COMMENTS OF THE CENTER FOR CLIMATE AND ENERGY SOLUTIONS

This document constitutes the comments of the Center for Climate and Energy Solutions (C2ES) on the proposed rule by the Securities and Exchange Commission (SEC) on climate-related financial disclosures, “The Enhancement and Standardization of Climate-Related Disclosures for Investors” (Release Nos. 33-11042; 34-94478).

C2ES is an independent, nonprofit, nonpartisan organization dedicated to advancing strong policy and action to reduce greenhouse gas emissions, promote clean energy, and strengthen resilience to climate impacts. We have extensive experience engaging stakeholders on climate-related financial disclosures and have released several publications and hosted public webinars on the subject.

- In September 2017 C2ES issued a report, *Beyond the Horizon: Corporate Reporting on Climate Change*, in which we identified areas where additional support was needed for companies implementing the Taskforce on Climate-related Financial Disclosure’s (TCFD) recommendations.
- In April 2020, C2ES released a brief, *Implementing TCFD: Strategies for Enhancing Disclosure*, that describes the themes, lessons, and best practices from two workshops that we held in 2019 on TCFD implementation challenges.
- In March 2022, C2ES released the results of a study of current practices pertaining to climate-related scenario analysis, how companies are determining financial impact of climate-related risks and opportunities, how they are addressing these impacts, and how they are publicly disclosing this information. The results of the study, reflected in C2ES’ report *Emerging Practices in TCFD-aligned Climate Risk and Opportunity Analysis and Disclosure*, are intended for use by companies to help them conduct more in-depth and decision-useful analysis of climate-related risks and opportunities. C2ES is submitting this report as part of our formal comments.

In preparing our comments, we gathered feedback from our Business Environmental Leadership Council, a group of 40, mostly Fortune 500 leading companies across sectors committed to climate action. While our insights were informed by input from member companies spanning multiple sectors (including manufacturing, financial services, technology, utilities, manufacturing, and heavy industry) and discussions with several additional companies and business-focused stakeholder groups, the views and recommendation expressed in this comment letter are those of C2ES and do not necessarily represent the views of our member companies.

**Executive Summary**

As we noted in our response to the SEC’s request for public input on climate-related financial disclosure in 2021, this decade is critical for decarbonizing our economy, achieving existing net-zero emissions targets, and building resilience to physical threats like wildfires and floods. Market participants must have access to consistent, comparable, and reliable information on climate-related risks and mitigation and resilience opportunities to ensure that markets are fair, capital is efficiently allocated, and investors are protected. Well-regulated, consistent, meaningful, and comparable climate risk disclosures from companies are needed to provide investors with information that enables them to assess their own material risks and opportunities related to climate change across their portfolios. Many investors are already seeking this information and
many leading companies provide their investors with information on how they are managing their climate impacts, and increasingly, their climate risks. As companies have noted in their feedback to C2ES, much of the greenhouse gas emissions data, targets, and emissions reduction efforts that investors seek is available publicly or shared privately.

C2ES supports mandatory climate-related financial risk disclosure, and believes that the proposed rule can play a vital role in helping the broader investor community gain better insights into how all publicly traded companies are managing their climate-related financial risks.

In these comments, we identify a number of elements of the proposed rule that we strongly agree with. We also highlight where improvements are needed for this rule to be operational and effective. In particular, several provisions not raised in the SEC’s 2021 request for input have been introduced that present challenges for implementation and compliance.

Throughout our responses to the SEC’s questions our intention is to support the proposed rule’s broader aim to create greater transparency, consistency, and comparability of climate-related financial risks across publicly traded companies. We also note below where the SEC can engage with other government entities and the expert stakeholders to stay in step with new developments in science, data availability, and other climate-related disclosure standards.

**Support for key provisions in the rule:**

Noting that several of our recommendations in response to the SEC’s 2021 request for input were included in the proposed rule, we commend the following elements:

- **Comprehensive information:** Registrants would be required to provide information on climate-related risks and opportunities, scenario analysis, and carbon transition plans, thereby providing a more holistic picture of how companies are positioned to build their resilience and thrive in a low carbon economy.

- **Existing standards:** The proposed rule aligns with the TCFD, the current leading framework for assessing and reporting climate-related financial materiality which is widely accepted among countries and global financial institutions around the world. The proposed rule requires that companies provide information on their internal governance and strategy for addressing climate related financial risks. Such information can assist investors in understanding how companies are positioned to address climate-related financial risks and opportunities. The rule also references using the Greenhouse Gas Protocol to measure greenhouse gas emissions in scopes 1, 2, and 3, providing a common methodology that is already widely used in the marketplace as the basis for greenhouse gas emissions reporting.

- **Scope 3 emissions:** The proposed rule recognizes the difficulty in providing an accurate estimate of scope 3 emissions, requests more information on how data should be assessed and disclosed, removes the requirement for smaller reporting companies (SRCs) to report scope 3 emissions, and phases in assurance for scope 3 emissions from large accelerated and accelerated filers.

- **Safe harbor:** The proposed rule recognizes a need to provide safe harbor, especially for greenhouse gas emissions data, which is often based on data estimates, incomplete data, and evolving data. In our comments we identify additional areas where safe harbor provisions should be further strengthened.

**Recommendations for addressing implementation challenges:**

Based on input from companies across different sectors on challenges they would face in implementing the rule as it is currently proposed, we recommend the following modifications to facilitate compliance while still preserving the overall intent of the proposed rule.
- **Timing of reporting greenhouse gas emissions data:** The proposed rule examines the extent to which greenhouse gas emissions data must align with financial reporting. We maintain that for the thousands of companies that have already been developing their greenhouse gas emissions inventories adhering to the Greenhouse Gas Protocol, where they often report on a calendar year basis, they should continue to do so. Companies should be allowed to submit their emissions data for scopes 1, 2, and where applicable, 3, for calendar year reporting and not be required to align exactly with financial reporting. The data submitted would not be meaningfully different and would create significant reporting burden. Over time, if companies wish to align their greenhouse gas reporting with their financial timelines, they can choose to do so. In some cases, companies may need to submit their emissions data several months into the calendar year, also not aligning with their financial reporting, due to a necessary delay in data collection and processing. For example, financial institutions reporting their scope 3 financed emissions would need to wait until their portfolio companies submit their emissions data before being able to assess such emissions, a process that can take 5–6 months from the close of the prior calendar year. For this and similar examples, to reduce reporting burden, the SEC should consider allowing companies to disclose their completed annual greenhouse gas emissions data once in a separate greenhouse gas reporting form submitted before the end of the year, or possibly in tandem with the quarterly Form 10-Q, thereby avoiding the need to restate any estimated greenhouse gas inventories that would be initially reported in a Form 10-K, as is currently proposed.

