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Guidance on how to reflect the effects of climate-related matters in financial statements

NSW GOVERNMENT

Introduction

The purpose of this paper is to provide guidance on how NSW public sector entities should consider the effects of climate-rated matters when preparing financial statements. It is set out in the following sections:

- what actions should agencies undertake?
- background
- effects of climate-related matters on financial statement areas.

This guidance provides a high-level overview of some of the potential impacts of climate-related matters on an agency's financial statements. Potential climate-related impacts will vary depending on each agency's circumstances and this guidance should not be considered comprehensive. The guidance also provides a brief summary of the related requirements under accounting standards and reference should be made to the full text of the relevant Australian Accounting Standards in determining the impact on financial statements.

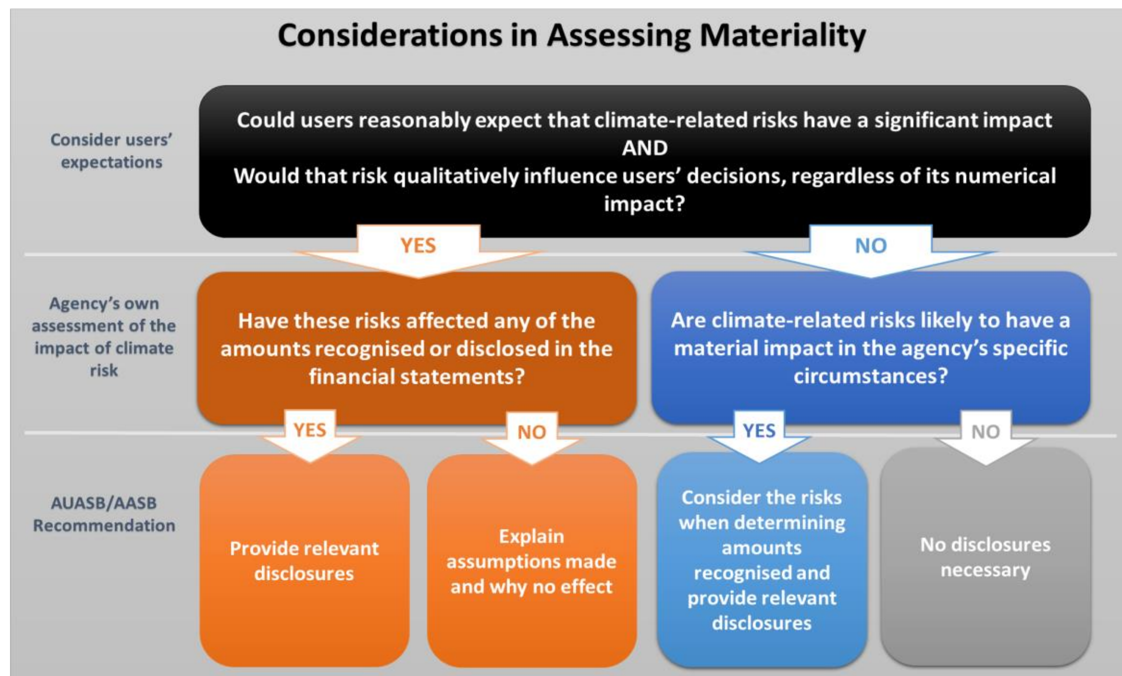
What actions should agencies undertake?

In preparing financial statements, agencies should consider climate related matters, if the effect of climate risk is material. Information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that primary users of financial statements make on the basis of those financial statements[1]. Information can be material and warrant disclosure in the financial statements under accounting standards regardless of its numerical impact.

When preparing financial statements, agencies should consider:

- what amounts presented or disclosed in the financial statements could reasonably be impacted by climate-related risks
- whether users could reasonably expect that climate-related risks, could affect disclosures reported in the financial statements and have indicated the importance of such information to their decision making, and
- the impact of climate-related risks and other emerging risks on key assumptions made in preparing the financial statements, that are material, and what disclosures should be made in respect of those assumptions.

