Climate risk in the financial statements

Executive Summary
Are you analyzing the potential effects of climate risk on your financial statements? Ask yourself the questions that we pose in this publication, create your own checklist, and monitor your organization’s environment and circumstances.

US GAAP

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Climate risk dominates the current ESG headlines. US registrants are waiting to see what disclosures the SEC will propose. Multinationals with operations in the European Union are analyzing the implications of the proposed Corporate Sustainability Reporting Directive. The international community awaits the formation of the International Sustainability Standards Board.

This comes against the backdrop of increasing questions about the role of the financial statements in highlighting the effects of climate risk, and in particular companies’ efforts to reduce emissions or to operate in a low-carbon world. Some commentators believe the financial statements should include explicit disclosures related to climate risk – based on their view that such disclosure would be consistent with the principles of GAAP.

The reality is more complex.

Liabilities are not recognized, assets are not written down, estimates are not adjusted, until the criteria in the relevant standards are met. And although a company’s financial statement disclosures may sometimes go beyond the strict requirements of the standards, typically they do not venture into what-if scenario analysis.

This does not mean that climate risk is irrelevant to the financial statements – it is very relevant. But context is everything. An intention to be net-zero by 2050 is not the same as an action plan to reduce emissions by 2030 that is already underway. As intentions change to strategies and then to actions, the potential effects on the financial statements increase.

So the message in this publication is to prepare your organization. Ask yourself the questions that we pose, create your own checklist, and monitor your environment and circumstances.

Today climate risk may have no effect on your financial statements, but tomorrow or one day soon, that may change.

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We asked participants at a recent KPMG webcast for their thoughts on ESG and climate risk.

More than half of respondents see financial disclosures of climate change mostly as an opportunity to promote their ESG advantage to employees and investors and distinguish themselves from competitors – as opposed to a new compliance requirement.

Just over a third of respondents have started considering the accounting effects of risks arising from transition to a low-carbon economy.


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 entities 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.
About climate risk

The Sustainability Accounting Standards Board (SASB) categorizes 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.

Regulatory risk
Legal and regulatory issues arising from climate risk
Examples: environmental laws, exposure to litigation, pricing mechanisms on emissions, emissions reporting obligations.

Transition risk
Risks arising from transition to a low-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 have been identified as high risk by the Task Force on Climate-related Financial Disclosures (TCFD): 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.
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 questions (not exhaustive) look at the bigger picture and help you determine the pressure points in the business; none are determinative.

These general questions are supplemented by more specific accounting-based questions in the pages that follow.
## Big picture

### QUESTION

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<th>Does your organization operate in a high-risk industry?</th>
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<th>Will your organization be affected by country or jurisdictional plans to reduce emissions?</th>
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<th>What is your organization’s exposure via its wider supply chain and customer base?</th>
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<th>Has your organization committed to reduce emissions? Have its competitors?</th>
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<th>Is your organization planning acquisitions and/or disposals?</th>
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<th>What are investors telling your organization?</th>
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<th>What are your lenders telling your organization?</th>
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<th>What can your organization learn from its insurance premiums?</th>
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<th>What pressure is your organization getting from key customers?</th>
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<th>What pressure is your organization placing on key suppliers?</th>
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### RELEVANCE

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<th>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.</th>
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<th>Exposure to countries or jurisdictions that plan to reduce emissions results in increased likelihood of regulatory and transition risk.</th>
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<th>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 pressure its suppliers.</th>
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<th>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.</th>
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<th>If the entity has not yet committed to reduce emissions but competitors have, this may indicate pressure on the entity to follow suit.</th>
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<th>Many plans to reduce emissions are accompanied by strategic acquisitions and disposals.</th>
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<th>Shareholder activism related to emissions reduction plans is becoming increasingly common and more successful.</th>
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<th>Lending facilities linked to ESG (and emissions targets and ratings) are becoming increasingly common and are expected to grow more significant.</th>
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<th>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.</th>
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<th>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.</th>
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<th>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.</th>
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<tr>
<th>In the reverse of pressure from customers, is the entity making inquiries as to the emissions reduction plans of key suppliers.</th>
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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, an ESG (or sustainability or other impact) report may be produced outside of the Finance function, which may be another key source of information in understanding the pressure points.