- **Timing of compliance date:** While we maintain that limited assurance of greenhouse gas emissions data is sufficient and that most companies in the S&P 500 are ready today to report their scopes 1 and 2 emissions, we recognize that for smaller publicly traded companies, developing their greenhouse gas emissions inventories will be a new undertaking. We propose that the SEC provide an additional fiscal year (i.e., to fiscal year 2026, filed in 2027) before SRCs need to comply, to enable them to catch up to larger companies. We recommend that the SEC develop guidance for all companies, especially SRCs. We would also support extending the timing of filing for large accelerated, accelerated and non-accelerated filers for an additional year from the proposed dates to ensure a level playing field in preparedness for collecting and submitting data.

- **Safe harbors:** While safe harbors have been proposed for scope 3 emissions and all forward-looking statements, C2ES recommends that safe harbors also apply to governance information and any strategies for managing climate risk. We recommend that the SEC place required disclosure of results of scenario analysis, climate targets, transition plans under safe harbors that provide full protection from both third-party litigation and from action by the SEC itself. There are several reasons we propose this to ensure that companies continue to develop ambitious climate action. On developing climate targets, we have seen over the last two years, dozens of large companies set new, ambitious, net zero targets, and an urgent need exists for companies to continue to publicly strive to drive down their greenhouse gas emissions. These targets are fluid and subject to change as new scientific information becomes available, the costs of clean energy technologies decrease, and new expectations from consumers and investors emerge. Transition plans are also a new development, with few companies experienced in developing and reporting them. A safe harbor that protects companies from both third-party litigation and action by the commission could reduce a chilling effect for companies to set ambitious targets. We seek to reward, not stifle progress. We recommend that the SEC reserve the ability to reassess its approach and determine if safe harbors should be reduced once the rule has been in effect for several years.

- **Level of specificity:** In several instances for how companies address climate risk internally, the proposed rule would require a significant level of detail and specificity. Several companies have provided feedback that such specificity may discourage companies from undertaking practices, such as using different scenarios, setting internal carbon prices, or setting new targets, where fear of
incremental liability from disclosure would outweigh the benefit of using these tools in their climate strategy. In some areas, C2ES proposes where companies can disclose information that would still be useful to investors without providing as much specificity.

- **Materiality:** Throughout the proposed rule, C2ES recommends that disclosure of information should only be required if considered material, and that the SEC should clarify that materiality for purposes of the proposed reporting and disclosure rules should be viewed consistently with the interpretation of materiality set out in the securities laws. The SEC should consider issuing guidance for how companies should assess materiality as it relates to climate change in the context of the existing interpretation of materiality. The SEC could leverage feedback from companies, investors, and others to develop principles-based questions that companies should ask when making a materiality assessment related to climate risks. The SEC has developed questions-based guidance on other issues, for example, the “Coronavirus (COVID-19) — Disclosure Considerations Regarding Operations, Liquidity, and Capital Resources” guidance issued during the pandemic (https://www.sec.gov/corpfin/covid-19-disclosure-considerations).

- **Auditing and financial metrics:** Based on feedback from stakeholders, there are no currently agreed upon controls or metrics by which auditors can assess climate-related financial risks, as we also noted in our response to the SEC's request for information in 2021. Given the unique and emerging context of climate risk disclosures, a deeper and ongoing consideration of auditing needs is recommended, and both the Financial Accounting Standards Board (FASBC) and the Public Company Accounting Oversight Board (PCAOB) should be actively engaged in developing the standards for developing and auditing financial metrics.

In addition, C2ES recommends the following:

- **Guidance and resources:** To assist registrants of all sizes to comply with the rule, the SEC should develop guidance on the use of scenario analysis, development of greenhouse gas emissions inventories for scopes 1, 2, and 3, use of data (e.g., emissions factors), and development of carbon transition plans. When evaluating their physical and transition risks, as we note in our 2022 report, Emerging Practices in TCFD-aligned Climate Risk and Opportunity Analysis and Disclosure, companies repeatedly cited the need for a single source of reputable, easy to use, public data on climate-related risk. We recommend that the SEC, informed by relevant federal science agencies such as the Environmental Protection Agency (EPA) and the National Oceanic and Atmospheric Administration (NOAA), provide publicly available guidance on scenario analysis tools and high-quality data for companies and investors. These efforts are necessary to fill a current knowledge gap and can help develop or validate existing tools and support best practices for calculating climate risks.

- **Developing and maintaining expertise:** The SEC should convene an interagency working group from across the financial regulatory agencies and agencies with experience working with industry on climate change, to keep in step with evolving climate disclosure needs, data availability, and market changes resulting from improved disclosures. It should also undertake an internal research agenda focused on relevant topics such as understanding transition and physical risk disclosures at an industry-level and continue to hire staff with climate science and climate economics experience. Finally, it should designate a regular sustainability standards board to oversee climate disclosure standards. This board should work closely with the SEC and be overseen by the SEC to ensure that ongoing standards account for emerging best practices in science and policy that may affect ongoing disclosure needs.

The proposed rule requires information from both common and newer practices to the market both of which are needed by investors to be able to make decisions that will help steer us this decade towards a low carbon, climate resilient future. Many large companies today are commonly measuring and reporting scope 1 and 2
emissions, having had two decades of experience using the Greenhouse Gas Protocol. To allow those companies new to developing their greenhouse gas inventories time to implement the requirements, we would support providing an additional year for all filers to begin reporting, based off the timelines in the proposed rule. Other elements in the proposed rule reflect practices that are newer to companies, such as undergoing scenario analysis and creating transition plans, where companies have less experience with implementation. Certain aspects of the proposed rule require even further development, such as clarifying financial auditing metrics, which have not yet been fully developed or standardized. To address concerns over implementing some of the newer practices, we recommend providing more time to phase in certain provisions or provide greater leniency and flexibility. As disclosures improve over several years, the SEC could consider including or strengthening some of it proposed requirements at a later date.

