

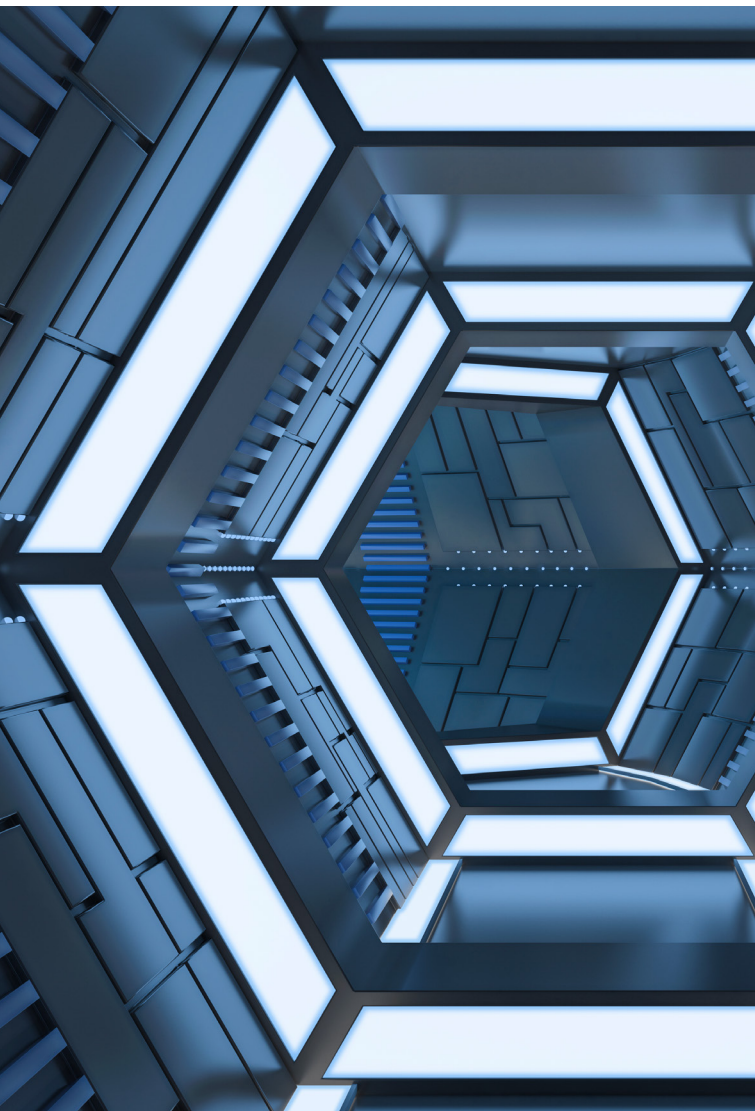
In depth

A look at current financial reporting issues

February 2022



Impacts of climate-related matters on the financial statements



At a glance

Climate change is a high-profile issue that is getting attention from investors and regulators. IFRS does not refer explicitly to climate-related matters; however, companies must consider them in applying IFRS where the effect of those matters is material to the financial statements.

This 'In depth' considers how climate-related matters impact on the financial statements in a New Zealand context, including the implications on:

- Financial instruments
- Fair value measurements
- Insurance contracts
- Property, plant and equipment and intangible assets
- Inventory
- Deferred tax assets
- Provisions and contingent liabilities
- Emission trading schemes
- Disclosures of judgements and assumptions

This publication is relevant for both for-profit entities and PBEs as the considerations are largely consistent for Tier 1 and Tier 2 public benefit entities (PBEs) applying PBE Standards. Where this may not be the case, we have highlighted this in the relevant section.



1. Introduction

Why focus on climate-related disclosures now?

Globally we have seen a significant level of engagement from investors and other stakeholders who are calling for more transparency in reporting on financial risks resulting from climate-related matters. There is also a call on auditors to appropriately challenge boards and management on their consideration of climate-related risks, the impact on financial statements and related disclosures. As we transition to a lower carbon economy and following the United Nations' recent Intergovernmental Panel on Climate Change (IPCC) "code red for humanity" report and COP26 in Glasgow in November 2021, we expect these demands to become even stronger both globally and here in New Zealand.

Recent legal opinions in New Zealand and Australia make it clear that directors' duties of due care and diligence require them to consider climate-related financial risks when making decisions. Investors will reasonably expect that climate-related matters will have an impact on the entity's operations and financial performance. While the significance of the impact may vary and be judgmental, entities will need to be able to clearly articulate and document how they considered the effects of climate-related risks on their financial statements.

Legislative and regulatory developments in New Zealand

In New Zealand, the Financial Sector (Climate-related Disclosures and Other Matters) Amendment Act will require listed companies and large insurers, banks, non-bank deposit takers and investment managers, to be known as Climate Reporting Entities (CREs). As such, these entities will need to produce annual climate statements that identify and report on the impact of climate change on their organisation and disclose Greenhouse Gas (GHG) emissions. Crown Financial Institutions with greater than \$1 billion in total assets under management would be expected to produce climate-related disclosures. The XRB aims to issue its first climate standard in December 2022, meaning these entities would be required to make disclosures from around 2023 at the earliest.

The FMA will be responsible for monitoring and enforcing the new regime.



