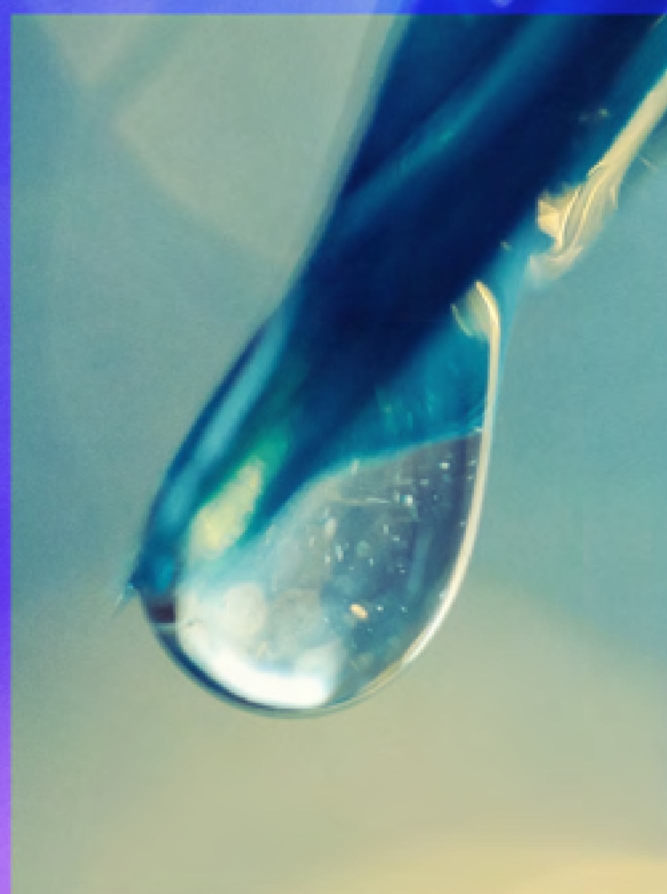
Climate risk in the financial statements

Executive summary



US GAAP

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kpmg.com/us/sustainabilityreporting

Growing acknowledgment of climate risk

Voluntary sustainability reporting is giving way to mandatory reporting. The International Sustainability Standards Board and the European Union have issued standards that set the foundation for global sustainability reporting, and the California climate laws require reporting in 2026 for thousands of US companies.

Whichever framework is applied, climate reporting is at the forefront; with metrics and narrative that provide greater visibility into a company's actions, plans and prospects. The picture those disclosures paint – and how it connects to a company's financial position and performance – is coming into view.

At the same time, as emissions reduction target dates get closer and as intentions change to strategies and then to actions, the potential effects on the financial statements are becoming more apparent. The volume and ingenuity of transactions linked to emissions reductions continue to increase – with the FASB's proposal on accounting for environmental credits and environmental credit obligations now open for comment.

These and other emissions-related transactions are testing the application of US GAAP in cases where there might not be explicit guidance – leaving the finance function to develop processes and controls to help it monitor the financial reporting implications of the organization's sustainability initiatives.

With the growing awareness of the implications of climate risk for the preparation of financial statements, we hope our US GAAP handbook will help you prepare. Ask yourself the questions that we pose, create your own checklist, and monitor your environment and circumstances.