In sum, we support many of the core requirements in this proposed rule and, at the same time, recognize where further clarifications and amendments are needed to enable implementation and compliance.

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SEC Questions for Consideration

Section B: Climate Strategy

19. Should we require a registrant to describe the actual and potential impacts of its material climate-related risks on its strategy, business model, and outlook, as proposed? Should we require a registrant to disclose impacts from climate-related risks on, or any resulting significant changes made to, its business operations, including the types and locations of its operations, as proposed?

Yes, we believe that the disclosure of material risks is a fundamental element of any climate-related disclosure and should be a requirement of any effective climate-related disclosure regulation. The specifics of what should be included in such a disclosure are discussed in later question responses, but we agree that material risks to a company's strategy, business model, and outlook should be required.

We agree that the climate-related disclosure should discuss the types of impacts from climate-related risks to business operations, and, at a very high level, the location of impacts. The location details should be limited to a regional, state, or national level (as opposed to a precise address) to limit excessive reporting burden and to avoid security concerns of location assets from disclosure.

20. Should we require a registrant to disclose climate-related impacts on, or any resulting significant changes made to, its products or services, supply chain or 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, as proposed? Are there any other aspects of a registrant's business operations, strategy, or business model that we should specify as being subject to this disclosure requirement to the extent they may be impacted by climate-related factors?

We agree that a registrant should be required to address if there are material changes to products or services, supply chain or 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. C2ES proposes that only material risks and impacts should be required to be disclosed, and while “significant” impacts are likely material, C2ES recommends that the commission be explicit in its use of the term “material.”

We would recommend explicitly adding the following additional items for companies to disclose, where they are deemed material:

- **Reputational risks**: How climate change risks may change the perception of the company and relationships with stakeholders
- **Access to capital**: How climate risks are impacting or may impact a company’s access to financing or investment
- **Divestment**: How climate risks are used to consider divestment from a company’s portfolio
- **Acquisition**: How climate risks and opportunities are analyzed and reviewed as part of a company’s acquisition and due diligence approaches
- **Insurance**: The impact of climate change on the cost and availability of insurance, including property and business interruption insurance.

We suggest providing guidance or a template that can be used by registrants to provide impacts in a standardized way. For example, the CDP Climate Change template provides a simple table that enables consistent disclosure. The commission should also consult the TCFD.

With respect to value chain, we would suggest limiting required analysis to tier 1 (direct) suppliers, as companies will have difficulties fully analyzing indirect suppliers. For example, in the case of large companies with multiple tiers and thousands of suppliers, entire value chain reporting is not practical. Over time, more
tier 1 suppliers should also report the emissions from their suppliers, encompassing more of the value chain. Companies can have tens or hundreds of thousands of upstream suppliers and downstream value chain partners.

C2ES received feedback that §229.1502(a)(1)(ii) states “For transition risks, describe the nature of the risk, including whether it relates 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.” While the “reputational risks” we recommend adding are already covered in the proposal, we recommend the Commission include access to capital should be covered under “investor preferences” and divestment, acquisition, and insurance should be covered in “other transition-related factors” by companies for whom these are material risks.

21. Should we require a registrant to specify the time horizon applied when assessing its climate-related impacts (i.e., in the short, medium, or long term), as proposed?

We believe that it is necessary for companies to specify their definitions for short, medium, and long term specifically as it relates to climate disclosure. Where possible, the time horizon should be expressed as a time horizon in number of years, or a range with beginning and end dates. Availability of this information is important for investors to assess a registrant’s readiness to address climate-related financial risks. In some cases, this information can also to enable greater comparability between climate disclosures.

C2ES received feedback from companies from different sectors that the definition of a short, medium and long-term time horizon can vary different depending on the industry sector a business is in. For example, with electric utilities, long-term planning can often mean more than 20 to 30 years, while some sectors would consider long-term much shorter than this time horizon. Other companies shared that financial impacts on longer term horizons are more difficult to model due to increased uncertainties.

Should the Commission require a medium- and long-term time horizon applied to assess materiality, C2ES recommends providing guidance and examples, including industry-specific examples, around how companies should apply materiality over short, medium, and long-term time horizons.

22. Should we require a registrant to discuss whether and how it considers any of the described impacts as part of its business strategy, financial planning, and capital allocation, as proposed? Should we require a registrant to provide both current and forward-looking disclosures to facilitate an understanding of whether the implications of the identified climate-related risks have been integrated into the registrant’s business model or strategy, as proposed? Would any of the proposed disclosures present competitive concerns for registrants? If so, how can we mitigate such concerns?

We consider it a fundamental element of climate-related disclosure for companies to provide information on how climate-related risks are integrated into business strategy, financial planning, and capital allocation.

We recommend that registrants only be required to disclose this information at a narrative level, and not a financial level. We believe that if the information is disclosed at a narrative level without prescriptive requirements for the financial details then competitive concerns can be alleviated. As an example, in the case where companies are using market mechanisms such as offset credits and renewable energy credits (RECs) to mitigate their emissions, we suggest that the SEC require registrants to disclose information on the volume and use of offset credits and RECs (see answer to Question 24), but that it make the disclosure of financial details of those mechanisms (e.g., cost of carbon credits and RECs) optional. We also suggest that the Commission require companies to disclose where their use is voluntary rather than required by government regulation.
23. Should we require the disclosures to include how the registrant is using resources to mitigate climate-related risks, as proposed? Should the required discussion also include how any of the metrics or targets referenced in the proposed climate-related disclosure subpart of Regulation S-K or Article 14 of Regulation S-X relate to the registrant’s business model or business strategy, as proposed? Should we require additional disclosures if a registrant leverages climate-related financing instruments, such as green bonds or other forms of “sustainable finance” such as “sustainability-linked bonds,” “transition bonds,” or other financial instruments linked to climate change as part of its strategy to address climate-related risks and opportunities? For example, should we require disclosure of the climate-related projects that the registrant plans to use the green bond proceeds to fund? Should we require disclosure of key performance metrics tied to such financing instruments?