2. Implications for the Financial Statements

What do we mean by climate-related risks?

Climate-related risks might have an impact on an entity's operations and financial performance. Climate change presents risks, but also opportunities in developing cleaner, greener solutions.

There are two broad categories of climate-related risks:

- the threat of exposure to the **physical risks** of climate change, such as severe weather events and the effects of rising temperatures; and
- alongside the physical impacts are what many call the **transitional impacts**, by which we mean the policy changes and economic consequences of efforts being made towards decarbonisation of the economy. With respect to transitional risk there is both a 'top-down' impact – in the form of changes in legislation and policy – as well as a 'bottom-up' shift in consumer preferences for low- or no-emissions products.

The IASB educational material

In November 2020, the IASB published the educational material 'Effects of climate-related matters on financial statements' to support consistent application of IFRS requirements to climate-related matters, where their effect is material to the financial statements.

The IASB's educational material acknowledges that IFRS does not refer explicitly to climate-related matters but it states that companies must consider climate-related matters in applying IFRS where the effect of those matters is material in the context of the financial statements taken as a whole.

This 'In depth' explores the areas covered by the IASB's educational material as well as a few other important areas to be aware of, including some examples to illustrate these concepts. The matters covered here are not new IFRS requirements – they are the application of existing requirements in IFRS to climate-related risks affecting the financial statements.

2.1 Financial Instruments: Accounting for Green Loans

Green loans (or 'sustainability-linked loans') are debt instruments where the interest rate is linked to certain climate-related or other ESG metrics – that is, loans where the cash flows under the contract vary depending on an ESG metric or measure.

For example, these measures might relate to compliance with emissions standards, energy efficiency metrics, or even a combination of different green measures.

The interest rate on the loan is adjusted periodically to reflect changes in the borrower's performance relative to these green measures.

In our experience, the terms of green loans can vary widely, and a lot of judgement can be involved in assessing the accounting for these instruments under the requirements of IFRS 9 and practice continues to evolve.

Lender's accounting

The main accounting consideration for the lender is assessing whether the payments received from green loans are 'solely payments of principal and interest' – commonly referred to as the 'SPPI test'. If the payments are deemed to be SPPI then the loan can be measured at amortised cost or fair value through other comprehensive income. Failing the SPPI test means the loan will have to be measured at fair value through profit or loss.

Borrower's accounting

The borrower needs to consider whether the green variability features in the loan give rise to an embedded derivative and, if so, whether that embedded derivative should be accounted for separately from the loan.

In assessing the areas above, it is important that entities ensure consistency with the non-financial information disclosed; for example, when assessing whether a feature is de-minimis or non-genuine, ensure that this is consistent with any non-financial information disclosed in the financial statements.

2.2 Financial Instruments: Expected Credit Losses

Climate change might affect a lender's exposure to credit losses for its financial assets. IFRS 9's expected credit losses (ECL) model requires reasonable and supportable information, that is available without undue cost or effort, to be taken into account in the calculation of ECL. Climate change might affect the assumptions that are made by lenders to estimate ECL. It could also affect the risk ratings for individual borrowers or groups of borrowers, or their probability of default (PD). In some cases, it could result in moving loans between stages.

Borrowers could face a range of physical, regulatory and reputational risks that ultimately impact their credit risk, and increase the likelihood that they might be unable to meet their debt obligations. Moreover, the value of assets against which loans are secured could fall in value, or even become inaccessible or uninsurable – affecting the value of collateral.

ECL considerations are important not only to banks, but also to corporate lenders, particularly those with exposures to industries that are most significantly affected.

Top tips to remember when considering ECL:

- Think separately about physical risk (for example, destruction or temporary disruption of physical assets from increased incidence of severe weather events) and transition risk (advancement or displacement as a result of moving to a 'greener' and more sustainable economy).
- Be mindful of duration – while change is happening fast, longer-term exposures are likely to be more affected than short-term ones.
- Recognise that 'one size' doesn't fit all – different portfolios will have different risk exposures depending on duration, industry, geography etc and, in many cases, only top-down assessments of vulnerable geographies and industries will be possible.
- Avoid double counting risks by considering the extent to which they might already be captured directly or indirectly through model inputs such as market credit spreads, expected default frequency and other factors.
- Consider other arrangements such as insurance, guarantees, government subsidies (or other payments and policies) and other sources of recoveries, including how they are structured and how their providers are thinking about (and responding to) evolving ESG risks.

Key steps to work through when measuring ECL:

Reasonable and supportable information: Whilst the higher level of judgement required in assessing what information is reasonable and supportable might make this area difficult for entities (particularly given the longer-term impact of climate change risk), it is not impossible, and the need for judgement does not mean that there is no information that is reasonable and supportable.

The time horizon of the financial instruments under consideration will also be relevant in assessing which information is reasonable and supportable and relevant to those instruments. In addition, it is important to challenge whether historical data, particularly for the longer term, reflect the estimated future conditions resulting from climate change.

Collective and individual assessment: Where a sector is impacted by climate risk and an entity cannot yet determine individually which borrowers in the sector will be impacted, a collective assessment should be performed to ensure that the risk is still captured in the ECL estimate. If not incorporated into the instrument-level ECL model, an overlay or post-model adjustment might be needed.