### Long-lived assets

**QUESTION**

| Will existing assets be replaced earlier than expected (required or voluntary)? |
| For assets that are routinely replaced while they still have significant resale value, are market changes affecting those values? |
| Are market changes affecting customer sentiment? |
| 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? |
| Is significant expenditure on new assets expected? |
| Will future expenditure have a significant software component |
| Are assets located in areas that are becoming high risk for extreme weather events? |

**ACTIONS IF ‘YES’**

- Review the estimated useful lives of property, plant and equipment.
- Review the salvage values used in calculating depreciation.
- Review the useful lives of intangible assets, including the appropriateness of any that are indefinite-lived.
- New asset retirement obligations may need to be recognized and existing ones may need to be remeasured.
- Understand which costs are capitalized versus expensed.
- The accounting for software costs is complex; understand the requirements for what costs are capitalized versus expensed.
- Understand the timing of the different accounting entries, which can be in different reporting periods: loss recognition, loss recovery, additional gains.
**Leases**

**QUESTION**

Do leases contain rights that allow the lessor to substitute the asset?

Lessee: Is the exercise (or non-exercise) of renewal options in leases being reconsidered?

Lessee: Will modifications be negotiated with the lessor?

Lessee: Will leases be terminated?

Lessor: Will leases be modified?

**ACTIONS IF ‘YES’**

Understand the limited circumstances in which substitution rights lead to a conclusion that there is no lease.

Understand how a business decision can trigger the need to reassess or remeasure the lease term or the lease payments.

Understand when a modification results in the remeasurement of the lease liability and right-of-use asset versus a separate contract.

Understand the accounting for termination payments.

Understand the accounting from the lessor’s perspective, which is not aligned (conceptually or mechanically) with the lessee’s accounting.

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**Impairment of nonfinancial assets**

**QUESTION**

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 your organization’s future strategy struggling to produce results?

Are operations exposed to areas that are becoming high risk for extreme weather events?

Are operations being reorganized, either physically or in terms of reporting?

**ACTIONS IF ‘YES’**

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.

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.
Financial instruments

**QUESTION**

**Will debt instruments containing an ESG feature be issued (e.g. a sustainability-linked bond?)**

**Does your organization provide financing to entities in industries that are susceptible to climate risk?**

**Do the your organization’s climate-related commitments require changes to the measurement or classification of available-for-sale or held-to-maturity debt securities?**

**Have the underlying investees associated with equity securities without readily determinable fair values or equity method investments experienced losses due to extreme weather events?**

**Has climate affected the probability of forecasted transactions occurring?**

**Does your organization hold over-the-counter derivative instruments in which the counterparty is in an industry susceptible to climate risk?**

**ACTIONS IF ‘YES’**

Evaluate whether the ESG feature represents an embedded derivative and, if so, whether it needs to be separated from the host contract.

Climate risk may introduce idiosyncratic risk to a borrower or industry, requiring the lender to evaluate their expected credit loss methodology.

Entities susceptible to climate risk may require modification of loan terms due to a changing business environment.

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 certain debt securities classified as available-for-sale.

Held-to-maturity: assess whether the ability to hold securities that remain in the held-to-maturity category to maturity is in doubt.

Consider whether investee operating losses may have impaired the value of investments.

Review hedging relationships to determine if they should be discontinued.
Contingencies and insurance

QUESTION

- Are new environmental regulations changing what assets require environmental remediation or the manner in which remediation is done?
- Are operations exposed to areas that are becoming high risk for extreme weather events?
- Is insurance coverage changing?

ACTIONS IF ‘YES’

- Consider whether new environmental remediation liabilities need to be recognized or existing ones remeasured.
- Understand the timing of the different accounting entries, which can be in different reporting periods: loss recognition, loss recovery, additional gains.
- Understand the implications for financial performance if losses are becoming more likely with shrinking insurance recoveries.

Revenue and inventories

QUESTION

- Do revenue contracts include emissions reduction targets?
- Are customers seeking to negotiate modified (or even terminate) contracts?
- Is climate risk affecting the selling price of inventories?
- Is climate risk affecting the cost of materials used in production?
- Is climate risk affecting the availability of materials used in production?
- Are production facilities located in areas that are becoming high risk for extreme weather events?