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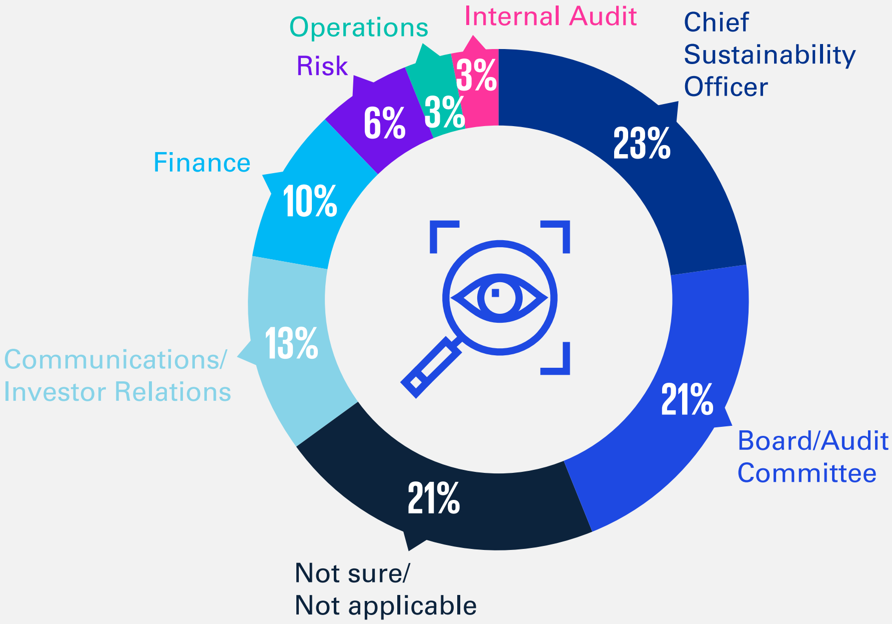
In a KPMG survey on companies' ESG reporting efforts, we asked who was involved with the company's ESG reporting strategy.

What function has the greatest focus and input regarding your company's ESG reporting strategy?



Only 10% of respondents indicated that the finance function has the greatest focus and input; another 21% were unsure or indicated 'not applicable'.

The finance function does not need to lead, but it should have a seat at the table, and it does need to analyze and understand the connectivity between sustainability reporting and financial reporting.

Source: KPMG survey on companies' ESG reporting efforts

This Executive Summary is an excerpt from our in-depth guide, Climate risk in the financial statements. That publication comprises a collection of issues and examples that we believe are relevant for companies thinking about the ways in which climate risk can affect their financial statements. Our intent is to stimulate your thinking about how climate risk might manifest in your financial statements. The issues highlighted in that publication are based on our experience in responding to questions about the application of US GAAP when climate risk was one of the drivers in the background. We expect these issues to evolve over time.

Contents

About climate risk

The recommendations of the Task Force for Climate-related Financial Disclosures (TCFD) categorize climate risk as follows.