In addition, previously homogeneous groups might need to be disaggregated into sub-groups, where climate risk might cause differing impacts.

Determining whether credit risk has increased significantly since initial recognition: Paragraph B5.5.17 of IFRS 9 lists a number of factors which would indicate that there has been a significant increase in credit risk (SICR). The same principles should be applied when considering climate-related and other ESG impacts on credit risk.

Multiple economic scenarios: Even if climate risk impacts are not considered likely, but they are still possible, they should be considered under the ECL model and should not be ignored.

An entity might need to consider:

- whether different climate change scenarios are factored in the measurement and whether they are suitably represented by existing scenarios; or
- whether more scenarios are needed to adequately capture climate change risk and the implications for forecast economic scenarios.

The inclusion of climate change factors could also necessitate a change in scenario weightings, particularly if it introduced different non-linearities.

Timing of recognising lifetime ECL: Changes in credit risk due to climate change will often impact periods beyond a 12-month time horizon, such that assessing SICR based only on a 12-month PD might no longer be supportable because there are changes in macro-economic or other credit-related factors that do not adequately reflect the risk of default in the next 12 months.

If this risk is not yet reflected in lifetime PDs but is captured for staging purposes by qualitative indicators instead, practically the continued use of a 12-month PD for staging might be acceptable. However, that could imply that the PD used in the ECL calculation is understated, without a suitable adjustment.



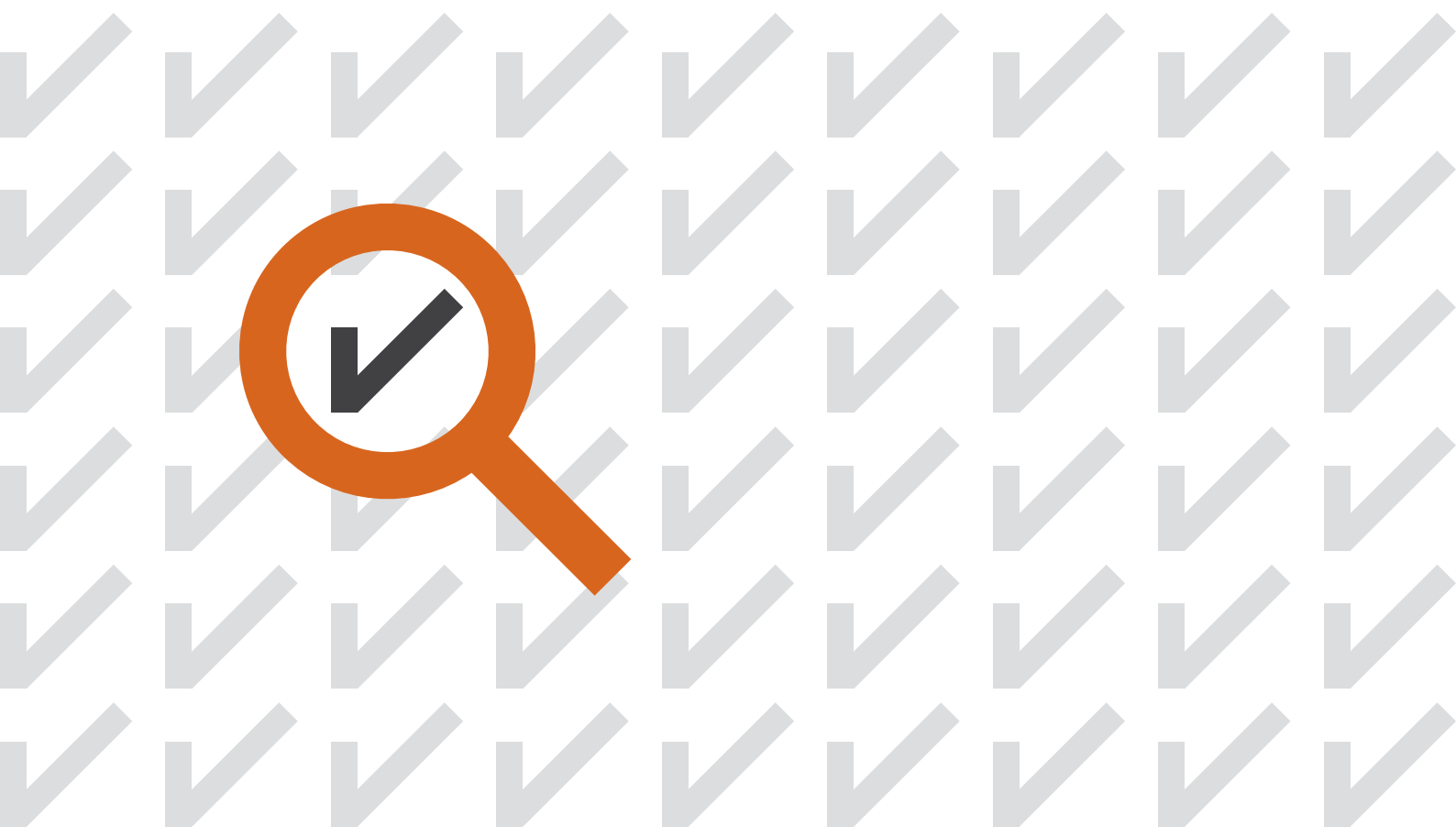
2.3 Financial Instruments: Disclosures

Among other things, IFRS 7 requires disclosure of information about the nature and extent of risks, and how the entity is managing those risks.

