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Technical Line

A closer look at the SEC's climate-related disclosure requirements

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What you need to know

- The SEC's recently adopted rules require registrants to provide climate-related disclosures in annual reports and registration statements.
- Registrants will be required to disclose, among other things, material climate-related risks, including descriptions of the related board oversight and risk management activities, the material impacts of these risks on a registrant's strategy, business model, outlook and results and any material climate-related targets or goals.
- The rules will only require disclosures and do not prescribe any particular approach to addressing climate-related risks.
- Registrants will be required to quantify certain effects of severe weather events and other natural conditions in a note to their audited financial statements.
- Accelerated and large accelerated filers will have to make disclosures about Scope 1 and Scope 2 greenhouse gas emissions, if material, which will be subject to independent third-party assurance.
- The compliance dates depend on a registrant's filer status and the type of disclosure.

Overview

The **final amendments** to Regulation S-X and Regulation S-K that the Securities and Exchange Commission (SEC or Commission) recently adopted will require registrants to provide climate-related disclosures in annual reports and registration statements. Under the rules, the disclosures

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that will be required in the audited financial statements include certain effects of severe weather events and other natural conditions and amounts related to carbon offsets and renewable energy credits or certificates (RECs). The required disclosures outside the financial statements include material climate-related risks (e.g., descriptions of the risks, related board oversight and risk management activities, the material impacts of these risks on a registrant's strategy, business model, outlook and results) and any material climate-related targets or goals.

The rules will require accelerated and large accelerated filers to disclose Scope 1 and Scope 2 greenhouse gas (GHG) emissions, if material, and these disclosures will be subject to independent third-party assurance. The rules will only require registrants to make disclosures and do not prescribe any particular approach to addressing climate-related risks. The compliance dates depend on a registrant's filer status and the type of disclosure.

The SEC said it adopted the amendments to provide investors with the information they need to make informed investment and voting decisions by evaluating a registrant's exposure to material climate-related risks. "These rules will enhance the disclosures that investors have been relying on to make their investment decisions. Issuers and investors will benefit from the consistency, comparability, and reliability of these disclosures," Chair Gary Gensler said in a statement.

The SEC's climate-related disclosure framework is modeled in part on the framework developed by the Task Force on Climate-related Financial Disclosures (TCFD), which comprises disclosure recommendations structured around the core elements of governance, strategy, risk management, and metrics and targets. The TCFD framework was established by the Financial Stability Board (FSB) and is currently maintained by the International Sustainability Standards Board (ISSB). Any future changes to the TCFD framework will have no impact on the rules absent additional Commission action.

The SEC also based concepts in aspects of its rules on the GHG Protocol, a widely used set of standards for measuring, managing and reporting GHG emissions that was developed by the World Resource Institute (WRI), a US-based global research non-profit organization focused on global challenges, including climate, and the World Business Council on Sustainable Development (WBCSD), a Geneva-based coalition of over 200 international companies focused on sustainability matters. The SEC named the GHG Protocol in its adopting release as an acceptable set of standards for reporting GHG emissions in accordance with the new rules. However, companies are not limited to using the protocol, and new standards could emerge that may be acceptable. In addition, registrants should be able to continue to use the protocol even as it changes over time, unless the SEC indicates it is no longer acceptable.

Under the rules, the placement of the climate-related disclosures, other than the financial statement disclosures, will be largely left up to each registrant. While the disclosure threshold for most of the requirements is the US Supreme Court's definition of materiality, some of the financial statement disclosures will be subject to bright line thresholds, and other disclosures, such as those related to the board's oversight of climate-related risks, will not be subject to materiality.

Forward-looking disclosures related to climate, which are discussed in this publication, are eligible for the safe harbors provided by the Private Securities Litigation Reform Act (PSLRA) of 1995. The safe harbors also apply to certain transactions that are otherwise excluded from the PSLRA statutory safe harbor, including initial public offerings.[1]

The SEC said in its adopting release that even after adoption of the new rules, registrants should continue to consider the **2010 Commission Guidance Regarding Disclosure Related to Climate Change** because it addresses how various existing rules (e.g., description of business, risk factors, legal proceedings, management's discussion and analysis) may require disclosure about climate-related matters.

Affected registrants and forms

The rules will apply to registrants with reporting obligations under the Securities Exchange Act of 1934 (the Exchange Act), including emerging growth companies (EGCs), smaller reporting companies (SRCs) and foreign private issuers (FPIs).

Registrants filing annual reports on Form 10-K will be required to provide their disclosures either in new Item 6 (Climate-related disclosure) to Part II or in other relevant sections of the annual report. FPIs reporting on Form 20-F will need to provide their disclosures either in new Item 3.E (Climate-related disclosure) to Part I or in other relevant sections. If disclosures are provided in other parts of the annual report (e.g., description of business, risk factors, legal proceedings, management's discussion and analysis), registrants should consider including cross-references to the climate-related disclosures under the new items.

The climate-related disclosure requirements will not apply to asset-backed issuers or Canadian registrants that use the multijurisdictional disclosure system (MJDS).

Climate-related disclosures will also be required in registration statements under both the Securities Act of 1933 (the Securities Act) (i.e., Forms S-1, F-1, S-3, F-3, S-4, F-4 and S-11) and the Exchange Act (i.e., Forms 10 and 20-F).

The rules do not apply to private companies that are parties to business combination transactions, as defined by Securities Act Rule 165(f), involving a securities offering registered on Forms S-4 and F-4. While Form S-1 may be used for business combination transactions, climate-related disclosure will be required for reporting companies that are parties to the transaction. Forms S-3 and F-3 were not amended to reference the new requirements because these would be included in a registrant's annual report on Form 10-K or 20-F that is incorporated by reference into those registration statements.

Definitions

The SEC rules and this publication use the following definitions included in new Item 1500 of Regulation S-K:

Climate-related risks are the actual or potential negative impacts of climate-related conditions and events on a registrant's business, results of operations or financial condition. Climate-related risks include the following:

- **Physical risks** include both acute risks and chronic risks to the registrant's business operations.
  - **Acute risks** are event driven and may relate to shorter term severe weather events, such as hurricanes, floods, tornadoes and wildfires, among other events.
  - **Chronic risks** relate to longer term weather patterns, such as sustained higher temperatures, sea level rise and drought, as well as related effects such as decreased arability of farmland, decreased habitability of land and decreased availability of fresh water.
- **Transition risks** are the actual or potential negative impacts on a registrant's business, results of operations or financial condition attributable to regulatory, technological and market changes to address the mitigation of, or adaptation to, climate-related risks, including such non-exclusive examples as increased costs attributable to changes in law or policy, reduced market demand for carbon-intensive products leading to decreased prices or profits for such products, the devaluation or abandonment of assets, risk of legal liability and litigation defense costs, competitive pressures associated with the

adoption of new technologies and reputational impacts (including those stemming from a registrant's customers or business counterparties) that might trigger changes to market behavior, consumer preferences or behavior and registrant behavior.

Transition plan refers to a registrant's strategy and implementation plan to reduce climate-related risks, which may include a plan to reduce its GHG emissions in line with its own commitments or commitments of jurisdictions where it has significant operations.

Scenario analysis is a process for identifying and assessing a potential range of outcomes of various possible future climate scenarios, and how climate-related risks may impact a registrant's business strategy, results of operations or financial condition over time.

Carbon dioxide equivalent (CO_2e) is the common unit of measurement to indicate the global warming potential (GWP) of each GHG, expressed in terms of the GWP of one unit of carbon dioxide.

Emission factor is a multiplication factor allowing actual GHG emissions to be calculated from available activity data or, if no activity data is available, economic data, to derive absolute GHG emissions. Examples of activity data include kilowatt-hours of electricity used, quantity of fuel used, output of a process, hours of operation of equipment, distance traveled and floor area of a building.

GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), nitrogen trifluoride (NF_3), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6).

GHG emissions are direct and indirect emissions of GHGs expressed in metric tons of CO_2e, of which:

- Direct emissions are GHG emissions from sources that are owned or controlled by a registrant.
- Indirect emissions are GHG emissions that result from the activities of the registrant but occur at sources not owned or controlled by the registrant.

Scope 1 emissions are direct GHG emissions from operations that are owned or controlled by a registrant.

Scope 2 emissions are indirect GHG emissions from the generation of purchased or acquired electricity, steam, heat or cooling that is consumed by operations owned or controlled by a registrant.

Operational boundaries are the boundaries that determine the direct and indirect emissions associated with the business operations owned or controlled by a registrant.

Organizational boundaries are the boundaries that determine the operations owned or controlled by a registrant for the purpose of calculating its GHG emissions.

Internal carbon price is an estimated cost of carbon emissions used internally in an organization.

Carbon offsets represent emissions reduction, removal or avoidance of GHGs in a manner calculated and traced for the purpose of offsetting an entity's GHG emissions.

Renewable energy credit or certificate (REC) is a credit or certificate representing each megawatt-hour (1 MWh or 1,000 kilowatt-hours) of renewable electricity generated and delivered to a power grid.

Regulation S-X disclosure requirements

Under new Article 14, *Disclosure of Severe Weather Events and Other Information*, in Regulation S-X (Rules 14-01(a)-(d) and 14-02(a)-(h)), registrants will be required to provide a number of disclosures in a note to the audited financial statements (and will therefore be subject to internal control over financial reporting). The disclosures will be required in any SEC filing that requires the registrant to comply with new Subpart 1500 of Regulation S-K for the most recently completed fiscal year and, if previously disclosed or required to be disclosed, for the historical fiscal year(s) for which audited consolidated financial statements are included in the filing.

Illustration 1 — Periods to present in the note to the financial statements

ABC, Inc., a large accelerated filer, files its annual report for the fiscal year ended 31 December 2025 (i.e., its first annual report after its applicable compliance date for the Article 14 disclosures). ABC, Inc. is only required to provide Article 14 disclosures, as applicable, for the fiscal year ended 31 December 2025 (i.e., one of the three periods covered by the financial statements) because it had not previously disclosed the information or been required to disclose it.

In its annual report for the fiscal year ended 31 December 2026 (its second year of compliance), ABC, Inc. is required to provide Article 14 disclosures, as applicable, for the fiscal years ended 31 December 2025 and 2026 (i.e., two of the three periods covered by the financial statements).

In its annual report for the fiscal year ended 31 December 2027 (its third year of compliance), ABC, Inc. is required to provide Article 14 disclosures, as applicable, for the fiscal years ended 31 December 2025, 2026 and 2027 (i.e., all the periods covered by the financial statements).

Rule 14-01(c) will require registrants to calculate the effects that will need to be disclosed in the financial statements (1) using financial information that is consistent with the scope of the rest of the registrant's consolidated financial statements and (2) applying the same set of accounting principles that a registrant is required to apply in preparation of the rest of its consolidated financial statements included in the filing. Any capitalized costs, expenditures expensed, charges, losses, and material impacts to financial estimates and assumptions required to be disclosed, as further described below, will be limited to those that a registrant has actually incurred and recorded in its books and records.

How we see it

Because the SEC limited these disclosures to matters that are already reflected in a registrant's books and records, items such as lost revenue due to a severe weather event or other natural conditions are excluded from the scope of these reporting requirements.