We agree that a registrant should be required to disclose how they are planning to adapt to or mitigate risks identified, and how they will use these actions to create climate-related opportunities. We do not necessarily recommend disclosure of detailed project financing or other financial management as this may create competitive concerns among investors.

A fundamental purpose for measuring and tracking climate-related metrics and targets is so they can inform business model and strategy. Therefore, we believe that it is imperative that registrants indicate how climate-related metrics are being used to inform strategy and planning.

24. If a registrant has used carbon offsets or RECs, should we require the registrant to disclose the role that the offsets or RECs play in its overall strategy to reduce its net carbon emissions, as proposed? Should the proposed definitions of carbon offsets and RECs be clarified or expanded in any way? Are there specific considerations about the use of carbon offsets or RECs that we should require to be disclosed in a registrant’s discussion regarding how climate-related factors have impacted its strategy, business model, and outlook?

Registrants should include information on their generation, purchase and use of carbon credits and RECs to provide a comprehensive view for investors on how they are addressing their climate risks and opportunities though use of such market instruments.

For clarification, where companies are using offset credits and RECs in their strategies to reduce net carbon emissions, registrants should disclose information on the volume and use of offset credits and RECs to provide a comprehensive view for investors on how they are addressing their climate risks and opportunities though use of such market instruments. The disclosure of financial details of those mechanisms (e.g., cost of carbon credits and RECs) should be optional. We also suggest that the commission require companies to disclose where their use is voluntary rather than required by government regulation.

25. Should we 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 its consolidated financial statements, as proposed? Should the discussion include any of the financial statement metrics in proposed 17 CFR 210.14-02 (14-02 of Regulation S-X) that demonstrate that the identified climate-related risks have had a material impact on reported operations, as proposed? Should the discussion include a tabular representation of such metrics?

We agree that there should be a narrative discussion of how climate-related risks have impacted or are reasonably likely to affect consolidated financial statements.

Further discussion of inclusion in financial statements is in Section F. Feedback from companies noted that the financial statement metric requirements appear unworkable in their current form.
26. Should we require registrants to disclose information about an internal carbon price if they maintain one, as proposed? If so, should we require that the registrant disclose:

- The price in units of the registrant’s reporting currency per metric ton of CO2e
- The total price
- The boundaries for measurement of overall CO2e on which the total price is based if different from the greenhouse gas emission organizational boundary required pursuant to 17 CFR 210.14-03(d)(4)
- The rationale for selecting the internal or shadow carbon price applied, as proposed?
- Should we also require registrants to describe the methodology used to calculate its internal carbon price?

Registrants should not be required to disclose specifics of an internal carbon price (i.e., expressed in per dollar per ton) if they have implemented such a policy. Companies across different sectors provided feedback that disclosure of this information may present a competitive risk, potentially putting them at a competitive disadvantage if the information were made public. At the same time, several companies relayed that this information is not directly required for investor decision making.

27. Should we also require a registrant to disclose how it uses the described internal carbon price to evaluate and manage climate-related risks, as proposed? Should we further require a registrant that uses more than one internal carbon price to provide the above disclosures for each internal carbon price, and disclose its reasons for using different prices, as proposed? Are there other aspects regarding the use of an internal carbon price that we should require to be disclosed? Would disclosure regarding any internal carbon price maintained by a registrant elicit important or material information for investors? Would requiring the disclosure of the registrant’s use of an internal carbon price raise competitive harm concerns that would act as a disincentive from the use of an internal carbon price? If so, should the commission provide an accommodation that would mitigate those concerns? For example, are there exceptions or exemptions to an internal carbon price disclosure requirement that we should consider?

We agree with the proposal for requiring disclosure for how a price is used, as the use of a carbon price can signal a way for a company to demonstrate how it assesses its climate risk. Companies should be required to disclose, in narrative form, if they use an internal carbon price, and if so how they use it (e.g., as a guide to internal investment decisions, in scenario planning, as a means of achieving internal emissions reductions, etc.)

SEC should not require disclosure of the actual carbon price (expressed in per dollar per ton) due to the competitive concerns noted in question 26.


28. To the extent that disclosure that incorporates or is based on an internal carbon price constitutes forward-looking information, the PSLRA safe harbors would apply. Should we adopt a separate safe harbor for internal carbon price disclosure? If so, what disclosures should such a safe harbor cover and what should the conditions be for such a safe harbor?

C2ES recommends a safe harbor where information on internal carbon price constitutes forward-looking information. We would suggest a safe harbor that prevents private rights of action or vastly limits the scope
of possible litigation/actionable claims and provides certainty for issuers around what they could and could not be sued for.

We also believe an expanded safe harbor should cover all forward-looking climate information (e.g., climate targets, use of scenarios analysis) and not just for internal carbon pricing or the safe harbor around Scope 3 emissions. The safe harbor should go beyond the PSLRA and limit private rights of action and SEC enforcement to basically fraud.

29. Should we require all registrants to disclose an internal carbon price and prescribe a methodology for determining that price? If so, what corresponding disclosure requirements should we include in connection with such mandated carbon price? What methodology, if any, should we prescribe for calculating a mandatory internal or shadow carbon price? Would a different metric better elicit disclosure that would monetize emissions?

We do not agree that all registrants should be required to disclose an internal carbon price. Several industries – especially in the energy sector-- use an internal carbon price to assess their energy price risk and for other reasons (i.e., raising funds to cover the costs of greenhouse gas emissions reduction projects). C2ES considers setting an internal carbon price as leading practice for companies across sectors. However, not all companies use an internal carbon price and should not be subject to being required to develop one.

30. Should we require a registrant to disclose analytical tools, such as scenario analysis, 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, as proposed?

We believe it is a fundamental requirement of a climate disclosure framework to disclose how a registrant is addressing resilience within the organization. While climate change is occurring now, per the latest IPCC assessment reports, its effects are felt more strongly and become more apparent over time. As such, testing resilience is necessarily a forward-looking exercise, and scenario analysis is the core tool to conducting a forward-looking analysis. We would therefore recommend that all companies be required to conduct some form of scenario analysis.