Entities might have to change the way in which they are approaching risk concentration disclosures to take into account climate risk – for example, more precision in geographic concentration might be necessary to reflect heightened risk in particular areas (such as city versus provincial/state disclosures where a particular city is particularly impacted) or more precision in the industry sector (such as more precise disaggregation of exposure to the industrial products sector based on carbon intensity).

Entities will also need to consider disclosures about market risk (for example, for investments in industries impacted by climate risk). In some cases, enhanced sensitivity disclosures for particular risks might be relevant.

Finally, liquidity risk might also be a consideration. As an entity's climate risk exposures become more significant, there could be growing pressure on an entity's debt covenants. In this context, disclosures about key covenants might become increasingly material. Reduced access to funding from investors in carbon-intensive industries could also be a risk that entities need to address and disclose.



3. Fair Value Measurements

Fair value measurements can be impacted, because a market participant view might include assumptions about climate-related risk.

Fair value measurements using observable inputs might already appropriately reflect market participant views of any climate change inputs (this may be the case, for example, for the quoted equity price of an entity in the extractives or agriculture industry). However, valuation models for items not traded in an active market should be reviewed to ensure that they adequately represent market participant assumptions for the particular item being valued.

Valuations involving forecasts, might also need to be adjusted to factor in climate-related risk. For example, the fair value measurement for an investment property might need to be adjusted to reflect climate impacts on rental income, occupancy rates as well as insurance cost assumptions.

Climate-related risks might also impact business combination fair value exercises relating to all asset and liability categories – from provisions to customer relationships, inventories to brands and trademarks.

Finally, the fair value of biological assets, such as trees being grown for timber or fruit before the point of harvest, might need to factor in changes on the income and cost sides. For example, changes in consumer dietary preferences and shifts to low-carbon products might impact the price of produce. On the cost side, changes in expected costs as a result of physical risks (such as storms) and changes in the costs of inputs (such as water and regulatory tariffs like those related to land use) might be relevant.

IFRS 13 requires disclosure of the inputs used in fair value measurements and, for recurring fair value measurements with significant unobservable inputs, a description of the sensitivity of those measurements to changes in unobservable inputs.

PBEs should consider the fair value measurement guidance in the PBE Standard that is specific to the transaction or balance for guidance (if any).

4. Insurance Contracts

Climate change might affect the assumptions used to measure insurance contracts.

For example, climate-related events might increase the frequency or magnitude of insured events relating to extreme weather events (such as floods and fires), or accelerate the timing of their occurrence. Such events could affect insurance cover for business interruption, property damage or injury. Climate-related changes also include chronic effects, such as rising average temperatures. Such chronic effects can result in increased incidence of illness or higher mortality rates and could affect insurance cover for death or long-term

illness. Therefore, the impacts could be seen by both life and non-life insurers.

An entity should incorporate assumptions about climate-related risks in the measurement of insurance liabilities and might need to disclose significant judgements and changes in those judgements as a result of those assumptions. Companies may also need to reflect climate-related risk in disclosures about risk exposures, concentrations of risk, how they manage those risks, and sensitivity analysis showing the effect of changes in risk variables.

5. Property, Plant and Equipment and Intangible Assets

Impairment considerations

Climate-related risk can have a significant impact on impairment of non-financial assets.

Climate change could be an indicator of impairment and trigger the need for an impairment test. For example, a decline in demand for products that emit greenhouse gases could indicate that a manufacturing plant might be impaired. Similarly, the introduction of new legislation could cause an entity to reassess the viability of a product line, or result in the imposition of new costs, triggering the need to test associated assets for impairment. Engaging in activities that are seen as potentially damaging to the environment could result in reputational damage, loss of customers, and could impact the value of brands, trademarks and other intangibles. Voluntary environmental commitments that the company has made might also need to be taken into account – for example, a commitment to discontinue a product line, or decarbonise its operations could be an indicator of impairment.

Impacts to the cash flows in a Value-in-Use

(ViU) model: In a ViU model, future cash flows are estimated for the asset in its current condition. Over time, the impact of climate change will likely result in an adjustment to the forecast income expected to be generated from an asset, or changes to an entity's cost base. The timing of these changes to cash flows will differ between industries and countries. For instance, sales forecasts could:

- decrease if customer behaviours change (for example, existing products can fall out of favour or greener products / technologies enter the market that could affect the competitiveness or possibility to operate and generate sales);
- increase if opportunities can be taken to shift to greener products; or
- change depending on whether an entity will be able to pass cost increases on to its customers.

If a shift to greener products will require outflows for enhancements to the existing asset base or restructuring, consider whether this can be reflected in a ViU model. There are differences in whether outflows for enhancements and restructurings and their related resulting beneficial inflows and cost savings are included in the cash flows or not (depending on whether the FVLCD or the ViU model is used).

The FVLCD model is a market participant model and, to the extent that a market participant would capture these enhancements or restructuring, they would be included.

