise assessments.	Occasionally	Not identified	Not identified	Often, particularly for New Zealand entities	Occasionally	Not identified	Not identified	Not identified
XDI, Cross Dependency Initiative	Specialist asset-level analysis of flood, heat and infrastructure vulnerability.	Occasionally	Occasionally	Occasionally	Occasionally	Occasionally	Often	Occasionally	Occasionally
Jupiter Intelligence	Proprietary asset-level modelling of acute and chronic physical hazards.	Not identified	Not identified	Not identified	Occasionally	Not identified	Occasionally	Occasionally	Not identified
WRI Aqueduct	Water-risk model used to assess baseline water stress, scarcity and prospective water-related physical risks.	Occasionally	Occasionally	Not identified	Occasionally	Occasionally	Often where water risk is material	Occasionally	Occasionally
Climate Valuation and catastrophe-risk models	Models used to assess asset exposure and potential impacts	Occasionally	Occasionally	Occasionally	Occasionally	Occasionally	Occasionally	Often	Occasionally

Climate model, scenario or dataset	Detail and principal use	Consumer and Retail	Energy	Finance and Insurance	Utilities, Infrastructure and ICT	Manufacturing and Agriculture	Mining and Metals	Property and REITs	Public Sector, Government and Health
	from flood, cyclone, storm, heat and other hazards.								
Climate Council mapping	Australian location-based physical-risk mapping, including assessment of real-property collateral exposure.	Not identified	Not identified	Seldom	Not identified	Not identified	Not identified	Not identified	Not identified
Climate Impact Lab and external hazard datasets	External data used for location-level assessment of flooding, heat and other physical hazards.	Not identified	Not identified	Occasionally	Occasionally	Occasionally	Occasionally	Occasionally	Occasionally
Wood Mackenzie energy-transition outlooks	Commodity-demand, energy-transition and market outlooks used to assess transition exposure and opportunities.	Not identified	Occasionally	Not identified	Not identified	Not identified	Occasionally	Not identified	Not identified
BloombergNEF, BNEF	Market analysis covering low-carbon technology deployment, energy-transition investment and commodity demand.	Not identified	Occasionally	Occasionally	Occasionally	Occasionally	Occasionally	Not identified	Not identified
MSCI ESG Manager	Portfolio and investee-company climate data used for investment sensitivities and	Not identified	Not identified	Seldom	Not identified	Not identified	Not identified	Not identified	Not identified

Climate model, scenario or dataset	Detail and principal use	Consumer and Retail	Energy	Finance and Insurance	Utilities, Infrastructure and ICT	Manufacturing and Agriculture	Mining and Metals	Property and REITs	Public Sector, Government and Health
	portfolio-risk analysis.								
ISS ESG	Portfolio carbon-intensity and investee-company climate data used to compare investment exposure and performance.	Not identified	Not identified	Seldom	Not identified	Not identified	Not identified	Not identified	Not identified
PCAF methodology	Financed-emissions accounting methodology used to measure emissions associated with lending and investment portfolios. It is a measurement methodology rather than a scenario model.	Not identified	Not identified	Seldom	Not identified	Not identified	Not identified	Not identified	Not identified
SBTi methods and tools	Methods for designing emissions targets and evaluating alignment with a 1.5°C pathway. Primarily a target-setting framework rather than a physical-risk model.	Occasionally	Occasionally	Occasionally	Occasionally	Occasionally	Occasionally	Occasionally	Occasionally
Net Zero Investment Framework, NZIF	Investment framework used to evaluate portfolio alignment with net zero and support	Not identified	Not identified	Seldom	Not identified	Not identified	Not identified	Not identified	Not identified

Climate model, scenario or dataset	Detail and principal use	Consumer and Retail	Energy	Finance and Insurance	Utilities, Infrastructure and ICT	Manufacturing and Agriculture	Mining and Metals	Property and REITs	Public Sector, Government and Health
	portfolio-transition analysis.								
Paris Agreement-aligned pathway	Generic 1.5°C or well-below-2°C pathway used where a company disclosed Paris alignment without naming the underlying model.	Often	Very often	Often	Often	Often	Often	Often	Very often
Company-developed proprietary scenarios	Internal scenarios combining external pathways with entity-specific commodity prices, demand, technology, operational and decarbonisation assumptions.	Occasionally	Often	Occasionally	Occasionally	Occasionally	Often	Occasionally	Occasionally
Third-party specialist climate modelling	Bespoke geospatial, physical-hazard, engineering, catastrophe-risk or economic modelling. Providers were frequently not named.	Often	Often	Often	Very often	Often	Often	Often	Often

Frequency scale:

- **Very often:** described as very common or used by most companies
- **Often:** described as common or used by several companies
- **Occasionally:** identified for some companies or particular applications
- **Seldom:** only one or a small number of explicitly identified users
- **Not identified:** the sector narrative does not record use, not necessarily that no company used the source.