“Parsing the SEC's New 'Climate Disclosure' Proposal”

Tuesday, April 12, 2022

Course Materials

"Parsing the SEC's New 'Climate Disclosure' Proposal"

Tuesday, April 12, 2022

1:00 - 2:00 pm, eastern [archive and transcript to follow]

Save This Webcast To Your Calendar: Outlook | iCalendar | Google Calendar

The SEC’s long-anticipated proposal to enhance climate change disclosure is here. If adopted, these climate change disclosures will require significant changes to your upcoming SEC filings and disclosure controls & procedures, with big implications for companies and their boards. Join these practitioners for a deep dive into the new proposal, as well as practical advice on proactively tackling climate disclosures:

- **Dave Lynn**, Partner, Morrison & Foerster and Senior Editor, TheCorporateCounsel.net
- **Lawrence Heim**, Editor, PracticalESG.com
- **Sonia Barros**, Partner, Sidley Austin
- **Yafit Cohn**, Vice President, Chief Sustainability Officer and Group General Counsel, The Travelers Companies, Inc.
- **Mike Dilinger**, Executive Director - Regulatory Law & Affairs, Permitting, Sustainability & ESG, NuStar Energy

Among other topics, this program will cover:

- Overview of Climate Disclosure Proposal
- Required Quantitative Information
- Required Qualitative Information
- Primary Areas for Comment
- Compliance Timeframe Considerations
- Impact on Disclosure Controls & Procedures
- Auditors and Climate-Related Financial Disclosures
- Interpretive Issues and Surprises
- Predictions for Adopted Rule Proposal
- Tips on Updating Climate Disclosures Proactively

“Parsing the SEC's New 'Climate Disclosure' Proposal”

Course Outline / Notes

1. Overview of SEC’s climate disclosure proposal

2. Required quantitative information

3. Required qualitative information

4. Primary areas for comment

5. Compliance timeframe considerations

6. Impact on disclosure controls & procedures

7. Auditors and climate-related financial disclosures

8. Interpretive issues and surprises

9. Predictions for adopted rule proposal

10. Tips on updating climate disclosures proactively

“Parsing the SEC’s New ‘Climate Disclosure’ Proposal”

Table of Contents – Course Materials

FACT SHEET

Enhancement and Standardization of Climate-Related Disclosures

The Securities and Exchange Commission proposed rule amendments that would require a domestic or foreign registrant to include certain climate-related information in its registration statements and periodic reports, such as on Form 10-K, including:

- Climate-related risks and their actual or likely material impacts on the registrant's business, strategy, and outlook;
- The registrant's governance of climate-related risks and relevant risk management processes;
- The registrant's greenhouse gas ("GHG") emissions, which, for accelerated and large accelerated filers and with respect to certain emissions, would be subject to assurance;
- Certain climate-related financial statement metrics and related disclosures in a note to its audited financial statements; and
- Information about climate-related targets and goals, and transition plan, if any.

The proposed disclosures are similar to those that many companies already provide based on broadly accepted disclosure frameworks, such as the Task Force on Climate-Related Financial Disclosures and the Greenhouse Gas Protocol.

Background

The Commission began efforts to provide investors with material information about environmental risks facing public companies in the 1970s and most recently provided related guidance in 2010. Many investors are concerned about the potential impacts of climate-related risks to individual businesses. As a result, investors are seeking more information about the effects of climate-related risks on a company's business to inform their investment decision-making. Investors also have expressed a need for more consistent, comparable, and reliable information about how a registrant has addressed climate-related risks when conducting its operations and developing its business strategy and financial plan. The proposed rules are intended to enhance and standardize climate-related disclosures to address these investor needs. Many issuers currently seek to provide this information to meet investor demand, but current disclosure practices are fragmented and inconsistent. The proposed rules would help issuers more efficiently and effectively disclose these risks, which would benefit both investors and issuers.

Content of the Proposed Disclosures

The proposed rules would require a registrant to disclose information about:

- The oversight and governance of climate-related risks by the registrant's board and management;

- How any climate-related risks identified by the registrant have had or are likely to have a material impact on its business and consolidated financial statements, which may manifest over the short-, medium-, or long-term;
- How any identified climate-related risks have affected or are likely to affect the registrant's strategy, business model, and outlook;
- The registrant's processes for identifying, assessing, and managing climate-related risks and whether any such processes are integrated into the registrant's overall risk management system or processes;
- If the registrant has adopted a transition plan as part of its climate-related risk management strategy, a description of the plan, including the relevant metrics and targets used to identify and manage any physical and transition risks;
- If the registrant uses scenario analysis to assess the resilience of its business strategy to climate-related risks, a description of the scenarios used, as well as the parameters, assumptions, analytical choices, and projected principal financial impacts;
- If a registrant uses an internal carbon price, information about the price and how it is set;
- The impact of climate-related events (severe weather events and other natural conditions) and transition activities on the line items of a registrant's consolidated financial statements, as well as the financial estimates and assumptions used in the financial statements;
- The registrant's direct GHG emissions (Scope 1) and indirect GHG emissions from purchased electricity and other forms of energy (Scope 2), separately disclosed, expressed both by disaggregated constituent greenhouse gases and in the aggregate, and in absolute terms, not including offsets, and in terms of intensity (per unit of economic value or production);
- Indirect emissions from upstream and downstream activities in a registrant's value chain (Scope 3), if material, or if the registrant has set a GHG emissions target or goal that includes Scope 3 emissions, in absolute terms, not including offsets, and in terms of intensity; and
- If the registrant has publicly set climate-related targets or goals, information about:
    - The scope of activities and emissions included in the target, the defined time horizon by which the target is intended to be achieved, and any interim targets;
    - How the registrant intends to meet its climate-related targets or goals;
    - Relevant data to indicate whether the registrant is making progress toward meeting the target or goal and how such progress has been achieved, with updates each fiscal year; and
    - If carbon offsets or renewable energy certificates ("RECs") have been used as part of the registrant's plan to achieve climate-related targets or goals, certain information about the carbon offsets or RECs, including the amount of carbon reduction represented by the offsets or the amount of generated renewable energy represented by the RECs.

When responding to any of the proposed rules' provisions concerning governance, strategy, and risk management, a registrant may also disclose information concerning any identified climate-related opportunities.

Presentation and Attestation of the Proposed Disclosures

The proposed rules would require a registrant (including a foreign private issuer) to:

- Provide the climate-related disclosure in its registration statements and Exchange Act annual reports, for example on Form 10-K;

- Provide the Regulation S-K mandated climate-related disclosure in a separate, appropriately captioned section of its registration statement or annual report;
- Provide the Regulation S-X mandated climate-related financial statement metrics and related disclosure in a note to its consolidated financial statements;
- Electronically tag both narrative and quantitative climate-related disclosures in Inline XBRL; and
- If an accelerated or large accelerated filer, obtain an attestation report from an independent attestation service provider covering, at a minimum, Scopes 1 and 2 emissions disclosure.

Phase-In Periods and Accommodations for the Proposed Disclosures

The proposed rules would include:

- A phase-in period for all registrants, with the compliance date dependent on the registrant's filer status, and an additional phase-in period for Scope 3 emissions disclosure (see tables);
- A phase-in period for the assurance requirement and the level of assurance required for accelerated filers and large accelerated filers (see assurance table);
- A safe harbor for liability for Scope 3 emissions disclosure;
- An exemption from the Scope 3 emissions disclosure requirement for smaller reporting companies; and
- Forward-looking statement safe harbors pursuant to the Private Securities Litigation Reform Act, to the extent that proposed disclosures would include forward-looking statements.

For explanatory purposes, the following tables assume that the proposed rules will be adopted with an effective date in December 2022 and that the filer has a December 31st fiscal year-end:

Registrant Type	Disclosure Compliance Date	
	All proposed disclosures, including GHG emissions metrics: Scope 1, Scope 2, and associated intensity metric, but excluding Scope 3	GHG emissions metrics: Scope 3 and associated intensity metric
Large Accelerated Filer	Fiscal year 2023 (filed in 2024)	Fiscal year 2024 (filed in 2025)
Accelerated Filer and Non-Accelerated Filer	Fiscal year 2024 (filed in 2025)	Fiscal year 2025 (filed in 2026)
SRC	Fiscal year 2025 (filed in 2026)	Exempted

Filer Type	Scopes 1 and 2 GHG Disclosure Compliance Date	Limited Assurance	Reasonable Assurance
Large Accelerated Filer	Fiscal year 2023 (filed in 2024)	Fiscal year 2024 (filed in 2025)	Fiscal year 2026 (filed in 2027)
Accelerated Filer	Fiscal year 2024 (filed in 2025)	Fiscal year 2025 (filed in 2026)	Fiscal year 2027 (filed in 2028)

Additional Information:

The proposing release will be published on SEC.gov and in the Federal Register. The comment period will remain open for 30 days after publication in the Federal Register, or 60 days after the date of issuance and publication on sec.gov, whichever period is longer.

PracticalESG.com's Perspectives on the Climate Disclosure Proposal

By Lawrence Heim, Editor

Summary/Highlights

The proposal weighs in at 510 pages and is comprehensive. Based on both TCFD and Greenhouse Gas Protocol regimes, it stays focused on the SEC's existing definition/interpretation of financial materiality and doesn't attempt to wade into double or dynamic materiality of other ESG disclosure frameworks. The SEC believes that proposing rules based on the TCFD framework and GHG protocol may facilitate achieving a balance between eliciting better disclosure and limiting compliance costs.

In general, the proposal would require registrants to:

- Provide the climate-related disclosure in registration statements and Exchange Act annual reports;
- Provide the Regulation S-K mandated climate-related disclosure in a separate, appropriately captioned section of a company's registration statement or annual report, or alternatively to incorporate that information in the separate, appropriately captioned section by reference from another section, such as Risk Factors, Description of Business, or Management's Discussion and Analysis ("MD&A");
- Provide the Regulation S-X mandated climate-related financial statement metrics and related disclosure in a note to the registrant's audited financial statements and in conformance with US accounting standards (GAAP);
- Obtain independent third party assurance for the GHG emissions disclosure and climate-related financial disclosure;
- Electronically tag both narrative and quantitative climate-related disclosures in Inline XBRL; and
- File rather than furnish the climate-related disclosure.

When it comes to information that the proposed rules would require, registrants would need to disclose:

- Scopes 1 and 2 GHG emissions metrics, separately, and expressed:
    - Both by disaggregated constituent greenhouse gases and in the aggregate, and
    - In absolute and intensity terms;
- Scope 3 GHG emissions and intensity, if material, or if the registrant has set a GHG emissions reduction target or goal that includes its Scope 3 emissions;
- The oversight and governance of climate-related risks by the registrant's board and management;
- How any climate-related risks identified by the registrant have had or are likely to have a material impact on its business and consolidated financial statements, which may manifest over the short-, medium-, or long-term;
- How any identified climate-related risks have affected or are likely to affect the registrant's strategy, business model, and outlook;
- The registrant's processes for identifying, assessing, and managing climate-related risks and whether any such processes are integrated into the registrant's overall risk management system or processes;
- The impact of climate-related events (severe weather events and other natural conditions as well as physical risks identified by the registrant) and transition activities (including transition risks identified by the registrant) on the line items of a registrant's consolidated financial statements and related expenditures, and disclosure of financial estimates and assumptions impacted by such climate-related events and transition activities; and
- The registrant's climate-related targets or goals, and transition plan, if any.

In terms of timing/phase-in, the proposal contemplates a phase-in period that would first require compliance from the largest filers in 2024 assuming the final rule is adopted and effective by December 2022.

There is a lot of ground covered in the proposal, and this is only a high-level overview. I'll be posting more blogs this week examining some of the details and offering commentary – including on the compliance cost estimates.

A Fact Sheet is available to accompany the full text of the proposal. The deadline for submitting comments is the later of either (a) 30 days after date of publication in the Federal Register or (b) May 20, 2022. Comments that have already been filed (as memoranda of meetings) are available here.

What Happens Now

Liz blogged yesterday on TheCorporateCounsel.net about the SEC's rulemaking process. Like any other regulatory proposal, the climate disclosure proposal is now open for public comment. We expect there to be lots and lots of comments. The really interesting part is what happens after the public comment period closes. The SEC Staff will, of course, have to review and consider all of them and will formulate responses for the Commissioners to consider as part of the adopting release. There may be more face-to-face meetings between interested parties and Staff. The comment period may extend beyond the allotted 30 days. The Commissioners would then decide whether to consider and adopt final rules – and by that time, we may have new individuals on the roster, due to the vacancy created by former Commissioner Roisman's departure and the planned departure of Commissioner Lee after her term expires in June and a successor is confirmed.

Some of the big regulatory process questions are:

- How long will the Staff need to develop the final rule and the accompanying adopting release?
- When will the Commissioners consider the adopting release?
- If the climate disclosure rules are adopted, will the contemplated phase-in period also be adopted as-is?
- Will a lawsuit be filed challenging the substantive provisions and/or delaying the effective date?
- How long will any legal challenges take before they are resolved?
- If and when the final rule is adopted, will all or part of it be remanded back to the SEC for further rulemaking as part of any legal challenge, and if so, how long will that take?

- Will parts of the final rules remain in effect during any legal challenge?

Risk Disclosure & Governance

Proposed Risk Disclosures

The proposed rules would require a registrant to describe any processes the registrant has for identifying, assessing, and managing climate-related risks, and whether and how climate-related risks are integrated into the registrant's overall risk management system or processes. These proposed disclosures would help investors assess whether the registrant has centralized and adequate processes for managing climate-related risks and whether they are aligned with investor preferences.

A registrant would have to disclose any climate-related risks reasonably likely to have a material impact on the registrant's business or consolidated financial statements. A registrant may also disclose, as applicable, the actual and potential impacts of any climate-related opportunities it is pursuing.

- **Physical risk:** "Acute" and "chronic" risks pose harm to businesses and their assets arising from acute climate-related disasters such as wildfires, hurricanes, tornadoes, floods, and heatwaves. Companies and their investors may also face chronic risks and more gradual impacts from long-term temperature increases, drought, and sea level rise.

- **Transition Risk**: Risks may arise from potential adoption of climate-related regulatory policies including those that may be necessary to achieve the national climate goals that may be or have been adopted in the United States and other countries; climate-related litigation; changing consumer, investor, and employee behavior and choices; changing demands of business partners; long-term shifts in market prices; technological challenges and opportunities, and other transitional impacts. Transition risks would include, but are not limited to:

    - increased costs attributable to climate-related changes in law or policy,

    - reduced market demand for carbon-intensive products leading to decreased sales, 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, or
- reputational impacts (including those stemming from a registrant's customers or business counterparties) that might trigger changes to market behavior, changes in consumer preferences or behavior, or changes in a registrant's behavior.

The proposed rules would require a registrant to specify whether an identified climate-related risk is a physical or transition risk so that investors can better understand the nature of the risk and the registrant's actions or plan to mitigate or adapt to the risk. A registrant would have to describe the nature of transition risks, including whether they relate to regulatory, technological, market (including changing consumer, business counterparty, and investor preferences), liability, reputational, or other transition-related factors, and how those factors impact the registrant.

If a registrant has adopted a transition plan as part of its climate-related risk management strategy, the proposed rules would require the registrant to discuss, as applicable, how it plans to mitigate or adapt to any physical risks identified in the filing, including but not limited to those concerning exposure to sea level rise, extreme weather events, wildfires, drought, and severe heat.

Our view: The gap between a company's internal risk management function and the sustainability/ESG/climate practitioners has long been noted as a meaningful obstacle in corporate programs. This proposal would likely force companies to begin integrating the disparate activities, risk valuation approaches and risk management solutions. In addition, the proposal would require that companies specifically assess operational business risks and costs association with moving to a transition economy. In a time when many place more emphasis on what I have called "sprinkling ESG fairy dust on shares" rather than evaluating practical business impacts/opportunities, I welcome this component of the proposal.

Proposed Governance Disclosures

The proposed rules would require a registrant to disclose, as applicable, certain information concerning the board's oversight of climate-related risks, and management's role in assessing and managing those risks. A comprehensive understanding of a board's oversight, and management's governance, of climate-related risks is necessary to aid investors in evaluating the extent to which a registrant is adequately addressing the material climate-related risks it faces, and whether those risks could reasonably affect the value of their investment.

A registrant would have to disclose a number of board governance items, as applicable:

- Identify any board members or board committees responsible for the oversight of climate-related risks. The responsible board committee might be an existing committee, such as the audit committee or risk committee, or a separate committee established to focus on climate-related risks;

- Whether any member of a registrant's board of directors has expertise in climate-related risks, with disclosure required in sufficient detail to fully describe the nature of the expertise;

- A description of the processes and frequency by which the board or board committee discusses climate-related risks. The registrant would have to disclose how the board is informed about climate-related risks, and how frequently the board considers such risks.

- Whether and how the board or board committee considers climate-related risks as part of its business strategy, risk management, and financial oversight. The proposed disclosure requirement could help investors assess the degree to which a board's consideration of climate-related risks has been integrated into a registrant's strategic business and financial planning and its overall level of preparation to maintain its shareholder value;

- Whether and how the board sets climate-related targets or goals and how it oversees progress against those targets or goals, including the establishment of any interim targets or goals; and

- A number of items, as applicable, about management's role in assessing and managing any climate-related risks in a manner similar to that for Boards.

Our view: Strengthening climate-specific governance structures is an important element of any compliance activity or corporate initiative. Transparency here should enhance the quality and efficacy of governance. It also means that, if the rule is finalized, methods for ensuring Director education/awareness of climate issues will no longer be discretionary.

Materiality, Scenarios, Offsets/RECs & Internal Carbon Price

How the Proposal Addresses "Materiality"

The preamble clarifies that the proposal is based on financial materiality as defined/interpreted by the SEC and the courts. Therefore, the proposal focuses on the financial impact of climate matters to the company and does not address company impact on the environment or society, nor a societal cost of carbon. The preamble makes no mention of double materiality or dynamic materiality that are elements of some international disclosure regimes.

Registrants would have to disclose

- how they assess materiality,
- whether they consider likely future regulatory actions,
- how they prioritize, mitigate, or adapt to climate-related risks,
- overall how climate-related factors are integrated into the registrants' risk management systems or processes,
- detailed descriptions on any transition plans, as applicable, including relevant targets and metrics, how physical and transition risks are managed, and actions taken and progress made toward the plan's targets or goals.

All of these matters would be shaped by a registrant's assessment of the financial materiality of climate risks.

Our view: This responds to input from many investors who have voiced to their holdings and to the SEC that climate information is decision-useful to them. It also clarifies SEC's jurisdiction, likely as a strategy of head off threats of lawsuits based on claims that SEC is attempting to regulate beyond its authority and mission of investor protection. Finally, it supports the position of the regulation being consistent with US accounting and disclosure regimes under FASB.

Some registrants may be able to use existing materiality assessments, however we caution that "social impact" based materiality determinations may not be consistent with the more focused financial materiality basis of the SEC's proposal.

Proposed Scenario Disclosure

This is a big one and something that investors have been clamoring for. A registrant also would be required to describe any analytical tools, such as scenario analysis, that the registrant uses to assess the impact of climate-related risks on its business and consolidated financial statements, or to support the resilience of its strategy and business model in light of foreseeable climate-related risks.

Disclosure of the parameters, assumptions, and analytical choices involved in the described scenarios would help investors better understand the various considered scenarios and help them evaluate whether the registrant has a plan to manage the climate-related risks posed by each scenario. Because a registrant's scenario analysis disclosure would necessarily include predictions and other forward-looking statements based on assumptions concerning future events, the SEC believes that the Private Securities Litigation Reform Act (PSLRA) forward-looking safe harbors would apply to much of the disclosure concerning scenario analysis.

Our view: Understanding various assumptions and scenarios incorporated into company evaluations is critical to transparency. With safe harbor protections afforded scenario disclosure under the proposal, companies should feel less constrained about communicating those.

Proposed Offsets and RECs Disclosures

The proposed rules would require registrants to disclose the role that carbon offsets or renewable energy credits or certificates ("RECs") play in the registrant's climate-related business strategy. Understanding the role that carbon offsets or RECs play in a registrant's climate-related business strategy can help investors gain useful information about the registrant's strategy, including the potential risks and financial impacts. A registrant that relies on carbon offsets or RECs to meet its goals might incur lower expenses in the short term but could expect to continue to incur the expense of purchasing offsets or RECs over the long term. The value of an offset may decrease substantially and suddenly if, for example, the offset represents protected forest land that burns in a wildfire and no longer represents a reduction in GHG emissions. There is also the risk that the availability or value of offsets or RECs might be curtailed by regulation or changes in the market.

Our view: Increased visibility into the use of offsets may be a disincentive for companies to use (or overuse) them. This disclosure may also help weed out fraud and low quality offsets to an extent as the risk to such providers would be far greater than it is today.

Proposed Internal Carbon Price Disclosure

If a registrant uses an internal carbon price, the proposed rules would require disclosure of information about how the price is estimated, boundaries for measurement, rationale for selecting the price used, and how it uses its disclosed internal carbon price to evaluate and manage climate-related risks.

Our view: A requirement to report on internal carbon prices and the associated assumptions used may become a disincentive for companies to use them. It could also unintentionally shed light on certain competitive information that some companies prefer remain confidential.

Financial Statement Metrics & Compliance Costs

Proposed Financial Statement Metrics

Although the SEC agreed that registrants are currently required to disclose material financial impacts on the financial statements, the proposed climate-related financial statement metrics should provide additional transparency into the impact of climate-related events on information reported in the financial statements that would be relevant to investors when making investment or voting decisions.

The proposed rules would require disclosure falling under the following three categories of information:

- Financial Impact Metrics;
- Expenditure Metrics; and
- Financial Estimates and Assumptions.

For each type of financial statement metric, the registrant would have to disclose contextual information to enable a reader to understand how it derived the metric, including a description of significant inputs and assumptions used, and if applicable, policy decisions made by the registrant to calculate the specified metrics.

The new item under Regulation S-K would require a registrant to provide a narrative discussion of whether and how any of its identified climate-related risks have affected or are reasonably likely to affect the registrant's consolidated financial statements. The proposed rules would also require a registrant to disclose the financial impact of any identified transition risks and any efforts to reduce GHG emissions or otherwise mitigate exposure to transition risks (collectively, "transition activities") on any relevant line items in the registrant's consolidated financial statements during the fiscal years presented.

The financial impact metric disclosure requirements in proposed Rules 14-02(c), (d), and (i) would require a registrant to disclose the financial impacts of severe weather events, other natural conditions, transition activities, and identified climate-related risks on the consolidated financial statements included in the relevant filing unless the aggregated impact of the severe weather events, other natural conditions, transition activities, and identified climate-related risks is less than one percent of the total line item for the relevant fiscal year.

Our view: These elements of the proposal align with the SEC's financial materiality emphasis, including the 1% value which is already used by the SEC as a reporting threshold for certain excise taxes, open option contracts and transactions by a smaller reporting company (SRC). The proposal would bring significant clarity to a registrant's climate programs and plans through the detailed financial breakdowns. However, some will criticize this as not considering social costs or other externalities that – in the eyes of numerous economists and academics – far outweigh direct costs currently accounted for.