These considerations are illustrated in the chart below[2]:



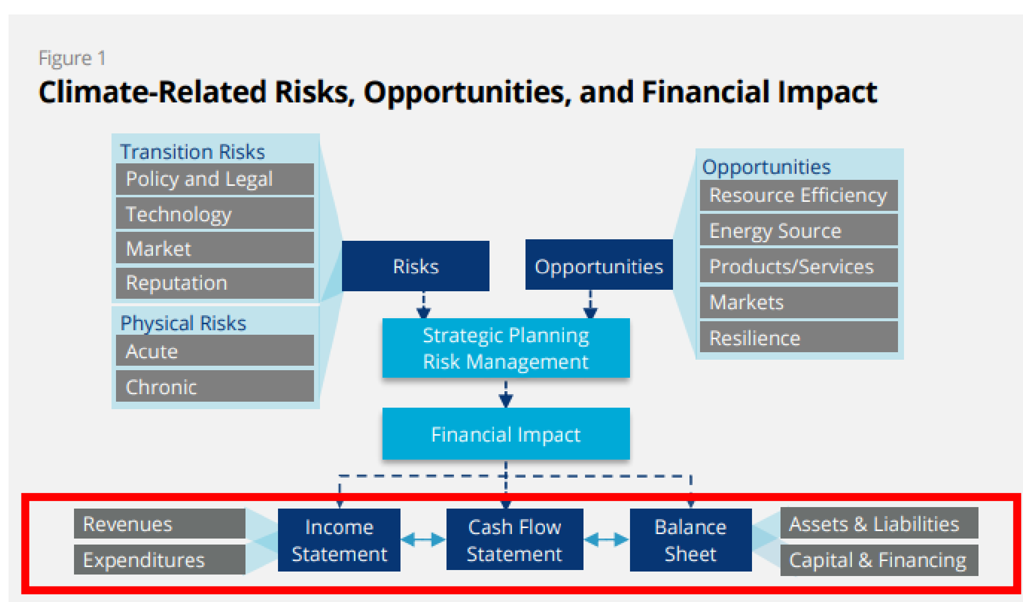
[1] AASB 101.7

[2] Adapted from page 5 of Joint Bulletin issued by the Australian Accounting Standards Board and the Auditing Assurance Standard Board

Background

In December 2018, the Australian Accounting Standards Board and the Auditing Assurance Standard Board issued a joint bulletin (subsequently updated in April 2019) setting out how materiality should be considered in the context of disclosures in respect of climate-related and other emerging risks. In accordance with this joint bulletin, agencies should consider the impact of climate related matters when preparing financial statements.

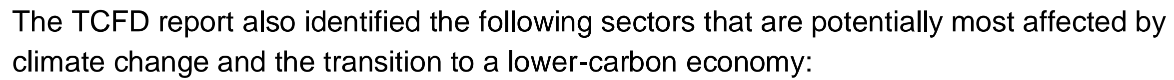
Users of financial statements are taking an increasing interest in climate-related matters. As the diagram below illustrates, climate-related matters could introduce various risks to an organisation including policy and legal risks, technological risks, market risks, reputation risks as well as risks relating to the physical environment surrounding the organisation's operations. On the other hand, climate-related matters can also create opportunities for an organisation, such as resource efficiencies, energy source, new product/services, new markets and resilience. As organisations adapt their strategies and risk management policies in response to these climate-related risks and opportunities, the financial statements should ultimately reflect the financial impacts of these decisions and policies. Appendix A sets out examples, extracted from a report[3] published by the Task Force on Climate-related Financial Disclosures (TCFD), of climate-related risks and opportunities and the potential financial impacts[4].



Source: Recommendations of the Task Force on Climate-related Financial Disclosures

[3] Recommendations of the Task Force on Climate-related Financial Disclosures

[4] The Taskforce was set up by the Financial Stability Board (FSB) to assist entities with developing voluntary climate-related financial risk disclosures in the management commentary section outside the financial statements.



The TCFD report also identified the following sectors that are potentially most affected by climate change and the transition to a lower-carbon economy:

- financial sectors: asset owners, asset managers, banks (lending), insurance companies (underwriting),
- non-financial sectors: energy, transportation, materials and buildings, agriculture, food, and forest products.