ACTIONS IF ‘YES’

- Understand the implications for revenue recognition.
- Understand when a modification results in an adjustment to revenue recognized under the current contract (current period or prospective) versus a separate contract.
- Review the net realizable (or market) value of inventories.
- Review the net realizable (or market) value of inventories.
- Reassess what is considered ‘normal’ operating capacity in allocating overhead to inventory.
- Understand the accounting for ‘normal’ versus ‘abnormal’ inventory costs.
### Compensation and benefits

**QUESTION**

<table>
<thead>
<tr>
<th>Will emissions reduction targets be included in stock option awards?</th>
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<tr>
<td>Will emissions reduction targets be included in other compensation arrangements?</td>
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<tr>
<td>Will the emissions reduction plans result in employees being terminated?</td>
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<td>Will voluntary terminations be offered?</td>
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<tr>
<td>Will an arrangement for ongoing termination benefits be set up for longer term use as your organization carries out its strategy?</td>
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<tr>
<td>Will a restructuring result in a one-time arrangement under which employees will be involuntarily terminated?</td>
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**ACTIONS IF ‘YES’**

- Understand the implications for the recognition of compensation.
- Understand the implications for the recognition of compensation.
- Understand the different types of termination benefits, which have different accounting requirements.
- Understand the timing of liability recognition, which is based on ‘acceptance’.
- Understand the timing of liability recognition, which is based on ‘probability of entitlement’.
- Understand the timing of liability recognition, which is based on ‘communication’ date.
QUESTION

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 your organization’s future strategy struggling to produce results?

Are operations exposed to areas that are becoming high risk for extreme weather events?

Are tax laws changing in jurisdictions in which your organization operates?

Will your organization acquire property that qualifies for investment tax credits?

ACTIONS IF ‘YES’

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.

Understand the timing of accounting for the effects of changes in tax law or tax rates.

Elect an appropriate accounting policy to be applied consistently to all such credits.
### Acquisitions and restructuring

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>ACTIONS IF ‘YES’</th>
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<tbody>
<tr>
<td>Do contracts to acquire businesses include consideration that is contingent on emissions reduction targets?</td>
<td>Understand the accounting for contingent consideration, as part of the acquisition accounting and subsequently.</td>
</tr>
<tr>
<td>Will operations be restructured?</td>
<td>Understand how to account for the cost of exit activities, including terminating contracts.</td>
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<tr>
<td>Will your organization dispose of assets as part of its strategy?</td>
<td>Assess the criteria for classifying assets (disposal groups) as held-for-sale, and understand the related measurement.</td>
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<tr>
<td>Will the disposals represent a significant change in operations?</td>
<td>Assess whether a (planned) disposal rises to the level of a discontinued operation.</td>
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### Fair value measurement and projections

<table>
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<tr>
<th>QUESTION</th>
<th>ACTIONS IF ‘YES’</th>
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<tr>
<td>What assets are measured at fair value?</td>
<td>Prepare an inventory of assets measured at fair value.</td>
</tr>
<tr>
<td>Are any liabilities measured at fair value?</td>
<td>Prepare an inventory of liabilities measured at fair value.</td>
</tr>
<tr>
<td>What approach(es) are used to measure fair value?</td>
<td>Map the inventory of assets and liabilities measured at fair value to the approaches used.</td>
</tr>
<tr>
<td>Has climate risk been considered in measuring fair value using the income approach?</td>
<td>Review the key assumptions in measuring fair value.</td>
</tr>
<tr>
<td>Is climate risk a factor in assessing the recoverability of long-lived assets?</td>
<td>Review the key assumptions in estimating the recoverability of long-lived assets.</td>
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</tbody>
</table>
Do conditions and events related to climate risk raise substantial doubt about your organization’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 your organization have climate-related contingencies that do not meet the criteria to be recognized?

Assess the disclosures being made, particularly in light of SEC staff concerns about the robustness of disclosures.

Is your organization subject to climate-related risks and uncertainties that could affect estimates in the financial statements in the near term?

Assess the quality of the disclosures being made.

Does your organization have significant concentrations (e.g. through its supply chain or customer base) that create exposure as a result of climate risk?

Assess purchase contracts and determine if they fall in the scope of disclosures for commitments.

Has your organization made purchase commitments as a result of its emissions reduction strategy that require disclosure?
KPMG resources

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

**KPMG IMPACT** helps your business create a more sustainable future while driving measurable growth today. Our extensive services and capabilities focus on key ESG themes with a wide range of data-driven solutions, technology tools and deep industry experience to navigate and simplify the complexities of every stage of your ESG journey.

**KPMG ESG Assurance** helps your journey to assured ESG reporting: establish your ESG reporting strategy; assess your company’s readiness for reporting; design and implement a roadmap; sustain with continuous monitoring and test work; and finally, ready to provide your stakeholders with rigorous and timely ESG reporting.

**KPMG Financial Reporting View** delivers guidance, publications and insights for financial reporting professionals. Visit our ESG resource page to stay informed about SEC developments and other ESG news that affects the Finance function.

**KPMG Climate Change Resource Center** 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/IMPACT

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

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Acknowledgments

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Ryan Swedalla

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