SEC's Estimated Compliance Costs

The preamble includes an extensive discussion of benefits of the disclosure item by item, including a thorough discussion of voluntary disclosures and why those are inadequate in the SEC's opinion. The primary direct costs that the proposed rules would impose on registrants are compliance costs. To the extent that they are not already gathering the information required to be disclosed under the proposed rules, registrants may need to re-allocate in-house personnel, hire additional staff, and/or secure third-party consultancy services. Registrants may also need to conduct climate-related risk assessments, collect information or data, measure emissions (or, with respect to Scope 3 emissions, gather data from relevant upstream and downstream entities), integrate new software or reporting systems, seek legal counsel, and obtain assurance on applicable disclosures (i.e., Scopes 1 and 2 emissions). In addition, even if a registrant already gathers and reports the required information, some or all of this information may be in locations outside of SEC filings (such as sustainability reports posted on company websites or emissions data reported to the EPA) or in a form inconsistent with the SEC's proposed requirements.

Total costs estimated for non-smaller reporting company (SRC) registrants:

- First year compliance cost – $640,000 ($180,000 for internal costs and $460,000 for outside professional costs)
- Subsequent annual costs – $530,000 ($150,000 for internal costs and $380,000 for outside professional costs)

Total costs estimated for SRC registrants:

- First year compliance cost – $490,000 ($140,000 for internal costs and $350,000 for outside professional costs)
- Subsequent annual costs – $420,000 ($120,000 for internal costs and $300,000 for outside professional costs)

A company qualifies as an SRC if it has

- public float of less than $250 million or
- less than $100 million in annual revenues and

  - no public float, or
  - public float of less than $700 million

These costs are expected to decrease over time for various reasons, including increased institutional knowledge, operational efficiency, and competition within the market for relevant services.

Much of the cost depends on whether a registrant is already collecting and disclosing climate data. The SEC believes that third-party cost estimates of preparing TCFD reports or completing the CDP questionnaire offer a rough approximation of potential compliance costs due to their similarity with the proposed rules. Some companies indicated that anticipated incremental costs of a mandatory climate disclosure rule are expected to be minimal. One company reported the cost of producing their first TCFD report was less than $10,000 and another company reported the costs of preparing its first CDP questionnaire was no more than $50,000. A multinational financial institution reports the cost of producing its first TCFD report, SASB report, and CDP questionnaire were each less than $100,000 given that such information overlaps with what the company already discloses under the EU's Prospectus Regulation (Regulation (EU) 2017/1129).

Headcount requirements ranged from two to 20 full-time equivalent employees. Fees for external advisory services ranged from $50,000 to $1.35 million annually, which generally included legal counsel and consulting services related to environmental engineering, emissions, climate science, modeling, or sustainability reporting.

Assurance cost estimates (included in the above figures) were:

- For limited assurance, SEC estimated that accelerated filers will incur costs ranging from $30,000 to $60,000 (with a median of $45,000), while large accelerated filers will incur costs ranging from $75,000 to $145,000 (with a median of $110,000).
- For reasonable assurance, SEC estimated that accelerated filers will incur costs ranging from $50,000 to $100,000 (with a median of $75,000), while large accelerated filers will incur costs ranging from $115,000 to $235,000 (with a median of $175,000).

The UK's Department for Business, Energy & Industrial Strategy, as part of its Green Finance Strategy, released cost estimates that a company with no pre-existing climate-related disclosure practices or expertise could incur costs of $201,800 in the first year and $177,900 in subsequent years, plus additional costs due to subsidiaries, as applicable. While these costs reflect conformance to UK requirements, the SEC considered them a reasonable benchmark.

Our view: There are numerous cost estimate components and benchmarks provided in the preamble. To be frank, I was taken aback by the numbers. If you are a buyer of GHG quantification and disclosure services, it would be worth challenging your current fee structure and checking out alternative providers. If this becomes a final rule, there will almost certainly be more service providers in the market to increase competition and rationalize pricing. At the same time, one difficulty facing service providers is that engineering firms that know how to do emissions inventories don't know assurance, and the audit firms who know assurance aren't particularly strong in air emissions inventories.

While IT systems may offer cost and efficiency benefits here, it is worth being cautious when it comes to systems that claim to automatically calculate or determine emissions, especially those from suppliers (Scope 3) based on procurement data/systems. If the final release is substantially similar to the proposal, registrants will be required to understand, evaluate and report on third-party emissions data relied on, and the methodologies used. Some procurement-based IT systems making claims about Scope 3 data capabilities may be cost effective, but may not provide emissions data credible enough for SEC reporting.

The assurance cost estimates seem reasonable in my opinion, especially given that they cover two separate engagements – the financial metric and GHG emissions assurance statements. At the same time, I would expect first year costs to be higher than expected due to the learning curve that assurance providers will have to go through. After that, I hope to see costs come down due to increased competition in the space and work efficiencies gained from first year experiences.

Forms Affected, GAAP & Targets and Goals

Forms Affected by the Proposal

The proposal would require a registrant to include climate-related disclosure in Securities Act or Exchange Act registration statements (Securities Act Forms S-1, F-1, S-3, F-3, S-4, F-4, and S- 11, and Exchange Act Forms 10 and 20-F) and Exchange Act annual reports (Forms 10-K and 20-F), including the proposed financial statement metrics. Similar to the treatment of other important business and financial information, the proposed rules would also require registrants to disclose any material change to the climate-related disclosure provided in a registration statement or annual report in its Form 10-Q (or, in certain circumstances, Form 6-K for a registrant that is a foreign private issuer that does not report on domestic forms).

The climate-related disclosures would be "filed" and therefore subject to potential liability under Exchange Act Section 18, except for disclosures furnished on Form 6-K. The proposed filed climate-related disclosures would also be subject to potential Section 11 liability if included in or incorporated by reference into a Securities Act registration statement.

GAAP Would be the Applicable Accounting Standards

A registrant would be required to apply the same set of accounting principles that it is required to apply in preparation of the rest of its consolidated financial statements included in the filing, US accounting standards – GAAP. Financial statements filed with the Commission that are not prepared in accordance with GAAP will be presumed misleading or inaccurate unless the Commission has otherwise provided. The SEC felt it was important to clarify the application of this concept in the proposed rules, given the possible confusion that may arise between the current body of GAAP and the proposed requirements.

Foreign private issuers that file consolidated financial statements under home country GAAP and reconcile to U.S. GAAP, would be required to use U.S. GAAP as the basis for calculating and disclosing the proposed climate-related financial statement metrics. The same requirement would apply for the purpose of determining the proposed GHG emissions metrics.

Our view: This shouldn't be a surprise given that this is a proposed US regulatory requirement. Anyone waiting for US alignment to/convergence with an IFRS climate-related accounting standard will have to wait awhile. Possibly quite a long while.

Proposed Disclosure of Targets and Goals

If a registrant has set any climate-related targets or goals (the proposal does not require these), then the registrant would have to provide certain information about those targets or goals. Despite the numerous commitments to reduce GHG emissions, SEC believes many companies do not provide their investors with sufficient information to understand how the companies intend to achieve those commitments or the progress made regarding them. The proposed disclosure requirements are intended to elicit enhanced information about climate-related targets and goals so that investors can better evaluate these points.

If a registrant has set climate-related targets or goals, the proposed rules would require disclosing, as applicable, a description of:

- The scope of activities and emissions included in the target;
- The unit of measurement, including whether the target is absolute or intensity based;
- The defined time horizon by which the target is intended to be achieved, and whether the time horizon is consistent with one or more goals established by a climate-related treaty, law, regulation, policy, or organization;
- The defined baseline time period and baseline emissions against which progress will be tracked with a consistent base year set for multiple targets;
- Any interim targets set by the registrant;
- How the registrant intends to meet its climate-related targets or goals;
- The baseline year for multiple targets; and
- Relevant data to indicate whether it is making progress toward achieving the target or goal and how such progress has been achieved.

Some companies might establish climate-related goals or targets without yet knowing how they will achieve those goals. They might plan to develop their strategies over time, particularly as new technologies become available that might facilitate their achievement of their goals. The fact that a company has set a goal or target does not mean that it has a specific plan for how it will achieve those goals. What is important is that investors be informed of a registrant's plans and progress wherever it is in the process of developing and implementing its plan.

If the registrant includes carbon offsets or renewable energy certificates (RECs) in its plan to achieve climate-related targets or goals, it would be required to disclose the amount of carbon reduction represented by the offsets or the amount of generated renewable energy represented by the RECs, the source of the offsets or RECs, a description and location of the underlying projects, any registries or other authentication of the offsets or RECs, and the cost of the offsets or RECs.

A registrant's disclosure of its climate-related targets or goals should not be construed to be promises or guarantees. To the extent that information regarding a registrant's climate-related targets or goals would constitute forward-looking statements, which the SEC would expect, for example, with respect to how a registrant intends to achieve its climate-related targets or goals and expected progress regarding those targets and goals, the Private Securities Litigation Reform Act (PSLRA) safe harbors would apply to such statements, assuming all other statutory requirements for those safe harbors are satisfied.

Our view: A requirement to disclose this level of detail about Net Zero commitments may trigger dramatic changes in those commitments, pledges and public statements for companies that viewed Net Zero as simply a PR/marketing opportunity. If this component is included in the final release, I expect it will go a long way in very clearly separating those companies that are seriously managing climate-related business risks and those that aren't.

Emissions Inventory Reporting & Assurance

Proposed GHG Emissions Inventory Reporting – Scope 1 and 2

The proposed rules would require a registrant to disclose its GHG emissions for its most recently completed fiscal year. "Greenhouse gases" are defined as carbon dioxide ("CO2"); methane ("CH4"); nitrous oxide ("N2O"); nitrogen trifluoride ("NF3"); hydrofluorocarbons ("HFCs"); perfluorocarbons ("PFCs"); and sulfur hexafluoride ("SF6") – consistent with those that are currently commonly referenced by international, scientific, and regulatory authorities as having significant climate impacts and the GHG Protocol.

For those that are not familiar already, the GHG Protocol calculates GHG emissions in a spreadsheet once the user enters certain information. There are different protocols available for emissions types/sources including:

- fuel burning (stationary and mobile sources)
- refrigeration equipment
- cement production
- pulp and paper manufacturing
- other manufacturing sectors

Important things to know about the GHG Protocol spreadsheets are they:

- require the user to have a level of technical knowledge about chemical and fuel types and the processes in which they are used, and
- apply emissions factors to calculate emissions, therefore no emissions sampling/analysis is necessary.

The proposed definitions of Scope 1 and Scope 2 emissions are substantially similar to the corresponding definitions provided by the GHG Protocol. Direct emissions are GHG emissions from sources that are owned or controlled by a registrant, whereas indirect emissions are GHG emissions that result from the activities of the registrant, but occur at sources not owned or controlled by the registrant.

The organizational scope of reporting for a registrant's GHG emissions metrics would be consistent with the scope of reporting for the proposed financial statement metrics and other financial data included in its consolidated financial statements in order to provide investors a consistent view of the registrant's business across its financial and GHG emissions disclosures. For an equity method investee or an operation that is proportionally consolidated, the registrant would be required to include its share of emissions based on its percentage ownership of such investee or operation. For a registrant that applies the equity method to an investee, the percentage of ownership interest used to record its share of earnings or losses in the investee must be the same for measuring its share of GHG emissions by the equity method investee.

A registrant would have to disclose its total Scope 1 emissions separately from its total Scope 2 emissions after calculating them from all sources that are included in the registrant's organizational and operational boundaries. In addition, the disclosure would be disaggregated by each constituent greenhouse gas and in the aggregate.

GHG emissions would be expressed in terms of carbon dioxide equivalent ("CO2e") in gross terms, excluding any use of purchased or generated offsets. Disclosure would also include GHG intensity – metric tons of CO2e per unit of total revenue and per unit of production for the fiscal year. If the registrant has no revenue for a fiscal year, it would be required to calculate its GHG intensity with another financial measure (*e.g.,* total assets), with an explanation of why the particular measure was used. Similarly, if the registrant does not have a unit of production, it would be required to calculate its GHG intensity with another measure of economic output, depending on the nature of its business (*e.g.*, data processing capacity, volume of products sold, or number of occupied rooms) with an explanation of why the particular measure was used.

The proposal would require registrants to describe the methodology, significant inputs, and significant assumptions used to calculate its GHG emissions metrics. As proposed, the description of the registrant's methodology must include:

- the registrant's organizational boundaries,
- operational boundaries,
- calculation approach, and
- any calculation tools used to calculate the registrant's GHG emissions, including emissions factors applied and any gaps in the data required to calculate its GHG emissions (as well as the importance of those gaps).

By sharing certain basic concepts and a common vocabulary with the GHG Protocol, the proposed rules should help limit the compliance burden for those registrants that are already disclosing their GHG emissions pursuant to the GHG Protocol. Similarly, to the extent that registrants elect to follow GHG Protocol standards and methodologies, investors already familiar with the GHG Protocol may also benefit.

Because GHG emissions data compiled for the EPA's own GHG emissions reporting program would be consistent with the GHG Protocol's standards, and thus with the proposed rules, a registrant may use that data in partial fulfillment of its GHG emissions disclosure obligations pursuant to the proposed rules.

Our view: Air emissions inventories and the use of emissions factors are nothing new to environmental professionals, but putting them in the SEC reporting context is – and may create heightened professional liability risk for environmental professionals providing these services. Based on my history with auditing emissions inventories and calculations, I predict a lot of companies will need to start paying more attention to details that have previously been brushed aside. Under the proposal, whatever set of emission factors a registrant chooses to use, it must identify the emission factors, its source and any use of third-party data when calculating its GHG emissions, regardless of the particular scope of emissions. A registrant can't blindly use third party data since part of the disclosure would require a description of the process the registrant undertook to obtain and assess such data.

Expressing emissions in both actual absolute terms (i.e., not applying any offsets/RECs) and intensity should offer meaningful insight into company activities. Absolute emissions show total gross emissions without the benefit or effect of offsets/RECs. In subsequent years, there will likely be significant business activities (mergers, acquisitions and divestitures) that have a big impact on the absolute values. Registrants will want to provide a clear and direct explanation of such events to allow readers to understand the reason for the changes. Intensity metrics are also valuable in that they indicate process efficiency gains – how companies get the most "use" out of their emissions.

When the final release is issued, GHG data that has been collected for other purposes/reporting should be reviewed to ensure it is consistent with SEC requirements. This is especially true where intensity metrics use units of measure other than what the SEC deems appropriate in the final reliance once issued.

Proposed GHG Emissions Inventory Reporting – Scope 3

Except for smaller reporting companies (SRCs) – which are exempted from Scope 3 reporting – a registrant would also be required to disclose separately its total Scope 3 emissions for the fiscal year if those emissions are material, or if it has set a GHG emissions reduction target or goal that includes its Scope 3 emissions. Consistent with the Commission's definition of "material" and Supreme Court precedent, a registrant would be required to disclose its Scope 3 emissions if there is a substantial likelihood that a reasonable investor would consider them important when making an investment – or voting – decision.

When assessing the materiality of Scope 3 emissions, registrants should consider whether Scope 3 emissions make up a relatively significant portion of their overall GHG emissions. While the SEC did not propose a quantitative threshold for determining materiality, they noted that some companies rely on, or support reliance on, a quantitative threshold such as 40% when assessing the materiality of Scope 3 emissions under TCFD and the Science Based Targets Initiative (SBTi).

However, even when Scope 3 emissions do not represent a relatively significant portion of overall GHG emissions, a quantitative analysis alone would not suffice for purposes of determining whether Scope 3 emissions are material. Consistent with the concept of materiality in the securities laws, this determination would ultimately need to take into account the total mix of information available to investors, including an assessment of qualitative factors. Accordingly, Scope 3 emissions may make up a relatively small portion of a registrant's overall GHG emissions but still be material where Scope 3 represents a significant risk, is subject to significant regulatory focus, or "if there is a substantial likelihood that a reasonable [investor] would consider it important."

If a registrant determines that its Scope 3 emissions are not material, and therefore not subject to disclosure, it may be useful to investors to understand the basis for that determination.

If required to disclose its Scope 3 emissions, a registrant would also be required to apply the same organizational boundaries used when determining its Scopes 1 and 2 emissions as an initial step in identifying the sources of indirect emissions from activities in its value chain over which it lacks ownership and control and which must be included in the calculation of its Scope 3 emissions. For an equity method investee or an operation that is proportionally consolidated, the registrant would be required to include its share of emissions based on its percentage ownership of such investee or operation. For a registrant that applies the equity method to an investee, the percentage of ownership interest used to record its share of earnings or losses in the investee must be the same for measuring its share of GHG emissions by the equity method investee.

The proposed rules would also require a registrant to disclose its Scope 3 emissions if it has set a GHG emissions reduction target or goal that includes Scope 3 emissions. This disclosure requirement would enable investors to understand the scale and scope of actions the registrant may need to take to fulfill its commitment to reduce its Scope 3 emissions and the potential financial impact of that commitment on the registrant. It would also enable an investor to assess the registrant's strategy for meeting its Scope 3 emissions target or goal and its progress towards that target or goal, which may affect the registrant's business.

If a registrant has a relatively ambitious Scope 3 emissions target, but discloses little investment in transition activities in its financial statements and little or no reduction in Scope 3 emissions from year to year, these disclosures could indicate to investors that the registrant may need to make a large expenditure or significant change to its business operations as it gets closer to its target date, or risk missing its target. Both potential outcomes could have financial ramifications for the registrant and, accordingly, investors.

Similar to Scopes 1 and 2, Scope 3 emissions disclosures would be disaggregated by each constituent greenhouse gas and in the aggregate.

Disclosure would also include GHG intensity – metric tons of CO2e per unit of total revenue and per unit of production for the fiscal year. If the registrant has no revenue for a fiscal year, it would be required to calculate its GHG intensity with another financial measure (*e.g.,* total assets), with an explanation of why the particular measure was used. Similarly, if the registrant does not have a unit of production, it would be required to calculate its GHG intensity with another measure of economic output, depending on the nature of its business (*e.g.*, data processing capacity, volume of products sold, or number of occupied rooms) with an explanation of why the particular measure was used.

If required to disclose Scope 3 emissions, a registrant would have to identify the categories of upstream and downstream activities that are included in the calculation of its Scope 3 emissions. In some cases, the category in which an emissions source belongs may be unclear, or the source might fit within more than one category. In those cases, registrants would need to use their best judgment as to the description of the emissions source and provide sufficient transparency as to the reasoning and methodology to facilitate investor understanding of the emissions category and source. Avoiding double-counting will be important for accuracy.

Also, if required to disclose Scope 3 emissions, registrants would have to describe the methodology, significant inputs, and significant assumptions used to calculate its GHG emissions metrics. As proposed, the description of the registrant's methodology must include the registrant's organizational boundaries, operational boundaries, calculation approach, any calculation tools used to calculate the registrant's GHG emissions and any gaps in the data required to calculate its GHG emissions (as well as the importance of those gaps).

If required to disclose Scope 3 emissions, a registrant would also be required to describe the data sources used to calculate those emissions, including the use of any of the following:

- Emissions reported by parties in the registrant's value chain, and whether such reports were verified by the registrant or a third party, or unverified;
- Data concerning specific activities, as reported by parties in the registrant's value chain; and
- Data derived from economic studies, published databases, government statistics, industry associations, or other third-party sources outside of a registrant's value chain, including industry averages of emissions, activities, or economic data.

A registrant would not be expected to blindly use third party data as part of the disclosure would require a description of the process the registrant undertook to obtain and assess such data.

The proposal includes a targeted safe harbor for Scope 3 emissions data in light of the unique challenges associated with this information. This safe harbor would provide that disclosure of Scope 3 emissions by or on behalf of the registrant would be deemed not to be a fraudulent statement unless it is shown that such statement was made or reaffirmed without a reasonable basis or was disclosed other than in good faith.

Our view: Given investor interest in emissions for both investment decisions and voting decisions, it may be difficult for a company to successfully claim that Scope 3 emissions are not material. If this provision ends up in the final release, companies that determine Scope 3 emissions are not material should anticipate being challenged about how they reached that conclusion.

Registrants will likely end up expending meaningful effort chasing down this information from suppliers, determining its credibility and explaining those efforts in their disclosure. Simply emailing suppliers the GHG Protocol spreadsheet to complete won't be adequate. I also expect there will be significant disparities in the quality, quantity and validity of data received from suppliers for a few years. This will probably follow a similar path as conflict minerals supplier information requests processes did when they were launched. Registrants should expect to conduct some review and validation of climate information received from suppliers.

The requirement to disclose Scope 3 data sources will create more professional liability risk for IT systems making claims of automatically calculating GHG emission from suppliers based on procurement data. An increased concern for/attention to detail may well be warranted as I am not aware how/whether the emissions calculations from such IT systems have been validated – or if they have, whether the criteria used would be acceptable for SEC reporting. Moreover, the proposal requires that whatever set of emission factors a registrant chooses to use, it must identify the emission factors, its source and any use of third-party data when calculating its GHG emissions, regardless of the particular scope of emissions. This could also be a factor in registrants successfully claiming safe harbor protections.

Proposed Disclosure Audit and Attestation Requirements

The proposal contains a minimum level of attestation services for accelerated filers and large accelerated filers including: (1) limited assurance for Scopes 1 and 2 emissions disclosure that scales up to reasonable assurance after a specified transition period; (2) minimum qualifications and independence requirements for the attestation service provider; and (3) minimum requirements for the accompanying attestation report.

The proposed transition periods would provide existing accelerated filers and large accelerated filers one fiscal year to transition to limited assurance and two additional fiscal years to transition to reasonable assurance. For existing accelerated filers, this transition period would be in addition to the one additional year they will have to comply with the Scopes 1 and 2 emission disclosure requirements (compared to large accelerated filers). During this transition period, GHG emissions attestation providers would also have time to prepare themselves for providing such services in connection with Commission filings.

- **Financial statement:** As part of the registrant's financial statements, the financial statement metrics would be subject to audit by an independent registered public accounting firm, and come within the scope of the registrant's internal control over financial reporting ("ICFR").

- **Emissions disclosures**: The proposed rules would require an accelerated filer or a large accelerated filer to include, in the relevant filing, an attestation report covering, at a minimum, the disclosure of its Scope 1 and Scope 2 emissions and to provide certain related disclosures about the service provider. An attestation service provider would not have to be a registered public accounting firm and the attestation report would not need to cover the effectiveness of internal control over GHG emissions disclosure (i.e., ICFR).

The proposed approach to assurance was guided by "attestation" standards published by organizations including the PCAOB, AICPA, and the International Auditing and Assurance Standards Board ("IAASB"). Such attestation standards apply to engagements other than audit and review of historical financial statements and have been widely used in the current voluntary ESG and GHG assurance market for a number of years. The SEC believes that open access to the standard (i.e., publicly available at no cost to investors who desire to review them) is an important consideration when determining the suitability of attestation standards for application to GHG emissions disclosure because it would enable investors to evaluate the report against the requirements of the selected attestation standard.