Contextual information

Rule 14-02(a) will require registrants to disclose contextual information about their other Article 14 disclosures pursuant to Rules 14-02(b)-(h), describing how each financial statement effect was derived, including a description of significant inputs and assumptions used, significant judgments made and other information that is important to understand the financial statement effect, and, if applicable, policy decisions made to calculate the items included in the specified disclosures. The SEC noted in its adopting release that the rules intentionally provide flexibility to registrants to allow them to include contextual information that is tailored to their circumstances.

Effects of severe weather events and other natural conditions

The rules will require registrants to provide disclosures related to the effects of severe weather events and other natural conditions to both the income statement and the balance sheet, subject to a threshold, as described below.

Severe weather events and other natural conditions

Rules 14-02(c) and 14-02(d) provide a non-exhaustive, non-exclusive list of examples of severe weather events and other natural conditions to which the disclosures could relate: hurricanes, tornadoes, flooding, drought, wildfires, extreme temperatures and sea level rise. The SEC said in its adopting release:

- Registrants have flexibility to determine what constitutes a severe weather event or other natural condition based on the particular risks they face, taking into consideration the registrant's geographic location, historical experience[2] and the financial impact of the event on the registrant, among other factors.
- A particular weather event may be "severe" in one region but not in another region.
- Registrants are not required to determine that a severe weather event or other natural condition was caused by climate change or climate-related to trigger the disclosure required by Rules 14-02(b)-(d). For instance, natural conditions may include types of non-climate-related occurrences such as earthquakes or volcanic eruptions.

Attribution principle

Once a weather event or other natural condition is determined to be severe, Rule 14-02(g) will require registrants to apply an attribution principle to identify the financial statement effects to determine whether the disclosure threshold has been met and that would be required to be disclosed pursuant to Rules 14-02(c), (d), and(f), as further discussed below. Under this principle, when a severe weather event or other natural condition is a significant contributing factor in incurring a capitalized cost, expenditure expensed, charge, loss or recovery, registrants will be required to attribute the effects to the severe weather event or other natural condition, include the entire amount of the effect in their assessment of whether the disclosure threshold has been met and disclose the entire amount, if applicable.

The SEC noted that many areas of US GAAP (e.g., Accounting Standards Codification (ASC) 280, *Segment Reporting*; ASC 323, *Investments — Equity Method and Joint Ventures*; ASC 810, *Consolidations*; ASC 820, *Fair Value Measurement*) currently require a registrant to apply the concept of significance even though US GAAP does not define the term "significant."

Illustration 2 — Attribution principle
Recent floods temporarily halt the operations of a registrant's factory. Rather than resume operations at the factory, the registrant decides to relocate it closer to headquarters because the new location will facilitate the execution of one of its quality control initiatives and has historically not been affected by flooding. Based on its facts and circumstances, the registrant concludes that the flooding constitutes a severe weather event and, in spite of its quality control initiatives, that event was a significant contributing factor in incurring the expenditures (both capitalized costs and expenses) associated with relocating the factory. Therefore, the registrant includes the entire amount of relocation expenditures in its assessment of whether the severe weather event disclosures are required.

How we see it

The rules do not provide a definition of the terms "severe weather events" and "other natural conditions" or of the term "significant" in the context of the application of the attribution principle. As part of their implementation activities, companies will need to develop accounting policies to guide their judgments in determining (1) what constitutes a severe weather event or other natural condition and (2) whether a severe weather event or other natural condition was a significant contributing factor to incurring the financial statements effects that may be subject to disclosure.

Disclosure threshold and required disclosures

Rules 14-02(b)-(d) will require registrants to provide disclosures related to the aggregate effects of severe weather events and other natural conditions, subject to bright line disclosure thresholds, as summarized below. The disclosures must be included in the note to the financial statements if the percentage impact (calculated as the numerator over the denominator listed below) equals or exceeds the 1% disclosure threshold, unless the numerator does not equal or exceed $100,000 when considering income statement effects or $500,000 when considering balance sheet effects.

The rules require registrants to disclose certain effects of severe weather events and other natural conditions.

Effect category	Required effect disclosure	Percentage impact components		Disclosure threshold	De minimis threshold
		Numerator	Denominator		
Income statement	Aggregate amount of incurred expenses and losses, excluding recoveries, and the income statement line item(s) in which they are presented	Aggregate amount of incurred expenses and losses, excluding recoveries	Absolute value of income or loss before income tax expense or benefit[3]	1%	$100,000
Balance sheet	Aggregate amount of capitalized costs and charges, excluding recoveries, and the balance sheet line item(s) in which they are presented	Aggregate amount of the absolute value of capitalized costs and charges, excluding recoveries	Absolute value of stockholders' equity or deficit	1%	$500,000

Illustration 3 — Disclosure and de minimis thresholds

ABC, Inc.'s stockholders' equity is $25 million as of 31 December 20X5, and its loss before income tax benefit is $7.9 million for the year ended 31 December 20X5. The registrant determines a recent flood constitutes a severe weather event that significantly contributed to incurring expenses of $95,000 and capitalizing costs of $600,000.

ABC, Inc.'s percentage impact for the income statement is 1.20% ($95,000 / $7,900,000 = 1.20%). ABC, Inc., is not required to provide the related disclosure for the year ended 31 December 20X5 because, although the percentage impact exceeds 1%, the aggregate amount of expenses incurred ($95,000) does not equal or exceed the $100,000 income statement de minimis threshold.

ABC, Inc.'s percentage impact for the balance sheet is 2.40% ($600,000 / $25,000,000 = 2.40%). ABC, Inc. is required to provide the related disclosure for the year ended 31 December 20X5 because the percentage impact exceeds 1% and the aggregate amount of capitalized costs ($600,000) exceeds the $500,000 de minimis threshold.

Registrants will need to separately aggregate on an absolute value basis the (1) capitalized costs and charges on the balance sheet and (2) expenditures expensed as incurred and losses in the income statement to determine whether the applicable disclosure threshold is triggered for purposes of disclosure. Rules 14-02(c) and 14-02(d) state that the income statement and balance sheet effects to be disclosed may include those incurred or capitalized to restore operations; relocate assets or operations affected by the event or other natural condition; replace, repair or retire affected assets; or recognize impairment on affected assets; or otherwise respond to the effect that severe weather events and other natural conditions had on business operations. These items may affect both the income statement and the balance sheet (e.g., an impairment loss reflected on the income statement to write off the value of an asset on the balance sheet) and, if so, need to be included in each disclosure if the applicable threshold is met. The SEC said that registrants are not prohibited from disclosing how the severe weather event or other natural condition affected both the income statement and balance sheet, even if the disclosure threshold for one of the financial statements is not triggered.

The SEC stated in its adopting release that the rules do not require a registrant to disclose both the capitalization of costs and subsequent expensing of those capitalized amounts, but only the expenditures expensed and losses "as incurred." As an example, the SEC noted that a registrant would not be required to include in either the numerator of the percentage impact calculation or in the note to the financial statements the depreciation of new machinery purchased to replace one damaged by a severe weather event. The registrant would only be required to include in the numerator and disclose (assuming the relevant disclosure threshold is met) the cost to purchase the new machinery.

If a registrant is required to provide disclosures about incurred expenses, capitalized costs and charges, and losses, the registrant also will need to disclose in its contextual information under Rule 14-02(f) the aggregate amount of any related recoveries (e.g., insurance proceeds, guarantees, indemnifications) and the line item(s) of the income statement and balance sheet in which such recoveries are presented.

Illustration 4 — Disclosure of certain effects of severe weather events and other natural conditions

XYZ Inc.'s operations are affected by wildfires, extreme temperatures and an earthquake throughout calendar year 20X5. The registrant determines that the wildfires, extreme temperatures and earthquake constituted severe weather events and other natural conditions. XYZ Inc. also concludes the wildfires, extreme temperatures and earthquake experienced were significant contributing factors in:

- Capitalizing $1.2 million of expenditures to rebuild the wing of a building and receiving $400,000 in insurance proceeds (related to the wildfires)
- Incurring an impairment charge of $750,000 in the income statement to write off inventory and capitalizing $1 million of replacement inventory (related to the earthquake)
- Expensing $200,000 of expenditures for ventilation and air conditioning repairs in corporate offices (related to the extreme temperatures)

XYZ Inc.'s stockholders' equity is $150 million as of 31 December 20X5, and its income before income tax expense is $75 million for the year ended 31 December 20X5. The registrant assesses whether these events trigger the disclosure requirements as follows:

Disclosure threshold analysis					
Effect category	Financial statement amounts as of and for the year ended 31 December 20X5	Wildfires	Earthquake	Extreme temperatures	Percentage impact
Balance sheet (capitalized costs and charges)	$150,000,000	$1,200,000 capitalized expenditures	$1,750,000 ($750,000 inventory write-off + $1,000,000 inventory replacement)		1.97% (($1,200,000 + $1,750,000)/ $150,000,000)
Income statement (expenditures expensed as incurred and losses)	$75,000,000		$750,000 inventory write-off	$200,000 expensed expenditures	1.27% (($750,000 + $200,0000)/ $75,000,000))

The percentage impacts on both the income statement and the balance sheet exceed 1% (as shown above) and the de minimis thresholds: the numerator for the balance sheet percentage impact ($1,200,000 + $1,750,000 = $2,950,000) exceeds $500,000, and the numerator for the income statement percentage impact ($750,000 + $200,000 = $950,000) exceeds $100,000. As such, XYZ, Inc. discloses the following table in a note to the financial statements:

Note X — Financial statement effects related to severe weather events and other natural conditions

Category	Balance sheet		Income statement		
	Years ended 31 December		Years ended 31 December		
Capitalized costs and charges	20X4	20X5	20X3	20X4	20X5
Inventory	-	$250,000			
Property, plant and equipment	-	$1,200,000			
Expenditures expensed as incurred and losses					
General and administrative	-	-	-	-	$200,000
Other income (loss)	-	-	-	-	($750,000)

In this illustration, XYZ Inc. only provides the disclosures for fiscal year 20X5 because it is its first year of compliance. In its required contextual information disclosure (not illustrated), XYZ Inc. may include, among other things:

- The specific severe weather events and natural conditions and the transactions that were aggregated for purposes of determining the effects on the balance sheet and income statement amounts (e.g., the $750,000 inventory write-off and the $1 million inventory replacement that comprise the $250,000 net effect to the inventory balance sheet line item resulting from the earthquake) (Note: Although XYZ Inc. presented the

aggregate effects to the inventory balance sheet line item on a net basis, it separately aggregated the effects on an absolute value gross basis to determine whether the applicable disclosure threshold was triggered)

- The significant judgments made to determine the amount of capitalized costs and expenditures, charges and losses incurred (e.g., those related to the inventory impairment charge)
- The $400,000 in insurance proceeds recognized in the financial statements as a result of the wildfires and its location in the income statement or balance sheet

Effects of carbon offsets and RECs

Rule 14-02(e) will require registrants to provide additional disclosure if carbon offsets or RECs have been used as a material component of a registrant's plan to achieve disclosed climate-related targets or goals. RECs subject to disclosure include those purchased in the open market and those obtained through power purchase agreements and virtual power purchase agreements. This is consistent with the requirement of Regulation S-K, Item 1504(d), as further discussed in the targets and goals section of this publication.