Physical risk

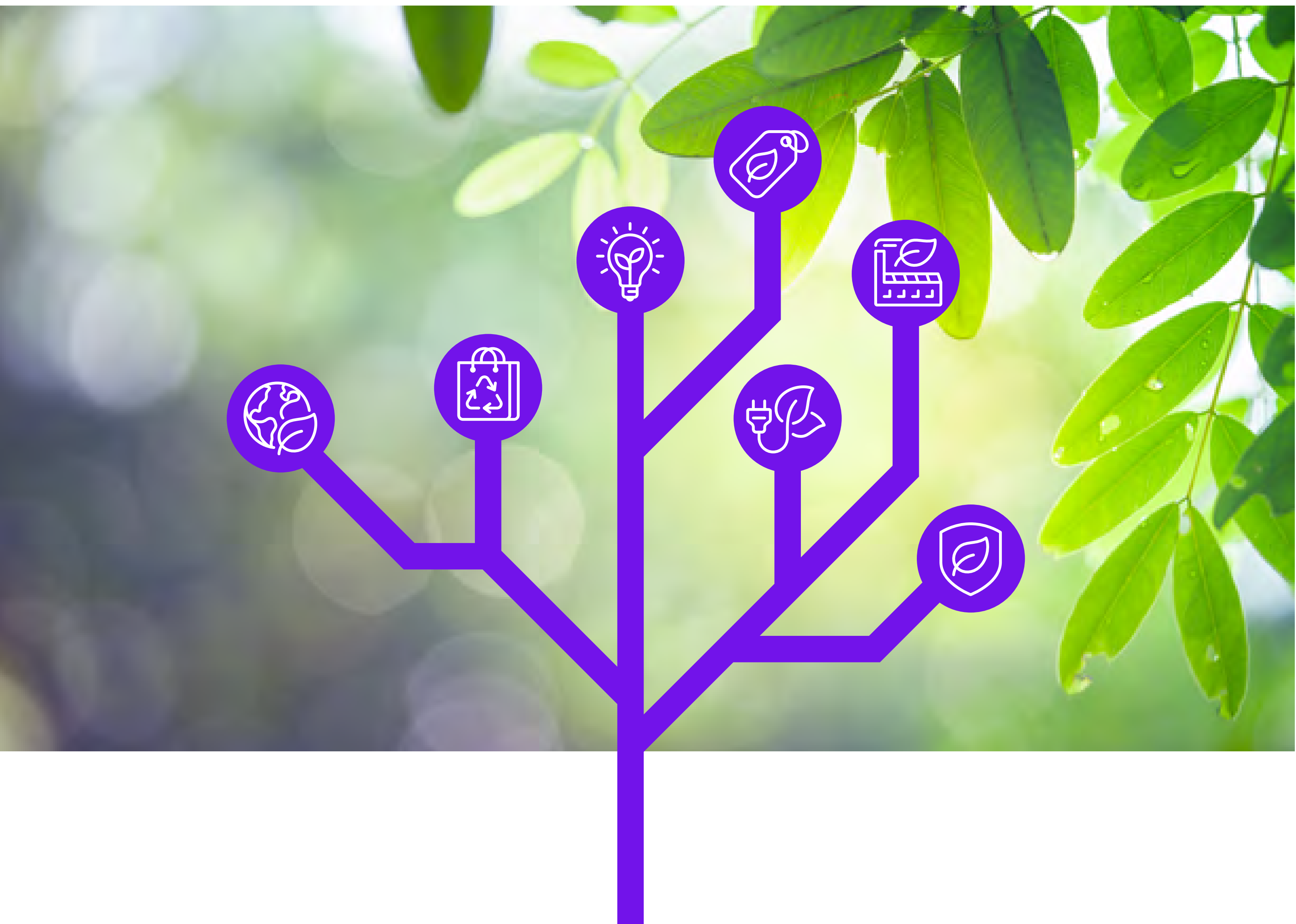
Effects of climate risk on the physical environment

Examples: floods, hurricanes, wildfires, drought, rising temperatures and sea levels, and weather pattern changes.

Transition risk

Risks arising from transition to a lower-carbon economy

Examples: changing customer behavior, availability of capital, stigmatization of industries, stranded assets.



High-risk industries

While the effects of climate risk are relevant to all entities, certain industries are more susceptible by their nature.

The following industries are identified as high risk in the TCFD recommendations: finance because of its central role in the economy, and the other industries by virtue of being responsible for the largest proportion of greenhouse gas emissions, energy usage and water usage.

Although industry is an indicator of risk, ultimately the nature and extent of risk to which an entity is exposed depends on numerous factors, including its business model, assets, geographical locations, services provided and supply chains.

Finance

- Banks
- Insurance companies
- Asset owners
- Asset managers

Energy

- Oil and gas
- Coal
- Electric utilities

Transportation

- Air freight
- Passenger air
- Maritime
- Rail
- Trucking
- Automobiles, components

Material and buildings

- Materials, mining
- Chemicals
- Construction materials
- Capital goods
- Real estate

Agriculture, food, forestry products

- Beverages
- Agriculture
- Packaged foods, meats
- Paper, forest products

Questions to ask

To help you formulate a view of the potential effects of climate risk on your financial statements, we ask a series of questions – first at the business level and then specific to each accounting topic. These questions are not intended to be exhaustive. Instead, they are designed to help you create your own personal checklist that you can modify and adapt to suit the company's specific circumstances.

As a starting point to understanding the potential effects of climate risk on your financial statements, an in-depth understanding of your organization and its business environment is required.

The objective is to gain an understanding of the pressures the entity faces that may give rise to climate risk – if not now, then in the future.

These pressures are multi-dimensional.

- Internal (arising from the entity's actions) and external (arising from third-party actions).
- Domestic and foreign.
- Direct (e.g. via physical operations or a stock exchange listing) and indirect (e.g. via customers and suppliers).

