



## Accounting for Sustainability: Climate Risks

The fourth article in the 'Accounting for Sustainability' series

March 2026

# Introduction

By 2030 all industrial sectors are expected to face at least moderate exposure to climate hazards, yet companies are making slow progress in adapting to these risks. S&P Global found that only 42% of companies they surveyed disclosed plans for climate adaptation and resilience. Sectors that are already exposed to extreme weather and lack adequate resilience investments are likely to face significant operational and financial challenges, including increased credit risk.<sup>1</sup> Companies urgently need to integrate climate risks into their operational and financial planning.

Encouragingly, there is some clear evidence that adoption of climate disclosure frameworks is increasing. A benchmark study of Swiss sustainability reports published in May 2025 found that most large-cap and mid-cap companies listed on the SIX Swiss Exchange are reporting on climate-related risks and opportunities following the Task Force on Climate-related Financial Disclosures (TCFD) framework. However, a significant majority did not disclose the financial resources allocated to their transition plans.<sup>2</sup>

Robust accounting and reporting practices are fundamental for informed climate-related decision-making and effective risk management. This article explores the connection between climate risk and the IFRS Accounting Standards, illustrating how companies can identify, measure, and disclose climate risks in their financial statements.

## Climate risks

In recent years climate risk assessments have become increasingly common, particularly among sustainability professionals. This increased focus is largely driven by evolving regulatory requirements that compel many companies to assess and disclose their climate-related risks in sustainability reports. These risks are generally categorised into two main types: physical risks and transition risks, each with distinct implications for businesses and their accounting practices.

Physical risks primarily arise from the direct impacts of climate change and will be exacerbated if global temperatures continue to increase. These risks can be further divided into chronic and acute. Chronic physical risks include long-term changes such as rising average temperatures, sea-level rise, and shifting precipitation patterns. Acute physical risks, on the other hand, refer to sudden and severe events like typhoons, floods, and droughts. Such physical risks can cause significant damage to tangible assets, disrupt supply chains, increase operational costs, and lead to interruptions in business. For accounting purposes, these impacts may result in asset impairments, increased provisions for obligations, contingencies, and changes in estimates related to useful lives and the residual values of assets. Additionally, physical risks can affect inventory valuations, insurance costs, and even the recoverability of customers' receivables.

---

<sup>1</sup> [S&P Global's Top 10 Sustainability Trends to Watch in 2026 | S&P Global](#) (2026). Retrieved 3. March 2026.

<sup>2</sup> [Navigating the Swiss Sustainability Reporting Landscape | Deloitte Switzerland](#)

Transition risks emerge from the process of adapting to a low-carbon economy. Triggers include the introduction of carbon pricing, stricter emissions standards, and shifts in market preferences towards sustainable products and services. Transition risks also encompass technological advances and reputational risks associated with failing to adapt. From an accounting perspective, transition risks may lead to accelerated depreciation of assets that become obsolete, recognition of losses for onerous contracts, provisions for environmental damage, or impairment of assets in carbon-intensive industries. Transition risks may also affect revenue streams and cost structures, thereby impacting profitability and cash flow projections.

Climate risk assessments typically involve scenario modelling, exploring a range of possible future outcomes based on different assumptions about climate policies, technological developments, and physical impacts. While these scenarios offer valuable insights, it is important to acknowledge their inherent uncertainties. Scenario models cannot be certain to predict precisely what will occur. By 2050, for example, the assumptions on which climate models depend may have changed considerably. Consequently, companies must exercise significant judgement in applying these scenarios to their financial reporting and ensure transparency about the assumptions applied.

## Financial quantification of climate risk

A brief examination of how both physical and transition risks can be quantified financially helps to demonstrate their potential impact on the business.

Data-driven climate models analyse physical climate indicators such as extreme rainfall or drought and estimate their effects on both physical assets and business operations. These models facilitate assessment of how climate events may damage a company's assets, such as manufacturing sites, warehouses, and offices, and disrupt its business activities, resulting in reduced employee productivity, higher energy costs, and diminished revenues. Quantifying exposure to various hazards can support strategic decision-making aimed at enhancing resilience and minimising financial losses.<sup>3,4</sup>

Transition risks can be calculated using various climate scenarios developed by organisations such as the Network for Greening the Financial System (NGFS) and the International Energy Agency (IEA). These scenarios depict plausible futures rather than precise forecasts and outline a range of potential climate-related economic developments. They incorporate factors such as policy changes, technological advances, and shifts in market dynamics associated with the transition to a low-carbon economy. Applying these scenarios to a company's business makes it possible to assess potential future costs, including carbon pricing, raw material expenses, and other financial impacts related to the transition. This approach helps companies identify vulnerabilities and opportunities, enabling more informed strategic and financial decision-making.<sup>3</sup>

---

<sup>3</sup> [Climate Risk Assessments | Deloitte Switzerland](#)

<sup>4</sup> [A practical approach to physical climate risks | Deloitte Switzerland](#)

# Accounting for climate risk

Companies must reflect the growing climate-related risks accurately in their financial statements. This section outlines how the IFRS Accounting Standards can guide disclosures on climate risks. The overview is not exhaustive and should be considered alongside the full requirements of relevant accounting standards and evolving regulatory guidance.