Effects of climate-related matters on financial statements areas

Sources of estimation uncertainty and significant judgement note (AASB 101 *Presentation of Financial Statements*)

Summary of the relevant requirements of the standard	Requires notes to the financial statements to provide information that is not present elsewhere, but is relevant to the understanding of the entity's financial statements[5].

Impact of climate-related matters

Disclosure	For agencies that are affected by climate related matters, consideration should be given as to whether additional information is needed in order to provide users with an understanding of the impact of climate-related matters on the agency's financial position and performance. Information will be relevant if it could be reasonably expected that climate related risks would have a significant impact on the agency and would influence user's decisions. *Climate Risk Ready NSW Guide* provides guidance on assessing potential climate impacts and risks for agencies (in particular page 8, Figure 2 and page 11, Table 1).

[5] AASB 101.112(c)

Examples in practice	Changing responses to climate change, climate policies and regulations and new technologies may affect the significant estimates and assumptions used for impairment testing and calculation of provisions for dismantling/ clean-up. Agencies may need to explain for example: o whether and how they considered climate-related risks in determining fair values of assets o risks that affect assumptions used to develop estimates, including uncertainties relating to those assumptions. For example, the best estimate of expenditure required to settle a decommissioning obligation o significant risks that key assumptions may change within the next financial year (e.g. due to an uncertain regulatory environment). Agencies should explain the assumptions and uncertainty o where there is significant uncertainty and a wide range of possible outcomes, agencies may need to provide a sensitivity analysis of key assumptions used. To the extent relevant and material, the assumptions and estimates under different climate scenarios and the resulting impact on the balance sheet line items should be disclosed.

Property, plant and equipment and intangible assets (AASB 116 *Property Plant and Equipment* and AASB 138 *Intangible Assets)*

Summary of the relevant requirements of the standard	Residual values and useful lives should be reviewed at least at each financial year end. Changes are to be reflected in the amount of depreciation in the current and subsequent periods[6]. Disclosure of the expected useful lives for each class of asset and the nature and amount of any change in estimated residual values or expected useful lives[7]. Costs that are directly attributable to bringing an asset to its intended use and the initial estimate of dismantling, removal and restoration costs are capitalised.[8] Expenditure on research should be expensed[9]. Expenditure on development can only be capitalised if all the recognition criteria are met[10]. Disclose the amount of research and development expenditure recognised as an expense during the period.[11]

Impact of climate-related matters

Measurement	Climate-related matters may affect the estimated residual values and expected useful lives of assets.
Disclosure	If there has been a re-estimate of useful lives and/or residual values, because of climate-related matters, disclose the nature and effect of the change that has an effect in the current period or is expected to have an effect in subsequent periods. Disclose the aggregate amount of research and development expenditure recognised as an expense during the period.

[6] AASB 116.51, AASB 138.102 & 104

[7] AASB 116.73 & 76, AASB 138.121

[8] AASB 116.16

[9] AASB 138.54

[10] AASB 138.57

[11] AASB 138.116

Examples in practice	Climate-related matters may lead to: ○ obsolescence, legal restrictions or inaccessibility of the assets and therefore a re-estimation of residual values and/or expected useful lives ○ early retirement of existing assets (e.g. as older/more polluting plant/equipment/motor vehicle are being phased out) and therefore a re-estimation of its useful life ○ a decrease in residual value of older/more polluting assets as demand for these assets declines, or ○ research expenditure on climate-related activities such as researching for possible new or improved alternatives for materials, devices, products, processes, systems etc.

Asset fair values (AASB 13 *Fair Value Measurement*)

Summary of the relevant requirements of the standard	The fair value of an asset is measured using assumptions that market participants would use when pricing the asset.[12] Fair value measurements categorised within Level 3 of the fair value hierarchy use unobservable inputs significant to their measurement[13]. Requires disclosure of the inputs and valuation techniques used in level 3 fair value measurements For recurring level 3 fair value measurements, a narrative description is required of the sensitivity of the fair value measurement to changes in unobservable inputs, if a change in those inputs might result in a significantly higher or lower fair value measurement[14].