Registrants will be required to disclose the following:

- The aggregate amounts of (1) carbon offsets and RECs expensed, (2) carbon offsets and RECs capitalized and (3) losses incurred on the capitalized carbon offsets and RECs during the fiscal year
- The beginning and ending balances of the capitalized carbon offsets and RECs for the fiscal year
- Their accounting policy for carbon offsets and RECs, as part of the contextual information disclosure[4]

Rule 14-02(e) also will require registrants to separately disclose the line item(s) of the income statement and balance sheet, as applicable, in which the capitalized costs, expenditures and losses are presented.

Illustration 5 — Disclosure of effects of carbon offsets and RECs

XYZ Inc. used carbon offset units generated by reforestation projects as a material component of its plan to reduce its disclosed Scope 1 emissions by 30% over the next five years. Consistent with its accounting policy, XYZ Inc. capitalizes all costs of carbon offsets and presents them within the intangible assets line item. XYZ Inc. provides the following disclosure:

Carbon offsets and RECs at 1 January 20X5	**$ 2,500,000**
Capitalized carbon offsets and RECs	**$ 1,000,000**
Expensed carbon offsets and RECs	**$ (3,000,000)**
Carbon offsets and RECs at 31 December 20X5	**$ 500,000**

XYZ Inc. capitalizes carbon offsets and RECs and expenses them upon retirement. Carbon offsets and RECs are presented in the intangible assets line item on the balance sheet and expensed in the general and administrative line item on the income statement.

As shown above, XYZ Inc. discloses its accounting policy for carbon offsets and RECs as part of the required contextual information also provided in the note.[5]

Impacts on financial estimates and assumptions

Rule 14-02(h) will require registrants to disclose whether exposures to risks and uncertainties associated with, or known impacts from, (1) severe weather events and other natural conditions, (2) any disclosed climate-related targets and (3) any disclosed transition plans, materially impacted the estimates and assumptions used in preparing the financial statements. If they did, registrants will need to provide a qualitative description of how the development of such estimates and assumptions was impacted by the events, conditions, targets or transition plans, as applicable.

The SEC noted in the adopting release that the disclosure of impacts required by Rule 14-02(h) is not limited to negative impacts. The SEC also stated that financial statement estimates and assumptions that may require disclosure include those related to the estimated salvage value of certain assets, estimated useful life of certain assets, projected financial information used in impairment calculations, estimated loss contingencies, estimated reserves (e.g., environmental reserves, asset retirement obligations, loan loss allowances), estimated credit risks, fair value measurement of certain assets and commodity price assumptions.

How we see it

Regulation S-X Rule 14-02(h) will require registrants to disclose both the negative and the positive impacts of certain climate-related matters on estimates and assumptions used in preparing the financial statements. This differs from the Regulation S-K requirements for disclosures outside the financial statements, as further discussed below. Although the SEC noted registrants may voluntarily disclose information about climate-related opportunities or the positive effects of climate-related items outside the financial statements, the requirements of Regulation S-K do not compel such disclosure.

Regulation S-K disclosure requirements

Under new Subpart 1500, *Climate-Related Disclosure*, in Regulation S-K, registrants will be required to disclose quantitative and qualitative climate-related information, including information about material climate-related risks; material impacts of climate-related risks; processes to identify, assess, and manage material climate-related risks; governance over climate-related risks; material targets and goals; and GHG emissions metrics. The disclosure threshold for most disclosures (unless noted otherwise in the relevant sections of this publication) is based on the definition of materiality under US securities laws as defined by the U.S. Supreme Court, as follows:

- Information is material if there is a substantial likelihood that a reasonable investor would consider it important in deciding how to vote or make an investment decision.[6]
- An omitted fact is material if there is a substantial likelihood that disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the "total mix" of information made available.[7]

In its adopting release, the SEC stated that although Article 14 of Regulation S-X requires a registrant to disclose certain financial effects of severe weather events and other natural conditions, which may include weather events that are not climate-related (as discussed above), Subpart 1500 of Regulation S-K does not require the disclosure of material impacts from non-climate-related weather events.

How we see it

Registrants should start planning for their materiality assessments related to the relevant requirements, taking into consideration quantitative and qualitative factors. Registrants should consider the information that is being disclosed outside their SEC filings, such as in corporate sustainability reports or other regulatory filings. For instance, they may be providing disclosures under the concept of "double materiality" (i.e., a disclosure is material if it is material from what is called an "impact" perspective, a financial perspective or a combination of both) and address the information needs of stakeholders other than investors (e.g., customers, suppliers, employees). Registrants should carefully assess whether their disclosures of certain climate-related information outside SEC filings is potentially indicative of their materiality for purposes of the SEC climate-related disclosures rules.

Climate-related risks and their impact on a registrant

Item 1502 of Regulation S-K will require registrants to make certain disclosures about climate-related risks and their impact on a registrant.

Climate-related risks

Item 1502(a) of Regulation S-K will require registrants to describe climate-related risks that have materially impacted or are reasonably likely to have a material impact on the registrant, including on its strategy, results of operations and financial condition. As noted above, Item 1500 defines climate-related risks stating that they may include physical risks and transition risks. The SEC noted in its adopting release that the definitions of physical risks and transition risks provide non-exclusive examples of such risks and that risks are dynamic and may change over time. Further, the SEC said a registrant would only need to disclose the transition risk of a party in its value chain when such risk has materially impacted or is reasonably likely to materially impact the registrant itself.

In their description of climate-related risks, registrants will need to explain whether the risk is reasonably likely to manifest in the short term (i.e., the next 12 months) and separately in the long term (i.e., beyond the next 12 months), broadly consistent with the temporal standard used in the disclosure requirements under Item 303, *Management's discussion and analysis of financial condition and results of operations*, of Regulation S-K. However, climate-related risks may manifest over much longer periods than matters considered today for management's discussion and analysis disclosure, and the SEC said that a registrant is not precluded from breaking down its description of risks reasonably likely to manifest beyond the next 12 months into components that may include more medium- and longer-term risks if that is consistent with the registrant's assessment and management of the climate-related risk.

How we see it

When determining whether a risk is reasonably likely to have a material impact, registrants should carefully consider how a lengthy time period affects the analysis. While the reasonably likely standard is familiar because it is used multiple times in Item 303 of Regulation S-K, it typically does not result in disclosure of matters that are considered to affect a registrant in, for example, 25 years. We believe that registrants should work closely with their legal counsel to make these determinations, among others.

Registrants also will need to state whether the disclosed climate-related risks are physical or transition risks and provide information needed to understand their nature and the extent of the registrant's exposure to the risks.

For a physical risk, this information may include whether it is categorized as an acute or chronic risk and the geographic location and nature of the properties, processes or operations subject to the risk. For a transition risk, this information may include whether it relates to regulatory, technological, market or other transition-related factors, and how those factors impact the registrant. A registrant that has significant operations in a jurisdiction that has made a GHG emissions reduction commitment should consider whether it may be exposed to a material transition risk related to the implementation of the commitment.

The list of disclosures under Item 1502(a) is non-exhaustive and non-exclusive and registrants should consider additional disclosures they may need to provide to help investors understand the material impact that has occurred or is reasonably likely to occur. The SEC noted in the adopting release that, for instance, as a disclosed risk develops over time (e.g., the category of physical risk changes and/or the nature of the impact to the registrant evolves), depending on the facts and circumstances, the registrant may need to describe the changes to the risk so an investor can understand the impact.

Impacts on strategy, business model and outlook

Item 1502(b) of Regulation S-K will require registrants to disclose the actual and potential material impacts of climate-related risks identified in response to Item 1502(a) (i.e., material climate-related risks) on their strategy, business model and outlook,[8] including any material impacts on the following non-exclusive list of items:

- Business operations, including the types and locations of their operations
- Products and services
- Suppliers, purchasers and counterparties to material contracts, if known or reasonably available
- Activities to mitigate or adapt to climate-related risks, including the adoption of new technologies or processes
- Expenditure for research and development

If a registrant has identified a material climate-related risk, it will be obligated to disclose the actual and potential material impact on its strategy, business model and outlook even if it is not specifically listed under Item 1502(b).

How we see it

The SEC departed from its "reasonably likely" threshold in Item 1502(b) in favor of a "potential" threshold. It is unclear whether the SEC intended for this to be a lower threshold for disclosure and, if so, why and how it should be applied. Registrants should consult with legal counsel when determining what disclosures it will be required to provide.

Item 1502(c) of Regulation S-K will require registrants to also discuss whether and how the impacts disclosed in accordance with Item 1502(b) are considered as part of their strategy, financial planning and capital allocation, including (1) whether the impacts have been integrated into the registrant's business model or strategy, including whether and how resources are being used to mitigate climate-related risks and (2) how any of the targets referenced pursuant to Item 1504 or transition plans referenced in Item 1502(e) (discussed in the sections below) relate to the registrant's business model or strategy.

The SEC said a registrant that has not yet articulated a business model or does not believe that its business model is or will be materially impacted by climate-related risks will not need to provide the related disclosure.

Impacts on the business, results of operations or financial condition

Item 1502(d) of Regulation S-K will require registrants to discuss how any climate-related risks described in response to Item 1502(a) have materially impacted or are reasonably likely to materially impact the registrant's business, results of operations or financial condition.

The discussion will need to include quantitative and qualitative disclosures of material expenditures incurred (both capitalized and expensed) and material impacts on financial estimates and assumptions that, in management's assessment, are the direct result of activities to mitigate or adapt to climate-related risks, including adoption of new technologies or processes.[9] The rules do not specify whether the disclosure should be tabular or narrative.

The SEC stated in its adopting release that if there is any overlapping disclosure of material expenditures (which is also required in the context of transition plans and targets and goals, as discussed below), to avoid redundancy, a registrant should provide the disclosure in the location where, in its assessment, such disclosure is most appropriate, and then cross-reference to that disclosure when responding to the other requirements.

Transition plans

If a registrant has adopted a transition plan to manage a material transition risk, it will be required under Item 1502(e) of Regulation S-K to provide disclosure describing the plan. The registrant must update the disclosure each fiscal year to describe the actions taken during the year under the plan, including how such actions have impacted the registrant's business, results of operations or financial condition.

The description of the transition plan will need to include quantitative and qualitative disclosure of material expenditures incurred (both capitalized and expensed) and material impacts on financial estimates and assumptions as a direct result of the transition plan,[10] including actions taken under the plan (e.g., material expenditures made for climate-related research and development).[11] The SEC stated in its adopting release that when determining which expenditures related to progress under a transition plan are material over the relevant period and therefore require disclosure, registrants should consider whether overall expenditures are material in the aggregate, even if individual expenditures do not appear to be material (e.g., series of individually immaterial expenditures could be the result of the same action or related actions under the plan, and those expenditures could be material in the aggregate).

The SEC stated that, if disclosure of material impacts on financial estimates and assumptions as a direct result of a transition plan is disclosed in response to Rule 14-02(h) of Regulation S-X (discussed above), a registrant would be able to cross-reference to that disclosure.

Item 1507 of Regulation S-K extends the PSLRA safe harbors to forward-looking statements about transition plans made in response to Item 1502(e) disclosure requirements. The safe harbors do not extend to historical facts, including disclosed material expenditures actually incurred.