## **IAS 1 Presentation of Financial Statements / IFRS 18 Presentation and Disclosure in Financial Statements and IAS 8 Basis of Preparation of Financial Statements (amendments effective 1 January 2027)**

IAS 1 requires entities to disclose material uncertainties related to climate risk, including the significant assumptions and the estimation uncertainties that could significantly affect the recorded values of the company's assets and liabilities.<sup>5</sup> This includes disclosing assumptions related to the assessment of climate change risks if they pose a significant risk of materially adjusting assets and liabilities within the next financial year, in accordance with IAS 1:125 (and IFRS 18 from FY2027: IAS 8.31A and IAS 8.33E). It may also be relevant to disclose information substantiating assumptions about climate change and their sensitivity, even if effects occur in the medium to long term.

## **IAS 36 Impairment of Assets**

IAS 36 requires assessment of whether climate risks, such as changes in demand for certain products, or regulatory shifts, indicate asset impairment. For example, a decline in demand for carbon-intensive products could indicate that a manufacturing plant may be impaired, requiring the asset to be tested.<sup>6</sup> In addition, sensitivity disclosures are specifically mandated for Cash-Generating Units (CGUs) that contain goodwill or tangible assets with an indefinite useful life. These disclosures are necessary where a possible change in management's key assumptions would cause the CGU's carrying amount to exceed its recoverable amount, thereby indicating impairment. As an example, one key assumption that might change is the frequency of extreme weather events. Furthermore, according to the illustrative examples issued by the International Accounting Standards Board (IASB) in November 2025<sup>5</sup>, if a change in key assumptions might result in a material adjustment to the carrying amount of assets and liabilities in the following financial year, sensitivity information should be provided in accordance with IAS 1.125 (or IAS 8.31A and IAS 8.33E under IFRS 18).

## **IAS 2 Inventories**

Climate-related factors can negatively affect the net realisable value of inventories. This may happen if selling prices fall due to changing consumer behaviour or if completion costs rise, for example due to sourcing constraints or physical damage caused by extreme weather, or because regulatory changes make a product obsolescent. Should the cost of inventory become not recoverable under these circumstances, IAS 2 requires that such inventories be written down to their net realisable value.<sup>7</sup>

---

<sup>5</sup> [Illustrative Financial Statements under IFRS Accounting Standards as adopted by the EU \(2025\) | Deloitte](#)

<sup>6</sup> [Effects of climate-related matters on financial statements, IFRS \(July 2023\)](#).

<sup>7</sup> [Illustrative Financial Statements under IFRS Accounting Standards as adopted by the EU \(2025\) | Deloitte](#)

## IAS 37 Provisions, Contingent Liabilities and Contingent Assets and IFRIC 21 Levies

IAS 37 is crucial for recognising and measuring environmental damage related to transition risks and climate-related obligations. Provisions are recognised when they arise from:

- legal or constructive obligations, such as those related to regulatory requirements for environmental damage remediation
- restructurings aimed at redesigning products or services to meet climate-related targets
- legal obligations to offset emissions
- publicly committing to offset emissions in a manner that creates a constructive obligation.

Climate-related obligations may also generate levies or fines for failing to meet regulatory targets, regulatory requirements to remediate environmental damage<sup>8</sup>, contractual obligations, or product modifications required to comply with evolving standards. Levy liabilities should be recognised when the obligation is triggered by law (per IFRIC 21 Levies).

## IAS 16 Property, Plant and Equipment

IAS 16 and IFRS 16 set out the accounting treatment for property, plant and equipment (PP&E), focusing on recognising assets only when it is probable that future economic benefits will flow to the entity. Climate-related risks can affect this criterion by raising concerns over asset viability, potentially affecting recognition and the useful life or residual value of assets. Additionally, climate risks may impact the depreciation or amortisation of assets through changes in their useful lives or residual values. Considering the complexities of IAS 16 and IAS 36, our next article will delve deeper into how climate change is affecting the valuation, depreciation, and impairment considerations for PP&E, as well as how to account for stranded assets.