Impact of climate-related matters

Measurement	Climate-related matters may affect the fair value measurement of assets. Climate related matters may provide indications that the fair value of an asset differs materially from the carrying amount. Treasury policy TPP 14-01 *Accounting Policy: Valuation of Physical Non-Current Assets at Fair Value* requires an interim revaluation between comprehensive revaluations, where there is an indication that the fair value of an asset differs materially from its carrying amount.
Disclosure	The impact of climate risk on an asset's fair value should be disclosed, including the assumptions made when factoring climate-related risk into the fair value calculation. Agencies in sectors that are particularly impacted by climate-related risks, should disclose their assumptions regarding climate-related risks and the impact on assets' fair values, regardless of the quantitative impact.

[12] AASB 13.22

[13] AASB 13.72, 73-90

[14] AASB 13.91, 93

Examples in practice	Market participants' views of potential climate-related legislation could affect an asset's fair value (especially for those older/more polluting assets). Indications that fair value may be materially different may include: o A change in environmental regulation that has an adverse effect on an agency's future cash flows o External information such as significant changes in the environment (e.g. natural disasters such as bushfires) that adversely affects assets. Climate-related matters may lead to a decrease in residual value of older/more polluting assets as demand for these assets declines. Climate-related physical events such as flooding/droughts, bushfires could lead to a decline in asset values.

Non-financial asset impairment (AASB 136 *Impairment of Assets*)

Summary of the relevant requirements of the standard	Requires entities to assess whether there is any indication of impairment at the end of each reporting period[15]. External indicators of impairment include significant changes with an adverse effect in the technological, market, economic or legal environment[16]. Requires entities to base cash flow projections on reasonable and supportable assumptions that represent management's best estimate of the range of future economic conditions[17]. Requires disclosure of the events and circumstances that led to the recognition of an impairment loss[18]. Disclosure of key assumptions used to estimate the asset's recoverable amount, as well as information related to reasonably possible changes in those assumptions, is also required in specified circumstances[19].

Impact of climate-related matters

Measurement	Climate related matters may be relevant when considering if there are any indicators of impairment. Agencies should consider whether climate related matters affect those reasonable and supportable assumptions that relate to an asset's carrying value.

[15] AASB 136.9

[16] AASB 136.12(b)

[17] AASB 136.33

[18] AASB 136.130

[19] AASB 136.132

Disclosure	Where climate-related risks could have a significant impact on the entity's operations, information about how this has been factored into the recoverable amount calculations will be relevant for the users of financial statements. Where climate-related matters impact the projected cash flows, disclose significant assumptions and estimates used to determine the projected cash flows, the judgements involved and the sensitivities around these assumptions. Where climate-related matters have resulted in an impairment loss, disclose the event and circumstances that led to the recognition of the impairment loss.
Examples in practice	Physical damage due to a climate event e.g. flooding / bushfires, is an indicator of impairment. A change in environmental regulation that has an adverse effect on future cash flows, is an indicator of impairment. As a result of new legislation certain costs could increase, leading to a reduction in cash flows.

Provisions and contingent liabilities (AASB 137 *Provisions, Contingent Liabilities and Contingent Assets*)

Summary of the relevant requirements of the standard	Requires a provision to be recognised when: o an entity has a legal or a constructive obligation as a result of a past event o it is probable there will be an outflow of economic resources to settle the obligation, and o a reliable estimate can be made as to the amount of the obligation[20]. Specifically requires any contracts that are onerous to be recognised as provision[21]. Requires disclosure of the nature of a provision or contingent liability and an indication of the uncertainties about the amount or timing of any related outflows of economic benefits[22]. A contingent liability is: o a possible obligation as a result of a past event o a present obligation but it is not probable there will be an outflow of economic resources, or o a present obligation but the amount cannot be measured reliably[23].

Impact of climate-related matters

Measurement	Contracts that may become onerous as a result of climate-related changes. Climate-related matters could require the recognition of additional provisions/and or a re-estimation of existing provisions.