The rules do not mandate that registrants adopt a transition plan, and the SEC believes that the requirements are flexible enough to allow registrants to avoid disclosing competitively sensitive information. The SEC also noted in the adopting release that an update to the disclosures would not be required if disclosure of the underlying transition plan is no longer required (e.g., because the plan is no longer used to manage a material transition risk).

Scenario analysis

If a registrant (1) uses scenario analysis to assess the impact of climate-related risks on its business, results of operations or financial condition and (2) identifies that a climate-related risk is reasonably likely to have a material impact based on the results of that analysis, Item 1502(f) of Regulation S-K will require the registrant to describe:

- Each scenario used that identified that a climate-related risk is reasonably likely to have a material impact, including a brief description of the parameters, assumptions and analytical choices used
- The expected material impacts (including financial impacts) on the registrant under each scenario

If it will be required to provide the disclosure, the registrant should determine the mix of qualitative and quantitative disclosure that best fits its circumstances. The SEC said as a registrant's use of scenario analysis becomes more sophisticated, the SEC expects the disclosure of the results of scenario analysis to become more quantitative, particularly when the registrant discusses the expected material financial impacts on its business strategy, under each considered scenario.

The SEC also stated that, because companies use scenario analysis to test the resilience of their business strategies under varying future climate scenarios (and because such use is explained in the definition of scenario analysis in Item 1500), if registrants are required to provide scenario analysis disclosures, they likely would include a description of the resilience of their strategies under various climate scenarios (e.g., those that assume global temperature increases above pre-industrial levels). However, the rules do not prescribe any scenario models, and a registrant may select the climate scenario model(s) it believes best fits its industry or business and/or its climate risk assessment approach.

Item 1507 of Regulation S-K extends the PSLRA safe harbors to forward-looking statements about the use of scenario analysis made in response to the Item 1502(f) disclosure requirements. The safe harbors do not extend to historical facts.

The rules do not mandate that registrants perform scenario analysis, and the SEC believes that the requirements are flexible enough that registrants can avoid disclosing competitively sensitive information.

Internal carbon price disclosures

If a registrant's use of an internal carbon price is material to how it evaluates and manages a climate-related risk identified in response to Item 1502(a), Item 1502(g) of Regulation S-K requires the registrant to disclose the following, in units of its reporting currency, for each internal carbon price used:

- The price per metric ton of CO_2e
- The total price and how it is estimated to change over the short term (i.e., the next 12 months) and separately in the long term (i.e., beyond the next 12 months), as applicable
- If a registrant uses more than one internal carbon price, it will have to also disclose the reasons for using different prices.

If the scope of entities and operations involved in the use of an internal carbon price is materially different from the organizational boundaries used for the purpose of calculating a registrant's GHG emissions pursuant to Item 1505 of Regulation S-K (discussed in a later section of this publication), if applicable, the registrant will need to briefly describe this difference.

Item 1507 of Regulation S-K extends the PSLRA safe harbors to forward-looking statements about internal carbon prices made in response to Item 1502(g) disclosure requirements. The safe harbors do not extend to historical facts.

The rules do not mandate that registrants use an internal carbon price. To reduce the risk of registrants being required to disclose competitively sensitive information, the SEC did not require that a registrant disclose how it uses a carbon price or the rationale for selecting it.

Governance

Item 1501 of Regulation S-K will require registrants to describe the board of directors' oversight of climate-related risks and management's role in assessing and managing climate-related risks. The SEC said that this item does not require registrants that do not engage in the oversight of material climate-related risk to disclose any information.

Board of directors' oversight disclosures

A registrant will be required to identify any board committee or subcommittee that oversees climate-related risks, if applicable, and describe the processes by which the board or committee is informed about such risks. If there is a climate-related target or goal disclosed pursuant to Item 1504 (as further discussed below) or transition plan disclosed pursuant to Item 1502(e), the registrant will need to describe whether and how the board oversees progress against the target, goal or transition plan, as applicable.

The disclosures about the board of directors' oversight will not be subject to materiality. That is, registrants will need to provide these disclosures even if they do not deem any climate-related risk to be material.

Management's role in assessing and managing climate-related risks

A registrant will be required to describe management's role in assessing and managing the registrant's material climate-related risks, including, as applicable:

- Whether and which management positions or committees are responsible for assessing and managing climate-related risks and their relevant expertise in such detail that is necessary to fully describe the nature of the expertise (e.g., prior work experience in climate-related matters; any relevant degrees or certifications; any knowledge, skills or other background on climate-related matters)
- The processes by which management assesses and manages climate-related risks
- Whether management reports information about such risks to the board of directors or a board committee or subcommittee

In contrast with the disclosure requirement related to board oversight, the management-related disclosure will only be required if a registrant has identified material climate-related risks.

Risk management

Item 1503 of Regulation S-K will require registrants to describe their processes for identifying, assessing and managing material climate-related risks. The SEC said that if a registrant has not identified a material climate-related risk, no disclosure is required. Registrants will need to address in their description, as applicable, how they:

- Identify whether they have incurred or are reasonably likely to incur a material physical or transition risk
- Decide whether to mitigate, accept or adapt to particular risks
- Prioritize whether to address the risks

If a registrant manages a material climate-related risk, it will also need to disclose whether and how any such described processes have been integrated into its overall risk management system or processes. The list of disclosures under Item 1503 is non-exhaustive and non-exclusive, and registrants should consider additional disclosures they may need to provide to help investors understand their processes.

Targets and goals

Item 1504 of Regulation S-K will require registrants to provide disclosures of climate-related targets and goals that have materially affected or are reasonably likely to materially affect their business, results of operations or financial condition. The SEC noted that, regardless of the issue the target or goal addresses, if the target or goal is considered climate-related in the registrant's circumstances and if achieving it would materially impact the registrant's business, results of operations or financial condition, the registrant will need to disclose it. That is, targets or goals potentially subject to disclosure will not be limited to those related to GHG emissions.

The SEC stated that if a registrant sets an internal target or goal that materially affects or is reasonably likely to materially affect the registrant's business, results of operations or financial condition (e.g., due to material expenditures or operational changes that are required to achieve the target or goal), investors should have access to information about that target or goal to help them understand the financial impacts and assess the registrant's transition risk management. Therefore, disclosure of targets and goals will not depend on whether they have been publicly announced (or approved by the registrant's board or chief executive officer), and registrants will need to include nonpublic or internal targets and goals in the scope of those considered for disclosure.

Disclosures of targets and goals may be provided as part of the required disclosures on material climate-related risks (Item 1502 of Regulation S-K) or risk management (Item 1503 of Regulation S-K), discussed in other sections of this publication. The required disclosures will have to provide any additional information or explanation necessary to understand the material impact or reasonably likely material impact of the climate-related targets and goals, including, as applicable, a description of:

- Scope of activities included in the target
- Unit of measurement
- Defined time horizon in which the registrant intends to achieve the target, and whether the time horizon is based on one or more goals established by a climate-related treaty, law, regulation, policy or organization
- Baseline time period and the means by which progress will be tracked
- How, qualitatively, the registrant intends to meet the target or goal

In addition, a registrant will be required to disclose any progress made toward meeting them and how progress was achieved. This disclosure will include:

- A discussion of the material impacts on the business, results of operations or financial condition that are a direct result of the targets and goals or the actions taken to make progress in meeting the targets or goals

- Quantitative and qualitative disclosure of material expenditures and material impacts on financial estimates and assumptions that are a direct result of the targets and goals or the actions taken to make progress toward meeting the targets and goals[12]

The SEC stated that, when considering which expenditures related to progress under a disclosed target or goal are material over the relevant period and, therefore, require disclosure, registrants should consider whether such overall expenditures are material in the aggregate.

It also stated that, if disclosure of material impacts on financial estimates and assumptions as a direct result of the target or goal is provided in response to Rule 14-02(h) of Regulation S-X (discussed above), a registrant would be able to cross-reference to that disclosure.

Registrants will update their disclosures each fiscal year with a description of the actions taken during the year to achieve their targets or goals. However, no update about targets and goals would be required if the underlying targets or goals are not required to be disclosed (e.g., because the target or goal is no longer material).

If carbon offsets or RECs have been used as a material component of the registrant's plan to achieve disclosed climate-related targets or goals, Item 1504(d) of Regulation S-K requires the following information to be disclosed:

- Amount of carbon avoidance, reduction or removal represented by the offsets or the amount of generated renewable energy represented by the RECs
- The nature of the carbon offsets or RECs (i.e., whether a carbon offset represents carbon avoidance, reduction, or removal and whether a REC is bundled or unbundled) and source (i.e., the party that has issued the offset or REC)
- A description and location of the underlying projects
- Any registries or other authentication of the offsets or RECs
- The cost of the offsets or RECs

The SEC stated that a registrant that relies on carbon offsets or RECs as a material component of its plan to achieve its targets or goals might need to consider whether fluctuating supply or demand, and corresponding variability of price, related to carbon offsets or RECs, presents an additional material risk that is required to be disclosed when discussing its plan to achieve such target or goal.

Item 1507 of Regulation S-K extends the PSLRA safe harbors to forward-looking statements about targets or goals made in response to Item 1504 disclosure requirements. The safe harbors do not extend to historical facts, including terms related to carbon offsets or RECs (e.g., the amount of carbon avoidance, reduction or removal represented by the offset; the amount of generated renewable energy represented by the REC; the nature and source of the offset or REC) and material expenditures actually incurred.

How we see it

We understand there is concern that Item 1504 may require disclosure of GHG emissions metrics (as discussed later in this publication) if such metrics are the subject of a material target or goal (e.g., a net zero commitment).

Under Item 1504(b), registrants will need to provide "any additional information or explanation necessary to an understanding of the material impact or reasonably likely impact of the target or goal […]." This requirement, together with the others in Item 1504, could be interpreted to mean that emissions metrics will need to be disclosed. Separately, the SEC discussed the importance of emissions disclosure to targets and goals in the context of Item 1505. The SEC stated that an emissions disclosure may be qualitatively material if the calculation and disclosure are necessary to enable investors to understand whether the registrant has made progress toward achieving a target, goal or transition plan that the registrant is required to disclose under Subpart 1500 of Regulation S-K.

However, the SEC also said in a footnote to the release that "[a]ll registrants subject to the final rules, including SRCs and EGCs, are not required to disclose GHG emissions metrics other than as required by Item 1505, including where GHG emissions are included as part of a transition plan, target or goal."

We believe that this is the clearest statement regarding whether emissions disclosures are required in connection with disclosures under Item 1504. However, registrants should closely monitor any further statements made by the SEC staff on this topic.

GHG emissions disclosures

Item 1505 of Regulation S-K will require accelerated and large accelerated filers to disclose Scope 1 and/or Scope 2 GHG emissions, if material. Non-accelerated filers, EGCs and SRCs are exempt from providing these disclosures.[13]

Similar to the financial statement disclosures, the disclosure of a registrant's GHG emissions will be required for the most recently completed fiscal year and, if previously disclosed or required to be disclosed in an SEC filing, for the historical fiscal year(s) covered by the financial statements included in the filing.