The proposed minimum attestation engagement and report requirements are primarily derived from the AICPA's attestation standards (*e.g.,* SSAE No. 18), which are commonly used by accountants who currently provide GHG attestation engagement services as well as other non- GHG-related attestation engagement services, and are largely similar to the report requirements under PCAOB AT-101 and IAASB ISAE 3410. The report would include the following:

- Identification or description of the subject matter or assertion on which the attestation provider is reporting
- The point in time or period of time to which the measurement or evaluation of the subject matter or assertion relates
- The criteria against which the subject matter was measured or evaluated. The criteria against which the subject matter is measured or evaluated must be “suitable”
- A statement that identifies the level of assurance provided, a statement that identifies the attestation standard (or standards) used and describes the nature of the attestation engagement
- A statement that describes the registrant’s responsibility to report on the subject matter or assertion being reported on in order to make it clear to investors who is ultimately responsible for the disclosure
- A statement that describes the attestation provider’s responsibilities in connection with the preparation of the attestation report
- A statement that the attestation provider is independent
- For a limited assurance engagement, a description of the work performed as a basis for the attestation provider’s conclusion
- A statement that describes any significant inherent limitations associated with the measurement or evaluation of the subject matter (at a minimum, Scopes 1 and 2 emissions) against the criteria
- The attestation provider’s conclusion or opinion, as applicable, based on the attestation standard(s) used
- The signature of the attestation provider (whether by an individual or a person signing on behalf of the attestation provider’s firm), the city and state where the attestation report has been issued, and the date of the report

- Whether the attestation provider has a license from any licensing or accreditation body to provide assurance, and if so, the identity of the licensing or accreditation body, and whether the attestation provider is a member in good standing of that licensing or accreditation body

- Whether the GHG emissions attestation engagement is subject to any oversight inspection program, and if so, which program (or programs)

- Whether the attestation provider is subject to record-keeping requirements with respect to the work performed for the GHG emissions attestation engagement and, if so, identify the record-keeping requirements and the duration of those requirements.

If a registrant (other than a large accelerated filer or an accelerated filer that is required to include a GHG emissions attestation report) chooses to obtain voluntary third party assurance or verification of its GHG reporting, the registrant would be required to disclose within the separately captioned "Climate-Related Disclosure" section in the filing the following information:

- Identification of the provider of such assurance or verification;

- Description of the assurance or verification standard used;

- Description of the level and scope of assurance or verification provided;

- Brief description of the results of the assurance or verification;

- Whether the third-party service provider has any other business relationships with or has provided any other professional services to the registrant that may lead to an impairment of the service provider's independence with respect to the registrant; and

- Any oversight inspection program to which the service provider is subject (*e.g.,* the AICPA's peer review program).

Although many registrants have reportedly voluntarily obtained some level of assurance for their climate-related disclosures, current voluntary ESG assurance practices have been varied with respect to the levels of assurance provided (*e.g.,* limited versus reasonable), the assurance standards used, the types of service providers, and the scope of disclosures covered by the assurance. This fragmentation has diminished the comparability of the assurance provided and may require investors to become familiar with many different assurance standards and the varying benefits of different levels of assurance.

While some experienced assurance providers may be proficient in applying attestation standards to GHG emissions disclosures, other assurance providers may lack GHG emissions expertise. Similarly, some service providers providing assurance may have expertise in GHG emissions but have minimal assurance experience. Moreover, some service providers may use standards that are developed by accreditation bodies with notice and public comment and other robust due process procedures for standard setting, while other service providers may use privately developed "verification" standards

The proposed rules would define a GHG emissions attestation provider to mean a person or a firm that has all of the following characteristics:

- Is 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:
    - perform engagements in accordance with professional standards and applicable legal and regulatory requirements; and
    - enable the service provider to issue reports that are appropriate under the circumstances.
- Is independent with respect to the registrant, and any of its affiliates, for whom it is providing the attestation report, during the attestation and professional engagement period.

If the service provider is a firm, the SEC expects it to have policies and procedures designed to provide it with reasonable assurance that the personnel selected to conduct the GHG emissions attestation engagement have significant experience with respect to both attestation engagements and GHG disclosure. This would mean that the service provider has the qualifications necessary for fulfillment of the responsibilities that it would be called on to assume, including the appropriate engagement of specialists if needed. The proposed expertise requirement would apply to the person or the firm signing the GHG emissions attestation report.

The GHG emissions attestation provider would also be subject to liability under the federal securities laws for the attestation conclusion or, when applicable, opinion provided. Such liability should encourage the attestation service provider to exercise due diligence with respect to its obligations under a limited or reasonable assurance engagement.

Our view: I strongly believe that auditing/assurance is appropriate for this disclosure, especially since it has been lacking. Strangely, one statement in the preamble said, “80 percent of S&P 100 companies currently subject certain items of their ESG information, including climate-related disclosures such as greenhouse gas emissions, to some type of third-party assurance or verification.” That statement is not consistent with my personal experience, knowledge or recent research I completed for my book.

It is also worth noting that under certain practice standards, attestation providers may assess the validity and reliability of third-party information used by the registrant that forms a basis of what the attestation covers.

Once a rule is adopted as final, I foresee a battle in the market between environmental firms accustomed to and qualified in performing air emissions inventories (but not up to snuff in assurance/audit practices, experience, or securities law liability) and accounting firms who are generally the inverse. I expect acquisitions and staffing changes, along with a bunch of newly-minted “experts” on both sides. The vast majority of engineering/environmental consultants will not be familiar with the attestation report elements or the prescriptive audit practice requirements specified in the proposal. It wouldn’t be surprising if those factors serve to intimidate technical service firms and to some extent reduces the number entering the market on their own. However, they are better positioned to apply technical professional skepticism about emissions data based on their experience with manufacturing, chemical use, fuel burning and air pollution control equipment design, operation and maintenance.

Regulations S-K/S-X & Compliance Dates

Proposed Amendments to Regulations S-K and S-X

The proposal adds a new subpart to Regulation S-K and Regulation S-X

- **Regulation S-K** would be amended to include information about a registrant's climate-related risks that are reasonably likely to have material impacts on its business or consolidated financial statements, and GHG emissions metrics that could help investors assess those risks. A registrant may also include disclosure about its climate-related opportunities if it chooses to, but this is not mandatory. Regulation S-K would require disclosure of a registrant's:
    - governance of climate-related risks;
    - any material climate-related impacts on its strategy, business model, and outlook;
    - climate-related risk management;
    - GHG emissions metrics; and
    - climate-related targets and goals, if any (these are not required by the proposal).
- The proposed new subpart to Regulation S-K would include an attestation requirement for accelerated filers and large accelerated filers regarding certain proposed GHG emissions disclosures.
- **Regulation S-X** would be amended to require certain climate-related financial statement metrics and related disclosure to be included in a note to a registrant's audited financial statements. The proposed financial statement metrics would consist of disaggregated climate-related impacts on existing financial statement line items. The registrant would have to disclose in a note to its financial statements certain disaggregated climate-related financial statement metrics that are mainly derived from existing financial statement line items. These proposed disclosures fall under the following three categories of information:
    - financial impact metrics;
    - expenditure metrics; and
    - financial estimates and assumptions.

Proposed Compliance Dates

The following compliance dates assume the final release is adopted and effective by December 2022, although this is likely to be delayed in the event lawsuits are filed (as is expected):

Registrant Type	Disclosure Compliance Date		Financial Statement Metrics Audit Compliance Date
	All proposed disclosures, including GHG emissions metrics: Scope 1, Scope 2, and associated intensity metric, but excluding Scope 3.	GHG emissions metrics: Scope 3 and associated intensity metric	
Large Accelerated Filer	Fiscal year 2023 (filed in 2024)	Fiscal year 2024 (filed in 2025)	Same as disclosure compliance date
Accelerated Filer and Non-Accelerated Filer	Fiscal year 2024 (filed in 2025)	Fiscal year 2025 (filed in 2026)	
SRC	Fiscal year 2025 (filed in 2026)	Exempted	

SIDLEY

SIDLEY UPDATE

SEC Proposes Far-Reaching Rules for "Enhancement and Standardization" of Climate-Related Disclosures

March 24, 2022

On March 21, 2022, the U.S. Securities and Exchange Commission (SEC) issued **proposed rules** that would require domestic and foreign registrants to include extensive climate-related information in their registration statements and periodic reports.[1] The rules would require disclosure of

- climate-related risks reasonably likely to have a material impact on the registrant's business or consolidated financial statements, within the existing definition of materiality
- the actual and potential impacts of material climate-related risks on a registrant's strategy, business model, and outlook
- the manner in which a registrant's board oversees climate-related risks and management's role in assessing and managing those risks
- processes for identifying, assessing, and managing climate-related risks
- various climate-related financial statement metrics
- climate-related targets and goals, if the registrant has set them
- direct (Scope 1) and indirect (Scope 2) greenhouse gas (GHG) emissions data — as well as additional upstream/downstream indirect GHG emissions (Scope 3) if material or if the registrant has set targets for Scope 3 emissions

The proposed rules would impose substantial new disclosure responsibilities on public companies in their SEC filings. Whereas many public companies already publish voluntary climate-related disclosures in reports outside of SEC filings, the proposed rules would require registrants to disclose such information in SEC filings according to rigorous methods and standards elaborated by the SEC, and certain of this information would be subject to attestation or independent audit requirements.

The need to produce new disclosures will compel companies to apply added attentiveness to climate-related issues and may necessitate stepped-up engagement with external experts in climate change and climate accounting. While the proposed rules pertain only to disclosures, they will impact operations by indirectly compelling companies to take action, to the extent they are not already doing so, to put monitoring, accounting, planning, and governance practices in place to enable them to satisfy the proposed disclosure requirements.

This Update summarizes the principal features of the proposed rules and provides practical guidance for companies considering next steps in light of the proposed rules. Comments on the proposal are due 30 days from official publication or May 20, 2022, whichever is later.

Background

The proposed rules represent the latest development in a series of events affecting public companies in the U.S. related to the growing attention of investors and the public to climate change and the heightened focus on environmental, social, and governance (ESG) issues in investing and in company operations and disclosures. In 2010, the SEC provided limited guidance to public companies on the SEC's existing disclosure requirements as they apply to climate change matters. [2] As of 2020, in response to intensified interest in ESG in the public markets, roughly 92% of companies in the S&P 500 and 70% of Russell 1000 companies publish sustainability reports addressing environmental issues among other ESG-themed topics.[3] With the change of the U.S. presidential administration in 2021, SEC Commissioners signaled an intent to step up SEC efforts to advance mandatory climate-related disclosure requirements for public companies. The new proposed rules are the result of these efforts. Several of the proposed disclosures are similar to those that many companies already provide, although most commonly outside of SEC filings, based on broadly accepted disclosure frameworks, such as the Task Force on Climate-related Financial Disclosures (TCFD) and the Greenhouse Gas Protocol (GHG Protocol).

Summary of the Proposed Rules

The proposed rules would apply to registrants with reporting obligations under Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (the Exchange Act) and companies filing a registration statement pursuant to the Securities Act of 1933 (the Securities Act) or the Exchange Act. If the rules are adopted as proposed, a registrant would need to include the proposed disclosures in registration statements, such as Securities Act Forms S-1, S-3, S-11, F-1 and F-3, Exchange Act Form 10, and Exchange Act periodic reports, such as Form 10-K, 10-Q and 20-F. Similar to the treatment of other important business and financial information, the proposed rules would also require registrants to disclose any material change to the climate-related disclosure provided in a registration statement or annual report in its Form 10-Q.

The following discussion summarizes the principal components of the proposed rules.

1. Climate-Related Risks

Under the proposed rules, to be set forth in a new Subpart 1500 to Regulation S-K, a registrant must disclose any "climate-related risks" reasonably likely to have a material impact on the registrant's business or consolidated financial statements. "Climate-related risks" means the actual or potential negative impacts of climate-related conditions and events on a registrant's consolidated financial statements, business operations, or value chains, as a whole. The SEC proposed including a specific reference in this definition to a registrant's "value chain" — the upstream and downstream activities related to a registrant's operations [4] — to capture the full extent of a registrant's potential exposure to climate-related risks, which can extend beyond its own operations to those of its suppliers, distributors, and others engaged in upstream or downstream activities.

The proposed rules would require a registrant to specify whether an identified climate-related risk is a "physical" or "transition" risk so that investors can better understand the nature of the risk and the registrant's actions or plan to mitigate or adapt to the risk. The proposing release explains that climate-related conditions and events can present risks related to the physical impacts of the climate — that is, "physical risks" — and to a potential transition to a lower carbon economy — that is, "transition risks." Defining the key terms is critical for appreciating the scope of these disclosures:

- *"Physical risks"* include both acute and chronic risks to a registrant's business operations or the operations of those with whom it does business.
- *"Transition risks"* are actual or potential negative impacts on a registrant's consolidated financial statements, business operations, or value chains attributable to regulatory, technological, and market changes to address the mitigation of, or adaptation to, climate-related risks.
- *"Acute risks"* are event-driven risks related to shorter-term extreme weather events, such as hurricanes, floods, and tornadoes.
- *"Chronic risks"* are risks that the business may face as a result of longer-term weather patterns and related effects, such as sustained higher temperatures, sea level rise, drought, and increased wildfires.

The proposed rules would require a registrant to describe the nature of any transition risks, including whether they relate to regulatory, technological, liability, reputational, or other transition-related factors, and how those factors impact the registrant, and any physical risk, including whether the risk may be categorized as an acute or chronic risk.

Longstanding Definition of Materiality Applies

Registrants would be required to describe climate-related risks that are reasonably likely to have a material impact on the registrant's business or consolidated financial statements as manifested over the short, medium, and long term. The proposing release notes that, in keeping with existing definitions of the SEC and Supreme Court precedent, a matter is "material" for purposes of the climate rules if there is a substantial likelihood that a reasonable investor would consider it important when determining whether to buy or sell securities or how to vote. According to the proposing release, the materiality determination that registrants would be required to make is functionally similar to what is required in the management discussion and analysis section in a registration statement or annual report.

2. Climate-Related Impacts on Strategy, Business Model, and Outlook

The proposed rules would additionally require the registrant to describe the actual and potential impacts of its material climate-related risks on its strategy, business model, and outlook. To this end, the proposed rules would require

- discussion of how a registrant has considered the identified impacts as part of its business strategy, financial planning, and capital allocation
- current and forward-looking disclosures to facilitate understanding of whether the implications of the identified climate-related risks have been integrated into the registrant's business model or

strategy, including how resources are being used to mitigate climate-related risks

- information regarding the material impacts of transition risks and physical risks on a registrant's strategy, business model, and outlook
- discussion of whether and how any of a registrant's identified climate-related risks affected or are reasonably likely to affect the registrant's consolidated financial statements

If a registrant uses an internal carbon price — that is, an estimated cost of carbon emissions — whe assessing climate-related factors, it would be required to disclose information about this price and the methodology for establishing and updating the price. A registrant would also need to describe how it uses its disclosed internal carbon price to evaluate and manage climate-related risks.

A registrant also would be required to describe any analytical tools, such as scenario analysis, that it uses to assess the impact of climate-related risks on its business and consolidated financial statements, or to support the resilience of its strategy and business model in light of foreseeable climate-related risks. If a registrant uses scenario analysis, the proposed amendments would require disclosure of the scenarios considered (e.g., an increase of no greater than 2º or 1.5ºC above preindustrial levels), including parameters, assumptions, and analytical choices, and the projected principal financial impacts on the registrant's business strategy under each scenario. The disclosure is expected to include both quantitative and qualitative information.

3. Governance of Climate-Related Risk

The proposed rules would require a registrant to disclose, as applicable, certain information concerning a board of directors' oversight of climate-related risks and management's role in assessing and managing those risks.

As to board oversight, the proposed rules would require disclosure regarding

- the identity of board members or board committees responsible for the oversight of climate-related risks, including whether any board member has expertise in climate-related risks
- the processes and frequency by which the board or board committee(s) discuss(es) climate-related risks
- how the board is informed about climate-related risks, and how frequently the board considers such risks
- whether and how the board or board committee considers climate-related risks as part of its business strategy, risk management, and financial oversight
- whether and how the board sets climate-related targets or goals and how it oversees progress against those targets or goals

As to management oversight, the proposed rules would require disclosure regarding, as applicable,

- whether certain management positions or committees are responsible for assessing and managing climate-related risks and, if so, identifying such positions or committees and disclosing the relevant expertise of the position holders or members

- the processes by which the responsible managers or management committees are informed about and monitor climate-related risks
- whether the responsible positions or committees report to the board or board committee on climate-related risks and how frequently this occurs

4. Risk Management and Transition Plans

The proposed rules would require a registrant to describe any processes it has for identifying, assessing, and managing climate-related risks. The registrant would be required to make disclosures on a range of topics, including how it determines or considers

- the relative significance of climate-related risks compared to other risks
- existing or likely regulatory requirements or policies, such as GHG emissions limits, when identifying climate-related risks
- shifts in customer or counterparty preferences, technological changes, or changes in market prices in assessing potential transition risks
- the materiality of climate-related risks, including how it assesses the potential size and scope of any identified climate-related risk

If a registrant has adopted a transition plan as part of its climate-related risk management strategy, the proposed rules would require the registrant to discuss the plan, including how it plans to mitigate or adapt to any physical and transition risks identified. A “transition plan” means a registrant’s strategy and implementation plan to reduce climate-related risks. The rules would also require a registrant that has adopted a transition plan as part of its climate-related risk management strategy to discuss, as applicable, how it plans to mitigate or adapt to any identified transition risks, including laws, regulations, and policies that restrict GHG emissions or products with high GHG footprints or that require the protection of high conservation value land or natural assets; imposition of a carbon price; and changing demands or preferences of consumers, investors, employees, and business counterparties.

A registrant that has adopted a transition plan as part of its climate-related management strategy would be obligated to update relevant disclosure each fiscal year by describing the actions taken during the year to achieve the plan’s targets or goals.

5. Financial Statement Metrics

The SEC is also proposing to add a new Article 14 to Regulation S-X that would require a registrant to disclose in a note to its financial statements certain disaggregated climate-related financial statement metrics that are mainly derived from existing financial statement line items. Particularly, the proposed rules would require, in filings where the registrant is subject to Subpart 1500 of Regulation S-K in a form that also requires audited financial statements, disclosure falling under three categories:

- *Financial Impact Metrics*. The registrant would disclose the financial impacts of severe weather events, other natural conditions, transition activities, and identified climate-related risks on line items in the consolidated financial statements included in the relevant filing unless their aggregated impact is less than 1% of the total line item for the relevant fiscal year.

- *Expenditure Metrics.* Proposed expenditure metrics refer to the positive and negative impacts associated with the same climate-related events, transition activities, and identified climate-related risks as the proposed financial impact metrics. A registrant would separately aggregate amounts of expenditure expensed and capitalized costs incurred during the fiscal years presented.[5]
- *Financial Estimates and Assumptions.* A registrant would disclose whether the estimates and assumptions used to produce the consolidated financial statements were impacted by exposures to risks and uncertainties associated with, or known impacts from, climate-related events, such as flooding, drought, wildfires, extreme temperatures, and sea level rise.

The proposed financial statement metrics would be required in the financial statements, and therefore would be included in the scope of any required audit of the financial statements in the relevant disclosure filing, subject to audit by an independent registered public accounting firm, and within the scope of the registrant's internal control over financial reporting.

6. GHG Emissions Metrics Disclosure: Scopes 1, 2, and 3

The proposed rules would establish several disclosure requirements related to Scope 1, Scope 2, and Scope 3 emissions. Similar to the GHG Protocol, the proposed rules define Scope 1 emissions as direct GHG emissions from operations that are owned or controlled by a registrant; Scope 2 emissions as 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; and Scope 3 emissions as all indirect GHG emissions not otherwise included in a registrant's Scope 2 emissions, which occur in the upstream and downstream activities of a registrant's value chain.

A registrant would be required to disclose its total Scope 1 emissions separately from its total Scope 2 emissions after calculating them from all sources that are included in the registrant's organization and operation boundaries. A registrant would disclose its Scope 1 and Scope 2 emissions in gross terms and in terms of GHG intensity.

Most registrants would be required to disclose separately its total Scope 3 emissions for the fiscal year *if those emissions are material* or if it has set a GHG emissions reduction target or goal that includes its Scope 3 emissions. The proposed rules would exempt smaller reporting companies (SRCs) from the proposed Scope 3 disclosure requirement. The proposed definitions of Scope 1, Scope 2, and Scope 3 are similar to definitions provided by the GHG Protocol.[6]

The proposing release suggests that even where a registrant determines that its Scope 3 emissions are not material, and therefore not subject to disclosure, it may be useful for the registrant to explain the basis of its determination to investors. The proposing release also suggests that where a registrant determines that only certain categories of Scope 3 emissions are material, the registrant should consider disclosing why other categories are not material. Further, the proposing release expresses a view that where Scope 3 emissions are deemed material by the registrant, the extent of a registrant's exposure to Scope 3 emissions, and the choices a registrant makes regarding them, would be important for investors to understand when making investment or voting decisions.[7] These suggestions, although not stated as proposed rules, provide additional insight into the level of disclosure the SEC may be expecting, and information it may consider material, related to Scope 3 emissions.

The proposed rules would require a registrant to disclose its GHG emissions data from its most recently completed fiscal year and for the historical fiscal years included in the registrant's financial statements in the applicable filing, to the extent such historical GHG emissions data is reasonably available. However, a registrant would not be required to provide a corresponding GHG emissions metric for a fiscal year preceding its current reporting fiscal year if, for example, it was not required to and has not previously presented such metrics for such fiscal year and the historical information necessary to calculate or estimate such metric is not reasonably available to the registrant without unreasonable effort or expense.

A registrant would need to describe the methodology, significant inputs, and significant assumptions used to calculate its GHG emissions metrics. The SEC is also proposing additional rules related to the methodology for calculating GHG emissions. Some of these rules would apply generally to the determination of GHG emissions, while others would apply specifically to the calculation of Scope 3 emissions.

Registrants subject to the proposed Scope 3 disclosure requirements would have one additional year to comply with those disclosure requirements. (See "Compliance Dates" below.)

Scope 3 Emissions Safe Harbor

The proposing release acknowledges that calculation and disclosure of Scope 3 emissions may pose difficulties compared to Scopes 1 and 2 emissions. It may be difficult to obtain activity data from suppliers and other third parties in a registrant's value chain or to verify the accuracy of that information. It may also be necessary to rely heavily on estimates and assumptions to generate Scope 3 emissions data. In light of these challenges and concerns pertaining to registrants' taking on liability for information that would be derived largely from third parties, the proposed rules include a safe harbor from certain forms of liability under the federal securities laws. The proposed safe harbor would provide that disclosure of Scope 3 emissions by or on behalf of the registrant would be deemed not to be a fraudulent statement unless it is shown that such statement was made or reaffirmed without a reasonable basis or was disclosed other than in good faith. The safe harbor would extend to any statement regarding Scope 3 emissions that is disclosed pursuant to Subpart 1500 of Regulation S-K in an SEC filing.

7. Attestation of Scope 1 and Scope 2 Emissions Disclosures

Under the proposed rules, a registrant that is an accelerated filer or large accelerated filer would be required to include in the relevant filing an attestation report covering the disclosure of its Scope 1 and Scope 2 emissions and to provide certain related disclosures about the service provider. The proposed rules set forth minimum standards for experience, expertise, and independence for a GHG emissions attestation provider.