[20] AASB 137.14

[21] AASB 137.66

[22] AASB 137.85

[23] AASB 137.10

Disclosure	Agencies may need to explain how a climate-related risk has created a provision or contingent liability. Agencies may need to include an explanation of how a climate-related risk has been factored into the best estimate of the provision. Explanation should include major assumptions about future events reflected in the amount of a provision. Agencies may also need to disclose and explain any climate-related contingent liabilities. Provide narrative information that gives a brief explanation of: o the nature of the obligations o the expected timing of the expected outflows o the assumptions used to estimate the value of the liability and what it is expected to pay o any sources of uncertainty, and o how climate risks have been factored into the estimates of provisions.

Examples in practice	Potential loss of revenue or increased costs, as a result of climate-related changes in legislation, may require recognition of onerous contracts. Examples of climate-related matters that may give rise to provisions, include: o levies imposed by governments for failure to meet climate-related targets or to discourage or encourage specified activities o regulatory requirements to remediate environmental damage o restructurings or redesign of products or services to achieve climate-related targets o changes or potential changes to law and regulation (for example, the implementation of legislation aligned with the Paris Agreement[24]). Generally, obligations arising from regulatory change are not recognised until the change is virtually certain of being enacted o potential climate-related litigation, and o fines or penalties. Any potential litigation and fines/penalties due to stricter environmental and other regulations may need to be disclosed as contingent liabilities.

[24] https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

Inventories (AASB 102 *Inventories*)

Summary of the relevant requirements of the standard	Requires inventories to be measured at the lower of cost and net realisable value[25]. o Exception: Requires not-for-profit entities to measure 'inventories held for distribution' at cost, adjusted for any loss of service potential[26].

Impact of climate-related matters

Measurement	Climate-related matters may result in a write down of inventories.
Disclosure	Disclose the amount of any write down of inventories as an expense[27]. Disclose impact of climate-related risk on assumptions used to measure inventories.
Examples in practice	Write down of inventories may be due to: o obsolescence o declines in the service potential o declines in selling prices (or current replacement cost) o increases in costs to completion.

[25] AASB 102.9

[26] AASB 102.Aus 9.1-2

[27] AASB 102.36(e) & Aus 36.1(e)

Receivables and financial assets (AASB 9 *Financial Instruments*)

Summary of the relevant requirements of the standard	Requires receivables and financial assets to be measured at amortised cost if: ○ The contractual cash flows give rise to solely payments of principal and interest on the principal amount outstanding (SPPI), and ○ The instrument is held in hold-to-collect business model[28]. When measuring expected credit losses, AASB 9 requires use of all reasonable and supportable information that is available without undue cost or effort[29].

Impact of climate-related matters

Measurement	Loan receivables with contractual terms that are not SPPI must be accounted for at fair value through profit or loss (FVTPL). When determining whether credit risk has increased significantly since initial recognition, any actual or expected adverse changes in the regulatory, economic or technological environment of the borrower that results in a significant change in the borrower's ability to meet its debt obligations should also be considered.
Examples in practice	Loan contracts might include terms linking contractual cash flows to the borrower's achievement of climate-related targets. If an agency is the lender, it would need to determine whether the terms of the loan give rise to cash flows that are not solely payments of principal and interest on the principal amount outstanding. Climate-related matters may affect an agency's exposure to credit losses. For example, bushfires, floods or policy and regulatory changes could negatively affect a borrower or debtors' ability to meet its obligations to the agency. The value of any collateral pledge could also be impacted if the asset pledged becomes damaged, inaccessible or uninsurable due to climate-related physical events.

[28] AASB 9.4.1.2. B4.1.7

[29] AASB 9.5.5.1-20

Financial liabilities at amortised cost (AASB 9)

Summary of the requirements of the standard	Requires a non-closely related embedded derivative[30] to be separated from an amortised cost loan liability[31].

Impact of climate-related matters

Measurement	Embedded derivative liabilities that are not closely related to the contract must be separated and accounted for at FVTPL, or the entire financial liability (including the embedded derivative) must be accounted for at FVTPL.
Examples in practice	A loan liability may link the interest/principal payments to a particular asset/agency's achievement of climate-related targets. These targets may result in one or more embedded derivative/s requiring to be separated from the loan liability.

[30] An embedded derivative is where certain terms within a loan liability contract that meet the definition of a derivative.