Subject to certain disclosure requirements discussed below, registrants may use reasonable estimates when disclosing GHG emissions. Such disclosures will need to be:

- Made separately for each scope (i.e., Scope 1 and/or Scope 2)
- Provided on an aggregate basis and, if any constituent gas of the disclosed emissions is individually material, on a disaggregated basis for the particular constituent gas
- Expressed in gross terms (i.e., excluding the impact of any purchased or generated offsets) of metric tons of CO_2e

How we see it

Because these disclosures differ depending on a registrant's filing status, companies should consider the impact on their climate disclosures resulting from changes in their status (e.g., loss of EGC status). In some cases, registrants may only have a short time to prepare to comply with requirements applicable to their new status.

In addition, a company conducting an initial public offering (IPO) would not meet the definition of an accelerated or large accelerated filer because it would not have had periodic reporting obligations for at least 12 months when filing its IPO registration statement. Therefore, it would not be required to provide the GHG emissions disclosures required by Item 1505 in its IPO registration statement.

Qualitative and quantitative materiality considerations

The materiality determination of Scope 1 and/or Scope 2 emissions will need to be based on materiality under the US securities laws, as discussed above. The SEC stated that determining whether emissions are material is not merely a quantitative exercise, and it provided examples of scenarios in which a registrant's GHG emissions may be qualitatively material, including if:

- The registrant faces a material transition risk resulting from a requirement to report its GHG emissions under foreign or state law (e.g., under California's recently passed climate-related disclosure laws or the International Sustainability Standards Board's standards)
- The GHG emissions calculation and disclosure are necessary to enable investors to understand whether the registrant has made progress toward achieving a target, goal or transition plan that the registrant is required to disclose under Subpart 1500 of Regulation S-K

The SEC noted that a registrant's exposure to a material transition risk does not result in a de facto determination that Scope 1 and Scope 2 emissions are material to the registrant, which could be the case, when, for example, a new law restricts the sale of its products based on the technology it uses, rather than directly based on the products' emissions (even if such development may trigger other disclosures under Subpart 1500).

With respect to the materiality of individual constituent gases, the SEC noted that if a registrant has included a particular constituent gas, such as methane, in a GHG emissions reduction target that is disclosed pursuant to Item 1504(a) because it is reasonably likely to materially affect the registrant's business, such constituent gas may be material and, therefore, if determined to be material, the registrant would be required to disclose it on a disaggregated basis.

How we see it

The SEC did not provide guidance on the quantitative evaluation of the materiality of GHG emissions. Registrants should consider the nature and extent of quantitative analysis they will perform (in addition to qualitative analysis) as part of their GHG emissions materiality assessment. For example, a quantitative analysis of Scope 1 and/or Scope 2 emissions could be conducted in the context of total GHG emissions, industry averages or a different comparison point.

GHG Protocol

While Item 1505 of Regulation S-K will not require the use of the GHG Protocol (or any other particular methodology), the GHG Protocol is widely used by companies to account for and report GHG emissions voluntarily outside their SEC filings (e.g., in corporate sustainability reports). Such companies will likely continue to use it for their Item 1505 disclosure. The following is an overview of the GHG Protocol. For more details, refer to our publication ***Sustainability reporting developments — Greenhouse Gas Protocol***.

The GHG Protocol for corporate entities is mainly comprised of the following individual publications:

- Corporate Accounting and Reporting Standard (Corporate Standard)
- Scope 2 Guidance
- Corporate Value Chain (Scope 3) Accounting and Reporting Standard (Scope 3 Standard)
- Technical Guidance for Calculating Scope 3 Emissions (Scope 3 Guidance)

The Corporate Standard was first issued in 2001 and has been subsequently amended and supplemented by the Scope 2 Guidance, Scope 3 Standard and Scope 3 Guidance. Taken together, these publications provide standards and guidance for corporate entities to use to account for, measure and report their emissions from the seven GHGs defined by the United Nations Framework Convention on Climate Change, which are the same GHGs defined in Item 1500 of Regulation S-K.

These gases are classified as GHGs because they trap heat in the atmosphere. Each GHG has a different GWP. The GWP of a given GHG indicates the degree of harm to the atmosphere from one unit of a given GHG compared to one unit of carbon dioxide, generally over a 100-year period. The larger the GWP, the more a given GHG warms the earth compared to carbon dioxide over that time period. For example, PFCs and HFCs are often thousands of times more harmful to the atmosphere than carbon dioxide. The GWP of each GHG is published as a factor and is used to translate GHGs, other than carbon dioxide, into CO_2e units.

The GHG Protocol considers CO_2e to be the universal unit of measurement for GHGs as it expresses the GWP of each GHG in terms of the GWP of one unit of carbon dioxide. The purpose of this measure is to enable a reporting entity, users and other stakeholders to compare the harm to the atmosphere of a reporting entity's emissions, both across entities and over time, even when the composition of the GHG emissions changes.

Organizational boundaries

A reporting entity may have many different entities in its legal and organizational structure, which may include wholly owned subsidiaries, partially owned subsidiaries (e.g., joint ventures) and equity method investments. The GHG Protocol provides guidance on whether a reporting entity must include emissions from these various entities when accounting for and reporting emissions. The GHG Protocol refers to the process of identifying which entities to include as "setting organizational boundaries." The process is similar to the process to define the reporting entity for a set of financial statements for financial reporting (i.e., what entities to consolidate). That is, the organizational boundary selected determines which entities are included by the reporting entity for purposes of GHG emissions reporting.

The GHG Protocol allows a reporting entity to select one of two methods of setting organizational boundaries: the equity share approach and the control approach. Because control can be defined from an operational or financial perspective, the GHG Protocol further divides the control approach into the operational control approach and financial control approach.

Equity share approach

Under the equity share approach, a reporting entity sets its organizational boundary based on its share of the equity of an owned or partially owned entity (i.e., the reporting entity includes the same proportionate share of emissions of the owned entity as its share of equity of the entity). The equity share percentage used by the reporting entity should reflect the extent of the rights the reporting entity has to both the risks and rewards generated by an owned entity. This percentage is often the same as the legal ownership share of the owned entity, but it may not be in all cases. For example, the equity share and ownership share will differ when the ownership share does not faithfully represent the economic interest in the owned entity.

Control approach

Under the control approach, a reporting entity includes within its organizational boundaries 100% of the emissions of operations over which it has control, regardless of the equity share or legal ownership share held by the reporting entity. For example, a reporting entity that has an equity share of 65% and control over a subsidiary would account for and report 100% of

that entity's emissions using the control approach. Conversely, if the reporting entity has an equity share of 35% in an entity that it does not control, none of the emissions of the uncontrolled entity would be included in the reporting entity's GHG inventory.

The GHG Protocol provides two methods of determining control: financial control and operational control.

Financial control

A reporting entity has financial control over another entity if it can control the entity to gain economic benefits from the entity's activities. Financial control is often obtained if the reporting entity has the right to the majority of the economic benefits of the operation. Similar to the concept of equity share above, the determination of financial control depends on the economic substance of the relationship rather than the legal ownership. That is, financial control is not determined by legal ownership but by whether the reporting entity holds the rights to the majority of the economic benefits of the operation (e.g., the risks and rewards of ownership of the entity's assets). For example, a reporting entity may have financial control over another entity that is a variable interest entity, even though it owns less than 50% of the other entity.

When joint financial control exists (e.g., a joint venture under US GAAP), emissions are accounted for using the equity share approach even when the financial control approach is applied throughout the remainder of the reporting entity.

Operational control

The GHG Protocol specifies that a reporting entity that applies the operational control approach needs to include any facility over which it has operational control, even if it is not the owner of the facility, in the organizational boundary. This is particularly relevant for leased assets and other assets that are operated under a contractual arrangement.

A reporting entity that elects to use the operational control approach determines control by whether it has the authority to introduce and implement operating policies at an operation or facility. Operational control does not mean that the reporting entity can make all decisions concerning the operation or facility. For example, operational control may include decisions about how the day-to-day functions are performed but may not include certain other significant decisions (e.g., financing decisions, buying/selling significant assets) otherwise relevant to the financial control conclusions.

Certain facilities or operations may be under joint financial control (e.g., joint ventures, joint operations). Under the operational control approach, a reporting entity needs to determine whether it can introduce and implement operating policies for each facility or operation to determine whether the joint operation is included in its reporting boundary. A reporting entity that has operational control over an operation will include 100% of the operation's emissions in its reporting boundary even though it only owns 50% of the joint venture.

Operational boundaries

After a reporting entity sets its organizational boundary, the GHG Protocol requires it to determine its operational boundaries. This is the process of (1) identifying the emissions that relate to the reporting entity (which have been established by the organizational boundary), (2) determining if these emissions are direct (Scope 1) or indirect (Scope 2 or Scope 3) and (3) determining the extent of accounting for and reporting indirect emissions (i.e., which Scope 3 emissions, if any, are included in the GHG inventory and reported). Simply, this is the process of identifying and classifying GHG emissions within the organizational boundary.

Categories of GHG emissions (Scope 1, Scope 2 and Scope 3 emissions)

The GHG Protocol requires a reporting entity to categorize GHG emissions into three scopes:

- Scope 1 emissions are direct emissions from sources owned or controlled by a reporting entity within their reporting boundary. Common examples of Scope 1 emissions include emissions from entity owned production plants or entity-controlled vehicles.
- Scope 2 emissions are the indirect emissions generated from purchased energy (i.e., electricity,[14] heat, steam and cooling) that was consumed by a reporting entity. Common examples of Scope 2 emissions include emissions from the generation of electricity purchased from a utility company.
- Scope 3 emissions are other indirect emissions (i.e., indirect emissions other than Scope 2 emissions) from sources owned or controlled by other entities in a reporting entity's value chain (i.e., upstream or downstream activities). Common examples of Scope 3 emissions include emissions from purchased goods or services and emissions from business travel.

The GHG Protocol requires a reporting entity to differentiate its GHG emissions from direct and indirect sources (i.e., Scope 1 vs. Scope 2 and Scope 3) to increase the transparency of the emissions based on which party is emitting the GHGs. This structure avoids double counting by ensuring that two or more reporting entities do not account for the same emissions in Scope 1, while also providing information about a reporting entity's other GHG emissions. That is, if every entity and individual throughout the world reported their GHG emissions, the total of all Scope 1 emissions would equal the total GHGs emitted throughout the world. However, a stakeholder may also want information about how a reporting entity's decisions (e.g., how much purchased electricity its production process uses) affects GHG emissions.

Illustration 6 — Classification of electricity generated by a utility company

A utility company generates and sells electricity to a toy manufacturing company, which then uses that electricity to produce a product. The product is then sold to a toy store.

- The utility company that generates electricity would report the emissions from that electricity generation in its Scope 1 emissions.
- The toy manufacturing company that consumes the electricity while making the product would report the electricity-related emissions in its Scope 2 emissions.
- The toy store that purchases the product would report the emissions used to make the product (including the portion of the electricity-related emissions required to produce the purchased product) in its Scope 3 emissions.

Although the GHG Protocol requires the inclusion of Scope 1, Scope 2 and Scope 3 emissions, Item 1505 of Regulation S-K will not require the disclosure of Scope 3 GHG emissions. For more information on the GHG Protocol's requirements related to Scope 3 GHG emissions, refer to our publication ***Sustainability reporting developments — Greenhouse Gas Protocol*.**

Scope 1 emissions

Scope 1 emissions include those incurred within the entity's reporting boundary. An entity's reporting boundary is determined by the organizational boundary and operational boundary identified and selected by the reporting entity.