At a minimum, the attestation engagement must be at of one the two assurance levels — "limited" or "reasonable" — for the indicated fiscal year for the required GHG emissions disclosures:

Limited Assurance	Reasonable Assurance
Fiscal years 2 and 3 after Scopes 1 and 2 emission disclosure	Fiscal years 4 and beyond after Scopes 1 and 2 emissions disclosure

compliance date	compliance date

The objective of a limited assurance engagement is for the service provider to express a conclusion about whether it is aware of any material modifications that should be made to the Scopes 1 and 2 emissions disclosure for it to be fairly stated or in accordance with the relevant criteria. In such engagements, the conclusion is expressed in the form of negative assurance regarding whether any material misstatements have been identified. In contrast, the objective of a reasonable assurance engagement, which is the same level of assurance provided in an audit of a registrant's consolidated financial statements, is to express an opinion on whether the subject matter is in accordance with the relevant criteria in all material respects. A reasonable assurance opinion provides positive assurance that the subject matter is free from material misstatement.

Assuming the proposed rules will be adopted with an effective date in December 2022 and that the hypothetical accelerated or large accelerated filer has a December 31 fiscal year-end, the following transition periods would apply:

Filer Type	Scopes 1 and 2 GHG Disclosure Compliance Date	Limited Assurance	Reasonable Assurance
Large Accelerated Filer	Fiscal year 2023 (filed in 2024)	Fiscal year 2024 (filed in 2025)	Fiscal year 2026 (filed in 2027)
Accelerated Filer	Fiscal year 2024 (filed in 2025)	Fiscal year 2025 (filed in 2026)	Fiscal year 2027 (filed in 2028)

During the transition period when limited assurance is required, the proposed rules would permit an accelerated filer or a large accelerated filer, at its option, to obtain reasonable assurance of its Scope 1 and 2 emissions disclosure.

The proposed rules would require the attestation report for accelerated filers and large accelerated filers to be included in a new separately captioned "Climate-Related Disclosure" section in the relevant filing and provided pursuant to standards that are publicly available at no cost and are established by a body or group that has followed due process procedures, including the broad distribution of the framework for public comment. The proposing release observes that attestation standards of the Public Company Accounting Oversight Board (PCAOB), the American Institute of Certified Public Accounts (AICPA), and the International Auditing and Assurance Standards Board (IAASB) would meet this due process requirement. The proposed rules would not include any requirement for a registrant to obtain an attestation report covering the effectiveness of internal control over GHG emissions disclosure, and therefore such a report would not be required even when the GHG emissions attestation engagement is performed at a reasonable assurance level. The proposed rules otherwise set forth minimum attestation engagement and report requirements that are primarily derived from the AICPA's attestation standards and are largely similar to the report requirements under PCAOB AT-101 and IAASB ISAE (International Standard on Assurance Engagements) 3410. The SEC has also proposed minimal attestation report requirements in addition to prevailing attestation standards to assist investors in evaluating the qualifications of the GHG emissions attestation provider selected by the registrant.

8. Emissions Targets and Goals

If a registrant has previously set climate-related targets or goals, the proposed rules would require it to disclose them, including, as applicable, a description of

- the scope of activities and emissions included in the target
- the unit of measurement, including whether the target is absolute or intensity based
- the defined time horizon by which the target is intended to be achieved and whether the time horizon is consistent with one or more goals established by a climate-related treaty, law, regulation, policy, or organization
- the defined baseline time period and baseline emissions against which progress will be tracked with a consistent base year set for multiple targets
- any interim targets set by the registrant
- how the registrant intends to meet its climate-related targets or goals

A registrant would be required to update this disclosure each fiscal year by describing the actions taken during the year to achieve its targets or goals.

If the registrant has used carbon offsets or renewable energy certificates (RECs) in its plan to achieve climate-related targets or goals, it would be required to disclose the amount of carbon reduction represented by the offsets or the amount of generated renewable energy represented by the RECs, the source of the offsets or RECs, and the cost of the offsets or RECs. Furthermore, the proposed rules make clear that a registrant's disclosure of its climate-related targets or goals should not be construed to be promises or guarantees. To the extent that information regarding a registrant's climate-related targets or goals would constitute forward-looking statements, for example, with respect to how a registrant intends to achieve its climate-related targets or goals and expected progress regarding those targets and goals, under the proposed rules such statements would fall under the Private Securities Litigation Reform Act safe harbors, assuming all other statutory requirements for those safe harbors are satisfied.

Treatment for Purposes of the Securities Act and Exchange Act

The proposing release proposes to treat the required climate-related disclosures as "filed" and therefore subject to potential liability under Section 18 of the Exchange Act, except for disclosures furnished on Form 6-K. Such climate-related disclosures would also be subject to potential Section 11 liability if included in or incorporated by reference into a Securities Act registration statement. This treatment would apply both to the disclosures in response to proposed Subpart 1500 of Regulation S-K and Article 14 of Regulation S-X. Consequently, the rules, if adopted as proposed, could lead to companies' being more circumspect and careful in disclosing carbon targets and goals given the potential for SEC enforcement actions and federal securities law claims arising out of such disclosures.

Compliance Dates

The table below summarizes the proposed phase-ins for the compliance dates of the proposed rules. The table assumes, for illustrative purposes, that the proposed rules will be adopted with an effective date in December 2022 and that the registrant has a December 31 fiscal year-end.

Registrant Type	Disclosure Compliance Date		Financial

			Statement Metrics Audit Compliance Date
	All proposed disclosures, including GHG emissions metrics: Scope 1, Scope 2, and associated intensity metric, but excluding Scope 3	GHG emissions metrics: Scope 3 and associated intensity metric	
Large Accelerated Filer	Fiscal year 2023 (filed in 2024)	Fiscal year 2024 (filed in 2025)	Same as disclosure compliance date
Accelerated Filer and Non-Accelerated Filer	Fiscal year 2024 (filed in 2025)	Fiscal year 2025 (filed in 2026)	
SRC	Fiscal year 2025 (filed in 2026)	Exempted	

If the proposed rules are adopted in 2022, large accelerated filers would not be subject to the rules until filings made in 2024 that include 2023 financial statements.

Comment Period

The proposed rules will be open for public comment until the later of May 20, 2022 or the date that is 30 days after their publication in the Federal Register.

Next Steps for Public Companies

Given that the proposed rules are not yet finalized, the following practical guidance is provided for consideration by public companies.

- **Evaluate how the proposed rules would impact your future disclosures in SEC filings.** Public companies should begin assessing the gaps between climate-related information they currently disclose, inside and outside of SEC filings, and what would be required under the proposed rules, if adopted. These gaps could be significant for many companies. In addition, many companies that have to date been partially compliant with TCFD in climate-related disclosures may need to rework their approach or disclose more information to satisfy the proposed disclosure requirements that are derived from the TCFD reporting framework.
- **Evaluate how the proposed rules would impact your operations.** While the proposed rules pertain only to disclosure, if adopted they may impact operations, as companies would be compelled to take actions, to the extent they are not doing so already, to have monitoring, accounting, planning, and governance practices in place so that required disclosures could be

made. The likelihood of the adoption of the proposed rules in some form suggests that companies should begin considering the processes, personnel, policies and technologies that would be needed to satisfy the new disclosure requirements.

- **Identify the disclosure obligations that would be challenging for your enterprise to meet.** Many of the proposed disclosure requirements would create new challenges for public companies that have not made these disclosures in the past, including the new attestation requirements applicable to disclosures of Scope 1 and Scope 2 emissions. The proposed Scope 3 emissions disclosures would also inevitably pose challenges. On the one hand, a company choosing to disclose Scope 3 emissions will face hurdles of estimating emissions of third parties. On the other hand, as the proposing release notes, a company choosing not to disclose all or certain Scope 3 emissions on the basis that they are not material may feel a need — or may be expected — to explain the basis of its determination to investors.[8]

- **Line up attestation firms, auditors, and advisers as needed.** As the proposed rules would require attestation of and auditing of climate-related information, companies may need to evaluate the capabilities of their current service providers to supply these services and, if necessary, line up providers to fill gaps and needs. Changes in operations and disclosures may necessitate the engagement of new expertise, both inside and outside of the company, related to management, operations, and legal ramifications related to the new disclosures and any new operational initiatives designed to support them. Companies may additionally wish to assess the expected costs of increased engagement with outside advisers.

- **Review existing climate-related goals.** Public companies should begin to carefully review their climate-related goals, such as net-zero emissions pledges, including a comprehensive understanding and review of all internal processes and assumptions that go into these goals. If your company is anticipating releasing new climate-related goals, it may be advisable to delay the release of such goals until after the final rules have been released and engage counsel with the necessary expertise to review such goals. If your company has not yet identified climate-related goals, it may be time to begin exploring options.

- **Participate in the comment period.** The SEC takes into account feedback from registrants when drafting final rules. In light of the significant new burdens the proposed rules would impose on companies directly and indirectly, we encourage public companies to reach out to counsel and other advisers as necessary to discuss giving input to the SEC on the proposed rules, either individually or through their trade associations.

- **Keep an eye on the potential for litigation.** In the sole dissenting statement objecting to the proposed rules, Commissioner Hester Peirce argued that the proposed rules are beyond the scope of the SEC's legal mandate.[9] The "major questions" doctrine, which provides that agency rules of major significance be the subject of a clear delegation of congressional authority, may provide support to such arguments. Threats of litigation along these and other lines against final rules may soon be in the pipeline and could contribute to delays in the finalization of the proposed rules in their current or amended form.

*For additional information on the topics covered in this update and current issues around rulemaking of the SEC and other federal agencies, see recent publications of Sidley Austin LLP on our practice pages for **Public Companies**, **ESG**, **Capital Markets**, and **Corporate Governance and Executive***

Compensation, *including Sonia Barros,* ***Preparing Your 2021 Form 10-K: A Summary of Recent Key Disclosures Developments, Priorities, and Trends***, *Sidley Corporate Governance and Executive Compensation Update (Feb. 4, 2022); Sonia Barros,* ***SEC Climate Change Comment Letters Signal Early Action on Environmental, Social, and Governmental Disclosures***, *Sidley Environmental Update (Oct. 7, 2021); Sonia Barros, Lindsay Smith, and Rebecka E. Manis,* ***Environmental, Social, and Governance Disclosures in Proxy Statements: Benchmarking the Fortune 50***, *Sidley Corporate Governance Update (Aug. 31, 2021); Heather Palmer,* ***Managing ESG Risks through the Energy Downturn***, *The Texas Lawbook (Nov. 18, 2020); Holly Gregory, Heather Palmer, and Leonard Wood,* ***Emerging ESG Disclosure Trends Highlighted in GAO Report***, *Sidley Environmental, Social and Governance Update (Jul. 16, 2020).*

---

[1] SEC, The Enhancement and Standardization of Climate-Related Disclosures for Investors (2022), Release Nos. 33-11042; 34-94478, **https://www.sec.gov/rules/proposed/2022/33-11042.pdf**.

[2] SEC, Commission Guidance Regarding Disclosure Related to Climate Change (2010), Release Nos. 33-9106, 34-61469, FR-82, **http://www.sec.gov./rules/interp/2010/33-9106.pdf**.

[3] Governance & Accountability Institute, Inc., 2021 Sustainability Reporting in Focus (Nov. 2021).

[4] "Upstream activities" include activities by a party other than the registrant that relate to the initial stages of a registrant's production of a good or service. "Downstream activities" include activities by a party other than the registrant that relate to processing materials into a finished product and delivering it or providing a service to the end user.

[5] For each of these categories, a registrant would be required to disclose separately the amount incurred during the fiscal years presented (i) toward positive and negative impacts associated with the climate-related events and (ii) toward transition activities, specifically, to reduce GHG emissions or otherwise mitigate exposure to transition risks.

[6] "Upstream emissions" include emissions attributable to goods and services that the registrant acquires, the transportation of goods, and employee business travel and commuting. "Downstream emissions" include the use of the registrant's products, transportation of products, end of life treatment of sold products, and investments made by the registrant.

[7] See Release No. 33-11042 at 174.

[8] See "6. GHG Emissions Metrics Disclosure: Scopes 1, 2 and 3" above.

[9] See Commissioner Hester M. Peirce (SEC), "We Are Not the Securities and Environment Commission – At Least Not Yet," Mar. 21 2022, **https://www.sec.gov/news/statement/peirce-climate-disclosure-20220321**.

CONTACTS

Heather M. Palmer, Partner	+1 713 495 4525, hpalmer@sidley.com
Sonia Gupta Barros, Partner	+1 202 736 8387, sbarros@sidley.com
John P. Kelsh, Partner	+1 312 853 7097, jkelsh@sidley.com
Samir A. Gandhi, Partner	+1 212 839 5684, sgandhi@sidley.com
Samuel B. Boxerman, Partner	+1 202 736 8547, sboxerman@sidley.com
Leonard Wood, Senior Managing Associate	+1 713 495 4679, lwood@sidley.com
Evan Grosch, Associate	+1 713 495 4554, egrosch@sidley.com

SEC (finally) proposes new rules on climate disclosure [UPDATED—PART I]

Posted by Cydney Posner All Posts

[This post is Part I of a revision and update of my earlier post primarily reflecting the contents of the proposing release. This post covers background and describes various aspects of the proposal other than the sections on GHG emissions disclosure and attestation, which will be covered in a separate post early next week.]

The SEC describes it modestly as a proposal to "enhance and standardize registrants' climate-related disclosures for investors." The *WSJ* called it "the biggest potential expansion in corporate disclosure since the creation of the Depression-era rules over financial disclosures that underpin modern corporate statements," and *Fortune* said it "could be the biggest change to corporate disclosures in the U.S. in decades." But now you can judge for yourself, after the SEC voted earlier this week, three to one, to propose new rules on climate disclosure regulation. The proposal was designed to require disclosure of "consistent, comparable, and reliable—and therefore decision-useful—information to investors to enable them to make informed judgments about the impact of climate-related risks on current and potential investments." The proposal would require public companies to disclose information about climate-related risks that are reasonably likely to have a material impact on their businesses, results of operations or financial condition, as well as information about the effect of climate risk on companies' governance, risk management and strategy. The disclosure, which would be included in registration statements and periodic reports, would draw, in part, on disclosures provided for under the Task Force on Climate-Related Financial Disclosures and the Greenhouse Gas Protocol. Compliance would be phased in, with reporting for large accelerated filers due in 2024 (assuming an—optimistic—effective date at the end of this year). The proposal would also mandate disclosure of a company's Scopes 1 and 2 greenhouse gas emissions, and, for larger companies, Scope 3 GHG emissions if material (or included in the company's emissions reduction target), with a phased-in attestation requirement for Scopes 1 and 2 data for large accelerated filers and accelerated filers. The proposal would also require disclosure of certain climate-related financial metrics in a note to the audited financial statements. At 510 pages, the proposal is certainly thoughtful, comprehensive and stunningly detailed—some might say overwhelmingly so. If adopted, it would surely require a substantial undertaking for many companies to get their arms around the extensive and granular requirements and comply with the proposal's mandates. How companies would manage this enormous effort remains to be seen.

According to SEC Chair Gary Gensler,

> "[o]ur core bargain from the 1930s is that investors get to decide which risks to take, as long as public companies provide full and fair disclosure and are truthful in those disclosures. Today, investors representing literally tens of trillions of dollars support climate-related disclosures

> because they recognize that climate risks can pose significant financial risks to companies, and investors need reliable information about climate risks to make informed investment decisions. Today's proposal would help issuers more efficiently and effectively disclose these risks and meet investor demand, as many issuers already seek to do. Companies and investors alike would benefit from the clear rules of the road proposed in this release. I believe the SEC has a role to play when there's this level of demand for consistent and comparable information that may affect financial performance. Today's proposal thus is driven by the needs of investors and issuers."

Why does the SEC believe that the rules are necessary? The SEC makes its case as follows:

> "Climate-related risks can affect a company's business and its financial performance and position in a number of ways. Severe and frequent natural disasters can damage assets, disrupt operations, and increase costs. Transitions to lower carbon products, practices, and services, triggered by changes in regulations, consumer preferences, availability of financing, technology and other market forces, can lead to changes in a company's business model. Governments around the world have made public commitments to transition to a lower carbon economy, and efforts towards meeting those greenhouse gas ('GHG') reduction goals have financial effects that may materially impact registrants. In addition, banking regulators have recently launched initiatives to incorporate climate risk in their supervision of financial institutions. How a company assesses and plans for climate-related risks may have a significant impact on its future financial performance and investors' return on their investment in the company. Consistent, comparable, and reliable disclosures on the material climate-related risks public companies face would serve both investors and capital markets. Investors would be able to use this information to make investment or voting decisions in line with their risk preferences. Capital allocation would become more efficient as investors are better able to price climate-related risks. In addition, more transparency and comparability in climate-related disclosures would foster competition. Many other jurisdictions and financial regulators around the globe have taken action or reached similar conclusions regarding the importance of climate-related disclosures and are also moving towards the adoption of climate-related disclosure standards."

In its economic analysis, however, the SEC acknowledges the magnitude of the undertaking. For companies that are not already gathering the information required to be disclosed under the proposed rules, they "may need to re-allocate in-house personnel, hire additional staff, and/or secure third-party consultancy services. Registrants may also need to conduct climate-related risk assessments, collect information or data, measure emissions (or, with respect to Scope 3 emissions, gather data from relevant upstream and downstream entities), integrate new software or reporting systems, seek legal counsel, and obtain assurance on applicable disclosures (*i.e.*, Scopes 1 and 2 emissions). The SEC estimates the costs in the first year of compliance, for companies that are not smaller reporting companies, "to be $640,000 ($180,000 for internal costs and $460,000 for outside professional costs), while annual costs in subsequent years are estimated to be

$530,000 ($150,000 for internal costs and $380,000 for outside professional costs). For SRC registrants, the costs in the first year of compliance are estimated to be $490,000 ($140,000 for internal costs and $350,000 for outside professional costs), while annual costs in subsequent years are estimated to be $420,000 ($120,000 for internal costs and $300,000 for outside professional costs)." Hmmmm. Only time will tell how accurate those estimates are.

The comment period will be open for 30 days after publication in the *Federal Register*, or May 20, 2022 (60 days after the date of issuance and publication on sec.gov), whichever period is longer.

As summarized in the fact sheet, domestic and foreign public companies would be required to disclose:

- "Climate-related risks and their actual or likely material impacts on the registrant's business, strategy, and outlook;
- The registrant's governance of climate-related risks and relevant risk management processes;
- The registrant's greenhouse gas ('GHG') emissions, which, for accelerated and large accelerated filers and with respect to certain emissions, would be subject to assurance;
- Certain climate-related financial statement metrics and related disclosures in a note to its audited financial statements; and
- Information about climate-related targets and goals, and transition plan, if any. "

Here are the rule proposal—over 500 pages!—and the press release.

Background

Of course, the topic is not exactly new to the SEC. In 2010, the staff issued interpretive guidance regarding climate change disclosure, addressing in some detail how then-current disclosure obligations could apply to climate change, such as the Reg S-K requirements for business narrative, legal proceedings, risk factors and MD&A. (See this PubCo post.) Nevertheless, many have viewed the current regulatory regime as ineffective in eliciting appropriate climate disclosure. As described in this 2021 report from the Institute for Policy Integrity at NYU and the Environmental Defense Fund, two years after the issuance of the 2010 guidance, the SEC reported to Congress that it had not seen a noticeable change in disclosure as a result, a conclusion supported by

> "outside studies conducted in the first few years after publication of the guidance reached similar conclusions. One examination of disclosures made for fiscal years 2010 to 2013, for example, found that disclosures 'are very brief, provide little discussion of material issues, and do not quantify impacts or risk,' and that 41% of corporations did not include any climate-related disclosure in their annual report. Even now, some corporations continue to avoid climate risk disclosures whole cloth. Others provide only boilerplate disclosures that are neither corporation-specific (or even industry-specific) nor decision-useful—that is, they do not help investors understand and assess the risk the corporation faces or how that risk compares to those faced by other corporations."

And that state of affairs largely continued in periodic reporting, even in the face of the development of numerous voluntary frameworks and standards. Indeed, the SEC contends, to some extent, the proliferation of frameworks under private ordering has made reporting more difficult and contributed to fragmentation. Because they are voluntary, the proposing release contends, "companies that choose to disclose under these frameworks may provide partial disclosures or they may choose not to participate every year. In addition, the form and content of the disclosures may vary significantly from company to company, or from period to period for the same company." Various studies have "found a lack of transparency and standardization with regard to the methodologies companies apply in disclosing climate-related information." Because much of the disclosure appears outside of SEC filings, the SEC observed, it is harder for investors to locate and compare this information. In addition, it is not subject to disclosure controls and procedures or to the same level of "additional potential liability, which itself can cause registrants to prepare and review information filed in the Form 10-K more carefully than information presented outside SEC filings."

What's more, the 2021 report said, Corp Fin had failed, up to that point, to use the review process to elicit more disclosure. In 2010, according to the report, Corp Fin sent 49 letters to companies that included comments regarding their climate risk disclosure, but sent only three in 2012 and none in 2013. Since 2016, the report could identify only six comment letters with comments on climate risk disclosure. (See this PubCo post.)

That began to change in February 2021, when then-Acting SEC Chair Allison Herren Lee directed the staff of Corp Fin, in connection with the disclosure review process, to "enhance its focus on climate-related disclosure in public company filings," starting with the extent to which public companies addressed the topics identified in the 2010 interpretive guidance. The staff would also "assess compliance with disclosure obligations under the federal securities laws, engage with public companies on these issues, and absorb critical lessons on how the market is currently managing climate-related risks." (See this PubCo post.) Lee also issued a statement in March 2021 requesting public input on climate disclosure, observing that, since the 2010 guidance, investor demand for climate disclosure has increased dramatically, and questions have arisen about "whether climate change disclosures adequately inform investors about known material risks, uncertainties, impacts, and opportunities, and whether greater consistency could be achieved." According to Gensler, 600 unique comment letters were submitted in response and were beneficial in developing the proposal.

In September last year, Corp Fin posted a sample letter to companies containing illustrative comments regarding climate change disclosures, presumably designed to help companies think about and craft their climate-related disclosure. (See this PubCo post.) And the staff then began to issue more climate-related comments as part of the disclosure review process. Most of these comments, however, related to climate discussions in companies' voluntary corporate social responsibility reports; the *WSJ* has reported that about 90% of companies in the S&P 500 publish reports voluntarily disclosing climate-related statistics, such as GHG emissions; however, only "16% report similar metrics in regulatory filings, according to S&P Global Sustainable1…." Many of the comments asked companies to justify—in some detail—why the disclosure in their corporate social responsibility reports wasn't also in their SEC filings and drilling down on companies' responses that they did not disclose certain climate information in their SEC filings because the information was not viewed to be material. In many of those cases, the SEC indicated that they viewed the companies' responses to be conclusory and pressed the companies to drill down in their responses by providing quantitative details or more detailed explanations to justify their conclusions. (See this PubCo post.)