We recommend the SEC provide guidance on the use and meaning of scenario analysis. Scenario planning defines possible future environments that companies might face over a time horizon. By engaging in scenario analysis, companies explore a wide range of economic, regulatory, technological, and societal conditions, and consider how business and strategies might fare under varying operating environments. Companies recognize that individual countries’ efforts to mitigate climate change and unexpected technological innovations introduce additional uncertainty into the range of outcomes for regulations and consumer behaviors. Because of today’s uncertain context, companies do not assign probabilities to scenarios nor plan to a probable scenario; rather, they examine the resilience of strategies to differing futures and adjust accordingly. Therefore, it is key that it is understood that scenarios are not predictions of the future and do not represent forecasts.

However, as developed further in our response to this question, we do not suggest that the SEC require specific elements of the scenario analysis for disclosure. Different companies may conduct scenario analysis at varying levels of detail, depending on the maturity and materiality of climate risks, and some may produce quantitative or only qualitative information.

Scenario analysis is also a fundamentally personal effort for the organization. Every company should conduct scenario analysis in a way that is most decision useful for their strategy and operations, and true to the size and complexity of the organization. Small or new registrants should not be required to conduct analyses at
the same level of rigor as large or mature registrants, but they should be required to conduct some exercise to test resilience and it is the responsibility of the market to judge whether the analysis conducted and disclosed was sufficient to address concerns related to risk.

To require prescriptive scenario analysis and scenario analysis disclosure may deter companies to conduct this valuable exercise. We therefore recommend that the SEC require the companies disclose narrative details as to the type of scenario analysis conducted (qualitative or quantitative), the scenarios applied, methodological choices, and narrative results. Forward-looking financial impacts should not be required.

2. **What other analytical tools do registrants use for these purposes, and should we require disclosure of these other tools?**

Scenario analysis is the core tool for conducting forward looking analysis.

3. **Are there other situations in which some registrants should be required to conduct and provide disclosure of scenario analysis?**

We do not have a response to this question at this time.

4. **Alternatively, should we require all registrants to provide scenario analysis disclosure?**

As discussed above, we would recommend requiring all registrants to provide some form of scenario analysis disclosure. However, we would not recommend that the SEC require registrants to provide detailed financial outcomes of scenario analysis or prescribe specific forms of scenario analysis.

5. **If a registrant does provide scenario analysis disclosure, should we require it to follow certain publicly available scenario models, such as those published by the IPCC, the IEA, or NGFS and, if so, which scenarios?**

Providing scenario details as part of disclosure will be useful for investors to compare scenario analysis between registrants. However, we do not agree that the scenarios should be prescribed. New scenarios are being released, including sector-specific scenarios, that companies may find beneficial to use.

6. **Should we require a registrant providing scenario analysis disclosure to include the scenarios considered (e.g., an increase of global temperature of no greater than 3 degrees, 2 degrees, or 1.5 degrees C above pre-industrial levels), the parameters, assumptions, and analytical choices, and the projected principal financial impacts on the registrant's business strategy under each scenario, as proposed?**

We agree with the proposal for a registrant to provide disclosure related to parameters, assumptions, and analytical choices as part of scenario analysis. We suggest that registrants be required to provide only narrative descriptions of these considerations as part of their disclosure.

We do not agree that companies should be required to disclose principal financial future risk impacts. While it is noted that the financial impacts will be protected under safe harbor, given the lack of standards for conducting scenario analysis, financial impact calculation approaches may vary between registrants, which may create confusion among the investor community and undue focus on the financial outputs of scenario analysis as opposed to general conclusions related to risk and resilience. We believe the narrative outcomes and core input assumptions are sufficient disclosure, provided registrants are providing accurate disclosure of the outcomes.

Further, the SEC should recognize that a scenario analysis does not necessarily produce financial impact analysis, but that many companies conduct a scenario analysis considering only qualitative outputs and conclusions. A financially quantitative scenario analysis is a difficult and sometimes impossible undertaking,
and the SEC regulations should allow room for these registrants to describe how they have understood their resilience, and let investors determine whether deeper analysis is required.

7. Are there any other aspects of scenario analysis that we should require registrants to disclose?

We recommend that the following aspects of scenario analysis should be disclosed:

1. How the scenario analysis aligns with the company’s noted short, medium, and long time horizons.
2. How the company determined the sensitivity of their assets, operations, revenue, and business model to climate impacts.
3. What risks and opportunities were assessed, and against which parts of the business. For example, a registrant should disclose where in the operations heat stress was examined, or which revenue streams are most sensitive to a low carbon transition.
4. The fiscal year in which the scenario analysis was conducted, and the frequency with which scenario analysis will be conducted. In addition, we recommend that companies disclose if there have been major changes to the business since the last disclosure was made.

8. For example, should we require a registrant using scenario analysis to consider a scenario that assumes a disorderly transition?

We would recommend encouraging that registrants assess a disorderly transition. However, we would not necessarily require such disclosure given the ill-defined nature of a disorderly transition. Parameters such as the time period when the disorderly transition begins, what aspects of the transition are most disordered, are not well established.

9. Is there a need for us to provide additional guidance regarding scenario analysis?

As noted above, we would suggest that the SEC produce guidance, especially if there is to be mandatory disclosure. We would not recommend that the SEC standardize scenario analysis, as there are a number of diverse approaches to scenario analysis and a standardized approach may limit a company’s ability to faithfully apply scenario analysis to their company’s context.

10. Are there any aspects of scenario analysis in our proposed required disclosure that we should exclude?

We would not recommend that the SEC require the financial results of a scenario analysis, and only require narrative summaries. While it is noted that the financial impacts will be protected under safe harbor, given the lack of standards for conducting scenario analysis, financial impact calculation approaches may vary significantly between registrants, which may create confusion among the investor community and undue focus on the financial outputs of scenario analysis. We believe the narrative outcomes and core input assumptions are sufficient disclosure, provided registrants are providing accurate disclosure of the outcomes. Further, the SEC should recognize that a scenario analysis does not necessarily produce financial impact analysis, but that many companies conduct a scenario analysis considering only qualitative outputs and conclusions. A financially quantitative scenario analysis is a difficult and sometimes impossible undertaking, and the SEC regulations should allow room for these registrants to describe how they have understood their resilience, and let investors determine whether deeper analysis is required.