The ViU model reflects the current status of the assets and enhancement cash flows and benefits would only be included once incurred. Similarly the effects of restructurings are only included in ViU models if the related provision is recognised under IAS 37.

The cost base could increase:

- if green targets exist that force, or are expected to force, an entity to source greener (perhaps more expensive) input factors;
- due to additional carbon taxes or carbon offsetting certificates (for example, if green targets are self-imposed or arise via legislation – a transition risk);
- due to physical risks in the location of operations (for example flood risk) driving up insurance premiums;
- due to additional maintenance and repair expenditure to mitigate physical risks in the location of operations (for example flood risk);
- due to commodity and energy price rises (for example, arising from government intervention or other market forces that push to discourage fossil fuels or damaging commodities); or
- due to the cost of repurposing certain assets – a transition risk.

Impact on the length of the cash flow forecast period and terminal value:

This might be particularly relevant when looking at assets in energy-intensive industries, or assets based in countries that have signalled decarbonisation as a priority. Projections for ViU are based on management-approved budgets and under IAS 36 generally cover a period of up to five years. For many businesses our expectation is that responding to climate change is likely to have a more pronounced impact beyond the three-to five-year period; so the impact of climate change will need to be incorporated in the calculation of the terminal value. In many cases it may not be realistic to use a ViU calculation, in particular where material adjustments are necessary to the terminal cash flow for future improvement and enhancement expenditure or future restructurings.

The final year of cash flow projections is generally used to extrapolate cash flows into the future when calculating the terminal value. The final year would therefore need to represent a steady state in the development of the business. This would include a steady state with regards to the climate change transition that the business would have had to go through.

For many businesses, strategic actions around the climate transition might not be complete by the end of the management approved budget period and the final year might not yet have reached steady state. Determining a single terminal value could therefore prove challenging. One possible solution is to split the terminal value calculation into two or more components. The first component might reflect increased operating cash outflows (i.e. ignoring any planned improvements, enhancements or restructuring) to bring the business to a steady state in transitioning to certain climate related targets in the short to medium term. Another component might then represent the steady state after climate related transition expenditures have been made in perpetuity.

In extreme cases, the viability of operations in an existing location might not last beyond a certain point if the location is increasingly unsuitable (for example, flood risk, or area of water scarcity) or due to government legislation making a product unviable, thus limiting the forecast period.

The long-term growth rate impacts the terminal value significantly. Typically, impairment models have tended to assume positive growth rates at the rate of long-term inflation. If entities are not able to shift to climate-friendly products and processes (based on the assets in their current condition) in geographies expected to demand such products, the growth rates might be flat or negative, and a positive growth rate might not be justified. Assumptions that moving to a greener business model will introduce long-term growth might be challenging to support in the early stages of change.

Notion of reasonable and supportable assumptions:

Even though, for example, insurance premiums might not have risen yet, water prices might not have risen yet in water scarce areas or certain legislation has not been enacted – adverse impacts would need to be included in forecasts if it is a reasonable and supportable assumption. This is different, for example, from tax rate changes where the change has to be at least already substantively enacted to be used in tax calculations. To assess whether assumptions are reasonable and supportable, greater weight should be given to external evidence.

There will be a need to monitor climate-related laws and regulations. The regulations might evolve at speed and not necessarily be consistent across territories.

Promises outside financial statements (for example, in the entity ESG or Integrated reports) might need to be reviewed and could result in changes to the cash flow forecasts.

Entities should also be careful when factoring assumptions about premiums that they can command for carbon-neutral products in their forecasts, remembering that they are testing the existing assets in their current condition for impairment – especially if similar technologies and investments are also available to their competitors.

Discount rates: Despite climate risk introducing another risk factor into the modelling, the established methods for calculating the cost of capital should continue to be used. There might be different scenarios where environmental regulations are forecast to be put in place at different times or with different levels of stringency, and sometimes multiple scenarios might need to be built for impairment testing to deal with these inherent uncertainties. Generally, given the potential uncertainties associated with these scenarios, best practice would be to incorporate these into various scenarios in the cash flows, rather than adjusting the discount rate. Entities should remain careful that the same risks are not double counted in both the discount rate and cash flows.

In addition, an entity should consider that the discount rate could increase if an entity has higher exposure to climate risks than peers, because providers of finance (via debt or equity) will demand a higher return for riskier investments.¹ In extreme cases, debt financing might even become a constraint for certain industries, and the mix of debt/equity as an input into WACC could change.

Using fair value less costs of disposal: Because of the limitations on the cash flows that can be used in a ViU test, for the purposes of impairment testing, it might be necessary to use fair value less costs of disposal. If an entity uses fair value less costs of disposal, it is important to keep in mind that the valuation premise is based on market participant assumptions. See further discussion in section 3 – Fair Value Measurements.

Interplay between financial statement disclosures and narrative reporting: Impairment disclosures might need to explain climate-related impacts. Where climate-related risks could have a significant impact on an entity's operations, information about how this has been factored into the recoverable amount calculations would be relevant for the users of the financial statements. In some cases the conclusion **not** to adjust an impairment model for climate risk might be based on significant judgements or assumptions that entities should reflect in their financial statement disclosures.