To be sure, investors have also been clamoring for better and more comparable climate information. As Gensler indicated in his statement, "investors with $130 trillion in assets under management have requested that companies disclose their climate risks." In 2021, a group of 587 institutional investors managing over $46 trillion in assets signed a statement calling on governments to undertake five priority actions to accelerate climate investment, including 'implementing mandatory climate risk disclosure requirements aligned with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations, ensuring comprehensive disclosures that are consistent, comparable, and decision-useful." (See this PubCo post.) Both State Street Global Advisors (see this PubCo post) and BlackRock (see this PubCo post) have been focused on the systemic risk posed by climate change and promoted disclosure in alignment with TCFD and/or SASB. For example, in his 2021 letter to CEOs, BlackRock CEO Laurence Fink asked companies to disclose a "plan for how their business model will be compatible with a net zero economy" (see this PubCo post), and BlackRock Investment Stewardship has advocated that companies provide disclosure regarding how climate risks and risk mitigation affect their business, including sea level rise and extreme weather events, as well as national emissions goals, carbon taxes, regulations and investment in alternative energy. (See this PubCo post.)

One challenge the SEC had to face was the need to craft rules that would survive the political and legal opposition that has emerged. The SEC contends that it has "broad authority to promulgate disclosure requirements that are 'necessary or appropriate in the public interest or for the protection of investors'" and that it has "considered this statutory standard and determined that disclosure of information about climate-related risks and metrics would be in the public interest and would protect investors." That's because the SEC believes that the "information can have an impact on public companies' financial performance or position and may be material to investors in making investment or voting decisions." The potential direct financial effects of climate risks on businesses and the financial system as a whole, the SEC contends, were well documented in the 2021 Financial Stability Oversight Council's Report on Climate-Related Financial Risk. (See this PubCo post.) The SEC recognizes that "climate-related risks implicate broader concerns," but those concerns are subject to various other regulatory schemes—the SEC's objective is to advance its "mission to protect investors, maintain fair, orderly and efficient markets, and promote capital formation, not to address climate-related issues more generally."

The Proposal

Conceptual bases for disclosure

The SEC observes that "the TCFD and the GHG Protocol have developed concepts and a vocabulary that are commonly used by companies when providing climate-related disclosures in their sustainability or related reports." Accordingly, the proposal incorporates some of these now-familiar concepts and vocabulary, modeling the SEC's proposed framework in part on the TCFD's recommendations, which evaluate "material climate-related risks and opportunities through an assessment of their projected short-, medium-, and long-term financial impacts on a registrant. The TCFD framework establishes eleven disclosure topics related to four core themes that provide a structure for the assessment, management, and disclosure of climate-related financial risks: governance, strategy, risk management, and metrics and targets." (See this PubCo post.) The TCFD framework has been widely endorsed and, as of October 2021, the SEC reports, over "2,600 organizations globally, with a total market capitalization of $25 trillion have expressed support for the TCFD." Because of widespread adoption of the TCFD framework, companies (and investors) have experience with TCFD disclosures, which should facilitate compliance, reduce the burden for companies and improve global comparability.

GHG emissions data helps investors to assess exposure to "climate-related risks, including regulatory, technological, and market risks driven by a transition to a lower-GHG intensive economy," as well as progress toward reduction goals. Many commenters indicated that the GHG Protocol, was the "most widely used global greenhouse gas accounting standard." Accordingly, the proposal regarding disclosure of GHG emissions is based "primarily on the GHG Protocol's concept of scopes and related methodology."

Summary

The proposal would add an entire new subpart to Reg S-K and a new article to Reg S-X. The new subpart of Reg S-K would require disclosure of information about climate-related risks that are reasonably likely to have a material impact on a company's business or consolidated financial statements, as well as GHG emissions metrics. The disclosures would be required under a separate caption, "Climate-Related Disclosure," in registration statements and Exchange Act annual reports (with material updates in Forms 10-Q) and tagged using Inline XBRL. (Companies would also be able to incorporate by reference disclosure from other parts of the filing or from other filed or submitted reports.) Under Reg S-X, companies would be required to provide metrics and related disclosure—disaggregated climate-related impacts on existing financial statement line items—in a note to the audited financial statements. Accelerated filers and large accelerated filers would need to attach to their filings an attestation report regarding Scopes 1 and 2 GHG emissions and to provide certain related disclosures about the service provider. Although the attestation service provider need not be a registered public accounting firm, the proposal imposes "minimum attestation report requirements, minimum standards for acceptable attestation frameworks, and would require an attestation service provider to meet certain minimum qualifications." (GHG emissions disclosure and related attestation requirements will be discussed in Part II of this update.)

The proposal includes several phase-ins and other accommodations. The general compliance phase-in would be based on filer status, with additional phase-ins for disclosure of Scope 3 emissions as well as for the assurance requirement and the level of assurance. As proposed, accelerated filers and large accelerated filers would have one fiscal year to phase-in limited assurance and two additional fiscal years to transition to providing reasonable assurance, starting with the respective compliance dates for Scopes 1 and 2 disclosure described below. Smaller reporting companies would be exempt from the Scope 3 emissions disclosure requirement, but for those subject to it, there would be a safe harbor from liability for Scope 3 emissions disclosure. The safe harbor under the PSLRA would also be available (except for IPO registration statements) for disclosures that include forward-looking statements, provided that companies comply with the requirements of the safe harbor.

Disclosure framework under Reg S-K

The SEC's framework under Reg S-K, like the TCFD, would require disclosure of information about any material climate-related impacts on strategy, business model, and outlook; governance of climate-related risks; climate-related risk management; GHG emissions metrics; and climate-related targets and goals, if any. Note that new Item 1500 of Reg S-K would provide definitions, and, in some cases, much of the extensive detail is contained in the definitions. For example, the rule directs companies to provide the location of material physical risks. But "location" is a defined term meaning "a ZIP code or, in a jurisdiction that does not use ZIP codes, a similar subnational postal zone or geographic location."

Disclosure regarding climate-related impacts on strategy, business model and outlook (Item 1502)

Disclosure of climate-related risks

Definitions. Under the proposal, a company would be required to disclose "any climate-related risks reasonably likely to have a material impact on the registrant's business or consolidated financial statements." As defined, "climate-related risks" are broadly defined as "the actual or potential negative impacts of climate-related conditions and events on a registrant's consolidated financial statements, business operations, or value chains, as a whole. 'Value chain' would mean the upstream and downstream activities related to a registrant's operations." "Upstream activities include activities by a party other than the registrant that relate to the initial stages of a registrant's production of a good or service (*e.g*., materials sourcing, materials processing, and supplier activities). "Downstream activities" would be defined to include activities by a party other than the registrant that relate to processing materials into a finished product and delivering it or providing a service to the end user (*e.g*., transportation and distribution, processing of sold products, use of sold products, end of life treatment of sold products, and investments)."

Risks can refer to physical risks (*e.g*., fires, hurricanes, sea level rise, drought and floods, including both "acute and chronic risks to a registrant's business operations or the operations of those with whom it does business") and transition risks, meaning "the actual or potential negative impacts on a registrant's consolidated financial statements, business operations, or value chains attributable to regulatory, technological, and market changes to address the mitigation of, or adaptation to, climate-related risks." These might include increased costs attributable to regulatory changes, reduced market demand for carbon-intensive products or competitive pressures associated with new technologies or even reputational effects.

Description. To describe the proposal as highly prescriptive in mandating specific detailed disclosures is something of an understatement. For example, companies would be required to indicate whether the risk identified is a physical or transition risk. For physical risks, the company would be required to describe the nature of the risk, whether it is acute or chronic, the "location" (zip code) and the "nature of the properties, processes, or operations subject to the physical risk." For material flood risks, the description would also need to include the percentage of buildings, plants or properties (square meters or acres) that are located in flood hazard areas.

For assets in regions of high or extremely high water stress risk, the company would also need to disclose "the amount of assets (*e.g.*, book value and as a percentage of total assets) located in those regions," as well as the percentage of the company's "total water usage from water withdrawn in those regions." The SEC notes later that, to the extent loss of insurance coverage or increases in premiums is reasonably likely to have a material impact, the company would be required to disclose that risk under this Item. There are a number of requests for comment that refer to other potential specific information that could be required.

With regard to transition risks, companies would be required to disclose "the nature of transition risks, including whether they relate to regulatory, technological, market (including changing consumer, business counterparty, and investor preferences), liability, reputational, or other transition-related factors, and how those factors impact the registrant."

The company could also describe opportunities, such as "cost savings associated with the increased use of renewable energy, increased resource efficiency, the development of new products, services, and methods, access to new markets caused by the transition to a lower carbon economy."

Time horizons. Under the proposed rules, a company would need to disclose any climate-related risk that is reasonably likely to have a material impact on the company, its business or consolidated financial statements, "which may manifest over the short, medium and long term," as those terms are defined by the company. The company would need to describe its definitions of those terms, "including how it takes into account or reassesses the expected useful life of the registrant's assets and the time horizons for the registrant's climate-related planning processes and goals."

Materiality. An impact would be "material" if "there is a substantial likelihood that a reasonable investor would consider it important when determining whether to buy or sell securities or how to vote." The materiality determination "is largely fact specific and one that requires both quantitative and qualitative considerations," and, with respect to future events, requires "an assessment of both the probability of the event occurring and its potential magnitude, or significance" to the company over the short, medium and long term. The SEC suggests that the analysis might be similar to the analysis required for MD&A. The disclosure would include a discussion of the company's risk-materiality assessment over the short, medium and long term. Any forward-looking statements could be protected under the PSLRA (although not in IPO registration statements).

Disclosure of material impacts

The proposal would also require a description of "the actual and potential impacts" of the material climate risks identified above on the company's strategy, business model and outlook. More specifically, disclosure would be required regarding the risks' impact on the company's

- "Business operations, including the types and locations of its operations;
- Products or services;
- Suppliers and other parties in its value chain;
- Activities to mitigate or adapt to climate-related risks, including adoption of new technologies or processes;

- Expenditure for research and development; and
- Any other significant changes or impacts."

The time horizon would also need to be discussed for each described impact. Under the proposal, the company would need to discuss "whether and how" any of the identified impacts are considered as part of the company's business strategy, financial planning and capital allocation, including both current and forward-looking disclosures. The intent is to help investors understand "whether the implications of the identified climate-related risks have been integrated into the registrant's business model or strategy, including how resources are being used to mitigate climate-related risks." The discussion must also include how any of the required metrics (GHG emissions metrics or other metrics contained in the new climate note to the financial statements) or disclosed targets relate to the company's business model or strategy. An example would be the limitations on GHG emissions imposed under the Paris Climate Agreement that might require various targeted reductions over time. In that instance, the company could face material transition risks arising out of the estimated costs of the operational changes necessary to achieve these goals, which should be disclosed as transition risks, along with their impact on the company's strategy, business model and outlook. Other risks might involve the need to acquire new technology to curb operational emissions or a change to a less carbon-intensive product. Drought might have an impact on product mix or require increased expenses for additional water; rising sea levels could affect property and property value.

The company would also need to provide a narrative discussion, similar to MD&A, of how these risks have or are reasonably likely to affect the company's financials, including the financial statement metrics discussed in the new climate note (discussed below). The discussion should address short-, medium- and long-term effects, as applicable.

Carbon offsets or renewable energy credits if used. If, as part of the company's strategy, it uses carbon offsets (an "emissions reduction or removal of greenhouse gases in a manner calculated and traced for the purpose of offsetting an entity's GHG emissions") or renewable energy credits or certificates (a "credit or certificate representing each purchased megawatt-hour of renewable electricity generated and delivered to a registrant's power grid") to meet its goals, the company would be required to discuss the role that carbon offsets or RECs play in the company's climate-related business strategy, including short- and long-term costs and risks, such as the 'risk that the availability or value of offsets or RECs might be curtailed by regulation or changes in the market."

Maintained internal carbon price. An internal carbon price is an "estimated cost of carbon emissions used internally within an organization." An internal carbon price may be used as a "planning tool to help identify climate-related risks and opportunities," or as an "incentive to drive energy efficiencies," among other purposes. If the company uses an internal carbon price, the proposed rules spell out a number of specific detailed disclosures that would be required, including how the company uses the internal carbon price to evaluate and manage climate-related risks and the rationale for the price selected. The disclosure is intended to "help investors understand the rationale and underlying assumptions for a registrant's internal carbon price and help them assess whether the registrant's use of an internal carbon price as a planning tool is reasonable and effective." The SEC indicates that the "carbon price applied should not be viewed as a promise or guarantee with regard to the future costs to the registrant of GHG emissions."

Resilience and disclosure of scenario analyses, if used. The proposal requires the company to describe "the resilience" of its business strategy "in light of potential future changes in climate-related risks" and any analytical tools that it uses "to assess the impact of climate-related risks on its business and consolidated financial statements, and to support the resilience of its strategy and business model." One analytical tool that some companies use is the scenario analysis—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 operations, business strategy, and consolidated financial statements over time." Scenario analyses may be used to test the resilience of company strategies under future climate scenarios that might assume various global temperature increases. If the company uses scenario analyses, the proposal would require disclosure of the scenarios considered (*e.g.*, an increase of no greater than 3 ^{o}, 2 ^{o}, or 1.5 ^{o}C above preindustrial levels), "including parameters, assumptions, and analytical choices, and the projected principal financial impacts on the registrant's business strategy under each scenario. The disclosure should include both qualitative and quantitative information." The SEC suggests that companies may want to use as a basis for its own scenario analysis some of the publicly available, widely accepted climate-related scenarios, a number of which have been summarized by the TCFD. However, although several commenters requested that the SEC require companies to perform scenario analyses at several assumed temperatures, the SEC declined to go that far, at least in the proposal. Once again, the PSLRA safe harbor should apply to forward-looking statements in most circumstances.

Governance disclosure (Item 1501)

Again building on the TCFD framework, the proposal would require the company to disclose information concerning "the board's oversight of climate-related risks, and management's role in assessing and managing those risks." The SEC believes that this disclosure is necessary to help investors assess the extent to which the company is "adequately addressing the material climate-related risks it faces, and whether those risks could reasonably affect the value of their investment." According to the TCFD, few companies actually disclose climate-related governance information aligned with TCFD.

Board oversight

The proposal would require the company to describe the board's oversight of climate-related risks, including the following (to the extent applicable):

- The identity of any board members or board committee responsible for the oversight of climate-related risks, such as the audit committee or risk committee, or a separate committee focused on climate-related risks;
- Whether any member of the board has expertise in climate-related risks, including a full description of the nature of the expertise;
- The processes by which the board or board committee discusses climate-related risks, including how the board is informed about climate-related risks, and the frequency of these risk discussions;
- Whether and how the board or board committee considers climate-related risks as part of its business strategy, risk management and financial oversight, such as how the board "considers climate-related risks when reviewing and

guiding business strategy and major plans of action, when setting and monitoring implementation of risk management policies and performance objectives, when reviewing and approving annual budgets, and when overseeing major expenditures, acquisitions, and divestitures"; and
- Whether and how the board sets climate-related targets or goals (*e.g.*, to achieve net-zero carbon emissions for all or a large percentage of its operations by 2050), and how it oversees progress against those targets or goals, including the establishment of any interim targets or goals. The SEC believes that this proposed requirement "would help investors evaluate whether and how a board is preparing to mitigate or adapt to any material transition risks, and whether it is providing oversight for the registrant's potential transition to a lower carbon economy."

The company could also describe the board's oversight of climate-related opportunities, if applicable.

Management oversight

The proposal would also require the company to describe management's role in assessing and managing climate-related risks, including the following (to the extent applicable):

- Whether members of management or committees are responsible for assessing and managing climate-related risks and, if so, the identity of these positions or committees and the relevant expertise of the position holders or members, including a full description of the nature of their expertise;
- The processes by which these members of management or committees are informed about and monitor climate-related risks, such as whether there are "specific positions or committees responsible for monitoring and assessing specific climate-related risks, the extent to which management relies on in-house staff with the relevant expertise to evaluate climate-related risks and implement related plans of action, and the extent to which management relies on third-party climate consultants for these same purposes"; and
- Whether and how frequently these positions or committees report to the board or a committee of the board on climate-related risks. This requirement is intended to "help investors evaluate whether management has adequately implemented processes to identify, assess, and manage climate-related risks."

The company could also describe management's role in assessing and managing climate-related opportunities.

Risk management disclosure (Item 1503)

Processes for identifying, assessing, and managing climate-related risks

Under the proposal, the company would be required to describe any processes it has for "identifying, assessing, and managing climate-related risks." The SEC believes that more granular information about climate-risk management could "permit investors to ascertain whether a registrant has made the assessment of climate-related risks part of its regular risk management processes" and help investors evaluate the adequacy of a company's risk management processes. The company could also describe any processes for identifying, assessing and managing climate-related opportunities.

More specifically, in describing its processes for identifying, assessing and managing climate-related risks, the company should disclose, as applicable, how it:

- "Determines the relative significance of climate-related risks compared to other risks;
- Considers existing or likely regulatory requirements or policies, such as GHG emissions limits, when identifying climate-related risks;
- Considers shifts in customer or counterparty preferences, technological changes, or changes in market prices in assessing potential transition risks; and
- Determines the materiality of climate-related risks, including how it assesses the potential scope and impact of an identified climate-related risk, such as the risks identified in response to [Item 1502 (discussed above)]."

In addition, when describing any processes for managing climate-related risks, the company would be required to disclose, as applicable, how it:

- "Decides whether to mitigate, accept, or adapt to a particular risk;
- Prioritizes whether to address climate-related risks; and
- Determines how to mitigate any high priority risks."

The proposed rules would also require the company to disclose whether and how the processes regarding climate-related risks are integrated into the company's overall risk management system or processes. If a separate board or management committee is responsible for assessing and managing climate-related risks, the company must disclose how that committee interacts with the board or management committee governing risks. These disclosures are designed to help investors assess whether the company has "centralized the processes for managing climate-related risks, which may indicate to investors how the board and management may respond to such risks as they unfold."

The company may also need to describe any insurance or other financial products used to manage its exposure to climate-related risks.

Transition plans

Transition plans to mitigate or adapt to climate-related risks may be a key component of a company's climate risk management strategy. A transition plan is defined as a company'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 within which it has significant operations," such as the Paris Climate Agreement. Transition plans could also address transition risks that arise out of changes in customer or business counterparty preferences, technological change or changes in market prices.

If the company has adopted a transition plan, it would be required to describe the plan, including the relevant metrics and targets used to identify and manage any physical and transition risks. To provide insight into the company's progress to meet the plan's targets, a company would be required to "update its disclosure about the transition plan each fiscal year by describing the actions taken during the year to achieve the plan's targets or goals."

The company would also be required to describe how it plans to mitigate or adapt to any identified risks. With regard to physical risks, such as risks related to energy, land or water use and management, the discussion might include relocation of vulnerable operations or reinforcement of physical facilities. The company would also need to describe how it plans to mitigate or adapt to any identified transition risks, such as laws, rules or policies that restrict GHG emissions or products with high GHG footprints or require the protection of high conservation value land or natural assets; imposition of a carbon price; or changing demands or preferences of consumers, investors, employees, and business counterparties.

The company could also describe how it plans to achieve any identified climate-related opportunities, such as through the introduction of products that may facilitate the transition to a lower carbon economy; the generation or use of renewable power; the production or use of low waste, recycled or other less carbon-intensive consumer products; the setting of conservation goals and targets to reduce GHG emissions; and the provision of services related to any transition to a lower carbon economy.

Targets and goals disclosure (Item 1506)

If the company has set any climate-related targets or goals—such as reduction of GHG emissions or energy or water usage or increases in revenue from low-carbon products—the company would be required, under the proposal, to provide specified information about those targets or goals. The proposal doesn't appear to limit the requirement to targets or goals that have been publicly disclosed. Many companies have made commitments to reduce GHG emissions, but do not always provide investors with sufficient information to understand how they intend to achieve those commitments or even to assess the progress made toward achieving them. The disclosure is intended to help investors understand the scope of a company's climate-related targets or goals and assess its progress. The SEC advises that this information could be included as part of the information responsive to Items 1502 (strategy, business model and outlook) or 1503 (risk management).

Specifically, if companies have set targets or goals, they would be required to disclose:

- "The scope of activities and emissions included in the target;
- The unit of measurement, including whether the target is absolute or intensity based;
- The defined time horizon by which the target is intended to be achieved, and whether the time horizon is consistent with one or more goals established by a climate-related treaty, law, regulation, policy, or organization;
- The defined baseline time period and baseline emissions against which progress will be tracked with a consistent base year set for multiple targets;
- Any interim targets set by the registrant; and
- How the registrant intends to meet its climate-related targets or goals."

For example, if the company has set a goal of reducing its freshwater needs, to describe how it intends to meet its goal, it could describe its strategy to increase the water efficiency of its operations, such as by recycling wastewater; if the target is to reduce net GHG emissions, the company could describe its "strategy to increase energy efficiency, transition to lower carbon products, purchase carbon offsets or RECs, or engage in carbon removal and carbon storage." Even if the company has not yet developed a strategy, the SEC wants investors to be informed of the company's "plans and progress wherever it is in the process of developing and implementing its plan."

The company would also be required to disclose relevant data to show its progress toward the target or goal and "how such progress has been achieved," and must update this disclosure annually describing actions taken during the year.

If the company's plan has included the use of carbon offsets or RECs, the company must, "disclose the amount of carbon reduction represented by the offsets or the amount of generated renewable energy represented by the RECs, the source of the offsets or RECs, a description and location of the underlying projects, any registries or other authentication of the offsets or RECs, and the cost of the offsets or RECs." The SEC observes that a "reasonable investor could well assess differently the effectiveness and value to a registrant of the use of carbon offsets where the underlying projects resulted in authenticated reductions in GHG emissions compared to the use of offsets where the underlying projects resulted in the avoidance, but not the reduction, in GHG emissions or otherwise lacked verification."

The SEC advises that disclosure of climate-related targets or goals "should not be construed to be promises or guarantees." To the extent that the disclosure involves forward-looking statements, the PSLRA safe harbors should be available (except for IPO registration statements).

Financial statement metrics under Reg S-X (Items 14.01 and 14.02)

In a highly unusual move (see this Bloomberg article), the SEC is itself proposing changes to Reg S-X that would require a company to disclose in a note to its audited financial statements specified disaggregated climate-related financial statement metrics that are mainly derived from existing financial statement line items. Disclosure would be required for the company's most recently completed fiscal year, and for the historical fiscal years included in the consolidated financial statements in the filing (*e.g.,* with some exceptions, two years of the climate-related metrics that correspond to balance sheet line items and three years of the climate-related metrics that correspond to income statement or cash flow statement line items). To calculate the metrics, companies would be required to apply the same set of accounting principles and use financial information that is consistent with the scope of the rest of the consolidated financial statements included in the filing. Because the disclosures would be included in the audited financial statements, the disclosures would be (i) included in the scope of the audit, (ii) subject to audit by an independent registered public accounting firm, and (iii) within the scope of the company's internal control over financial reporting.

The proposed rules would require disclosure under the following three categories of information: financial impact metrics; expenditure metrics; and financial estimates and assumptions. The proposed metrics disclosures involve "estimation uncertainties that are driven by the application of judgments and assumptions," and, as a result, the company would be required to disclose contextual information for each type of metric to enable a reader to understand how it derived the metric, including a description of significant inputs and assumptions used, and if applicable, policy decisions made by the registrant to calculate the specified metrics."