The process of climate scenario analysis is evolving, and the approaches and data quality are expected to improve over time, which will contribute to a better understanding of climate risks and opportunities. As such, C2ES recommends that all scenario analysis to be covered under safe harbor.
11. Should we also require a registrant that does not use scenario analysis to disclose that it has not used this analytical tool? Should we also require a registrant to disclose its reasons for not using scenario analysis?

As discussed above, we would recommend that all registrants be required to conduct scenario analysis. However, as outlined, the SEC should allow registrants to conduct scenario analysis to a level of detail that is relevant for their organization (e.g. qualitative or quantitative).

12. Will requiring disclosure of scenario analysis if and when a registrant performs scenario analysis discourage registrants from conducting scenario analysis? If so, and to the extent scenario analysis is a useful tool for building strategic resilience, how could our regulations prevent such consequences?

We believe it is possible that if registrants conducting scenario analysis are required to disclose scenario analysis financial outputs, it can likely result in registrants choosing not to conduct a scenario analysis. For this reason, we have recommended that the SEC only require narrative outputs with respect to scenario analysis, as companies will not be comfortable disclosing detailed and speculative financial outputs.

31. Would the PSLRA forward-looking statement safe harbors provide adequate protection for the proposed scenario analysis disclosure? Should we instead adopt a separate safe harbor for scenario analysis disclosure? If so, what disclosures should such a safe harbor cover that would not be covered by the PSLRA safe harbors and what should the conditions be for such a safe harbor?

We would suggest that the safe harbor provided related to scenario analysis be expanded. Issuers need comfort that statements incorporated by reference into registration statements (so all 10-K and 10-Q disclosures and any new filings that might be developed for climate information) would be protected and would be able to maintain the defenses if sued under the Section 11 strict liability standard.

If the above suggestion cannot be adopted, we request that a similar provision to 17 CFR 229-305(a) be adopted that would apply to all scenario analyses, transition plans, targets, goals, and other forward-looking statements, providing that for purposes of the PSLRA, they will be deemed to be subject to the PSLRA (so no need to identify them as forward-looking statements) and accompanied by reasonable cautionary statements if they are prepared and provided in accordance with the new rules.

32. Should we adopt a provision similar to 17 CFR 229.305(d) that would apply the PSLRA forward-looking statement safe harbor to forward-looking statements made in response to specified climate-related disclosure items, such as proposed Item 1502 and Item 1505 (concerning targets and goals) of Regulation S-K? If so, which proposed items should we specifically include in the safe harbor?

See response to question 31.

33. As proposed, a registrant may provide disclosure regarding any climate-related opportunities when responding to any of the provisions under proposed 17 CFR 229.1502 (Item 1502). Should we require disclosure of climate-related opportunities under any or all of the proposed Item 1502 provisions?

C2ES received feedback from several companies across sectors that disclosing climate-related opportunities in their financial filings potentially subjects them to legal liability from investors if opportunities do not materialize. Requiring quantitative disclosures of the potential financial impact of opportunities could also pose a risk to confidential business information. Many companies currently disclose climate-related opportunities in their climate reports and CDP disclosures. C2ES recommends that any required disclosures of opportunities should be narrative, not quantitative, in nature. Other companies strongly oppose required disclosure of opportunities, noting that disclosure should be optional instead.
Section D. Governance Disclosure

34. Should we require a registrant to describe, as applicable, the board’s oversight of climate-related risks, as proposed? Should the required disclosure include whether any board member has expertise in climate-related risks and, if so, a description of the nature of the expertise, as proposed? Should we also require a registrant to identify the board members or board committee responsible for the oversight of climate-related risks, as proposed? Do our current rules, which require a registrant to provide the business experience of its board members, elicit adequate disclosure about a board member’s or executive officer’s expertise relevant to the oversight of climate-related risks?

Yes, registrants should describe, as applicable, the board’s oversight of climate-related risks. We do not think board members should be required to have climate expertise.

On whether board members have expertise on climate-related risks, it would be helpful to disclose if at least one board member has a background in climate change based on reputable experience or training regarding climate-related risks in alignment with the TCFD recommendations. Given that it is unlikely that there will be at least one board member with climate expertise at all publicly traded companies, registrants should describe how board members are initially—and then continually—trained on the latest climate science and climate-related risks, and the sources used in trainings to ensure that board members are informed of the latest information on climate-related issues. The climate-related certifications, trainings, educations, and experiences all vary considerably across climate change professionals and at this time there is not an official, accredited standard or certification that people can take and apply to their roles as a board member.

We believe the entire board should be responsible for the oversight of climate-related risks – not just one board member. To ensure that climate change is truly mainstreamed across the company, it will be important for a board committee to demonstrate how it prioritizes and supports assessing, managing, and addressing climate change from the bottom-up (management) and top-down (board) across critical business functions (e.g., finance, risk management, human resources, operations, legal, real estate).

35. Should we require a registrant to disclose the processes and frequency by which the board or board committee discusses climate-related risks, as proposed?

We do not have a strong view on the processes and frequency by which the board or board committee discusses climate-related risks, only that they adhere to their processes in place and timelines for doing so.

36. Should we require a registrant to disclose whether and how the board or board committee considers climate-related risks as part of its business strategy, risk management, and financial oversight, as proposed? Would the proposed disclosure raise competitive harm concerns? If so, how could we address those concerns while requiring additional information for investors about how a registrant’s board oversees climate-related risks?

Yes. This is consistent with the TCFD Recommendations. More transparency on how the board or board committee considers climate-related risks as part of its business strategy, risk management, and financial oversight is useful for several reasons and could also be seen as a competitive advantage as investors will want to invest in climate-ready companies: (1) to hold the board accountable, (2) understand how the company is mainstreaming climate considerations across these critical business processes and functions that climate change will impact and vice versa, and (3) incorporate metrics to assess progress of this integration across the company and its impact on climate action.

If all publicly traded companies were required to disclose this information, this could overcome any competitive harm concerns. It would also be important for companies to receive specific guidance from the
Commission on how to determine whether a climate risk is material to the company (both financially and non-financial).