The following are some general questions (not exhaustive) that look at the bigger picture and help you determine the pressure points in the business; none are determinative.

They are supplemented by more specific accounting-based questions in the sections that follow.

Big picture

QUESTION	RELEVANCE
Does the company operate in a high-risk industry?	In general, entities in higher-risk industries are predisposed to a wider variety of risks related to climate, and the severity of any particular risk may be greater.
Will the company be affected by country or jurisdictional plans to reduce emissions?	Exposure to country or jurisdictional actions or plans to reduce emissions results in increased likelihood of transition risk.
What is the company's exposure via its wider supply chain and customer base?	The ecosystem is interconnected, with each party potentially putting pressure on its suppliers to reduce emissions. As a result, every entity faces potential pressure from its customers, and may in turn put pressure on its suppliers.
Has the company committed to reduce emissions? Have its competitors?	While a commitment to reduce emissions may in the first instance be little more than a statement of intent, the plans and actions that follow are likely to have widespread accounting implications.
Is the company planning acquisitions and/or disposals?	Many plans to reduce emissions are accompanied by strategic acquisitions and disposals.
What climate risk information is the company communicating outside of financial reporting?	In addition to a formal sustainability report, other communications that may be relevant to financial reporting include information posted on the corporate website, CDP questionnaires and social media.
What are investors telling the company?	Shareholder activism related to emissions reduction plans is becoming increasingly common and more successful.
What are lenders telling the company?	Lending facilities linked to sustainability (and emissions targets and ratings) are common. Potential access to lower interest rates may provide an incentive to embark on a plan to reduce emissions, or speed the progress of an existing plan.
What can the company learn from its insurance premiums?	Insurers are at the forefront of pricing climate risk into their business models. Increasing insurance premiums may provide early warning of high-risk operations from a climate perspective.
What pressure is the company getting from key customers?	Are key customers making inquiries as to the entity's emissions reduction plans? This may provide early warning of more direct action as customers seek to credentialize their supply chain.
What pressure is the company placing on key suppliers?	In the reverse of pressure from customers, is the entity making inquiries as to the emissions reduction plans of key suppliers.

In formulating an understanding of these pressure points, not all of the information may be in the finance function. Other sources of information may include the teams covering sustainability, asset management, client relationships, sales and marketing, among others.

In addition, the entity may produce a sustainability or other impact report outside of the finance function, which may be another key source of information in understanding the pressure points.

Long-lived assets

QUESTION	ACTIONS IF 'YES'
Will existing assets be replaced earlier than expected (required or voluntary)?	Review the estimated useful lives of property, plant and equipment.
For assets that are routinely replaced while they still have significant resale value, are market changes affecting those values?	Review the salvage values used in calculating depreciation.
Are market changes affecting customer sentiment?	Review the useful lives of intangible assets, including the appropriateness of any that are indefinite-lived.
Are assets located in areas that are becoming high risk for extreme weather events?	Understand the timing of the different accounting entries, which can be in different reporting periods: loss recognition, loss recovery, additional gains.
Are new environmental regulations requiring assets to be disposed of in a certain way, or changing the manner of disposal for assets that were already subject to regulation?	New asset retirement obligations may need to be recognized and existing ones may need to be remeasured.
Is significant expenditure on new assets expected?	Understand which costs are capitalized versus expensed.
Will future expenditure have a significant software component?	The accounting for software costs is complex; understand the requirements for what costs are capitalized versus expensed.

Leases

QUESTION	ACTIONS IF 'YES'
Is an asset used for multiple purposes?	Understand how consideration of the asset's primary use may affect whether there is an identified asset.
Do leases contain rights that allow the lessor to substitute the asset?	Understand the limited circumstances in which substitution rights lead to a conclusion that there is no lease.
Has the company entered into a battery energy storage system (BESS) usage arrangement?	Understand the terms of the arrangement as a starting point to identifying whether there is a lease and, if so, whether it comprises a single or multiple separate lease components.
Lessee: Is the exercise (or non-exercise) of renewal options in leases being reconsidered?	Understand how a business decision can trigger the need to reassess or remeasure the lease term or the lease payments.
Lessee: Will modifications be negotiated with the lessor?	Understand when a modification results in the remeasurement of the lease liability and right-of-use asset versus a separate contract.
Lessee: Will leases be terminated?	Understand the accounting for termination payments.
Lessor: Will leases be modified?	Understand the accounting from the lessor's perspective, which is not aligned (conceptually or mechanically) with the lessee's accounting.