¹ Also refer to paragraph IE 11 of IFRS 13. The example includes a market risk premium as compensation for the risk that the actual cash flows might differ from those expected because of uncertainty inherent in locking in today's prices for a future event. So the concept of a risk premium for uncertainty that market participants would require for non-diversifiable risks, such as climate-related risk, is supported by the standards.



Many entities discuss climate scenarios as part of their narrative reporting. These scenarios might stem from the Paris Agreement or net zero targets or from Task Force on Climate-related Financial Disclosures (TCFD) reporting requirements. It is important to remember that such scenario analysis likely interacts with disclosures required by IAS 1 or IAS 36, but that the premise of such disclosure is not identical to what IAS 36 requires.

IAS 36 requires a sensitivity analysis if a reasonably possible change in assumptions would lead to an impairment. This might include a reasonably possible unfavourable change in an assumption relating to climate change. The IAS 36 sensitivity disclosures cover the forecast period (that is, perpetuity where a terminal value is included).

An entity should consider whether it should explain how assumptions used for IAS 36 correspond to assumptions used in the narrative reporting on climate change scenarios to help financial statement users understand the linkage. TCFD, for example, might require scenario disclosure that tracks to a 1.5 or 2.0 degrees limitation on temperature rise, even though these might not be assumptions that are aligned with an entity's best estimate or market participant assumptions. It is worth noting that auditors are required by ISA 720 to consider whether other information, such as climate reporting included in the entity's annual report, is consistent with the audited financial statements. In addition to this, regulators in a number of territories have been clear that they expect entities to explain and reconcile any discrepancies in assumptions used.

Useful life and residual value

In addition to impairment, the useful life and residual value of plant and equipment and intangible assets might need to be reassessed as a result of climate change. For example, climate impacts could result in earlier obsolescence of assets, legal restrictions might be placed on use of the assets, or assets may become inaccessible. In the most extreme cases, if assets become inaccessible either as a result of natural climate events, or government action, an entity could even lose control of assets permanently. IAS 16 requires the useful life of assets to be based on the 'best estimate', and this estimation of the useful life of assets is a matter of judgement. Entities should consider whether disclosures about estimation uncertainty related to useful life should be disclosed (for example, where there are multiple potential outcomes and some of them could significantly shorten the life compared to the scenario with the highest probability used in determining useful life).

PBEs should also consider PBE IPSAS 21 *Impairment of non-cash generating assets* to determine whether there has been a loss in the future economic benefits or service potential of non-cash generating assets.



6. Other Non-financial Assets: Considerations Related to Recoverability

Inventories

The recoverability of non-financial assets, such as inventories, could be affected by climate risk.

Inventories could become impaired if their cost is not recoverable. IAS 2 requires an entity to write down such inventories to their net realisable value. For example, certain sectors might experience increased volatility in market prices of assets – this could be as a result of changes in demand patterns for certain commodities, which could expose those inventories to greater risk of impairment.

In other cases, certain assets might be discontinued from use or production, which could result in impairment of the parts for those assets. For example, a certain model of combustion engine might be discontinued because it no longer meets emission standards, making the parts used to produce or service that engine obsolete.

Deferred tax assets

The recoverability of deferred tax assets (DTAs) might also come into question, for similar reasons as discussed above, when considering impairment of other non-financial assets. DTAs are recognised to the extent that it is probable that an entity will generate future taxable profits. Climate change might impact an entity's estimates of future taxable profits and result in it not being able to recognise DTAs or lead to it derecognising those previously recognised. If an entity performs an impairment test, assumptions between the assessment of recoverability of DTAs and the impairment test of non-financial assets should be aligned.

7. Provisions and Contingent Liabilities

On the liabilities side of the balance sheet, climate risk can have an impact on the recognition, measurement and disclosure of provisions and levies. This could impact restructuring provisions and environmental or decommissioning obligations. Actions taken or statements made by the entity could give rise to constructive obligations for which provisions must be recognised, even in the absence of legislation requiring the entity to take action.

Furthermore, changes in the entity's strategy related to climate risk could impact the timing (and therefore measurement) of decommissioning obligations. For example, an entity operates a plant that is heavily dependent on fossil fuels and for which it has recognised a decommissioning provision. The sustainability strategy promises carbon neutrality by 2030. This can realistically only be achieved by substituting the plant with a newer hybrid model plant in the medium term – sooner than originally anticipated.

As a result of this plan, the entity must bring forward the timing of the expected cash flows for decommissioning the plant, due to an earlier decommissioning of the plant than originally envisaged when the provision was first recognised.

In some cases, higher production and other input costs could result in changes to the recognition and measurement of onerous contracts.

For recognition of obligations arising from new legislation, it is important to remember the requirement that a provision should be recognised only when the legislation is 'substantively enacted'. In many cases, this will not occur until the law is actually passed, becomes legislation and requires action on the part of the entity. This might be different however from incorporating such anticipated legislation in measurement of other estimates, such as impairment of non-financial assets (discussed in section 5).

8. Emissions Trading Schemes

Emission trading schemes vary around the world. The New Zealand Emission Trading Scheme (NZ ETS) is a key tool in the New Zealand Government's climate change response toolbox. The purpose of the NZ ETS is to:

- assist New Zealand to meet its international obligations under the Paris Agreement; and
- help New Zealand to meet its 2050 target and emissions budgets.