37. Should we require a registrant to disclose whether and how the board sets climate-related targets or goals, as proposed? Should the required disclosure include how the board oversees progress against those targets or goals, including whether it establishes any interim targets or goals, as proposed? Would the proposed disclosure raise competitive harm concerns? If so, how could we address those concerns while requiring additional information for investors about how a registrant’s board oversees the setting of any climate-related targets or goals?

A registrant should disclose how, as a company, it approaches setting a climate-related target. While the board should have oversight in approving those targets, not all boards set the targets and goals and not all boards have the expertise to do so. Registrants should describe the extent to which boards approve the process for setting targets and goals and how they oversee progress against targets and goals. A brief narrative of how the board approaches goal setting should not, by itself, raise competitive harm concerns.

38. Should we require a registrant to describe, as applicable, management's role in assessing and managing climate-related risks, as proposed? Should the required disclosure include whether certain management positions or committees are responsible for assessing and managing climate-related risks and, if so, the identity of such positions or committees, and the relevant expertise of the position holders or members in such detail as necessary to fully describe the nature of the expertise, as proposed? Should we require a registrant to identify the executive officer(s) occupying such position(s)? Or do our current rules, which require a registrant to provide the business experience of its executive officers, elicit adequate disclosure about management's expertise relevant to the oversight of climate-related risks?

Yes, registrants should describe, as applicable, management’s role in assessing and managing climate-related risks, and describe which management positions or committees are responsible for assessing and managing those risks. Doing so enables the investor to understand the extent to which climate risks are considered throughout key decision-making roles that may also oversee critical business units responsible for, or impacted by, climate-related risks.

However, more guidance would be useful on what the commission deems as climate-related expertise. Disclosing how and where managers are educated and trained on climate-related risks and how they have used their training and experience to act on climate will be critical. Where managers themselves do not have climate-expertise, registrants should disclose how they are engaging with experts to inform their efforts to mitigate climate-related risks. Of note, the climate-related certifications, trainings, educations, and experiences all vary considerably across climate change professionals as there is not an official, accredited standard or certification that people can take and apply to their roles as managers. Most climate change professionals today have acquired their expertise by working on climate issues over an extended time.

C2ES recommends that there be added a liability safe harbor for any member of the board of directors designated as a climate expert, consistent with the proposed rule for cybersecurity experts and the final rule for audit committee financial experts.

Of note, companies that provided feedback expressed concern that if this disclosure were to be expanded across other special issues, such disclosures would become burdensome. The SEC’s current rules, which require registrants to provide the business experience of their executive officers, could elicit adequate disclosure about management’s expertise relevant to the oversight of climate-related risks. If the Commission agrees, we still consider that there should be guidance to ensure that such information is included when describing the business experience of executive officers. Where executive officers may not have climate
experience, the commission’s reporting requirement would provide information to investors on where climate expertise is located within management.

39. Should we require a registrant to describe the processes by which the management positions or committees responsible for climate-related risks are informed about and monitor climate-related risks, as proposed? Should we also require a registrant to disclose whether and how frequently such positions or committees report to the board or a committee of the board on climate-related risks, as proposed?

C2ES supports this proposed requirement because it is consistent with the TCFD Recommendations. Continual monitoring of climate-related risks and the measures in place to reduce these risks is important to disclose progress on the effectiveness of these measures or investments and/or how the company plans to adjust its measures to address climate-related risks if the risks change or increase.

However, C2ES received feedback from companies that the commission is too prescriptive in requiring registrants to describe the processes by which management or the board are informed about and monitor climate-related risks and how frequently such reports are made. Companies note there are no other matters about which the commission requires similar disclosure, such as company financials, litigation, and strategy, and the SEC doesn’t mandate disclosure about how often the board and management reviews those risks. There are also already rules in place that require companies to disclose their risk management processes in the proxy statement. Companies consider that such detailed disclosure about climate is too prescriptive and duplicative. Should the commission remove the requirement, C2ES recommends issuing guidance that companies include such information in their existing risk management processes.

40. Should we specifically require a registrant to disclose any connection between executive remuneration and the achievement of climate-related targets and goals? Is there a need for such a requirement in addition to the executive compensation disclosure required by 17 CFR 229.402(b)?

Yes. Connecting executive and management level remuneration and the achievement of climate-related targets and goals can accelerate action of executives and managers are held accountable for achieving these targets and goals. Some leading companies have instilled this practice, as noted in CDP’s annual questionnaire. Disclosing such information would be useful to investors to understand internal incentives for companies to achieve their stated climate targets.

C2ES received feedback disclosure to describe executive compensation metrics is already required in proxy rules and this requirement would be duplicative and unnecessarily single out climate above other issues. If the commission removes the requirement, we recommend the commission issue guidance that such information should be included in disclosures required by 17 CFR 229.402(b).

41. As proposed, a registrant may disclose the board's oversight of, and management’s role in assessing and managing, climate-related opportunities. Should we require a registrant to disclose these items?

Though this recommendation is consistent with the TCFD Recommendations, C2ES recommends that disclosures of management’s role in assessing and managing climate-related opportunities should be at a high narrative level to reduce any risk to confidential business information.

Section E. Risk Management Disclosure

42. Should we require a registrant to describe its processes for identifying, assessing, and managing climate-related risks, as proposed?
Yes. This is consistent with the TCFD Recommendations. However, the commission should provide additional guidance on what is considered “climate-related.”

43. When describing the processes for identifying and assessing climate-related risks, should we require a registrant to disclose, as applicable, as proposed:

- How the registrant determines the relative significance of climate-related risks compared to other risks? Yes. For how how material climate-related risks are compared to other risks the registrant is preparing for or has experienced. We recommend registrants also have the option to disclose a description (e.g., roadmap) for how these climate-related risks are being managed, minimized, tracked, and reported regularly in conjunction with other risks the registrant incudes in its risk taxonomy.
- How it considers existing or likely regulatory requirements or policies, such as emissions limits, when identifying climate-related risks? Yes. We recommend registrants also have the option to describe how these climate-related regulatory risks are being managed, minimized, tracked over time, and reported regularly.
- How it considers shifts in customer or counterparty preferences, technological changes, or changes in market prices in assessing potential transition risks? Yes. We recommend registrants also have the option to describe how these climate-related around risks technological and customer shift are being managed, minimized, tracked over time, and reported regularly.
- How the registrant determines the materiality of climate-related risks, including how it assesses the potential size and scope of an identified climate-related risk? Are there other items relevant to a registrant’s identification and assessment of climate-related risks that we should require it to disclose instead of or in addition to the proposed disclosure items? Yes, though the commission should continue to indicate and emphasize that materiality for purposes of the proposed reporting and disclosure rules would be viewed consistently with the interpretation of materiality set out in the securities laws.