Research and development

QUESTION	ACTIONS IF 'YES'
Has the company communicated R&D activities as part of its net-zero strategy?	Understand whether the communicated activities are R&D within the scope of Subtopic 730-10.
Will costs be incurred?	Understand the types of expenditure that will be incurred, and the assets (tangible or intangible) that will be developed or acquired. This is a starting point to analyzing which costs should be capitalized (and the subsequent timing of recognition in profit or loss) versus expensed immediately.
Has the company received funding for R&D activities, or is it funding R&D activities?	Understand the terms and conditions of the R&D funding arrangement to determine whether it is a borrowing or an obligation to perform services.

Impairment of nonfinancial assets

QUESTION	ACTIONS IF 'YES'
Are industry and market conditions changing? **Is the legal or regulatory environment changing?** **Are new competitors emerging?** **Are costs increasing?** **Is financial performance deteriorating?** **Are projects essential to the company's future strategy struggling to produce results?** **Are operations exposed to areas that are becoming high risk for extreme weather?**	Understand the external and internal pressure points that affect the recoverability of assets. Set up a process for monitoring events that might trigger the impairment testing of groups of assets or of goodwill more broadly. Understand the ripple effect of extreme weather events on all aspects of the entity's value chain as one of the pressure points on the entity.
Are operations being reorganized, either physically or in terms of reporting?	Consider whether there is a change in how goodwill or long-lived assets should be grouped for impairment testing, which may lead to a need for immediate testing.

Power purchase agreements

QUESTION	ACTIONS IF 'YES'
Did the company execute a PPA?	Understand the terms and conditions of the PPA that affect the determination of the appropriate accounting, which may be different for a physical versus a virtual PPA.
Does the PPA represent or contain a variable interest in the energy producer?	Evaluate whether the entity holds a variable interest in the power producer, and if so determine if consolidation is required.
Is the PPA a lease or does it contain a lease?	Consider whether the PPA conveys the right to control the use of an identified asset for a period of time in exchange for consideration.
Is the PPA a derivative or does it contain embedded derivatives?	If the PPA is not a lease, consider whether it contains the characteristics of a derivative.

Financial instruments

QUESTION	ACTIONS IF 'YES'
Will debt instruments containing a sustainability feature be issued (e.g. a sustainability-linked bond?)	Evaluate whether the sustainability feature represents an embedded derivative and, if so, whether it needs to be separated from the host contract.
Does the company provide financing to entities in industries that are susceptible to climate risk?	Climate risk may introduce idiosyncratic risk to a borrower or industry, requiring the lender to evaluate their expected credit loss methodology.
Do the company's climate-related commitments require changes to the measurement or classification of available-for-sale or held-to-maturity debt securities?	Review the measurement and classification of available-for-sale and held-to-maturity debt securities. Available-for-sale: assess whether there has been a change in the intent to sell, or it is more likely than not that the entity will be required to sell, debt securities classified as available-for-sale. Held-to-maturity: assess whether the intent and ability to hold securities that remain in the held-to-maturity category to maturity is in doubt.
Have the underlying investees associated with equity securities without readily determinable fair values or equity method investments experienced losses due to extreme weather events?	Consider whether investee operating losses may have impaired the value of investments.
Has the company provided guarantees to parties that are susceptible to climate risk?	Consider whether performance under guarantees is more likely, or expected losses greater.
Has climate affected the probability of forecasted transactions occurring? **Does the company hold over-the-counter derivative instruments in which the counterparty is in an industry susceptible to climate risk?**	Review hedging relationships to determine if they should be discontinued.