Financial impact metrics

To complement the requirement to provide a narrative discussion, under Item 1502, of the impact of "climate-related risks" on the financial statements, the proposal would require a company to include disaggregated information about the impact of climate-related conditions and events (including those identified under Item 1502(a) discussed above), and transition activities, on the consolidated financial statements included in the filing, unless the impact, on an aggregated basis, is less than 1% of the total line item for the relevant fiscal year. The proposal would require companies to disclose "the impact of severe weather events and other natural conditions, such as flooding, drought, wildfires, extreme temperatures and sea level rise on any relevant line items" in the financials, presented, at a minimum, on an aggregated line-by-line basis for all negative impacts and, separately, at a minimum, on an aggregated line-by-line basis for all positive impacts. Disclosure would also be required of the impacts of any climate-related risks identified under proposed Item 1502(a), including both physical risks and transition risks (including any efforts to reduce GHG emissions or otherwise mitigate exposure to transition risks) on any relevant line items. Impacts from physical risks could include, for example, changes to revenues or costs from business disruptions, impairment charges and changes to the carrying amount of assets, changes to loss contingencies or reserves or changes to total expected insured losses due to flooding or wildfire patterns. Transition impacts could include changes to revenue or costs due to the loss of a contract as a result of new emissions pricing or regulations; changes to operating, investing, or financing cash flow from changes in upstream costs, such as transportation of raw materials; changes to the carrying amount of assets due to a reduction of the asset's useful life or a change in the asset's salvage value by being exposed to transition activities; and changes to interest expense driven by financing instruments such as climate-linked bonds issued where the interest rate increases if certain climate-related targets are not met. Companies could also disclose the impact of opportunities, provided they do so consistently. To determine whether the disclosure threshold has been met, the company would be required to aggregate the *absolute values* of the positive and negative impacts on a line-by-line basis. The release contain charts illustrating how the threshold would be calculated and the disclosure would be presented.

Expenditure metrics

Under the proposal, the company would be required to disclose separately the aggregate amount of expenditure expensed and the aggregate amount of capitalized costs incurred during the fiscal years presented to mitigate the risks from severe weather events and other natural conditions, other climate-related risks identified under Item 502(a) and transition activities, subject to the same 1% threshold. For example, for climate-related physical risks, the company could be required to disclose the amount of expense or capitalized costs, as applicable, to increase the resilience of assets or operations, retire or shorten the estimated useful lives of impacted assets, relocate assets or operations at risk, or otherwise reduce the future impact of severe weather events and other natural conditions on business operations. For transition risks, the company could be required to disclose the amount of expense or capitalized costs incurred related to research and development of new technologies, purchase of assets, infrastructure, or products that are intended to reduce GHG emissions, increase energy efficiency, offset emissions (purchase of energy credits) or improve other resource efficiency.

For each of those categories (expenses and capitalized costs), the company would be required to disclose separately the amount incurred during the fiscal years presented (i) toward positive and negative impacts associated with the climate-related events (*i.e.*, severe weather events and other natural conditions and identified physical risks under Item 1502(a)) and (ii) toward transition activities, specifically, to reduce GHG emissions or otherwise mitigate exposure to transition risks (including identified transition risks). The company could also disclose opportunities. To determine if the disclosure threshold has been met, the company "would be permitted to separately determine the amount of expenditure expensed and the amount of expenditure capitalized; however, a registrant would be required to aggregate expenditure related to climate-related events and transition activities within the categories of expenditure (*i.e.*, amount capitalized and amount expensed)."

Financial estimates and assumptions

Under the proposal, the company would need to disclose whether the estimates and assumptions used to produce the financials were affected by "exposures to risks and uncertainties associated with, or known impacts from, climate-related events (including physical risks identified under Item 1502(a) and severe weather events and other natural conditions), or by transition activities and risks (including transition risks under Item 1502(a)). The company would be required to provide separate qualitative descriptions of how the climate-related events or transition activities have impacted the development of those estimates and assumptions. For example, if climate events or risks or transition activities affected asset values resulting in asset impairments, the "effect on asset values and the resulting impairments could, in turn, affect a registrant's assumptions when calculating depreciation expenses or asset retirement obligations associated with the retirement of tangible, long-lived assets." If the company elects to disclose the impact of an opportunity on its financial estimates and assumptions, it must do so consistently and must follow the same presentation and disclosure requirements.

General

Companies subject to the climate-related disclosure rules and affected forms and liability

The disclosure requirements would apply to Securities Act and Exchange Act registration statements and Exchange Act annual reports filed by domestic and foreign issuers. A company would also have to disclose any material change to the climate-related disclosure in its Form 10-Q (or 6-K). Under the proposal, SRCs would be exempt from the Scope 3 emissions disclosure requirement and would also have a longer transition period to comply with the proposed rules. The SEC requests comment on whether it should adopt an alternative reporting provision for foreign private issuers that are subject to the climate-related disclosure requirements of an alternative reporting regime.

The proposed required climate-related disclosures would be considered "filed" and therefore subject to potential liability under Exchange Act Section 18 (except for disclosures furnished on Form 6-K), and to potential liability under Section 11 if included in a Securities Act registration statement.

Structured data requirement

The proposed rules would require a company to tag the proposed climate-related disclosures using Inline XBRL, including block text tagging and detail tagging of narrative and quantitative disclosures.

Compliance date

The SEC has proposed phase-in dates for compliance as set forth in the table below. The proposed compliance dates would apply to both annual reports and registration statements. The table assumes, for illustrative purposes, that the proposed rules will be adopted with an effective date in December 2022, and that the company has a December 31 fiscal year end. There is also an additional one-year phase-in period for the Scope 3 emissions disclosure requirements.

Registrant Type	**Disclosure Compliance Date**		**Financial Statement Metrics Audit Complicance Date**
	All proposed disclosures, including GHG emissions metrics: Scope 1, Scope 2, and associated intensity metric, but excluding Scope 3.	GHG emissions metrics: Scope 3 and associated intensity metric	
Large Accelerated Filer	Fiscal year 2023 (filed in 2024)	Fiscal year 2024 (filed in 2025)	Same as disclosure compliance date
Accelerated Filer and Non-Accelerated Filer	Fiscal year 2024 (filed in 2025)	Fiscal year 2025 (filed in 2026)	
SRC	Fiscal year 2025 (filed in 2026)	Exempted	

If a non-accelerated filer with a December 31 fiscal year end filed a registration statement that was not required to include audited financial statements for fiscal 2024, it would not be required to comply with the proposed climate disclosure rules in that registration statement. A company with a different fiscal year end that results in the commencement of its fiscal 2023 before the effective date of the rules would not be required to comply until the following fiscal year.

SEC proposes new rules on climate disclosure [UPDATED—PART II—GHG emissions]

Posted by Cydney Posner All Posts

[This post is Part II of a revision and update of my earlier post that primarily reflects the contents of the proposing release. Part I (here) covered the background of the proposal and described the SEC's proposed climate disclosure framework, including disclosure of climate-related risks, governance, risk management, targets and goals, financial statement metrics and general aspects of the proposal. This post covers GHG emissions disclosure and attestation.]

So, what are the GHG emissions for a mega roll of Charmin Ultra Soft toilet paper? That was the question I asked to open this PubCo post. According to this article in the *WSJ*, the answer was 771 grams, a calculation performed by the Natural Resources Defense Council. But how did they figure that out? How public companies could be required to calculate and report on their GHG emissions is one of the major issues addressed by the SEC in its proposal on climate-related disclosure regulation issued last week. The proposal was designed to require disclosure of "consistent, comparable, and reliable—and therefore decision-useful—information to investors to enable them to make informed judgments about the impact of climate-related risks on current and potential investments." Drawing on the Greenhouse Gas Protocol, the proposal would, in addition to the disclosure mandate discussed in Part I of this Update, require disclosure of a company's Scopes 1 and 2 greenhouse gas emissions, and, for larger companies, Scope 3 GHG emissions if material (or included in the company's emissions reduction target), with a phased-in attestation requirement for Scopes 1 and 2 data for large accelerated filers and accelerated filers. The disclosure would be included in registration statements and periodic reports in the section captioned "Climate-Related Disclosure." At 510 pages, the proposal is certainly thoughtful, comprehensive and stunningly detailed—some might say overwhelmingly so. If adopted, it would certainly require a substantial undertaking for many companies to get their arms around the extensive and granular requirements and comply with the proposal's mandates. How companies would manage this enormous effort remains to be seen.

Why does the SEC believe that the rules are necessary? The SEC makes its case as follows:

> "Climate-related risks can affect a company's business and its financial performance and position in a number of ways. Severe and frequent natural disasters can damage assets, disrupt operations, and increase costs. Transitions to lower carbon products, practices, and services, triggered by changes in regulations, consumer preferences, availability of financing, technology and other market forces, can lead to changes in a company's business model. Governments around the world have made public commitments to transition to a lower carbon economy, and

> efforts towards meeting those greenhouse gas ('GHG') reduction goals have financial effects that may materially impact registrants. In addition, banking regulators have recently launched initiatives to incorporate climate risk in their supervision of financial institutions. How a company assesses and plans for climate-related risks may have a significant impact on its future financial performance and investors' return on their investment in the company. Consistent, comparable, and reliable disclosures on the material climate-related risks public companies face would serve both investors and capital markets. Investors would be able to use this information to make investment or voting decisions in line with their risk preferences. Capital allocation would become more efficient as investors are better able to price climate-related risks. In addition, more transparency and comparability in climate-related disclosures would foster competition. Many other jurisdictions and financial regulators around the globe have taken action or reached similar conclusions regarding the importance of climate-related disclosures and are also moving towards the adoption of climate-related disclosure standards."

In its economic analysis, however, the SEC acknowledges the magnitude of the undertaking. For companies that are not already gathering the information required to be disclosed under the proposed rules, they "may need to re-allocate in-house personnel, hire additional staff, and/or secure third-party consultancy services. Registrants may also need to conduct climate-related risk assessments, collect information or data, measure emissions (or, with respect to Scope 3 emissions, gather data from relevant upstream and downstream entities), integrate new software or reporting systems, seek legal counsel, and obtain assurance on applicable disclosures (i.e., Scopes 1 and 2 emissions). The SEC estimates the costs in the first year of compliance, for non-SRC registrants, "to be $640,000 ($180,000 for internal costs and $460,000 for outside professional costs), while annual costs in subsequent years are estimated to be $530,000 ($150,000 for internal costs and $380,000 for outside professional costs). For SRC registrants, the costs in the first year of compliance are estimated to be $490,000 ($140,000 for internal costs and $350,000 for outside professional costs), while annual costs in subsequent years are estimated to be $420,000 ($120,000 for internal costs and $300,000 for outside professional costs)." Hmmmm. Only time will tell how accurate those estimates are.

The comment period will be open for 30 days after publication in the *Federal Register*, or May 20, 2022 (60 days after the date of issuance and publication on sec.gov), whichever period is longer.

As summarized in the fact sheet, domestic and foreign public companies would be required to disclose:

- "Climate-related risks and their actual or likely material impacts on the registrant's business, strategy, and outlook;
- The registrant's governance of climate-related risks and relevant risk management processes;
- The registrant's greenhouse gas ('GHG') emissions, which, for accelerated and large accelerated filers and with respect to certain emissions, would be subject to assurance;
- Certain climate-related financial statement metrics and related disclosures in

a note to its audited financial statements; and

- Information about climate-related targets and goals, and transition plan, if any. "

Here are the rule proposal—over 500 pages!—and the press release.

GHG emissions metrics disclosure (Item 1504)

Summary

The SEC believes that GHG emissions data would help investors to assess exposure to "climate-related risks, including regulatory, technological, and market risks driven by a transition to a lower-GHG intensive economy," as well as progress toward reduction goals. Many commenters indicated that the GHG Protocol was the "most widely used global greenhouse gas accounting standard." Accordingly, the proposal regarding disclosure of GHG emissions is based "primarily on the GHG Protocol's concept of scopes and related methodology."

The GHG emissions disclosures would be required (along with the other climate-related disclosures) under a separate caption, "Climate-Related Disclosure," in registration statements and Exchange Act annual reports and tagged using Inline XBRL. Accelerated filers and large accelerated filers would need to attach to their filings an attestation report regarding Scopes 1 and 2 emissions and to provide certain related disclosures about the service provider. Although the attestation service provider need not be a registered public accounting firm, the proposal imposes "minimum attestation report requirements, minimum standards for acceptable attestation frameworks, and would require an attestation service provider to meet certain minimum qualifications."

The proposal includes several phase-ins and other accommodations. The general compliance phase-in would be based on filer status, with additional phase-ins for disclosure of Scope 3 emissions as well as for the assurance requirement and the level of assurance. As proposed, accelerated filers and large accelerated filers would have one fiscal year to phase-in limited assurance and two additional fiscal years to transition to providing reasonable assurance. Smaller reporting companies would be exempt from the Scope 3 emissions disclosure requirement, but for those subject to it, there would be a safe harbor from liability for Scope 3 emissions disclosure. The forward-looking statement safe harbor under the PSLRA would also be available to the extent that the disclosures include forward-looking statements and the company satisfied the requirements of the safe harbor.

Disclosure requirement

The proposed rules would require a company to disclose its GHG emissions for its most recently completed fiscal year and for the historical fiscal years included in its financials (to the extent the historical GHG emissions data is reasonably available). Under the proposal, consistent with the GHG Protocol, "greenhouse gases" are defined as "carbon dioxide ('CO2'); methane ('CH4'); nitrous oxide ('N2O'); nitrogen trifluoride ('NF3'); hydrofluorocarbons ('HFCs'); perfluorocarbons ('PFCs'); and sulfur hexafluoride ('SF6')." Commenters have indicated that GHG emissions are important to investment decisions because the data is quantifiable and comparable and can be used in conducting a transition risk analysis and to evaluate the company's progress in meeting net-zero commitments. The data may also indicate the company's ability "to reduce its carbon footprint in the face of regulatory, policy, and market constraints."

GHG emissions would include both direct emissions from sources owned or controlled by the company and indirect emissions that result from the company's activities, but occur at sources not owned or controlled by the company. The requirements of the proposal are based on the concept of "scopes" developed by the GHG Protocol, and the SEC has based its own definitions on those of the GHG Protocol. The SEC defines:

- "Scope 1 emissions as direct GHG emissions from operations that are owned or controlled by a registrant;
- Scope 2 emissions as 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; and
- Scope 3 emissions as all indirect GHG emissions not otherwise included in a registrant's Scope 2 emissions, which occur in the upstream and downstream activities of a registrant's value chain. Upstream emissions include emissions attributable to goods and services that the registrant acquires, the transportation of goods (for example, to the registrant), and employee business travel and commuting. Downstream emissions include the use of the registrant's products, transportation of products (for example, to the registrant's customers), end of life treatment of sold products, and investments made by the registrant."

GHG emissions data compiled for the EPA's own GHG emissions reporting program is consistent with the GHG Protocol—and with the proposed rules—allowing a company to use that EPA data to fulfill, in part, its GHG emissions disclosure obligations under the proposal.

The SEC is proposing to require that a company disclose separately its total Scope 1 emissions and its total Scope 2 emissions calculated from all sources that are included in the company's "organizational and operational boundaries" as discussed below). In addition, for a company that is not a smaller reporting company (which would be exempt from Scope 3 disclosure), if the company's Scope 3 emissions are material, or if it has set a GHG emissions reduction target or goal that includes its Scope 3 emissions, the company would also be required to disclose separately its total Scope 3 emissions.

For each of the Scopes 1, 2 and 3 emissions, the company would need to disclose the emissions both disaggregated by each constituent greenhouse gas and in the aggregate. The GHG emissions data must be expressed "in terms of carbon dioxide equivalent ('CO2e')," which is "the common unit of measurement used by the GHG Protocol to indicate the global warming potential ('GWP') of each greenhouse gas." Consistent with the GHG Protocol, the proposed rules would require disclosure of GHG emissions data in "gross terms, excluding any use of purchased or generated offsets." The SEC suggests that these specifics could be useful information if, for example, regulations were adopted targeting a specific GHG.

Treatment of Scopes 1 and 2 emissions compared to Scope 3 emissions. The SEC is proposing to require all companies to disclose their Scopes 1 and 2 emissions, which are emissions that result from facilities owned or activities controlled by the company. Scope 3 is another story, because those emissions typically result from the activities of third parties in the company's "value chain," making collection of the data much more difficult. (According to press reports, the internal wrangling at the SEC—among the Democratic commissioners—over whether or not to require disclosure of Scope 3 emissions was fierce and one of the reasons for the delay in the release of the climate disclosure proposal. See this PubCo post and this PubCo post.) The EPA provides detailed guidance for calculation of Scopes 1 and 2, but apparently not for Scope 3. Nevertheless, in some circumstances, Scope 3 emissions may represent the bulk of a company's emissions, and disclosure may be necessary in some cases "to present investors a complete picture of the climate-related risks—particularly transition risks—that a registrant faces and how GHG emissions from sources in its value chain, which are not included in its Scopes 1 and 2 emissions, may materially impact a registrant's business operations and associated financial performance." In addition, companies sometimes do take steps to limit Scope 3 emissions.

Under the proposal, Scope 3 emissions would need to be disclosed only if those emissions are "material," or if the company has set a GHG emissions reduction target or goal that includes its Scope 3 emissions, allowing investors to track the company's progress toward its target. In determining materiality, the company would assess whether there is a substantial likelihood that a reasonable investor would consider the Scope 3 emissions important when making an investment or voting decision. The SEC observes here that SCOTUS "recognized that '[d]oubts as to the critical nature' of the relevant information 'will be commonplace.' But 'particularly in view of the prophylactic purpose of the securities laws,' and 'the fact that the content' of the disclosure 'is within management's control, it is appropriate that these doubts be resolved in favor of those the statute is designed to protect,' namely investors."

According to the SEC, some commenters indicated that, for many companies, Scope 3 emissions represent a large proportion of overall GHG emissions, and therefore, could be material. For example, in some industries, a transition to lower-emission products or processes is ongoing, making financial risks (*e.g.*, the need to invest in lower emissions equipment) reasonably foreseeable for companies in those industries based on the emissions in their value chains. The SEC believes that investors may need information about "the full GHG emissions footprint and intensity…to determine and compare how exposed a registrant is to the financial risks associated with any transition to lower-emission products." More specifically, the SEC cited the auto industry as an example, where most of the emissions are from cars driven by customers, not from the company's own manufacturing. There is already a transition underway to reduce emissions, and demand for electric vehicles is increasing. According to the SEC, this transition "raises financial risks for automobile manufacturers, which can be gauged, in part, by their Scope 3 emissions." Likewise, financial institutions and investors that establish their own GHG emissions reduction goals may consider the total GHG emissions footprint of companies that they finance or invest in to meet their own goals. For some of those companies, Scope 3 emissions may constitute a significant portion of their emissions.

In assessing materiality, the SEC advises that companies consider both quantitative and qualitative information. Scope 3 emissions may be material when they make up a relatively significant portion of the company's overall GHG emissions—some companies use a 40% threshold, although the SEC is not proposing a quantitative threshold. Even if Scope 3 emissions constitute a relatively small proportion of overall GHG emissions, they could still be material "where Scope 3 represents a significant risk, is subject to significant regulatory focus, or 'if there is a substantial likelihood that a reasonable [investor] would consider it important.' Moreover, if a materiality analysis requires a determination of future impacts, *i.e.*, a transition risk yet to be realized, then both the probability of an event occurring and its magnitude should be considered. Even if the probability of an adverse consequence is relatively low, if the magnitude of loss or liability is high, then the information in question may still be material."

In addition, when a company has set a GHG emissions reduction target or goal that includes Scope 3 emissions, it would be required to disclose its Scope 3 emissions. The disclosure would allow an investor to assess the company's "strategy for meeting its Scope 3 emissions target or goal and its progress towards that target or goal," which may affect the company's business.

If the company were required to disclose Scope 3 emissions, it must "identify the categories of upstream and downstream activities that have been included in the calculation of its Scope 3 emissions." Proposed Item 1500(r) includes a long, non-exclusive list of upstream and downstream activities that could give rise to Scope 3 emissions. Under the proposal, if any upstream or downstream activities were significant in calculating Scope 3 emissions, the company would be required to identify the categories and "separately disclose Scope 3 emissions data for each of those categories together with a total of all Scope 3 emissions." As an example, the SEC cites a producer of oil and gas products that finds the end use of its sold products to be a significant category of activity resulting in Scope 3 emissions.

Under the proposal, to help investors assess the reliability of the data, companies required to disclose Scope 3 emissions would also need to describe the data sources used to calculate those emissions, including the use of any of the following:

- Emissions reported by parties in the company's value chain, and whether those reports were unverified or verified by the company or a third party;
- Data concerning specific activities, such as liters of fuel consumed or hours of time operated, as reported by parties in the company's value chain; and
- Data derived from economic studies, published databases, government statistics, industry associations, or other third-party sources outside of the value chain, including industry averages of emissions, activities, or economic data.

GHG Intensity. The proposed rules would also require a company to disclose the sum of its Scopes 1 and 2 emissions in terms of GHG intensity and to separately disclose the GHG intensity of its Scope 3 emissions, if required to disclose Scope 3 emissions. GHG intensity (or carbon intensity) means a ratio that expresses the impact of GHG emissions per unit of economic value (*e.g.,* metric tons of carbon dioxide equivalent (CO_2e) per unit of total revenues or per unit of production). The selected unit of production should be relevant to the company's industry. The measure is intended to provide context for the level of emissions relative to the scale of the company's business, demonstrating the level of emissions efficiency. The SEC believes that a standardized measure of GHG intensity can facilitate comparability and potentially indicate the likelihood of the company's being affected by transition risks. The company would be required to disclose the methodology and other information required pursuant to the proposed GHG emissions metrics instructions (discussed below).

GHG emissions data for historical periods. The proposed rules would require disclosure for the company's most recently completed fiscal year and for the historical fiscal years included in the consolidated financial statements in the applicable filing, to the extent that the historical GHG emissions data is reasonably available. Typically, that would mean data for three years, but only two years for SRCs. The historical data should allow investors to analyze trends, track over time the company's exposure to climate-related effects and assess how the company is managing the climate-related risks associated with those effects. The company would not be required to "provide a corresponding GHG emissions metric for a fiscal year preceding its current reporting fiscal year if, for example, it was not required to and has not previously presented such metric for such fiscal year and the historical information necessary to calculate or estimate such metric is not reasonably available to the registrant without unreasonable effort or expense."

GHG emissions methodology and related instructions

Under the proposed rules, a company would need to describe the methodology, significant inputs and significant assumptions used to calculate its GHG emissions metrics, including organizational boundaries, operational boundaries, calculation approach and any calculation tools used to calculate the GHG emissions. This information is intended to help investors understand the scope of the operations included in the GHG emissions metrics and how those metrics were measured.