[31] AASB 9.4.3.3

Financial instruments note (AASB 7 / AASB 13)

Summary of the relevant requirements of the standard	Requires disclosure of information about an entity's financial instruments, including information about the nature and extent of risks arising from financial instruments and how the entity manages those risks[32]. For recurring Level 2 and 3 fair value measurements, AASB 13 requires disclosure of the valuation techniques and inputs used in those fair value measurements[33]. For recurring Level 3 fair value measurements, a narrative description of the sensitivity of the fair value measurement to changes in unobservable inputs, if a change in those inputs might result in a significantly higher or lower fair value measurement[34].

Impact of climate-related matters

Disclosure	It may be necessary to provide information about the effect of climate-related matters on the measurement of expected credit losses or on concentrations of credit risk, where material. For financial assets and liabilities that are measured at FVTPL, the impact of climate and other related risks on fair values should be disclosed including the assumptions made when factoring climate relate risks into the fair value calculation, if material.
Examples in practice	Disclose borrowers that are more exposed to climate-related risks separately from borrowers that are less exposed. For equity investments it may be necessary to provide information about investments by industry or sector, identifying sectors exposed to climate-related risks, when disclosing concentrations of market risk.

[32] AASB 7.31-42, B8

[33] AASB 13.92

[34] AASB 13.93

Going concern note (AASB 101)

Summary of the relevant requirements of the standard	Requires management to assess an entity's ability to continue as a going concern and disclose any uncertainties that may cast doubt about the entity's ability to continue as a going concern[35].

Impact of climate-related matters

Disclosure	If climate-related matters create material uncertainties related to events or conditions that cast significant doubt upon an agency's ability to continue as a going concern, the agency should disclose those uncertainties. When an agency has concluded there are no material uncertainties related to the going concern assumption that require disclosure, but reaching that conclusion involved significant judgement (for example, about the feasibility and effectiveness of any planned mitigation), AASB 101 requires disclosure of that judgement.
Examples in practice	For those agencies operating in carbon intensive industries or exposed to physical climate risks such as droughts, floods, bushfires. Climate risks may increase the uncertainty of the agency's ability to continue as a going concern and therefore disclosures may be appropriate of the agency's significant assumptions on its ability to continue as a going concern.

[35] AASB 101.25

Appendix A

This appendix contains the following tables extracted from Recommendations of the Task Force on Climate-related Financial Disclosures that sets out examples of:

- Climate-related risks and their potential impacts, and
- Climate-related opportunities and their potential impacts.

Table 1

Examples of Climate-Related Risks and Potential Financial Impacts

Type	Climate-Related Risks[32]	Potential Financial Impacts
Transition Risks	**Policy and Legal**	
	– Increased pricing of GHG emissions – Enhanced emissions-reporting obligations – Mandates on and regulation of existing products and services – Exposure to litigation	– Increased operating costs (e.g., higher compliance costs, increased insurance premiums) – Write-offs, asset impairment, and early retirement of existing assets due to policy changes – Increased costs and/or reduced demand for products and services resulting from fines and judgments
	Technology	
	– Substitution of existing products and services with lower emissions options – Unsuccessful investment in new technologies – Costs to transition to lower emissions technology	– Write-offs and early retirement of existing assets – Reduced demand for products and services – Research and development (R&D) expenditures in new and alternative technologies – Capital investments in technology development – Costs to adopt/deploy new practices and processes
	Market	
	– Changing customer behavior – Uncertainty in market signals – Increased cost of raw materials	– Reduced demand for goods and services due to shift in consumer preferences – Increased production costs due to changing input prices (e.g., energy, water) and output requirements (e.g., waste treatment) – Abrupt and unexpected shifts in energy costs – Change in revenue mix and sources, resulting in decreased revenues – Re-pricing of assets (e.g., fossil fuel reserves, land valuations, securities valuations)
	Reputation	
	– Shifts in consumer preferences – Stigmatization of sector – Increased stakeholder concern or negative stakeholder feedback	– Reduced revenue from decreased demand for goods/services – Reduced revenue from decreased production capacity (e.g., delayed planning approvals, supply chain interruptions) – Reduced revenue from negative impacts on workforce management and planning (e.g., employee attraction and retention) – Reduction in capital availability
Physical Risks	**Acute** – Increased severity of extreme weather events such as cyclones and floods **Chronic** – Changes in precipitation patterns and extreme variability in weather patterns – Rising mean temperatures – Rising sea levels	– Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions) – Reduced revenue and higher costs from negative impacts on workforce (e.g., health, safety, absenteeism) – Write-offs and early retirement of existing assets (e.g., damage to property and assets in "high-risk" locations) – Increased operating costs (e.g., inadequate water supply for hydroelectric plants or to cool nuclear and fossil fuel plants) – Increased capital costs (e.g., damage to facilities) – Reduced revenues from lower sales/output – Increased insurance premiums and potential for reduced availability of insurance on assets in "high-risk" locations