The NZ ETS helps reduce emissions by doing three main things:

- requiring businesses that are participants in the scheme to measure and report on their GHG emissions;
- requiring participants to surrender one 'emissions unit', known as a carbon credit, or carbon unit, to the Government for each one tonne of emissions they emit (a New Zealand emissions unit is an NZU); and
- limiting the number of NZUs available to emitters (i.e. that are supplied into the scheme).

The Government sets and reduces the number of units supplied into the scheme over time. This limits the quantity that emitters can emit, in line with New Zealand's emission reduction targets.

Businesses that participate in the NZ ETS can buy and sell units from each other. The price for units reflects supply and demand in the scheme. This price signal allows businesses to make economically efficient choices about how to reduce emissions.

The schemes have been around for some time; however, they are again becoming a topic of focus for a few reasons:

- The price of carbon credits has generally been increasing around the world (NZU prices hit a record \$68 per NZU at the auction on 1 December 2021, the first held since the COP26 climate summit in Glasgow.) This means that carbon credits are becoming more material to entities' results, both for those that need to purchase credits to meet compliance obligations and also for those that buy and sell credits as part of their business activities.

- More businesses are getting involved in generating carbon credits through investing in wind or solar energy or carbon capture technologies.
- Many entities are more focused on reporting on carbon emissions as part of their ESG disclosures and are working towards their own carbon targets. In some cases, the carbon credits generated by such decisions can help to defray the costs of these initiatives.

There is no specific accounting standard that deals with accounting for emissions trading schemes. There are some complex conceptual accounting questions about the nature of obligations arising from pollutant pricing mechanisms, particularly where the entity receives emission allowances from the scheme administrator for no monetary consideration. There are also questions about whether (and, if so, how) to recognise assets and liabilities arising from pollutant pricing mechanisms.

There are a number of accounting models that can be used under IAS 8 to account for participation in these schemes, and there continues to be significant diversity in practice in this area.

Carbon credit accounting

Best practice is to treat carbon units as intangible assets (if held to fulfil an emission obligation) or as inventory (if held for sale in the ordinary course of business). Carbon credits do not meet the definition of a financial instrument or a derivative.

However, where entities enter into a forward purchase or sale of carbon credits, they must determine if the forward purchase or sale contracts for carbon credits fall within the scope of IFRS 9.

Emission obligation accounting

Emission obligations are measured either based on the market value of allowances at each period end (or a value based on a forward rate), or at the carrying amount of the credits on hand with any excess measured at the market value of allowances at the period end (or a value based on a forward rate).

9.1 Disclosures about Judgements and Assumptions, including Going Concern Assumption

Climate change can introduce significant uncertainty about the future. Assumptions that an entity makes about future scenarios and the likelihood of those scenarios playing out can have a material impact on what an entity reports.

If assumptions that an entity makes about the future have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year, IAS 1 requires disclosure of information about those assumptions and the nature and carrying amount of those assets and liabilities. Entities are also required to disclose the sensitivities of carrying amounts to the assumptions and estimates.

For example, if climate change matters create uncertainties that affect assumptions used to develop estimates, those assumptions might need to be disclosed if they have a significant risk of resulting in a material adjustment to the carrying amounts of assets and liabilities within the next financial year – and the impact of various potential climate scenarios on the financial report might need to be explained. In addition, entities would typically explain changes made to past assumptions. Critically, the assumptions that underpin the entity's financial reporting should align to assumptions and analyses described elsewhere – such as the entity's ESG disclosures.

IAS 1 also has a general disclosure requirement to ensure that the accounts capture all information that would be considered material. Paragraph 112 of IAS 1 requires entities to provide information that is not presented elsewhere in the financial statements but is relevant to an understanding of them. These overarching requirements in IAS 1 might be especially relevant for entities whose financial position or financial performance is particularly affected by climate-related matters.

IAS 1 requires management to assess an entity's ability to continue as a going concern when preparing financial statements. In assessing whether the going concern basis of preparation is appropriate, management takes into account all available information about the future, which is at least, but is not limited to, 12 months from the end of the reporting period. If climate-related matters create material uncertainties related to events or conditions that cast significant doubt on an entity's ability to continue as a going concern, disclosures are required by paragraph 25 of IAS 1. The uncertainties should be disclosed, even if the financial statements continue to be prepared on a going concern basis. The disclosures should:

- adequately describe the principal events or conditions that give rise to the significant doubt on the entity's ability to continue in operation, and management's plans to deal with these events or conditions; and
- state clearly that there is a material uncertainty related to events or conditions which might cast significant doubt on the entity's ability to continue as a going concern, such that it might be unable to realise its assets and discharge its liabilities in the normal course of business.

Where management has concluded that 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), IAS 1 requires disclosure of that judgement.

9.2 Paris Aligned Financial Statements and Consistency of Assumptions

The Paris Agreement 2020 was signed by 190 countries plus the European Union and has the objective of substantially reducing Greenhouse Gas (GHG) emissions and thus the impacts of climate change.

Many countries adopted the Paris Agreement and by 2020 also submitted their plans to reduce GHG emissions as part of their related nationally determined contributions (NDCs). NDCs normally include targets of net-zero GHG emissions by 2050 at the latest with interim targets for 2025 and 2030.

