

What's the impact on cash flow projections used for impairment testing of non-financial assets?

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Climate change is a business risk that may have a significant impact on a company's future cash flows. If this impact is ignored when performing impairment calculations, then the carrying amounts of assets such as goodwill, property, plant and equipment, right-of-use assets and intangible assets could be overstated.

What's the issue?

Under IAS 36 *Impairment of Assets*, companies are required to assess at each reporting date whether there is an indication that an asset or cash-generating unit (CGU) may be impaired¹. One such indicator is significant changes with adverse effects in the technological, market, economic or legal environment in which the company operates that have taken place during the period (or will take place in the near future). Transitioning to a lower-carbon economy may trigger such adverse effects. Therefore, a company needs to consider the impact of climate change in assessing whether assets or CGUs may be impaired. [\[IAS 36.9, 12\(b\)\]](#)

A company typically tests for impairment using the discounted cash flow (DCF) technique to calculate the recoverable amounts of assets or CGUs. How might climate-related matters affect cash flow projections used in calculating the recoverable amount?

Getting into more detail

How might climate-related matters affect cash flow projections?

Climate-related risks and opportunities may affect revenues, costs (including R&D) and capital expenditure in many ways, including the following.

- **Customer and supplier behaviour:** Revenue and growth may change as customer preferences shift away from existing non-green products and services towards more sustainable ones. A company's cost base may also change because of the impact of climate change on its suppliers – e.g. suppliers may pass increased costs through the supply chain.
- **Investor and lender behaviour:** The growth rate of companies with higher exposure to climate-related risks may decrease if they incur higher financing costs or become financially constrained as investors or lenders factor climate-related risks into their investing or lending decisions.
- **Government policies and legislation:** The introduction of new climate-related policies or legislation may affect a company's revenues or operating costs – e.g. a carbon tax.
- **Technological developments:** Emerging green technology may significantly affect a company's competitiveness in the market and result in higher capital expenditure to develop or acquire equivalent technology.

¹ Irrespective of any indicator of impairment, IAS 36 requires goodwill, intangible assets with indefinite useful lives and intangible assets not yet available for use to be tested for impairment at least annually.

- **Physical impacts:** The physical impacts of climate change, such as rising temperatures and increases in the frequency and severity of extreme weather events, may give rise to higher insurance or maintenance expenditure, or even limit the suitability of current operating locations.

How do you factor the impact of climate change into cash flow projections?

When calculating the recoverable amount (i.e. the higher of value in use (VIU) and fair value less costs of disposal (FVLCD)) using the DCF technique, the following are some of the aspects that a company needs to consider.

Making reasonable and supportable assumptions

The calculation of VIU reflects considerations such as the estimated future cash flows that a company expects to earn from the asset or CGU and possible variations in the amount or timing of those future cash flows. These cash flows need to be based on reasonable and supportable assumptions that represent management's best estimate of the range of economic conditions that will exist over the remaining life of the asset. [\[IAS 36.30\(a\)–\(b\), 33\(a\)\]](#)

Therefore, it is important that a company considers whether and how climate change may affect the asset or CGU when making reasonable and supportable assumptions. For example, it needs to consider whether enactment of future climate-related legislation (e.g. a carbon tax) is a reasonable and supportable assumption at the period end. If it is, then the company reflects it in the cash flow projections – e.g. by increasing the company's costs of production to reflect the impact of the tax on commodity or energy prices.

Considering which approach to use

Two approaches can be used to project cash flows – the traditional approach, which uses a single cash flow projection, and the expected cash flow approach (ECF), which uses multiple, probability-weighted cash flow projections. [\[IAS 36.A2, A4–A14\]](#)

A company needs to consider whether to use the ECF approach (rather than the traditional approach) in calculating the recoverable amount, because it may be useful in identifying and modelling various potential outcomes. [\[IAS 36.A2, A7\]](#)

Identifying capital expenditure to include

When calculating VIU, cash flow projections exclude future capital expenditure that will improve or enhance an asset's performance that have not been incurred, and the related benefits. Conversely, cash flow projections include capital expenditure necessary only to maintain the performance of an asset. Management needs to apply judgement when determining whether capital expenditure that will be incurred in response to climate change (e.g. making an asset compliant with climate-related laws or regulations) is more akin to maintenance or enhancement. Capital expenditure to improve or enhance an asset's performance and the related benefits are included in cash flow projections only once the expenditure is incurred. [\[IAS 36.44-45, 48-49, Insights 3.10.250\]](#)

Under VIU, cash flow projections exclude future restructurings to which the company is not yet committed, and the related benefits. For accounting purposes, a company is committed to a restructuring only when it meets the criteria to recognise a restructuring provision. [\[IAS 36.44-47, Insights 3.10.260\]](#)

When the recoverable amount is calculated on the basis of FVLCD, future capital expenditure to improve or enhance assets or future restructurings (and any associated benefits) are included in the cash flow projections, if this is consistent with the market participant perspective.