Organizational boundaries. An initial step in calculation of Scopes 1 and 2 emissions is setting "organizational boundaries," that is, determining the operations that are owned or controlled by the company for the purpose of calculating its GHG emissions. Under the proposal, a company would "set its organizational boundaries using the same scope of entities, operations, assets, and other holdings within its business organization as those included in, and based upon the same set of accounting principles applicable to, its consolidated financial statements." Accordingly, when determining which entities would be subject to consolidation or which investments qualify for equity method accounting or proportionate consolidation, the company would apply the accounting principles it applied under GAAP. The company would then use the same organizational boundaries to determine whether to include all the emissions of an entity or just a proportional share of the emissions, if any, in the company's Scopes 1 and 2 calculations. Companies required to disclose Scope 3 emissions would apply the same organizational boundaries in identifying the sources of indirect emissions from its value chain over which it lacks ownership and control.

Operational boundaries. "Operational boundaries" are the "boundaries that determine the direct and indirect emissions associated with the business operations owned or controlled by a registrant." Operational boundaries are required to be described when the company describes its methodology, significant inputs and significant assumptions used to calculate its GHG emissions metrics. To determine the operational boundaries, a company would need to identify the emissions sources from its plants, offices and other operational facilities that are within its organizational boundaries and then categorize those emissions as either direct or indirect. For example, many companies will have direct emissions (Scope 1) from stationary equipment (*e.g.*, combustion of fuels in heaters) and transportation, and companies in some industries will have emissions from manufacturing processes and fugitive emissions sources (*e.g.*, equipment leaks). Indirect emissions (Scope 2) would likely include, for example, purchased electricity. Under the proposal, a company would be required to describe its approach to categorizing its emissions and emissions sources as direct (for Scope 1) or indirect (for Scope 2) when describing its methodology for determining its operational boundaries.

Selection and disclosure of a GHG emissions calculation approach, including emission factors. Because companies rarely calculate emissions by directly monitoring the concentration and flow rate at the source—which would be the most accurate method—a company would need to select an approach to calculation of GHG emissions. The proposal suggests that "an acceptable and common method for calculating emissions involves the application of published emission factors." An "emission factor" is defined as "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." So, as in this example I found online, to calculate GHG emissions, the company would multiply a level of activity data (*e.g.*, kWh of electricity consumed by a facility) by an emission factor (*e.g.*, grams of CO_2 per kWh). Examples of activity data might include "kilowatt-hours of electricity used, quantity of fuel used, output of a process, hours of operation of equipment, distance travelled, and floor area of a building."

In the absence of activity data, a company may use an emission factor based on economic data. The example that the SEC provides here is of a company calculating Scope 3 emissions from purchased goods or services. In that event, the company "could determine the economic value of the goods or services purchased and multiply it by an industry average emission factor (expressed as average emissions per monetary value of goods or services)."

There are sets of emission factors published by the EPA, as well as a calculation tool. Using in part the EPA's emission factors, the GHG Protocol has also provided a set of emission factors and an emission calculation tool, and the SEC indicates that there are several others. Once a calculation approach has been selected, the company must identify its choice of emission factors and its source, determine the data that must be collected and how to conduct the relevant calculations, including whether to use any publicly available calculation tools. The SEC advises that the emissions data should then be reported to the corporate level.

Here are a couple of the SEC's examples:

> "When determining its Scope 1 emissions for a particular plant, a registrant might add up the amount of natural gas consumed by furnaces and other stationary equipment during its most recently completed fiscal year and then apply the CO_2 emission factor for natural gas to that total amount to derive the amount of GHG emissions expressed in CO_2e. The registrant would repeat this process for each type of fuel consumed and for each type of source. If a registrant owns a fleet of trucks, it might total the amount of diesel fuel or other type of gasoline consumed for the fiscal year and apply the appropriate CO_2 emission factor for that vehicle and type of fuel....[O]nce it has determined the amount of CO_2e for each type of direct emissions source and for each facility within its organizational and operational boundaries, the registrant would then add them together to derive the total amount of Scope 1 emissions for the fiscal year."

A similar process would apply to collecting Scope 2 data. According to the SEC, there are two common methods for calculating Scope 2 emissions for purchased electricity: under the market-based method, the company would apply emission factors and other data provided by the generator of electricity included in the contract; under the location-based method, the company would base its calculations on average energy generation emission factors for grids located in defined geographic locations, including local, subnational or national boundaries. The company could use either or both methods or another method altogether. In all cases, the company "would be required to describe its methodology, including its organizational and operational boundaries, calculation approach (including any emission factors used and the source of the emission factors), and any calculation tools used to calculate the GHG emissions."

Although the SEC is not proposing to require use of a particular methodology for the financial sector to calculate Scope 3 emissions, which would likely include emissions from companies to which the financial institution provides debt or equity financing, the SEC notes that the Partnership for Carbon Accounting Financials' Global GHG Accounting & Reporting Standard (the "PCAF Standard") provides one methodology that was endorsed by the drafters of the GHG Protocol and was developed to work with the calculation of Scope 3 financed emissions for the "investment" category of downstream emissions.

Additional rules related to methodology disclosure. The SEC is also proposing a slew of additional do's and don'ts in connection with disclosure of methodology:

- Reasonable estimates may be used when disclosing GHG emissions as long as the company also describes the assumptions underlying, and the reasons for using, the estimates.
    - To facilitate compliance with annual reporting deadlines, the SEC proposes that, when disclosing its GHG emissions for its most recently completed fiscal year, if actual reported data is not reasonably available, a company may use a reasonable estimate of its GHG emissions for its fourth fiscal quarter, together with actual, determined GHG emissions data for the first three fiscal quarters, as long as the company promptly discloses in a subsequent filing any material difference between the estimate used and the actual, determined GHG emissions data for the fourth fiscal quarter.
    - In addition to the use of reasonable estimates, a company may present its estimated Scope 3 emissions as a range as long as it discloses its reasons for using the range and the underlying assumptions. For example, a range may be helpful when a company has gaps in the data.
- A company must disclose, to the extent material and as applicable, any use of third-party data when calculating its GHG emissions, regardless of the particular scope of emissions, identifying the source of the data and the process the company undertook to obtain and assess the data. While third-party data is commonly used in Scope 3 disclosure, this provision would also apply in other instances, such as when determining Scope 2 emissions using contractual, supplier-provided emission factors for purchased electricity.
- A company must disclose any material change to the methodology or assumptions underlying its GHG emissions disclosure from the previous fiscal year, such as use of a different set of emission factors or development of a more direct method of measuring GHG emissions that results in a material change to the GHG emissions from the previous year.
- A company must disclose, to the extent material and as applicable, any gaps in the data required to calculate its GHG emissions. Although the SEC expects a

company's GHG emissions disclosure to provide investors with a reasonably complete understanding of the company's GHG emissions in each scope of emissions, the SEC recognizes that a company is more likely to encounter data gaps for Scope 3. If a company discloses any data gaps, it must also discuss whether it used proxy data or another method to address those gaps, and how that has affected the accuracy or completeness of its disclosure.

- When determining whether its Scope 3 emissions are material, and when disclosing those emissions, in addition to emissions from activities in its value chain, a company must include GHG emissions from outsourced activities that it previously conducted as part of its own operations, as reflected in the financial statements for the periods covered in the filing. This proposed provision is presumably intended to prevent a company from greenwashing its carbon footprint by outsourcing activities that are typically conducted as part of operations in order to reduce its Scopes 1 or 2 emissions.
- If required to disclose Scope 3 emissions, when calculating those emissions, if there was any significant overlap in the categories of activities producing the Scope 3 emissions, a company must describe the overlap, how it accounted for the overlap, and the effect on its disclosed total Scope 3 emissions. For example, if the total reported Scope 3 emissions involved some double-counting because of the overlap, a company would be required to report this effect.

Scope 3 safe harbor and other accommodations

The SEC acknowledges that calculating Scope 3 emissions will be a, uh, challenge: companies may have difficulty obtaining activity data from suppliers and other third parties in their value chains and verifying that the data is accurate, and companies may be compelled to rely on a lot of estimates and assumptions. To address that issue, the SEC is proposing a targeted safe harbor for Scope 3 emissions disclosure, an exemption from Scope 3 reporting for SRCs and delayed compliance for Scope 3 disclosures.

The proposed safe harbor would provide that a statement by or on behalf of the company in an SEC filing regarding Scope 3 emissions under the requirements of the proposal would be "deemed not to be a fraudulent statement," unless the statement was "made or reaffirmed without a reasonable basis or was disclosed other than in good faith." "Fraudulent statement" would mean a "statement that is an untrue statement of material fact, a statement false or misleading with respect to any material fact, an omission to state a material fact necessary to make a statement not misleading, or that constitutes the employment of a manipulative, deceptive, or fraudulent device, contrivance, scheme, transaction, act, practice, course of business, or an artifice to defraud" as those terms are used in the Securities Act and the Exchange Act and related rules.

All affected companies would have an additional year to comply initially with the Scope 3 disclosure requirement; as proposed, SRCs would be exempt from Scope 3 disclosure.

Below is the SEC's table showing the GHG metrics disclosure phase-in, assuming a December 2022 effective date and a December 31 FYE.

Registrant Type	**Disclosure Compliance Date**

Registrant Type	Disclosure Compliance Date	
	All proposed disclosures, including GHG emissions metrics: Scope 1, Scope 2, and associated intensity metric, but excluding Scope 3	GHG emissions metrics: Scope 3 and associated intensity metric
Large Accelerated Filer	Fiscal year 2023 (filed in 2024)	Fiscal year 2024 (filed in 2025)
Accelerated Filer and Non-Accelerated Filer	Fiscal year 2024 (filed in 2025)	Fiscal year 2025 (filed in 2026)
SRC	Fiscal year 2025 (filed in 2026)	Exempted

Finally, the SEC highlights the availability for the proposed Scope 3 emissions disclosures of "Securities Act Rule 409 and Exchange Act Rule 12b-21, which provide accommodations for information that is unknown and not reasonably available....These rules allow for the conditional omission of required information when such information is unknown and not reasonably available to the registrant, either because obtaining the information would involve unreasonable effort or expense, or because the information rests peculiarly within the knowledge of another person not affiliated with the registrant." Did you breathe a sigh of relief? Not so fast—the SEC adds this caveat: "We expect, however, that a registrant that requires emissions data from another registrant in its value chain would be able to obtain that data without unreasonable effort or expense because of the increased availability of Scopes 1 and 2 emissions data for registrants following the effectiveness of the proposed rules."

Attestation of Scope 1 and Scope 2 Emissions Disclosure (Item 1505)

According to the SEC, there has been increasing investor demand for climate-related financial information that is *reliable*, leading many companies to voluntarily obtain third-party assurance over their climate-related disclosures. The SEC observes that fragmentation in the levels of assurance provided (*e.g.*, limited versus reasonable), the assurance standards used, the types of service providers and the scope of disclosures covered has led to diminished comparability and investor confusion, especially as some assurance providers may lack GHG emissions expertise. To address these issues, the SEC is proposing to require a minimum level of attestation services for accelerated filers and large accelerated filers including: "(1) limited assurance for Scopes 1 and 2 emissions disclosure that scales up to reasonable assurance after a specified transition period; (2) minimum qualifications and independence requirements for the attestation service provider; and (3) minimum requirements for the accompanying attestation report."

The proposal would require assurance only for accelerated filers and large accelerated filers and only with respect to Scope 1 and Scope 2 emissions. Under the proposal, each accelerated and large accelerated filer, including foreign private issuers, would be required to include in its filings an attestation report covering the disclosure of its Scope 1 and Scope 2 emissions and to provide certain related disclosures about the provider of the attestation. As proposed, accelerated filers and large accelerated filers would have one fiscal year to phase-in limited assurance and two additional fiscal years to transition to providing reasonable assurance, starting with the respective compliance dates for Scopes 1 and 2 disclosure, although a company could elect to transition earlier.

The SEC indicates that "limited assurance" is "equivalent to the level of assurance (commonly referred to as a 'review') provided over a registrant's interim financial statements included in a Form 10-Q." The objective of limited assurance, the SEC continued,

> "is for the service provider to express a conclusion about whether it is aware of any material modifications that should be made to the subject matter (*e.g.,* the Scopes 1 and 2 emissions disclosure) in order for it to be fairly stated or in accordance with the relevant criteria (*e.g.*, the methodology and other disclosure requirements specified in proposed [Item 1504 of Reg S-K.] In such engagements, the conclusion is expressed in the form of negative assurance regarding whether any material misstatements have been identified. In contrast, the objective of a reasonable assurance engagement, which is the same level of assurance provided in an audit of a registrant's consolidated financial statements, is to express an opinion on whether the subject matter is in accordance with the relevant criteria, in all material respects. A reasonable assurance opinion provides positive assurance that the subject matter is free from material misstatement."

Most often, on a voluntary basis, companies have obtained only limited assurance with regard to GHG emissions.

A company could also elect to obtain assurance for more disclosures than required under the proposed rules, such as assurance for the GHG intensity metrics, but would need to follow the same requirements and use the same attestation standard (*e.g.*, the AICPA attestation standard) as the required assurance. Otherwise, Item 1505(e) prescribes the requirements for voluntary assurance.

Below is the SEC's table showing the attestation phase-in, assuming a December 2022 effective date and a December 31 FYE.

Filer Type	**Scopes 1 and 2 GHG Disclosure Compliance Date**	**Limited Assurance**	**Reasonable Assurance**
Large Accelerated Filer	Fiscal year 2023 (filed in 2024)	Fiscal year 2024 (filed in 2025)	Fiscal year 2026 (filed in 2027)
Accelerated Filer	Fiscal year 2024 (filed in 2025)	Fiscal year 2025 (filed in 2026)	Fiscal year 2027 (filed in 2028)

If the accelerated filer or the large accelerated filer has a non-calendar-year fiscal year-end date that results in the commencement of its 2024 or 2023 fiscal year, respectively, before the compliance dates of the rules, it would not be required to comply with proposed GHG emissions disclosure requirements until the following fiscal. Accordingly, for these filers, the time period for compliance with the corresponding attestation requirements would be one year later than illustrated above.

The SEC indicates that it is still considering, and is requesting comment on, whether to require management to include a statement in the annual report regarding its responsibility for the design and evaluation of controls over GHG emissions disclosures and its conclusion regarding the effectiveness of those controls. The SEC is also still considering whether to require the third-party attestation to cover the effectiveness of controls over GHG emissions disclosure.

GHG Emissions Attestation Provider Requirements

The attestation would need to be prepared and signed by a "GHG emissions attestation provider," a person or a firm that is independent (comparable to auditor independence under Rule 2-01 of Reg S-X) and meets specified expertise criteria. The company would be required to obtain and attach the written consent of the GHG emissions attestation as an expert as required under the securities laws.

GHG Emissions Attestation Engagement and Report Requirements

The proposed rules would require the attestation report to be included in the section captioned "Climate-Related Disclosure" in the relevant filing. Under the proposal, the report would be "provided under standards that are publicly available at no cost and are established by a body or group that has followed due process procedures, including the broad distribution of the framework for public comment," similar to the requirements for determining a suitable, recognized control framework for use in management's evaluation of ICFR. Although the SEC does not prescribe a particular attestation standard, it notes that the attestation standards of the PCAOB, AICPA and IAASB, for example, would meet this due process requirement.

The proposal would impose minimum attestation engagement and report requirements, primarily derived from the AICPA's attestation standards, including, for example, a requirement to identify the subject matter or assertion on which the attestation provider is reporting (*e.g.*, Scope 1 and Scope 2 emissions disclosure), the time period to which the evaluation relates, the scope of work and level of assurance provided and the attestation standard used, as well as the criteria against which the subject matter was measured or evaluated. For an attestation report "solely covering Scopes 1 and 2 emissions disclosure, the identified criteria would include the requirements in proposed Item 1504 of Regulation S-K and, in particular, Item 1504(a), which includes presentation requirements such as disaggregation by each constituent greenhouse gas. The identified criteria would also include Item 1504(b) [*e.g.*, calculation instructions] and the applicable instructions in Item 1504(e) regarding methodology, organizational boundary, and operational boundary."

The attestation report would also be required to include a statement of the company's responsibility to report on the subject matter or assertion being reported on, as well as a statement that describes the attestation provider's responsibilities in connection with the preparation of the attestation report and a statement of the attestation provider's independence. For a limited assurance engagement, the report would need to include a description of the work performed as a basis for the attestation provider's conclusion. The report would also include a statement that describes any significant inherent limitations associated with the measurement or evaluation of the subject matter against the criteria, which is intended to elicit disclosure about the estimation uncertainties inherent in the quantification of GHG emissions. Finally, the report would include the opinion and signature.

Additional disclosure by the company

The SEC is also proposing that companies provide some additional disclosure related to the attestation under the "Climate-Related Disclosure" caption, including information about the attestation provider's license, if any, any oversight inspection program to which the engagement is subject and any record-keeping requirements applicable to the attestation provider.

Disclosure of Voluntary Attestation

If a company (other than a large accelerated filer or accelerated filer) obtains a voluntary attestation regarding GHG emission disclosure, the SEC is proposing that the company provide additional information, under the caption "Climate-Related Disclosure," including the identity of the attestation provider, the standard used, the level and scope of assurance and the result, whether there are business relations that could impair independence and any applicable oversight inspection program.

Checklist: Internal Controls for E & S Information

PracticalESG.com

Environmental and social (E & S) data and information is reported to regulators, investors, asset managers, NGOs, the public and ESG ratings agencies, yet it is frequently not subjected to adequate internal controls. Errors and omissions in the data perpetuate through the ESG information ecosystem, which is problematic. Therefore establishing internal controls for E & S data and its disclosure are necessary.

Some companies may have an Enterprise Risk Management (ERM) framework in place; they may find it efficient to add E & S into those processes. For example, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) published October 2018 guidance: “Applying enterprise risk management to environmental, social and governance-related risks.” However, for companies that currently don’t use the COSO framework, this framework may be overwhelming and focuses on risk identification and management rather than on data quality, verification and reporting.

A company’s internal control over financial reporting (ICFR) provides a good model for E & S information controls, especially for data that forms the basis of voluntary and required disclosures.

ICFR Generally

ICFR focuses on providing reasonable assurance that public reporting of information is reliable and prepared in accordance with generally accepted accounting principles (GAAP). In the E & S context, GAAP isn’t applicable and unlike financial data, E & S data comes from a variety of sources, but generalized ICFR concepts are relevant. E & S information controls apply at a site level as well as to a corporate level. ICFR includes preventive and detective controls. Some activities fit in either category.

Developing and implementing ICFR controls for E & S

E & S professionals may not be familiar with the lexicon of “controls.” The term “management systems” may resonate with them more and to a large extent embody the same concepts. If the company has implemented environmental, safety or responsible sourcing management systems such as

ISO or industry specific programs (e.g., Responsible Care for the chemical industry or ICMM's Mining Principles for the mining industry), those programs address many elements of ICFR. The existence of management systems can be considered preventive controls, while implementation of those systems may be both preventive and detective controls.

Use caution in relying on E & S management systems certifications issued to sites or the company as a control. There tend to be gaps between the existence of written procedures/program elements (what these certifications tend to focus on) and their implementation (which is much more important in the controls context). It is also common for E & S procedures in management systems frameworks to sit for long periods of time without being reviewed or updated – which is itself a gap in implementation of the system/controls.

Finally, it is important to remember that fraud in E & S information is a relevant risk, so controls should be developed and implement with that in mind. Typical E & S management systems tend to discount the potential for fraud.

Who should be involved in development & implementing controls?

As with other aspects of E & S, the development and implementation of internal controls benefits from a multi-functional perspective. When developing and implementing these controls, companies should strive to engage participants in departments/functions including:

Role/function	Controls perspective
Executives	Policies, communications, financial management,
Management	Policies, enforcement, communications, culture, financial management,
Operations/production staff	Physical equipment controls, practical implementation of policies, communications, culture, training, procedures, data management, documentation, monitoring systems and corrective action implementation
Maintenance department	Physical equipment controls, communications, culture, training, procedures, data management, documentation, monitoring systems and corrective action implementation
EHS/sustainability staff	Physical equipment controls, communications, culture, training, procedures, data management, documentation, regulatory management, monitoring systems and corrective action implementation

Engineering/R&D	Communications, culture, training, procedures, data management, documentation, regulatory management, supplier management, materials specifications, monitoring systems and corrective action implementation
Procurement/purchasing department	Supplier management, administrative controls, financial management, communications, culture, training, data management, materials specifications
Accounting department	Policies, enforcement, administrative controls, procedures, communications, culture, training, data management, documentation, financial management,
Internal audit	Physical equipment controls, administrative controls, procedures, financial management, communications, culture, training, data management, regulatory management, monitoring systems and corrective action implementation
Risk Management department	Policies, physical equipment controls, administrative controls, communications, culture, documentation, monitoring systems and corrective action implementation
Legal department	Policies, communications, administrative controls, regulatory management, data management, monitoring, documentation
Training staff	Policies, culture, training, data management, documentation
IT staff	Data management, data security, monitoring systems and corrective action implementation

Preventive controls

Preventive controls are intended to deter and prevent E & S data errors or fraud from happening to begin with. Generally speaking, these involve developing and implementing procedures and include documentation, physical process controls and equipment and authorization/review practices. Separation of duties, a key part of authorization and review practices, ensures that no single individual is in a position to both (a) authorize/review/approve, and (b) be responsible for executing the activity requiring that authorization/review/approval.

It is important to consider that controls are especially critical for non-routine events. Emergency situations, shutdowns, maintenance outages, worker strikes and supply chain disruptions are site conditions where controls can be side stepped while pursuing speedy business recovery.

A non-exhaustive list of examples of preventive controls for E & S data at operating locations includes:

- Establishing a site-level policy for E & S operating expectations that are consistent with corporate mandates. Confirm that site management is aware of and understands these expectations.

- Establishing a supplier code of conduct or similar expectations that are consistent with corporate mandates.

- Establishing business integrity policies and procedures prohibiting bribery, corruption, fraud, abuse and harassment.

- Establishing site-level E & S committees. A site may have separate environmental, health and safety committees, or a combined EHS committee.

- Formally assigning E & S job responsibilities to employees, including backups/alternates in the event of employee illness, injury or vacations. All relevant employees should understand these job responsibilities.

- Establishing formal written job-specific personnel performance metrics specific to E & S as part of annual performance evaluations. All relevant employees should understand these performance metrics and they should be consistent with corporate mandates.

- Developing and posting formal written operating procedures for equipment and inspections. These should be available in all languages relevant to the workforce at the location(s) and consistent with corporate mandates.

- Providing on-going job specific and company general employee training on E & S topics consistent with corporate mandates.

- Establish formal communication procedures for E & S events such as injuries, emergencies, government site inspections.

- Establish formal written procedures for advance review and approval of E & S data that is submitted to regulatory authorities.

- Management enforcement of conformance to policies, procedures and performance requirements through a system of incentives and disincentives, up to termination of employment. This should be done consistent with corporate mandates.

- Developing and supporting peer-to-peer enforcement of E & S standards (corporate culture).

- Providing an anonymous mechanism for internal reporting of E & S concerns (hotline).

- Implement a "no retaliation" policy for employees who report their concerns. This should be done consistent with corporate mandates.

- Developing E & S risk/legal requirements registries and ensure they are reviewed and updated regularly.

- Developing E & S regulatory compliance and reporting calendars and ensure they are reviewed and updated regularly.