The type of emissions that are included in Scope 1 will vary based on the industry and business model of the reporting entity. The GHG Protocol includes four types of Scope 1 emissions, for which:

- Stationary combustion is the combustion of fuels in stationary equipment owned or controlled by the reporting entity. Stationary equipment can include boilers, furnaces, burners, turbines, heaters, incinerators and engines. Stationary combustion emissions are often created as part of the process to generate heat, electricity or steam. In contrast, emissions from the generation of purchased or acquired heat, electricity or steam consumed by the reporting entity are Scope 2 emissions.

- Mobile combustion is the combustion of fuels in mobile equipment owned or controlled by the reporting entity. Mobile equipment can include ground vehicles, ships and planes. Mobile combustion emissions are often created during the transportation of personnel, materials, products and waste.

- Process emissions are created by physical or chemical processing used by a reporting entity to manufacture or refine materials. These emissions also include emissions generated by processing waste. Examples of process emissions include CO_2 emitted from manufacturing concrete and PFCs emitted from smelting aluminum.

- Fugitive emissions are intentional and unintentional releases of GHGs from equipment and property owned or controlled by the reporting entity. These releases include equipment leaks, such as those from air conditioners or refrigerators, as well as emissions from coal piles, pits, wastewater treatment ponds, cooling towers and gas processing facilities.

The GHG Protocol includes detailed guidance on calculating Scope 1 emissions.

Scope 2 emissions

Scope 2 emissions are considered indirect emissions because an entity outside of the reporting entity's organizational boundary (e.g., a power-generating facility owned by a third-party energy company) generates the emissions from the electricity, steam, heat or cooling that is ultimately consumed by the reporting entity. That is, GHG emissions are a consequence of the activities of the reporting entity having consumed electricity, steam, heat or cooling produced by a third party).

Purchased electricity is often the largest source of Scope 2 emissions for a reporting entity, since it is regularly consumed as part of the reporting entity's operations (e.g., used to operate certain machinery and equipment, lights, heating and cooling systems). Steam is primarily used for mechanical work and heating. Heat is used to heat water or to heat specific equipment in a production process, and heat and cooling are used by most commercial or industrial buildings to control interior temperatures.

Only electricity, steam, heat and cooling purchased or acquired from a third party are included in a reporting entity's Scope 2 emissions. In contrast, electricity, steam, heat and cooling that are generated directly by the reporting entity (e.g., through an onsite power plant, boiler or furnace) are included in its Scope 1 emissions.

Generated electricity is either distributed to end-consumers through direct line transfer (i.e., directly from the electricity generator) or through a local electricity grid. An electric grid is a shared electricity distribution network where electricity moves to the closest point it can be consumed. The design of an electric grid can vary, and the grid is often supplied by different sources of electricity generation (e.g., wind, solar, natural gas, coal, nuclear, hydro). Different sources of electricity generation emit different amounts of emissions.

Because an electric grid is a shared distribution network, the end-consumer is generally unable to identify the emissions associated with the specific electricity it acquires and consumes. To address these complexities, the GHG Protocol outlines different considerations for determining how emissions from generated electricity are accounted for and reported by the entities involved in its generation, transfer and consumption.

Method for calculating Scope 2 emissions

The GHG Protocol prescribes two methods for calculating Scope 2 emissions: the location-based method (LBM) and the market-based method (MBM).

Location-based method

The LBM can apply in all locations within electricity grids and reflects emissions based on the location where a reporting entity consumes the electricity, applying the grid average emissions factor for the relevant location. A company's electricity procurement decisions (e.g., a decision to purchase electricity generated from renewable sources) are not factored into the LBM calculation of Scope 2 emissions. Therefore, this method can be applied in all locations and provides information on emissions from the overall mix of generation sources used in the grid. The LBM results in Scope 2 emissions from a reporting entity's activities in the respective region that are consistent with the Scope 2 emissions from other entities' activities in the same region. This provides better comparability among entities based on the location of their activities.

Under the LBM, a reporting entity uses an emissions factor that represents the average emissions from energy generation within a defined geographic area (e.g., local, subnational or national level) during a defined time period, often 12 months.

Market-based method

The MBM reflects the emissions associated with the choices a reporting entity makes when purchasing electricity. Scope 2 emissions under the MBM are derived from a reporting entity's contractual relationships or instruments. For example, if a reporting entity chooses an energy generation supplier or enters into a supply agreement for electricity from a regional wind farm, it would include the emissions factors resulting from these contracts in its Scope 2 emissions under the MBM. Unlike the LBM, the MBM provides information about the decisions a reporting entity has made to reduce emissions from its consumption of electricity.

Contractual instruments include direct contracts with a supplier (e.g., power purchase agreements, virtual power purchase agreements) and bundled or unbundled attribute claims (e.g., RECs, energy attribute certificates, guarantees of origin).

The Scope 2 Guidance includes Scope 2 Quality Criteria that all contractual instruments must meet to be used by a reporting entity in its MBM Scope 2 emissions calculation. Under the MBM, a reporting entity uses an emissions factor derived from contractual instruments that meet the Scope 2 Quality Criteria. When a reporting entity does not have contractual instruments for a given market or the contractual instruments do not meet the quality criteria in the Scope 2 Guidance, subnational or national residual mix factors are used, if available. When residual mix factors are not available, other grid-average emission factors are used instead, such as those used under the LBM.

The GHG Protocol includes detailed guidance on calculating Scope 2 emissions.

GHG emissions calculation methodology disclosures

Regardless of the framework used, Item 1505(b)(1) will require registrants to describe the methodology, significant inputs and significant assumptions used to calculate their GHG emissions. These disclosures will need to include:

- The organizational boundaries used when calculating disclosed Scope 1 and/or Scope 2 GHG emissions, including the method used to determine those boundaries[15]
- A brief discussion of, in sufficient detail for a reasonable investor to understand:
  - Whether and how organizational boundaries materially differ from the scope of entities and operations included in the registrant's consolidated financial statements
  - The operational boundaries used, including the approach to categorization of emissions and emission sources
  - The protocol or standard used to report the GHG emissions (e.g., the GHG Protocol's Corporate Accounting and Reporting Standard, an Environmental Protection Agency regulation, an applicable International Organization for Standardization standard), including:
    - The calculation approach for each disclosed scope of emissions (e.g., the LBM and/or MBM methods for Scope 2 GHG emissions)
    - The type and source of any emissions factors used (e.g., the Environmental Protection Agency's emissions factors for combustion and/or mobile combustion of various fuel types)[16]
    - Any calculation tools used to calculate the GHG emissions (e.g., those provided by the GHG Protocol or pursuant to GHG emissions calculation under the International Organization for Standardization standards)

Finally, a registrant that uses reasonable estimates to disclose GHG emissions will be required under Item 1505(b)(2) to describe the underlying assumptions and reasons for using the estimates.

Timing of disclosure

Annual reports

GHG emissions disclosures may be filed in annual reports (i.e., Form 10-K or Form 20-F) by the registrant's applicable due date based on its filer status. However, Item 1505(c)(1) of Regulation S-K provides an option to file the disclosures on a delayed basis.

Domestic registrants will be allowed to file the GHG emissions disclosures for the most recent year as part of their Form 10-Q for the second quarter or in an amendment to their annual report on Form 10-K (no later than the due date for the second quarter Form 10-Q). FPIs are allowed to delay filing the GHG emissions disclosures for the most recent year in an amendment to their annual report on Form 20-F, due no later than 225 days after the end of the fiscal year to which the GHG emissions disclosure relates.

The registrant will be required to include an express statement in its annual report indicating its intention to either (1) incorporate by reference this information from a quarterly report on Form 10-Q or (2) amend its annual report on Form 10-K or Form 20-F to provide this information by the applicable due date.

Registration statements

A registrant will be required to disclose GHG emissions metrics as of the most recently completed fiscal year that is at least 225 days prior to the date of effectiveness of the registration statement.

Illustration 7 — Timing of GHG emissions disclosures in registration statements
A calendar year-end large accelerated filer files a Form S-1 registration statement in 2028, which becomes effective on or after 7 August 2028. The GHG emissions disclosure is required for fiscal year 2027 since the Form S-1's date of effectiveness is at least 225 days after the 2027 fiscal year end. However, if the Form S-1 registration statement becomes effective on 4 August 2028, which is less than 225 days after its 2027 fiscal year end, the registrant may provide its GHG emissions disclosure for fiscal year 2026.

Assurance requirements

Item 1506(a) of Regulation S-K will require that material Scope 1 and/or Scope 2 GHG emissions disclosures of accelerated and large accelerated filers be subject to, at a minimum, limited assurance by an independent provider beginning with the third fiscal year after the compliance date for emissions disclosure. Such disclosures by large accelerated filers will subsequently be subject to reasonable assurance, beginning with the seventh fiscal year after the compliance date for emissions disclosure. Non-accelerated filers, EGCs and SRCs, all of which are exempt from disclosing material Scope 1 and/or Scope 2 emissions, are not required to obtain assurance over those disclosures if provided voluntarily.

The rules do not require any registrant to obtain an attestation report covering the effectiveness of internal control over GHG emissions disclosure.

Accelerated and large accelerated filers will be required to include the attestation report covering their disclosures of Scope 1 and/or Scope 2 GHG emissions in the filing that includes the GHG emissions to which the report relates. The option to delay the filing of GHG emissions disclosures will also apply to the filing of an attestation report. If a registrant chooses to delay filing the annual report's GHG emissions disclosure, it will need to include an express statement in its annual report indicating its intention to either (1) incorporate by reference the attestation report from a quarterly report on Form 10-Q or (2) amend its annual report on Form 10-K or Form 20-F to provide this information by the applicable due date.

In the first year that a registrant is required to provide an attestation report, the report is only required to cover the Scope 1 and/or Scope 2 emissions for its most recently completed fiscal year. The SEC said that a registrant would not be required to obtain an attestation report covering the disclosures of Scope 1 and/or Scope 2 emissions for any historical period, if presented, in the first year of the attestation rule's applicability.

However, for each subsequent annual report, the registrant will be required to provide an attestation report for an additional fiscal year until an attestation report is provided for the entire period covered by the registrant's GHG emissions disclosures. In circumstances where more than one GHG emissions provider may have provided an attestation report for the different fiscal years included in the filing, a GHG emissions attestation provider should be clear about its involvement with any historical information, including disclaiming any such involvement where applicable.

The assurance requirements and related disclosures that apply to accelerated and large accelerated filers are summarized in the following table and further discussed below:

Assurance-related requirements	Applicable requirements: After the compliance date for material Scope 1 and/or Scope 2 GHG emissions disclosures but before the compliance date for required assurance	Applicable requirements: After the compliance date for required assurance over material Scope 1 and/or Scope 2 GHG emissions disclosures
Minimum requirements for attestation standards, assurance provider and attestation reports	N/A	Items 1506(a)(2), 1506(b) and 1506(c)
Disclosures about required assurance over material Scope 1 and/or Scope 2 emissions	N/A	Item 1506(d)
Disclosures about voluntary assurance (e.g., over material Scope 1 and/or Scope 2 emissions disclosed before the assurance compliance date; over Scope 3 emissions voluntarily disclosed after the assurance compliance date)	Item 1506(e)	Item 1506(d)

Non-accelerated filers, SRCs and EGCs will not be required to disclose GHG emissions or obtain assurance, but if they voluntarily disclose and obtain assurance, the disclosure requirements of Item 1506(e) will apply.