FVLCD is a market-based measurement – it is measured using assumptions that market participants would use in pricing the asset or CGU. Therefore, the impact of potential climate-related matters on the assumptions used in the cash flow projections used to measure FVLCD is evaluated through the eyes of market participants. [\[IFRS 13.2, 22\]](#)

Determining the terminal value

The terminal value, which reflects the value after the explicit forecast period, is the parameter that is likely to be most affected by climate change. Small changes in the perpetual growth rate, an input used to calculate the terminal value, can change it significantly. Therefore, it is important to carefully consider whether the growth rate used to extrapolate the cash flows reflects the impacts of climate change. Companies that are not resilient to climate change may suffer from lower or negative long-term perpetual growth rates. IAS 36 requires a company to use a steady or declining growth rate to estimate value in use, unless an increasing rate can be justified. Climate-related matters could have a significant effect on management's assumptions of long-term average growth rates. Management may need to apply significant judgement when determining the long-term average growth rate and consider any external data on the expected impact of climate change on future growth, if any is available.

In the most extreme cases, the threats from climate change to a CGU's business model may mean that including a terminal value is inappropriate. This is sometimes referred to as an asset or CGU becoming 'stranded'. When relevant, IAS 36 contains specific requirements on estimating the net cash flows to be received (or paid) for the disposal of an asset (or CGU) at the end of its useful life. [\[IAS 36.33\(c\), 52–53\]](#)

When calculating the terminal value, the final year of cash flow projections is generally used to extrapolate cash flows into the future and, therefore, needs to represent a company's steady state in the development of a business. If it has not reached a steady state – e.g. due to climate-related matters – then it would consider when and how a steady state would be achieved – e.g. adjust the cash flows to reflect future expenditure to address the impact of climate change. It may be appropriate for a company to consider a longer explicit cash flow forecast period for modelling climate-related risks before assuming that it has reached a steady state. Under IAS 36, cash flow projections need to cover a maximum period of five years when estimating VIU, unless a longer period can be justified. [\[IAS 36.33\(b\)\]](#)

Disclosures

IAS 36 requires disclosure of the events and circumstances that led to the recognition of the impairment loss. For example, a company would need to disclose the introduction of climate-related legislation that will significantly affect its manufacturing costs and, therefore, result in an impairment loss. [\[IAS 36.130\(a\), 131\(b\)\]](#)

Where climate-related matters may significantly impact the company's operations, it may be necessary to disclose how this has been factored into the calculations of the recoverable amount. In the context of impairment testing of goodwill and intangible assets with an indefinite useful life, IAS 36 requires companies to disclose the key assumptions used in calculating the recoverable amount and management's approach to determining the value assigned to them. Additional disclosures such as the value(s) assigned to the key assumption(s) and sensitivity disclosures are required if a reasonably possible change in a key assumption would result in the CGU's carrying amount exceeding its recoverable amount. Sensitivity disclosures are typically provided for assumptions such as the discount rate and growth rate used to extrapolate cash flow projections. These disclosures may also be required for other assumptions due to the increasing valuation uncertainty resulting from the impact of climate change on the recoverable amount. [\[IAS 36.134\(d\)\(i\)–\(ii\), \(e\)\(i\), \(f\)\]](#)

For impairment testing of assets other than goodwill and intangible assets with an indefinite useful life, companies are encouraged, but not required under IAS 36, to disclose the assumptions used in determining the recoverable amount. Nonetheless, such disclosure may be needed if it is material for the users' understanding of the company's financial position or performance – e.g. if a company is operating in an industry particularly affected by climate-related matters. [\[IAS 1.17\(c\), 31, 36.132\]](#)

A company is also required to disclose the key assumptions used in estimating the cash flows that have a significant risk of resulting in a material adjustment to the carrying amount of the asset or CGU within the next financial year (e.g. assumptions related to the impact of uncertain changes to climate-related legislation on the cash flow projections), including information related to reasonably possible changes to those assumptions (e.g. sensitivity disclosures). [\[IAS 1.125, 129\]](#)

A company discloses judgements (apart from those involving estimations) that can significantly affect the amounts that it recognises in the financial statements – e.g. whether capital expenditure to be incurred due to climate change is more akin to maintenance or enhancement. [\[IAS 1.122–123\]](#)

Actions for management to take now

Consider whether:

- cash flow projections reflect the potential impact of climate-related matters;
- the assumptions underlying cash flow projections are in sync as applicable with the company's strategy and the climate-related matters discussed elsewhere in the annual report. Careful consideration needs to be given to the extent to which linkage between these assumptions and the scenario analyses performed to assess the resilience of the company's strategy to climate-related risks and opportunities is appropriate; and
- appropriate disclosures have been provided about significant judgements, assumptions and estimates made to calculate the recoverable amount.

References to 'Insights' mean our publication [Insights into IFRS](#)

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