## IFRS 9 Financial Instruments and IFRS 7 Financial Instruments: Disclosures

IFRS 7 requires companies to share information about their financial instruments, including the risks involved and how they manage those risks. Climate-related issues can have an impact on the risks arising from financial instruments, particularly expected credit losses, as determined under IFRS 9. Companies may be required to disclose their approach to assessing the credit risk of trade receivables, particularly when their customers demonstrate increased exposure to climate-related risks. Where a significant climate-related event has occurred, the effect of this event on trade receivables on the balance sheet date should be disclosed.<sup>9</sup>

## IFRS 17 Insurance Contracts

Physical climate issues can cause insured events, like business interruptions, property damage, illness, or death, to happen more often or sooner. This can affect the assumptions used to calculate insurance liabilities under IFRS 17. In addition, physical climate risks may require companies to disclose how changes in risk factors might impact their insurance contracts, for example through increased premiums to cover higher expected claims.

---

<sup>8</sup> [Appendix A1 Climate change. Deloitte Accounting Research Tool \(DART\)](#). Retrieved 3 November 2025.

<sup>9</sup> [Accounting for Sustainability Series: Where Sustainability Meets Financial Reporting | Deloitte Switzerland](#)

## Illustrative case

*The fictional examples presented below are purely illustrative. They are based on IFRS amendments for Disclosures about Uncertainties in the Financial Statements<sup>10</sup> and the related iGAAP in Focus article from November 2025<sup>11</sup>.*

RetChem, a fictional company, operates two chemical manufacturing plants and is confronting various climate-related accounting challenges. Below is a selection of the accounting considerations made by RetChem as they prepare their financial statement.

*IAS 1 Presentation of Financial Statements (or IAS 8 Basis of Preparation of Financial Statements, effective 1 January 2027)*

RetChem faces significant climate-related transition risks, such as evolving carbon emission regulations and shifts in demand towards sustainable materials, which could impact the recoverability of its manufacturing plants and specialised equipment. While its recent impairment review concluded there was no current impairment, management has identified a significant risk of material impairment to these non-current assets within the next financial year. Consequently, in accordance with IAS 1 or IAS 8, RetChem discloses the key assumptions used in its impairment assessment, along with the nature and carrying amount of the affected manufacturing assets, to provide users with material information about this future uncertainty.

*IAS 36 Impairment of Assets*

RetChem's coastal chemical plant, a cash-generating unit (CGU), faces climate-related risks from extreme weather and declining demand for carbon-intensive products. While no impairment loss was recognised during this period, RetChem identified future climate-related operating costs (for example for carbon taxes and flood defenses) and demand projections as key assumptions in its IAS 36 impairment testing. Applying IAS 36, RetChem discloses these key assumptions and its approach to determining their values. Furthermore, RetChem assesses and discloses sensitivity information, detailing how a reasonable change in these climate-sensitive assumptions could lead to an impairment loss, including the amount by which the recoverable amount exceeds the carrying amount and the required change in assumptions.

*IAS 37 Provisions, Contingent Liabilities and Contingent Assets*

RetChem has plant decommissioning and site-restoration obligations. It expects to operate its facilities for a very long time, meaning the costs required to settle the obligations related to their two facilities will be incurred so far into the future that, when discounted to their present value, their effect on the carrying amount of Blue RetChem's plant decommissioning and site-restoration provision is immaterial. However, these costs remain high, and there is a significant risk that RetChem may need to close its plants sooner than expected due to the transition to a lower-carbon economy, changing consumer demand, and potential regulatory actions to reduce greenhouse gas emissions. Although some of RetChem's plant decommissioning and site-restoration obligations have an immaterial effect on the provision's carrying

---

<sup>10</sup> [Amendments to Illustrative Examples on IFRS 7, IFRS 18, IAS 1, IAS 8, IAS 36 and IAS 37 — Disclosures about Uncertainties in the Financial Statements \(November 2025\)](#)

<sup>11</sup> [iGAAP in Focus - IAS Plus: IASB publishes illustrative examples for disclosures of uncertainties in the financial statements using climate-related scenarios \(November 2025\)](#).

amount, the entity considers information about these obligations material due to high settlement costs, a significant risk of early settlement, and climate-related factors affecting the industry and jurisdiction in which RetChem operates. RetChem discloses a description of the obligations, expected timing of outflows, and uncertainties, including key assumptions, such as on the timing of potential facility closures.

## Stay Tuned

The fifth article in the Accounting for Sustainability series will provide a detailed overview of accounting for stranded assets. It will explain the concept of stranded assets in the context of climate change and explore how to account for them in financial statements in accordance with IAS 16 and IAS 36.

## Authors



**Abetare Zymeri**

Director, Sustainability Services

[azymeri@deloitte.ch](mailto:azymeri@deloitte.ch)



**Oliver Köster**

Director, Audit & Assurance

[okoester@deloitte.ch](mailto:okoester@deloitte.ch)

*Additional contributors:*

Nadine Kusche, Director, Audit & Assurance

Caterina Schoehl, Senior Manager, Audit & Assurance

Dr. Ramona Achermann, Assistant Manager, Sustainability Services

Emilie Lundsgaard Jensen, Senior Consultant, Sustainability Services