Attestation standards requirements (Item 1506(a)(2))

Item 1506(a)(2) establishes the criteria for the attestation standards that will be acceptable. The standards must be (1) publicly available at no cost or are widely used for GHG emissions assurance and (2) established by a body or group that has followed due process procedures, including the broad distribution of the framework for public comment.

Although Item 1506(a)(2) does not specify the attestation standards that need to be used, the SEC said assurance providers will be allowed to use the attestation standards of the Public Company Accounting Oversight Board, the American Institute of Certified Public Accountants, the International Auditing and Assurance Standards Board and the International Organization for Standardization. The SEC noted that by highlighting these standards it did not mean to imply that others will not be suitable under the rules.

Attestation provider requirements after required assurance compliance date (Item 1506(b))

Item 1506(b) will require that the attestation provider be an expert in GHG emissions by virtue of having significant experience in measuring, analyzing, reporting or attesting to GHG emissions. Significant experience means having sufficient competence and capabilities necessary to (1) perform engagements in accordance with attestation standards and applicable legal and regulatory requirements and (2) enable the service provider to issue reports that are appropriate under the circumstances. The SEC said these principles do not preclude non-accountants from performing the GHG emissions attestation services.

Attestation providers will need to be independent with respect to the registrant and any of its affiliates[17] during the attestation and professional engagement period.[18] A GHG emissions attestation provider is not independent if such attestation provider is not — or a reasonable investor with knowledge of all relevant facts and circumstances would conclude that such attestation provider is not — capable of exercising objective and impartial judgment on all issues encompassed in the attestation provider's engagement.

The SEC said the foundational principles underlying the independence requirements in Rule 2-01 of Regulation S-X, which apply to financial statement auditors, and Item 1506(b) are the same, and the Commission views the independence requirements in both contexts as providing similar, if not equivalent, protections to investors, even if Item 1506(b) does not provide a non-exclusive list of circumstances inconsistent with independence as Rule 2-01(c) does for financial statement auditors. The SEC said that existing SEC guidance and staff interpretations regarding Rule 2-01 do not apply to the independence requirements in Item 1506(b). However, if any such guidance or interpretation may apply to an issue that is similarly presented under Item 1506, the guidance or interpretation would be a useful starting point for consideration, although not determinative.

However, registrants and GHG emissions attestation providers will only be required to comply with the independence requirements in Item 1506(b) and will not be required to separately comply with the independence requirements in Rule 2-01.

In determining whether a GHG emissions attestation provider is independent, the SEC will consider:

- Whether a relationship or the provision of a service creates a mutual or conflicting interest between the attestation provider and the registrant (or any of its affiliates), places the attestation provider in the position of attesting to such attestation provider's own work, results in the attestation provider acting as management or an employee of the registrant (or any of its affiliates), or places the attestation provider in a position of being an advocate for the registrant (or any of its affiliates)

- All relevant circumstances, including all financial or other relationships between the attestation provider and the registrant (or any of its affiliates), and not just those relating to reports filed with the Commission

The SEC said although the rules do not require a registrant's audit committee to pre-approve the GHG emissions attestation services, audit committees should consider what level of involvement would be appropriate for them to take on with respect to the selection and retention of attestation providers for climate-related disclosures.

The SEC also said that it would be permissible for a registrant to use the auditor of its financial statements to perform the GHG emissions attestation engagement, assuming the rules' requirements for assurance providers are met, and that fees associated with the attestation engagement would be considered audit-related fees for purposes of the requirements to disclose auditor fees and services (e.g., Item 14 of Form 10-K, Item 16C or Form 20-F or any similar requirements). The auditor of the financial statements will need to comply with applicable, existing pre-approval requirements.

The SEC also stated that it would be difficult for an expert that has assisted a registrant in calculating or preparing its GHG emissions data to meet the independence requirements because such an engagement would presumably place the attestation provider in the position of attesting to its own work and may create a mutual interest between the attestation provider and the registrant.

Attestation report requirements after required assurance compliance date (Item 1506(c))

The form and content of the attestation report will need to comply with the requirements set forth by the attestation standard(s) used by the GHG emissions attestation provider.

A GHG emissions attestation provider will need to include in its evaluation relevant contextual information, including the registrant's compliance with the presentation requirements (e.g., disaggregation of any constituent gas if individually material) under Item 1505(a) of Regulation S-K and the disclosure requirements regarding methodology, organizational boundary, and operational boundary under Item 1505(b).

The SEC said a report stating that the GHG emissions attestation provider is disclaiming an opinion on the GHG emissions would not constitute compliance with the requirement to obtain an attestation report over Scope 1 and/or Scope 2 emissions. The SEC did not indicate whether a qualified report would constitute compliance with the requirement.

Required disclosures of voluntary assurance (Item 1506(e))

A registrant that obtains voluntary assurance over its GHG emissions disclosure will need to provide information about the attestation engagement and provider. Registrants that may be required to provide these disclosures include (1) non-accelerated filers, SRCs and EGCs that voluntarily disclose their GHG emissions in an SEC filing and voluntarily obtain assurance over that disclosure and (2) accelerated and large accelerated filers that obtain voluntary assurance after the compliance date for the GHG emissions disclosure requirements but before the compliance date for required limited assurance (e.g., as soon as the fiscal year beginning 2026 for large accelerated filers).

Such registrants will need to provide the following information:

- Identification of the service provider
- Description of the assurance standard used
- Description of the level and scope of assurance services provided
- Brief description of the results of the assurance services
- Whether the service provider has any material business relationships with or has provided any material professional services to the registrant
- Whether the provider is subject to any oversight inspection program, and if so, which program(s), and whether the assurance services provided over GHG emissions are within the program's scope of authority

The disclosure requirement related to oversight inspection programs is not limited to those programs that apply to or require the inspection of the GHG emissions attestation engagement. A registrant will need to disclose any oversight inspection program the GHG emissions attestation provider is subject to for any type of engagement (e.g., the Public Company Accounting Oversight Board's inspection program over financial statement audits).

Notwithstanding the Item 1506(e) disclosure requirements listed above, registrants will not be required to file, furnish or otherwise submit voluntary assurance reports to the SEC. Amended Securities Act Rule 436 provides that any description of assurance regarding a registrant's GHG emissions disclosure in accordance with Item 1506(e) will not be considered part of a registration statement. Therefore, the assurance provider will not be required to submit a consent associated with the disclosure.

The Commission clarified that these disclosure requirements do not apply to other attestation engagements not intended to provide assurance (e.g., agreed-upon procedures engagements).

How we see it

We believe that all voluntary assurance over a registrant's reported Scope 1 and/or Scope 2 emissions that was obtained prior to such assurance being required, if applicable, is subject to this disclosure requirement, including those assurance engagements resulting in an assurance report that is not a publicly available general use report (i.e., the assurance report is restricted to certain specified parties) and those where GHG emissions are a subset of the information subject to assurance (e.g., assurance over a registrant's sustainability report or other regulatory report that includes the same Scope 1 and/or Scope 2 emissions).

Required assurance and voluntary assurance disclosures after the required assurance compliance date (Item 1506(d))

Starting with the first fiscal year in which Item 1506 requires accelerated and large accelerated filers to include an attestation report in the relevant filing, the registrant will need to provide the disclosures about attestation providers required by Item 1506(d).

Item 1506(d)(1) requires that accelerated and large accelerated filers disclose along with the GHG emissions disclosure to which the assurance report relates (after requesting relevant information from the attestation provider) whether the provider is subject to an oversight inspection program, and if so, which program and whether the GHG emissions attestation engagement is within the program's scope of authority.

As noted in the context of Item 1506(e) disclosures for voluntary assurance, the requirement to disclose whether the provider is subject to an oversight inspection program is not limited to oversight inspection programs that apply to, or require the inspection of, the GHG emissions attestation engagement.

In addition, if a provider that was previously engaged to provide attestation over required GHG emissions disclosure for the fiscal year period covered by the attestation report resigned, indicated that it declined to stand for reappointment after the completion of the attestation engagement or was dismissed, the registrant will need to state that fact under Item 1506(d)(2) and also state:

- Whether the former GHG emissions attestation provider resigned, declined to stand for reappointment or was dismissed, and the date thereof.
- Whether there were any disagreements with the former GHG emissions attestation provider during the performance of the engagement for the fiscal year period covered by the attestation report on any matter of measurement or disclosure of GHG emissions or attestation scope of procedures. If so, the registrant will need to:
- Describe each disagreement
- State whether it authorized the former provider to respond fully to the inquiries of the successor provider concerning the subject matter of each such disagreement

The term "disagreements" is intended to be interpreted broadly and to include any difference of opinion concerning any matter of measurement or disclosure of GHG emissions or attestation scope or procedures that, if not resolved to the satisfaction of the former GHG emissions attestation provider, would have caused it to make reference to the subject matter of the disagreement in connection with its report.

It is not necessary for there to have been an argument to have had a disagreement, only a difference of opinion. The term "disagreements" does not include initial differences of opinion based on incomplete facts or preliminary information that were later resolved to the former provider's satisfaction by, and providing the registrant and the provider do not continue to

have a difference of opinion upon, obtaining additional relevant facts or information. The registrants will need to disclose both disagreements that were and that were not resolved to the former provider's satisfaction.

Disagreements contemplated by the rules are those that occur at the decision-making level (i.e., between personnel of the registrant responsible for presentation of its GHG emissions disclosure and personnel of the GHG emissions attestation provider responsible for rendering its report). In determining whether any disagreement has occurred, an oral communication from the engagement partner or another person responsible for rendering the GHG emissions attestation provider's opinion or conclusion (or their designee) will generally suffice as a statement of a disagreement at the "decision-making level" within the GHG emissions attestation provider and will require disclosure.

The SEC said the required disclosures about certain former attestation providers are modeled on those required by Item 4.01, *Changes in Registrant's Certifying Accountant*, of Form 8-K and Item 304, *Changes in and disagreements with accountants on accounting and financial disclosure*, of Regulation S-K.

The Item 1506(b)-(c) attestation provider and report requirements and Item 1506(d) disclosures also will apply to voluntary assurance that an accelerated or large accelerated filer obtains in addition to any required assurance (e.g., voluntary assurance on voluntary Scope 3 GHG emissions disclosures) after the first required fiscal year in which they must comply with required assurance requirements. Such voluntary assurance will need to use the same attestation standard as the required assurance over Scope 1 and/or Scope 2 GHG emissions disclosures.

Acknowledgement letter and consent requirements

A registrant that obtains limited assurance from an attestation provider will be required to file as an exhibit a letter from the attestation provider acknowledging their awareness of the use of their attestation report in a registration statement, if applicable. The exhibit may be provided in the registration statement, an amendment to the registration statement or a periodic report on Forms 10-K, 10-Q or 20-F that is incorporated by reference into the registration statement.

The provider of limited assurance will not be required to provide a consent to be filed by the registrant in connection with the registration statement, and the acknowledgement letter will not create liability for the provider under Sections 7 or 11 of the Securities Act. This exception does not apply to a provider of reasonable assurance that will therefore have to submit a consent associated with its report included in a registration statement.