Table 2

Examples of Climate-Related Opportunities and Potential Financial Impacts

Type	Climate-Related Opportunities[33]	Potential Financial Impacts
Resource Efficiency	– Use of more efficient modes of transport – Use of more efficient production and distribution processes – Use of recycling – Move to more efficient buildings – Reduced water usage and consumption	– Reduced operating costs (e.g., through efficiency gains and cost reductions) – Increased production capacity, resulting in increased revenues – Increased value of fixed assets (e.g., highly rated energy-efficient buildings) – Benefits to workforce management and planning (e.g., improved health and safety, employee satisfaction) resulting in lower costs
Energy Source	– Use of lower-emission sources of energy – Use of supportive policy incentives – Use of new technologies – Participation in carbon market – Shift toward decentralized energy generation	– Reduced operational costs (e.g., through use of lowest cost abatement) – Reduced exposure to future fossil fuel price increases – Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon – Returns on investment in low-emission technology – Increased capital availability (e.g., as more investors favor lower-emissions producers) – Reputational benefits resulting in increased demand for goods/services
Products and Services	– Development and/or expansion of low emission goods and services – Development of climate adaptation and insurance risk solutions – Development of new products or services through R&D and innovation – Ability to diversify business activities – Shift in consumer preferences	– Increased revenue through demand for lower emissions products and services – Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services) – Better competitive position to reflect shifting consumer preferences, resulting in increased revenues
Markets	– Access to new markets – Use of public-sector incentives – Access to new assets and locations needing insurance coverage	– Increased revenues through access to new and emerging markets (e.g., partnerships with governments, development banks) – Increased diversification of financial assets (e.g., green bonds and infrastructure)
Resilience	– Participation in renewable energy programs and adoption of energy-efficiency measures – Resource substitutes/diversification	– Increased market valuation through resilience planning (e.g., infrastructure, land, buildings) – Increased reliability of supply chain and ability to operate under various conditions – Increased revenue through new products and services related to ensuring resiliency

Appendix B

This Appendix contains links to publications that may be helpful and relevant in considering the impact of climate-related risks on financial statements

- Australian Accounting Standards Board & Auditing Assurance Standards Board (2019) *Climate-related and other emerging risks disclosures*

  https://www.aasb.gov.au/admin/file/content102/c3/AASB_AUASB_Joint_Bulletin_Finished.pdf

- Climate Disclosure Standards Board (2020) *Accounting for climate: Integrating climate-related matters into financial reporting*

  https://www.cdsb.net/sites/default/files/cdsb_climateaccountingguidance_s_110121.pdf

- Department of Planning, Industry & Environment (2021) *Climate Risk Ready NSW Guide: Practical guidance for the NSW Government sector to assess and manage climate change risks*

  https://climatechange.environment.nsw.gov.au/adapting-to-climate-change/climate-risk-ready-nsw

- IFRS Foundation (2019) *IFRS Standards and climate-related disclosures*

  https://cdn.ifrs.org/-/media/feature/news/2019/november/in-brief-climate-changenick-anderson.pdf?la=en

- IFRS Foundation (2020) *Effects of climate related matters on financial statements*

  https://cdn.ifrs.org/-/media/feature/supporting-implementation/documents/effects-of-climate-related-matters-on-financial-statements.pdf?la=en

- Task Force on Climate-related Financial Disclosures (2017) *Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures*

  https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf

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