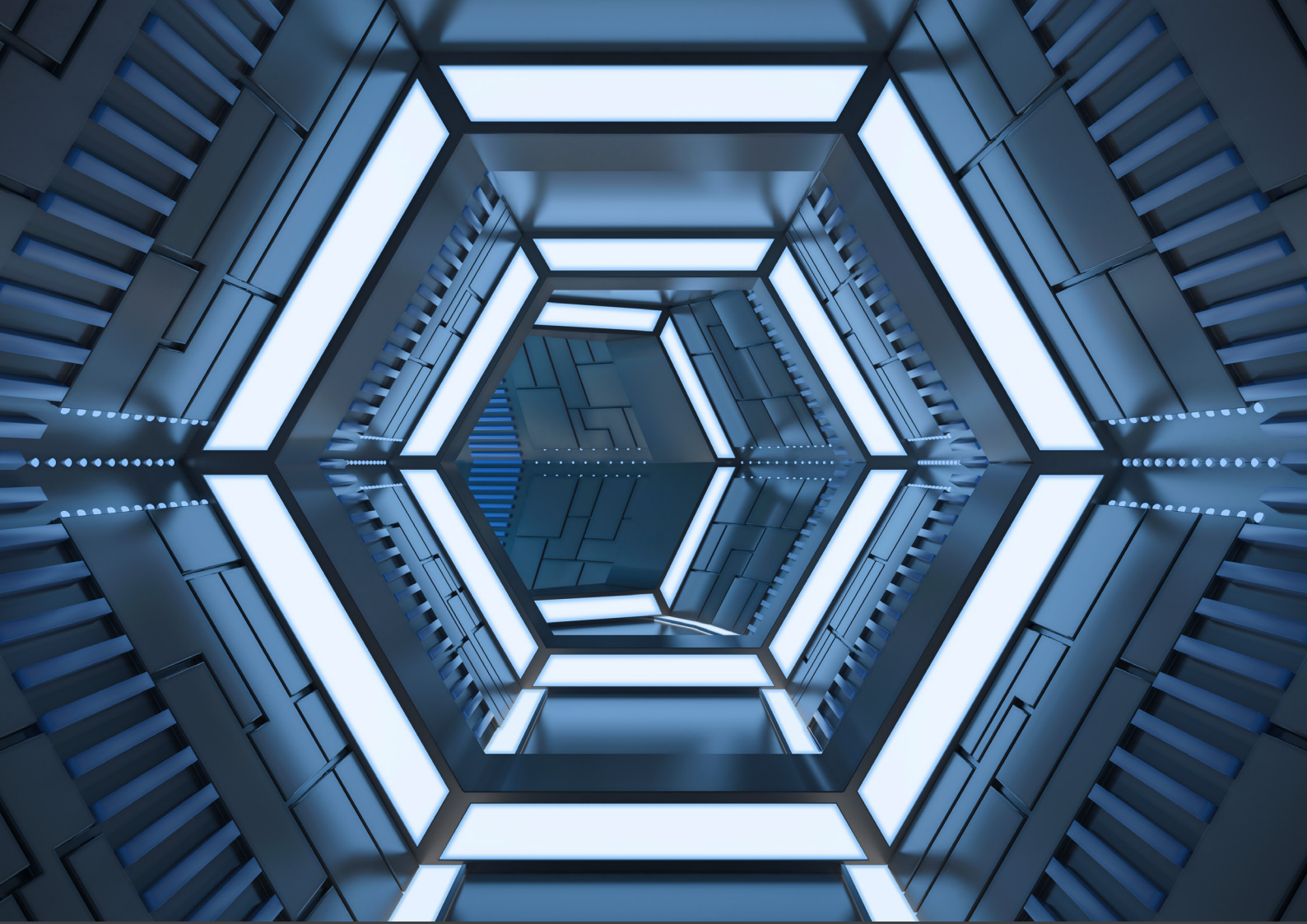
In October 2021, the New Zealand Government announced that it will significantly increase its contribution to the global effort to tackle climate change by reducing net greenhouse emissions by 50% below 2005 levels, by 2030.²

Countries might have implemented detailed laws and regulations relating to GHG reductions which might or might not be sufficient to meet their NDCs. Depending on the specificity of legislative requirements and expected impact to entities, entities will have varying degrees of detailed plans in place to address these requirements.

Questions often arise about whether an entity's financial statements are 'Paris Aligned' meaning whether they comply with the legally binding instrument that many nations have signed relating to limiting carbon emissions to a level designed to cap global temperature rises. Whether accounts are 'Paris Aligned' is not easy to determine because of the variety of measurement techniques required by IFRS depending on the item being considered in the statement of financial position (see more guidance on this further above in this publication). Therefore, it might be easier for recognition and measurement of some items to be more closely aligned to Paris assumptions than others.

In addition to considering the IFRS requirements, it is important that entities are consistent in the disclosures of financial and non-financial information in relation to climate-related matters, the impact and consideration of climate-related risk and any material disclosure in relation to significant judgements and estimates of uncertainty arising as a result of climate-related risk.

² <https://www.beehive.govt.nz/release/govt-increases-contribution-global-climate-target>



Need more information?

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