The SEC said that this bifurcated approach to reasonable vs. limited assurance engagements is consistent with the current treatment of audited financial statements and unaudited (reviewed) interim financial statements. The requirements to provide an acknowledgement letter or consent, as applicable, also apply when a registrant voluntarily files or furnishes an assurance report on GHG emissions to the SEC when assurance is not required.

XBRL requirements

All registrants will be required to electronically tag the financial statement disclosures in Inline eXtensible Business Reporting Language (Inline XBRL) pursuant to existing SEC regulations, starting with the first SEC filing in which the financial statement disclosures are provided. In addition, all registrants will be required under Item 1508 of Regulation S-K to electronically tag climate-related disclosures pursuant to the compliance dates noted below. The SEC said it will develop a draft taxonomy for the rules, which will be made available for public comment, and that a final taxonomy will be incorporated into an updated version of the Electronic Data Gathering, Analysis and Retrieval (EDGAR) system before the electronic tagging compliance dates take effect.

Transition

Companies will be required to comply with the disclosure requirements in the fiscal years beginning (FYBs) in the calendar years shown below:

Registrant type	Compliance dates				
	All disclosures, other than as noted in this table and endnote[19]	Scope 1 and Scope 2 GHG emissions[20]	Limited assurance	Reasonable assurance	Electronic tagging
Large accelerated filers	FYB 2025	FYB 2026	FYB 2029	FYB 2033	FYB 2026
Accelerated filers (other than SRCs and EGCs)	FYB 2026	FYB 2028	FYB 2031	N/A	FYB 2026
SRCs, EGCs and non-accelerated filers	FYB 2027[20]	N/A	N/A	N/A	FYB 2027

Implementation considerations

The effort and resources required to comply with the rules will depend on a registrant's facts and circumstances. Registrants that voluntarily report climate-related information outside of their SEC filings today will need to assess how the reporting frameworks they currently apply compare with the rules' requirements, the suitability of existing processes and systems and their readiness for the rules' attestation requirements, among other things.

Registrants that do not have existing climate-related reporting will need to consider these factors to a greater extent as new data collection and reporting processes and controls are designed and implemented. Companies may also need to implement new systems, tools and enablers to collect climate-related data.

How we see it

Registrants may be able to leverage their efforts to comply with other reporting regulations (e.g., the European Union's Corporate Sustainability Reporting Directive, California's climate disclosure laws) and standards (e.g., the GHG Protocol) to prepare for compliance with the SEC rules. However, because significant differences remain between other regulations and frameworks and the SEC rules, compliance with the former does not ensure compliance with the latter. Therefore, additional efforts will likely be required to comply with the SEC rules, particularly with respect to the disclosures required in the audited financial statements. Refer to our publication, ***Technical Line — How the climate-related disclosures under the SEC rules, the ESRS and the ISSB standards compare***, for additional information about the differences between the SEC rules and other regulations and frameworks.

Cross-functional approach

Companies may leverage the skillsets of finance personnel related to data collection and aggregation, controls and reporting expertise to educate and collaborate with any existing or new personnel dedicated to climate-related reporting. However, compliance with the disclosure requirements will entail a cross-functional approach that will involve members of the external reporting, sustainability, legal, business operations, investor relations and information technology functions, among others. Companies should consider integrating the data collection, aggregation and reporting activities related to their climate-related disclosures into their formal external reporting processes. Integration activities may include assigning formal data and process owners (including those from other business functions), updating the company's reporting calendar to include deadlines to provide data and complete documentation and revising the scope of reporting controls to include the review of climate-related information.

Internal controls over financial reporting

Internal controls over the preparation and reporting of the climate-related financial statement disclosures will be subject to attestation based on the requirements of Section 404 the Sarbanes-Oxley Act. Companies should consider the 2013 Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) that companies use to design, implement and monitor their internal control over financial reporting in the context of the new disclosures that will be required in the audited financial statements, particularly the 1% disclosure threshold.

Disclosure controls and procedures

The disclosures required by Subpart 1500 of Regulation S-K will be in the scope of a registrant's disclosure controls and procedures (DCPs), which the chief executive officer and chief financial officer certify annually based on the requirements of Section 302 and Section 906 of the Sarbanes-Oxley Act.

In its adopting release on final rules implementing Section 302, the SEC staff recommended the establishment of a committee responsible for considering the materiality of information and disclosure obligations on a timely basis, which has taken the form of a disclosure committee in many organizations. The SEC staff noted that members of a disclosure committee could include a company's principal accounting officer, general counsel, the principal risk management officer, the chief investor relations officer, individuals associated with business units, and others with equivalent responsibilities.

Outside of the SEC's stated expectations and suggested composition, companies have flexibility to design their disclosure committee structure and practices to suit their needs. A company may consider assessing the skills that members of its existing disclosure committee can contribute to the oversight of climate-related disclosures and planning for any identified gaps.

Companies may formalize the functions of the disclosure committee in a charter documenting the committee's role, responsibilities, composition, governance and operations, including information related to climate-related disclosures. In addition to, or in lieu of, a charter, a disclosure committee may choose to articulate written policies and procedures, which may address the process and calendar for an evaluation of disclosure controls and procedures to support the chief executive officer and chief financial officer certifications; the content of and process for execution of the chief executive officer and chief financial officer certifications; and procedures for the disclosure committee to follow in addressing various disclosures.

Companies may also consider the **guidance** issued by COSO to help achieve effective disclosure controls and procedures over sustainability reporting and build trust in their disclosures outside the audited financial statements.

GHG emissions assurance

Although assurance requirements will not be phased in until the third fiscal year after the compliance date for emissions disclosure, many registrants already voluntarily obtain assurance over their GHG emissions and thus may be required to make disclosures about voluntary assurance obtained in the first fiscal year of GHG emissions reporting (i.e., FYB 2026 for large accelerated filers and FYB 2028 for accelerated filers).

The requirements in Items 1506(a)(2) and 1506(b) with respect to the assurance standards, provider qualifications and independence do not apply to providers of voluntary assurance obtained before the required assurance compliance date. However, registrants that expect to be subject to voluntary assurance disclosure requirements may consider assessing whether their existing assurance providers and the standards used in their assurance reports meet those requirements, well in advance of making the disclosures.

Accelerated and large accelerated filers that do not obtain assurance over their voluntarily reported emissions may consider obtaining it starting with the first year of required reporting in SEC filings, if applicable, because of the enhanced accuracy and reliability offered by assurance.

Endnotes:

[1] In addition to initial public offerings, the safe harbors provided by Item 1507 of Regulation S-K apply to an offering of securities by a blank check company, the business or operations of an issuer of penny stock, a rollup transaction and an offering by, or relating to the operations of, a partnership, limited liability company or a direct participation investment program.

[2] The SEC said for example, average seasonal temperatures may be a relevant factor in determining whether high temperatures constitute a severe natural condition.

[3] The SEC said while some registrants are not explicitly required to present income or loss before income tax expense or benefit in accordance with Rule 5-03 of Regulation S-X in their financial statements, US GAAP includes presentation and disclosure requirements that result in information sufficient to calculate income or loss before income tax expense or benefit, and registrants often present this amount. In addition, while international financial reporting standards do not explicitly require income or loss before income tax expense or benefit, they require disclosure of profit or loss and income tax expense.

[4] The Financial Accounting Standards Board added a project in May 2022 to its technical agenda on the accounting for carbon offsets and RECs that are legally enforceable and tradeable.

[5] There is diversity in practice in accounting for carbon offsets and RECs. The illustrations provided in this publication do not intend to suggest the preferability of a particular accounting policy.

[6] *Basic Inc. v. Levinson*, 485 US 224, 231, 232, and 240 (1988).

[7] *TSC Industries, Inc. v. Northway, Inc.*, 426 US 438, 449 (1977).

[8] The SEC said that the term "outlook" as used in the final rules means "the prospect for the future" and that the use of the term is not intended to suggest that a registrant will have to disclose its earnings guidance or forecasts in response to Item 1502(b).

[9] This disclosure will be required in the compliance timeline noted in endnote 19.

[10] The SEC said if a registrant has adopted a transition plan to manage a material transition risk, it is likely that management will oversee actions taken under the plan and, therefore, any material expenditures or material impacts on financial estimates and assumptions that are disclosed will have been assessed by management as being the direct result of such actions. As such, this disclosure requirement is not qualified with a reference to whether "in management's assessment" the effects directly result from the transition plan.

[11] This disclosure will be required in the compliance timeline noted in endnote 19.

[12] This disclosure will be required in the compliance timeline noted in endnote 19.

[13] A registrant is not required to include GHG emissions from a manure management system when disclosing its overall Scope 1 and/or Scope 2 emissions if implementation of the disclosure is subject to restrictions on appropriated funds or otherwise prohibited under federal law. This exclusion from the GHG emissions disclosure requirement was made in response to the 2023 Consolidated Appropriations Act, which provides that none of the funds made available under that Act or any other Act (including to the Commission) may be used to implement "any provision in a rule, if that provision requires mandatory reporting of GHG emissions from manure management systems." Accordingly, an agricultural producer or other registrant that operates a manure management system will not be required to include GHG emissions from that system when disclosing its overall Scope 1 and/or Scope 2 emissions for so long as implementation of such a provision is subject to restrictions on appropriated funds or otherwise prohibited by Federal law.

[14] The term "electricity" is used throughout the GHG Protocol and in this publication to represent all acquired or purchased energy (i.e., electricity, steam, heat and cooling) from parties outside the organizational boundary.

[15] The SEC rules do not prescribe organizational boundaries and/or operational boundaries that registrants must apply in the calculation of Scope 1 and Scope 2 GHG emissions. The SEC said a registrant will have flexibility to use, for example, one of the methods for determining control under the GHG Protocol, including the operational control approach, if it discloses the method used, and provides investors with the disclosures described in this publication.

[16] The SEC said the emissions factors themselves need not be quantitatively disclosed.

[17] The term "affiliate" has the same meaning as otherwise provided in Regulation S-X Rule 2-01 regarding the qualifications of accountants, except that references to "audit" in those rules are deemed to be references to the attestation services provided pursuant to Item 1506 of Regulation S-K.

[18] The term "attestation and professional engagement period" means both (1) the period covered by the attestation report and (2) the period of the engagement to attest to the registrant's GHG emissions or to prepare a report filed with the Commission. The professional engagement period begins when the GHG attestation service provider either signs an initial engagement letter (or other agreement to attest to a registrant's GHG emissions) or begins attest procedures, whichever is earlier.

[19] Compliance with quantitative and qualitative disclosure requirements outside the audited financial statements for material expenditures and material impacts on financial estimates and assumptions that directly result from (1) activities to mitigate or adapt to the climate-related risks, (2) targets or goals and (3) transition plans will be required one year later (i.e., FYB 2026 for large accelerated filers, FYB 2027 for accelerated filers other than SRCs and EGCs, and FYB 2028 for SRCs, EGCs and non-accelerated filers).

[20] Registrants will need to comply with the voluntary assurance disclosure requirements of Item 1506(e), if applicable, starting with the first year of required reporting of material Scope 1 and/or Scope 2 GHG emissions for large accelerated filers and accelerated filers (until assurance becomes required) and with the first year of compliance with all climate-related disclosure requirements (i.e., FYB 2027) for non-accelerated filers, SRCs and EGCs.

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