- Requiring written EHS signoff in advance of implementing operational changes (such as obtaining new chemicals, increasing production, modifying equipment, new products or new construction).

- Limiting physical access to equipment or facility areas as part of safety measures. This may include physical or administrative controls. This should be done consistent with corporate mandates.

- Ensuring pollution control sampling/monitoring and safety equipment is tested, operated, maintained and calibrated in accordance with manufacturer specifications.

- Minimizing opportunities for E & S data transcription errors (i.e., maximize use of auto logged data)

- Implementing real time or daily tracking/logging of operating conditions, output, chemical use, fuel use, etc.

- Implementing automated chemical inventory management systems, linked to chemical vendors.

- Reviewing EHS operating procedures for all contractors/vendors working on site to ensure they have adequate training and procedures consistent with the site and corporate requirements.

- Conducting new supplier due diligence for environmental impacts, employee workplace conditions and wages and conformance to corporate standards.

- Ensuring supplier contracts or PO terms and conditions include a reservation of audit rights clause.

- Providing training to suppliers and contractors on E & S requirements of the company/location.

- When using external auditors/industry programs for E & S data and/or certifications for E & S statements, conduct formal due diligence on the auditors and certification mechanisms to ensure they are credible, professional and worthy of reliance. In particular, evaluate the auditors' technical competence and their processes for corroborating information from interviews.

- Reviewing worker safety, working conditions, pay programs and incident reports/reporting procedures to ensure they cover seasonal, migrant, temporary and contract workers.

- Confirming that, where appropriate, documented programs and procedures aligned with ILO Conventions are established.

- Minimizing staff access to E & S data and authority for changing it.

Detective controls.

Detective controls are designed to catch items, topics or events that have been missed by preventive controls. Once identified, those items can be corrected. Detective controls revolve around data reconciliation and confirmation. This is typically where fraud would be detected if it has occurred.

A non-exhaustive list of examples of detective controls for E & S data at operating locations includes:

- Regular reporting of monitoring results, challenges/problems to management (i.e., at the site level, daily operations meetings). Quarterly dashboards can also be created for the full board or a specific committee overseeing E&S strategies.

- Maintaining adequate documentation (written or electronic) of all E & S matters consistent with corporate mandates and legal frameworks such as Attorney-Client Privilege.

- Following a segregation of duties framework, review manual activity/inspection logs for completeness of schedule and activities, as well as confirm dates logged are consistent with operating and employee work schedules (i.e., no "pencil whipping" or pre-completed forms are used).

- Following a segregation of duties framework, review approvals/signoff documents to ensure they are complete and properly signed/dated (i.e., no "pencil whipping" or pre-signed blank forms are used).

- Conducting periodic reviews of E & S spreadsheet formulas for modifications, confirm calculations are correct and correct data is in the right cells.

- Conducting regular site inspections of all facility areas, using different staff to obtain different perspectives of site conditions and activities.

- Conducting periodic E & S audits, either internal or external. Audits conducted by customers may be considered an internal control only where results are made available to the site/company.

- Confirming reported stored and used volumes of chemicals, wastes and safety equipment by performing periodic reconciliations of inventory and purchasing/disposal records.

- Performing manual reviews and checks of supplier responses to information requests (ground truth against internal expertise/expectations). Responses that are inconsistent with internal expertise/expectations should be flagged for follow up and correction with the supplier.

- Monitoring existing suppliers for continuing conformance to corporate E & S standards and Codes of Conduct. If engaging external auditors, ensure the auditors have adequate qualifications to perform the audits to a level that is credible and reliable to warrant reliance.

- Monitoring industry supply chain due diligence mechanisms or ESG/sustainability certifications to confirm they remain credible and reliable to warrant reliance.

- Conducting periodic independent laboratory testing of materials, products and components obtained from suppliers to ensure they are consistent with site and corporate mandates (i.e., do not contain banned chemicals).

- Comparing documents provided by the site to known authentic examples (e.g., invoices, shipping documents, regulatory approvals/correspondence, signatures).

- Reviewing accident/incident investigation reports to verify the number and type of incidents reported. The site's conclusions, determinations and implementation of corrective actions should also be confirmed.

- Confirming that reported E & S data/information concerning workers includes seasonal, migrant, temporary and contract workers. Site injury/incident logs, reports and investigations should also cover seasonal, migrant, temporary and contract workers,

- Confirming that worker regular and overtime hours are accurately recorded and reported.

- Confirming that worker wage structures and leave/vacation at operating locations conform to local and national laws and company policies.

- Identifying conditions or situations where bypassing controls is allowable or has occurred and investigate the reasoning/cause. Corrective actions should be implemented to prevent bypassing of internal E & S data controls.

Corporate disclosure controls

Site-level controls as described above focus on providing reasonable assurance that E & S data at its point of generation does not contain meaningful errors and omissions. That data is frequently then aggregated at the corporate level and reported publicly. Additional ICFR controls are appropriate to provide reasonable assurance that meaningful errors and omissions do not occur when publicly reporting that validated E & S data.

Once E & S data controls are in place and the data confirmed, disclosure controls may be less comprehensive and concentrate on verifying that errors and omissions are not in the report language or from transcribing already-verified data into the draft report. These include:

- Comparing E & S data and information included in draft disclosures to the applicable original internally provided information sources to ensure consistency (i.e., no transcription errors).
- Reviewing the original E&S data and information to confirm that disclosures are not misleading or cherry-picking.
- Confirming mathematical formulas and calculation results of verified data aggregated from multiple locations/sources (e.g., confirm spreadsheets are calculating correctly, capture all appropriate cells, cell values are correct and appropriate – no text in numerical cells)
- Using internal or external subject matter experts to review draft disclosures for technical accuracy.
- Conducting internal audits of draft disclosures, not just document reviews.
- Setting up escalation processes so management and legal can be aware of any disclosure errors and omissions without undue delay.
- Having the preparers of the E & S data and those in charge of disclosure controls certify to management and/or board directors of disclosure accuracy.

Gaps in data versus weakness in controls - terminology

In addition to potential issues with E & S data, deficiencies may be identified in the controls systems themselves. ICFR audits/assessments use terminology of "material weakness", "significant deficiency", and "deficiency." As indicated in the introductory information, E & S professionals are likely more familiar with the lexicon of management systems - terminology like "major", "minor", "conformance", "nonconformance", "gap" and "finding." It may be optimal to use different terminology when discussing data versus the controls to ensure clarity. Getting alignment on terms and definitions is important to ensure there is consistency in understanding severity of identified deficiencies and prioritization for corrective actions.

Checklist: Considerations in Selecting an ESG Advisor or Auditor

PracticalESG.com

The massive growth in corporate ESG initiatives has spawned a tidal wave of self-proclaimed ESG experts in advisory and auditing services. As with any other potential business partner, buyers of ESG services need to perform due diligence on the service provider to minimize risk and unpleasant surprises.

ESG advisors may be engaged to help develop programs or assess program efficacy. ESG program implementation/performance and associated data rolls up through the organization and out externally to a range of stakeholders. Certainly, you want to make sure your company executes well and that you can demonstrate that. An important element of that is ensuring that the advisor or auditor you select and rely on has the knowledge, skills and background to warrant your reliance.

While this is not an exhaustive list, some of the more important aspects (yet perhaps less obvious) of service provider qualifications to evaluate include:

1. **Test their technical expertise**. Understanding a degree of technical aspects of manufacturing/assembly operations is a critical foundation of establishing the correct context for ESG programs and risks. It isn't always important for service providers to know details or even have experience with your specific industry or processes. For instance, metal parts fabrication is generally similar regardless of the actual part or industry. Applicable employee safety programs, such as respiratory protection, may vary from industry to industry based on the contaminant, but there is much consistency in applicability triggers and programmatic requirements for manufacturing.

   In interviewing service providers, have them tell stories about actual project experiences. Listen to their responses to determine if they are using lingo that is appropriate to your industry and/or processes. Avoiding "yes" or "no" questions helps tease more narrative – and therefore more revealing – responses for you to evaluate.

2. **Explore their knowledge of how equipment functions**. While the service providers don't need to know how to actually operate your company's equipment, they should have a reasonable understanding

of how the equipment functions, including possible malfunctions. This is especially important in understanding the context of pollution control equipment monitoring data. As an example, CO2 emissions differ greatly based the type and size of boilers, and fuels used. If the equipment is not correctly reflected in emissions calculations, then the emissions reported will not be accurate.

Likewise, service providers need to understand limitations and failure points of pollution control and safety equipment, including monitoring, calibration, inspections and maintenance. Failures in this category lead to inaccurate data and worker safety exposures. Air emissions baghouse gauges are subject to fouling, water/wastewater pH probes frequently fail, flow meters foul and have operational limitations and safety equipment needs ongoing inspections. Manufacturers of these types of equipment have specifications for operation, maintenance and performance limitations that ESG service providers should be familiar with to identify where data might not make sense and how the devices can be bypassed.

3. **Ensure the service provider isn't limited to a specific framework**. Providers can get locked into a specific framework, such as ISO, GRI, SASB or industry-specific initiatives. Where this is the case, you can be forced into a predetermined approach that is not aligned with your company's specific needs. For instance, SASB tends for focus on **financial impacts of ESG to the company**, whereas GRI relates to **ESG impact of the company on non-financial stakeholders**. Unless you are looking for alignment to a specific standard, framework or program, make sure your ESG service provider can provide you with programs/assurance services that are framework agnostic.

4. **Don't emphasize ESG certifications.** As with ESG initiatives and frameworks, there is a big bowl of alphabet soup of ESG and related certification programs. These can apply to both firms as a whole and to individual practitioners. Among the more common certifications are those from – or related to – well known entities such as ISO, ANSI, SASB, GRI and AICPA.

   Lesser-known organizations have specific focuses, such as Board of Global EHS Credentialing (Certified Professional Environmental

Auditor, Certified Process Safety Auditor, Certified Industrial Hygienist), Association of Professional Social Compliance Auditors (APSCA), iEMA in the UK, Association of Certified Fraud Examiners (ACFE), Institute of Internal Auditors (Certified Internal Auditor, Certification in Risk Management Assurance) – and the list goes on.

In the last 24 months, a number of ESG certificate programs have popped up, many of which require little more than attending six to eight hours of on-line training and payment of a fee.

Don't be too focused on or enraptured by firm or individual certifications. The important factor is how the individual(s) on your project team performs, which is more a function of the practical experience and knowledge not a certification. In situations where you deem a particular certification is important for your ESG advisory team, it may not be necessary for all team members to have the same certification as that might create limitations.

5. **Listen to the terminology they use.** While not everyone agrees with this, using the phrase "management systems" rather than "controls" may not be simply a matter of semantics. It can be an indicator of meaningful differences in the service provider's knowledge and project approach. Using "management systems" terminology can indicate older ways of thinking, outdated knowledge of the market and a more tactical/siloed attitude. Service providers that use an updated lexicon around "controls" may be more advanced, have a better appreciation for the cross-functional nature of ESG and present a more strategic perspective. It isn't necessary for everyone on the team to speak in "controls" terms, but a least the project lead should.

6. **Don't focus on the titles of team members.** Titles may not be indicative of experience. This is not anything unique to ESG, but it needs to be addressed. One notable trend in ESG hiring during the past 12-24 months has been offering big titles for a small amount of experience. Corporate ESG directors and ESG practice leaders these days can have little more than five years of ESG experience. Senior leadership or partners may have less than ten. Similar to certifications, it is best to not be swayed by individual titles, nor should you infer an experience level with a title. It might be

worthwhile asking about years of specific ESG experience associated with the titles of the project staff.

7. **Engage service providers that stay within their areas of competency**. ESG competence greenwashing is an unfortunate reality for which both service providers and buyers are complicit. Service providers seeking to maximize revenue opportunities may oversell their expertise in a number of ways.

    - ESG audit providers may sell site-level ESG implementation services (a conflict of interest)
    - Marketing/communications providers may sell services related to product content/formulation
    - IT companies may sell CO_2 emissions management services
    - Environmental consultants may sell corporate governance services
    - Social auditors may sell audits covering areas beyond their technical knowledge
    - Accountants may sell technical environmental or safety services

    Buyers of these services may be oversold on a firm's or individual's capabilities, or they may select their ESG service or assurance provider based on factors other than expertise, such as:

    - The buyer has an existing business relationship with a provider
    - The buyer wants to establish a new business relationship with a service provider for reasons unrelated to technical ESG capabilities
    - Cost
    - Industry-specific experience in matters other than ESG

    At the extreme, companies can face legal liabilities from oversights, omissions, errors and negligence on the part of unqualified ESG service providers. That risk grows daily with the global emphasis on ESG data, ratings and performance expectations. At a minimum, companies find themselves with work that does not meet expectations/requirements and then hiring a qualified service provider to redo the work correctly.

8. **Ensure service providers continually apply professional skepticism and information validation processes.** Even if the service provider is not performing audits, they should continually critically assess the information with which they are working. Service providers who don't apply professional skepticism may not understand the engagement requirements or technical information enough to know what should be questioned or explored further. With the ambiguity surrounding ESG, along with its new business importance, having defensible and credible information is a must. Ongoing questioning and validation of associated data and reporting should be expected.

9. **Consider whether their experience and client list reflect your company's position on the ESG performance spectrum.** Not every ESG consulting firm/advisor is appropriate for every company. Companies just beginning their journey, taking small steps or those that aren't looking to take a global leadership position can find themselves frustrated by consultants looking to make world-class ESG programs for every one of their clients. It can be more challenging than expected to find a service provider that is willing to be pragmatic and realize that it is acceptable for some companies to be less proactive than others.

10. **Consider small or boutique ESG firms. Big firms don't have a monopoly on ESG expertise.** There are many small firms made up of highly qualified ESG practitioners who made the choice to move away from the big firm environment/culture. As with anything, proper due diligence into the firm and its members is warranted.

January 2022

Checklist: Verifying Air Emissions for Environmental or ESG Reporting

PracticalESG.com

Reporting air emissions is a common element of ESG disclosures, especially greenhouse gas emissions, but there can be hidden traps and risks to something that appears simple. While there is much emphasis on Scope 1 emissions of greenhouse gases (those that are directly emitted by a company's own operations), direct emissions encompass many more pollutants that may be reported externally. This information is relied on by regulatory agencies and a spectrum of stakeholders: investors, ratings agencies/advisors, media, NGOs, and the general public. Yet most companies don't recognize the importance of internal controls, procedures and systems for the technical data itself.

Different methods can be employed to verify air emissions data at operating sites: in-house environmental audits, internal audits and external audits hired by companies themselves or by customers. Regardless of the specific method, it should thoroughly evaluate and check not onlythe data, but related data collection processes and controls to ensure accuracy and validity.

1. **Be clear on the specific pollutants to be reported and quantified**. For instance, GHGs generally are a group of chemicals, not just CO_2. A range of pollutants may be monitored and reported under permits and regulations, but a company may not wish toreport all those emissions in an ESG disclosure.

2. **Units of measure.** Usually reported (and most useful) in gross tons of the specific pollutant, but can be CO_2e or parts per million (ppm). Measurements using ppm are best forambient air quality and industrial hygiene rather than emissions. Ensure that you use consistent units during calculations, reporting and comparisons. Convert to a consistent unit if necessary. Normalizing data to production, CO_2e or another operational factors is best done after the basic emissions volumes are calculated.

3. **Determine how emissions will be quantified.** Air emissions can be determined throughdirect measurement (sampling), applying calculations or a combination of both. Emissions

sampling/testing produces the most concrete results but can be difficult and costly. Calculations can be simple (such as assuming 100% of a purchased solvent volume evaporates and becomes an air emission) but they are usually more complex. It may be tempting to use one approach for regulatory reporting data and another (perhaps simpler) approach for emissions that are not reported to regulatory agencies. However, this is likely to cause confusion and create a potential legal risk.

4. **If using calculations, verify you have all needed data.** Using EPA emissions factors and the GHG Protocol requires a lot of technical information on processing or fuel combustion equipment, operating parameters, pollution control equipment (including manufacturers operating, maintenance and performance specifications) and specific fuel and chemical types. Many times it is necessary to understand chemical reactions/conversions that occur in the equipment (for instance, bakeries release ammonia from some leavening agents).

5. **Confirm that fuel and chemical use tracking systems are correct and accurate.** Calculations are only as accurate as the data they use. Fuel use tracking systems may include natural gas meters, liquid fuel inventory readings/reconciliation or conveyor weighing systems. Chemical inventory management may be a manual process subject to errors or omissions. Methods used to determine the amount of fuel and chemicals that become emissions should be tested and verified.

6. **Evaluate all potential emissions sources**. Stacks are obvious emissions points but there are others that may be overlooked. Non-point sources such as landfills, livestock, building/room vents, ancillary chemical use (maintenance), non-routine operations (startup/shut down operations, backup generators) and mobile sources (lift trucks and mobile tanks) should all be recognized as potential emissions sources. Subsequent technical evaluations may determine they are not a source, but that should be proven, not assumed.

7. **Ensure that air pollution control equipment is operated, inspected and maintained in accordance with manufacturer specifications.** Pollution control equipment is designed to achieve certain performance under specific conditions, including that the equipment is maintained and operated as the manufacturer specifies. Malfunctioning equipment may not only result in erroneous reported emissions values, but it can also be a violation of legal emissions requirements.

8. **If relying on information from monitoring equipment, ensure the equipment is operated, inspected and maintained in accordance with manufacturer specifications.** Measurement and monitoring equipment can fail, become fouled or fall out of calibration, giving false readings. Readings from monitoring equipment that is not properly maintained can become questionable legally.

9. **For calculated emissions, double check the math.** Especially in spreadsheets that have evolved or changed over time, calculations can sometimes refer to incorrect cells and produce inaccurate results. Calculations should be updated to reflect changes in processes or production efficiency. It may be painstaking to verify calculation factors and data sources (cells) in complicated spreadsheets, but it is a valuable exercise. Third party IT systems are beginning to include embedded environmental data modules. If you are using one of these, or plan to, thoroughly assess the calculation methods, data sources and assumptions to make sure they are consistent with those vetted by and applicable to your company.

10. **When evaluating Scope 3 emissions, be aware that suppliers may not be as diligent in their emissions reporting efforts as you would like.** Ask for back up information to perform your own review of their reported emissions. Comparing reported emissions of suppliers operating under similar conditions may be unsuccessful because the variability in equipment, fuel types, operating conditions and other meaningful parameters.

    Conducting year-over-year comparisons of emissions information submitted by the same supplier to assess consistency of emissions and improvements may be a more valuable exercise. Year-over-year consistency or improvements may not be positive – the same emissions values reported in multiple years can be an indication that the supplier is simply “recycling” previous years’ calculations. Dramatic year-over-year emissions reductions should be a red flag for detailed follow-up and evaluation with thesupplier to verify the veracity and accuracy.

11. **Verify staff training.** Staff involved in collecting and processing emissions data must understand their responsibilities, how to identify errors or concerns and how to raise those. In some cases, staff may need detailed technical process or chemistry knowledge,in other instances they may only require knowledge about chemical inventory receiving.

12. **Take a step back and ask if it makes sense.** Unusual consistency (such as the same number being reported over multiple time periods) or variability may indicate problemswith monitoring equipment or manual data entry errors. Where known production or other operational changes don’t appear to be reflected in the numbers, investigate to understand whether the changes were too minimal to make an impact or if the data management processes have not captured the changes. Make sure there is consistency between emissions data that is reported to/available from regulatory agencies and thatwhich is disclosed in non-regulatory reports.

Checklist: Using Internal Audit in ESG Data Validation

PracticalESG.com

Company-generated ESG data forms the basis of the ESG information ecosystem and is relied on globally by the whole spectrum of stakeholder: investors, ratings agencies/advisors, media, NGOs, the government and the general public. Yet most companies don't commonly recognize the importance of internal controls, procedures and systems for the technical data itself.

Currently third-party assurance for ESG disclosure is voluntary in the US, although SEC rules may be changing. Regardless of the status of mandated assurance, companies should consider it a priority to evaluate ESG data validity, including the system of controls and monitoring used. Leveraging your corporate Internal Audit group to build a multi-disciplinary team is an excellent way to start.

1. **Take an inventory of ESG information that is already reported.** The first step is to understand what ESG information is being disclosed or made publicly available. Some of this may be filed with governmental agencies (such as EEO and OSHA data), while other information may simply be made available on the company website (such as recycling information). In some cases, it may be prudent to include information that is used internally only.

   Regardless of where or in what form it is made available, assign a general category to it (E, S or G). This becomes important in subsequent steps.

2. **Identify sources of the raw data.** Internal data is generated in different ways and in different locations. Some ESG data may be automatically created in IT systems and easily accessed. Other data is generated by manual processes at operating/manufacturing sites and compiled in handwritten logbooks or spreadsheets. Divisional or geographic management may have their own ways of collecting or managing the information. Some data may not be maintained on an on-going basis and is only gathered/processed in response to specific requests.

3. **Locate technical staff within the company who understand operational aspects surrounding the data.** To successfully validate the ESG data and associated controls, it is important to have a solid understanding of what the technical data means, how it is generated, who has access to it and the operating and monitoring equipment producing the data. Most internal audit staff don't have the technical expertise to spot errors in air emissions data for instance. Employees whose day-to-day responsibilities involve operations or equipment to which data relates can be excellent additions to internal audit teams.

   It is also important to remember that although ESG data may not be financial, it is still potentially subject to fraud. Therefore, understanding the control environment is necessary as well.

4. **Have at least one training session between IA and the technical experts.** Bring together internal audit staff and identified in-house technical experts to learn from each other as their skills are complementary. Internal auditors can explain concepts of controls, processes and monitoring (*i.e.,* Sarbanes 404) that form the basis of the audit procedures used by the company for financial disclosures. Technical staff can educate Internal Audit staff on the meaning of specific non-financial data, how it is generated and typical failure points. Lastly, technical staff may require training on general auditing practices (such as sampling techniques), interviewing skills and auditor bedside manner.

5. **Evaluate the need for and applicability of audit or self-evaluation privilege.** The use of Attorney-Client Privilege in traditional environmental and safety audits has been a source of debate for decades and generates strong feelings. Some companies may want to extend privilege to internal ESG audits as well. Each company should undertake their own assessment of the applicability and practicality of any legal privilege and associated limitations. The multi-disciplinary teams may not be accustomed to operating under privilege, so there may be additional effort on the part of the legal staff to ensure the conditions for establishing and maintaining privilege are met.

6. **<u>Conduct a pilot audit using a team of IA and technical staff.</u>** Once a team is established and trained on the company's controls, technical basis of data, auditing techniques and working under privilege (if applicable), a test audit should be conducted before launching the concept company-wide.

   In selecting the pilot site, minimally, consideration should be given to complexity/size of the operation to be audited, staffing at the site and size of the audit team. Resist the temptation to "really kick the tires on the process" by intentionally selecting a difficult or large site. Every aspect of the team make up, audit procedures, technical training and reporting will be challenged naturally enough at small to medium sized site.

7. **<u>Assess the pilot.</u>** Once the audit is complete, the process should be thoroughly assessed to determine if – and where – improvements are needed. Input should be obtained from the facility that was audited, the audit team, legal, management and others that were involved or may use ESG information. Once modifications are complete, the program can be launched more widely.