Contingencies and insurance

QUESTION	ACTIONS IF 'YES'
Are new environmental regulations changing what assets require environmental remediation or the manner in which remediation is done?	Consider whether new environmental remediation liabilities need to be recognized or existing ones remeasured.
Is there pending or threatened litigation or possible claims related to climate risk?	Consider whether accrual and/or disclosure related to pending or threatened litigation, actual or possible claims or assessments is required or whether existing accruals need to be remeasured.
Are operations exposed to areas that are becoming high risk for extreme weather events?	Understand the timing of the different accounting entries, which can be in different reporting periods: loss recognition, loss recovery, additional gains.
Is insurance coverage changing?	Understand the implications for financial performance if losses are becoming more likely with shrinking insurance recoveries.

Revenue and inventories

QUESTION	ACTIONS IF 'YES'
Do revenue contracts include emissions reduction targets?	Understand the implications for revenue recognition.
Are customers seeking to negotiate modified (or even terminate) contracts?	Understand when a modification results in an adjustment to revenue recognized under the current contract (current period or prospective) versus a separate contract.
Is climate risk affecting the selling price of inventories? **Is climate risk affecting the cost of materials used in production?**	Review the net realizable (or market) value of inventories.
Is climate risk affecting the availability of materials used in production?	Reassess what is considered 'normal' operating capacity in allocating overhead to inventory.
Are production facilities located in areas that are becoming high risk for extreme weather events?	Understand the accounting for 'normal' versus 'abnormal' inventory costs.

Compensation and benefits

QUESTION	ACTIONS IF 'YES'
Will emissions reduction targets be included in stock option awards?	Understand the implications for the recognition of compensation.
Is vesting of an award linked to a sustainability target (e.g. scope 3 emissions reduction)?	Analyze whether the vesting condition meets the definition of a performance condition and consequently whether the award is equity-classified.
Will emissions reduction targets be included in other compensation arrangements?	Understand the implications for the recognition of compensation.
Will emissions reduction plans result in employees being terminated?	Understand the different types of termination benefits, which have different accounting requirements.
Will voluntary terminations be offered?	Understand the timing of liability recognition, which is based on 'acceptance'.
Will an arrangement for ongoing termination benefits be set up for longer term use as the company carries out its strategy?	Understand the timing of liability recognition, which is based on 'probability of entitlement'.
Will a restructuring result in a one-time arrangement under which employees will be involuntarily terminated?	Understand the timing of liability recognition, which is based on 'communication' date.

Income taxes and related incentives

QUESTION	ACTIONS IF 'YES'
Are industry and market conditions changing? **Is the legal or regulatory environment changing?** **Are new competitors emerging?** **Are costs increasing?** **Is financial performance deteriorating?** **Are projects essential to the company's future strategy struggling to produce results?** **Are operations exposed to areas that are becoming high risk for extreme weather events?**	Understand the external and internal pressure points that affect the recoverability of deferred tax assets. If a process is set up for monitoring events that might trigger the impairment testing of groups of assets or of goodwill more broadly, that same process can be used to help assess valuation allowances.
Are tax laws changing in jurisdictions in which the company operates?	Understand the timing of accounting for the effects of changes in tax law or tax rates.
Will the company enter into transactions that qualify for tax credits?	Understand the nature of the various credits to be received as a starting point to determining the appropriate accounting.

Carbon credits

QUESTION	ACTIONS IF 'YES'
Do the company's sustainability communications refer to the use of carbon credits in reducing emissions?	Understand the terms and conditions of the arrangement(s) being referred to in communications, which are often written without involvement of the finance function.
Has the company purchased carbon credits on a stand-alone basis, or are they linked to or embedded in other acquisition transactions? **Is the company selling or retiring carbon credits as part of revenue transactions, or otherwise advertising low-carbon attributes in goods or services being sold?**	Understand how the arrangement(s) works, and whether the carbon credits are linked to or embedded with other goods or services in the contract(s). This is a starting point to determining the appropriate accounting.

Acquisitions and restructuring

QUESTION	ACTIONS IF 'YES'
Do contracts to acquire businesses include consideration that is contingent on emissions reduction targets?	Understand the accounting for contingent consideration, as part of the acquisition accounting and subsequently.
Will operations be restructured?	Understand how to account for the cost of exit activities, including terminating contracts.
Will the company dispose of assets as part of its strategy?	Assess the criteria for classifying assets (disposal groups) as held-for-sale, and understand the related measurement.
Will the disposals represent a significant change in operations?	Assess whether a (planned) disposal rises to the level of a discontinued operation.

Fair value measurement and projections

QUESTION	ACTIONS IF 'YES'
Are any assets measured at fair value?	Prepare an inventory of assets measured at fair value.
Are any liabilities measured at fair value?	Prepare an inventory of liabilities measured at fair value.
Are different approach(es) used to measure fair value?	Map the inventory of assets and liabilities measured at fair value to the approaches used.
Has climate risk been considered in measuring fair value using the income approach?	Review the key assumptions in measuring fair value.
Is climate risk a factor in assessing the recoverability of long-lived assets?	Review the key assumptions in estimating the recoverability of long-lived assets.

Presentation and disclosure

QUESTION	ACTIONS IF 'YES'
Do conditions and events related to climate risk raise substantial doubt about the company's ability to continue as a going concern?	Understand the steps required in management's assessment of whether it is probable the entity will be unable to meet its obligations over a period of one year from the date the entity's financial statements are issued (or available to be issued).
Are operations being reorganized, either physically or in terms of reporting?	Consider whether there is a change in operating segments or reportable segments.
Does the company have climate-related contingencies that do not meet the criteria to be recognized?	Assess whether the disclosures being made are appropriately robust.
Is the company subject to climate-related risks and uncertainties that could affect estimates in the financial statements in the near term? **Does the company have significant concentrations (e.g. through its supply chain or customer base) that create exposure as a result of climate risk?**	Assess the quality of the disclosures being made.
Has the company made purchase commitments as a result of its emissions reduction strategy that require disclosure?	Assess purchase contracts and determine if they fall in the scope of disclosures for commitments.
Has the company received government assistance to support any of its climate-related actions?	Assess whether the disclosure requirements of Topic 832 (government assistance disclosures) apply.

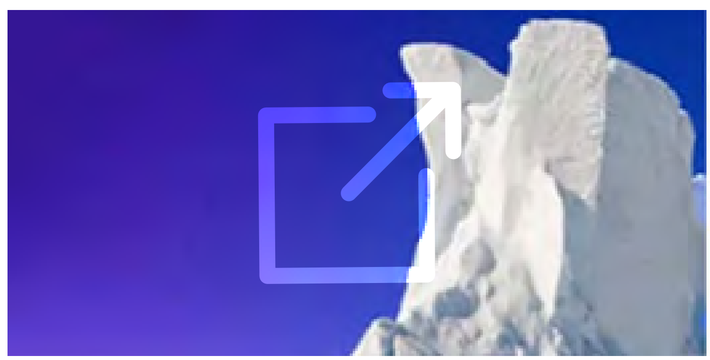
KPMG resources

Use our resources to learn more about sustainability, what it means for you, and how we can help.

KPMG Sustainability helps your company create a more sustainable future while driving measurable growth. We know the power of sustainability to transform your business. Learn more about how our sustainability solutions will help you harness it.

KPMG Sustainability Assurance provides insights that help your business in this new era of sustainability reporting. See how a comprehensive sustainability reporting strategy can go beyond compliance to enhance trust, mitigate risk and create value.

KPMG Financial Reporting View delivers guidance, publications and insights for financial reporting professionals. Visit our sustainability resource page to stay informed about sustainability reporting news that affects the finance function.



KPMG Clear on Climate Reporting is our international resource center on the financial reporting impacts of climate change. Learn more about climate risk in financial statements prepared under international standards.

Sign up for ESG alerts at visit.kpmg.us/kpmg-sustainability

Read the in-depth guide of which this Executive Summary is an excerpt

Acknowledgments