We recommend that the commission provide more guidance to registrants on how to assess the financial and non-financial materiality of climate-related risks and opportunities. This is an area that causes much confusion for registrants and puts the onus on the registrant to deem a risk material based on their own internal methodology. Without this type of consistent guidance for registrants to follow and align with, investors will continue to get varying degrees of disclosure from these companies on what they consider to be material (or what their materiality threshold is and why) when it comes to climate-related risk.

44. When describing the processes for managing climate-related risks, should we require a registrant to disclose, as applicable, as proposed:

- How it decides whether to mitigate, accept, or adapt to a particular risk? Yes.
- How it prioritizes climate-related risks? Yes. In particular, how it prioritizes climate-related risks compared to other risks the registrant is managing.
- How it determines to mitigate a high priority risk? Yes.

Are there other items relevant to a registrant’s management of climate-related risks that we should require it to disclose instead of or in addition to the proposed disclosure items?

Yes. Their materiality methodology should be disclosed so investors understand why or why not a registrant deemed climate-related risks material or not. Materiality for purposes of the proposed reporting and disclosure rules would be viewed consistently with the interpretation of materiality set out in the securities
laws. Materiality should be determined based on the commission’s long-standing approach to materiality, as confirmed by the U.S. Supreme Court in TSC vs. Northway and Basic vs. Levinson, 426 U.S. 438 (1976). Specifically, information is material for purposes of federal securities regulation if “there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote” or invest. Id. at 449.

In addition, disclosing the diversity of management across the company could help ensure equity in climate-related decisions and that a variety of perspectives are offered at the management and board levels. Such disclosure of diversity of management across the company could already be included in any existing requirements related to disclosure of human capital management

45. Should we require a registrant to disclose whether and how the processes described in response to proposed 17 CFR 229.1503(a) are integrated into the registrant’s overall risk management system or processes, as proposed? Should we specify any particular aspect of this arrangement that a registrant should disclose, such as any interaction between, and corresponding roles of, the board or any management committee responsible for assessing climate-related risks, if there is a separate and distinct committee of the board or management, and the registrant’s committee in charge, generally, of risk assessment and management?

Yes because this is consistent with the TCFD Recommendations, however reporting should occur at a summary level. Climate change is a threat multiplier and understanding how climate-related risks are being managed in the context of other risks the registrant is managing through its existing risk management system or processes will help the registrant understand the interactions of and compounding effects that climate change may have on other risks the company faces. In addition, solutions to address certain risks like cyber security threats, water stress, or natural disasters may offer co-benefits to addressing and enhancing the resilience of the registrant to climate change. If a registrant discloses how climate risks are being managed, investors will better understand the level of attention climate change is receiving and the actions and controls being taken to minimize climate-related risks in the context of other risks.

However, according to some companies, item 407 of Regulation S-K already requires disclosure in the proxy statement of the board’s oversight of risk, such as whether there is a separate risk committee. Companies are concerned that requiring this level of detail on disclosure of climate risk management singles out climate as compared to all other issues facing a company. To strike a balance between TCFD’s recommendations and to reduce reporting burden, C2ES recommends a summary description of how climate risks are being managed.

46. If a registrant has adopted a transition plan, should we require the registrant to describe the plan, including the relevant metrics and targets used to identify and manage physical and transition risks, as proposed? Would this proposed disclosure requirement raise any competitive harm concerns and, if so, how can we mitigate such concerns? Would any of the proposed disclosure requirements for a registrant’s transition plan act as a disincentive to the adoption of such a plan by the registrant?

Yes. Requiring registrants to disclose the details of their transition plan or roadmap will help investors understand what actions and investments the registrant is taking to achieve the transition to a low-carbon economy and how the registrant is managing any risks they may face in this transition. It will be important for the commission to provide guidance on what it expects to see in such a transition plan (e.g., just climate-related transition information or transition and physical information, how this plan is different or similar to a net zero plan or carbon neutrality plan) so these plans are consistent in what they disclose and at what granularity across all sectors and industries.

If the commission intends for climate-related physical risks and adaptation or resilience measures to be included in this transition plan, explicitly stating or requiring that in the guidance or final rule will ensure that information describing how the registrant plans to reduce physical risks by building resilience are not omitted.
If the commission does not intend for climate-related physical risks and adaptation or resilience measures to be included in a transition plan but in a different or separate plan, explicitly stating or requiring that in the guidance or final rule will be important so physical risks can be managed and disclosed at the same level as transition risks and plans but with a focus on adaptation and resilience.

Importantly, the commission should provide flexibility and safe harbor in disclosing details of a transition plan as many factors that impact these plans are constantly evolving.

47. If a registrant has adopted a transition plan, should we require it, when describing the plan, to disclose, as applicable, how the registrant plans to mitigate or adapt to any identified physical risks, including but not limited to those concerning energy, land, or water use and management, as proposed? Are there any other aspects or considerations related to the mitigation or adaptation to physical risks that we should specifically require to be disclosed in the description of a registrant’s transition plan?

Yes. If the commission intends for the transition plan to include physical risks, we recommend calling these “Transition and Adaptation (or Resilience) Plans,” so that investors understand that these plans include the disclosure of and management measures for both climate-related transition and physical risks and opportunities. Registrants today are primarily preparing transition plans focused on reducing greenhouse gas (greenhouse gas) emissions, instead of also including how they plan to build resilience for physical impacts of climate change (acute and chronic).

48. If a registrant has adopted a transition plan, should we require it to disclose, if applicable, how it plans to mitigate or adapt to any identified transition risks, including the following, as proposed:

Laws, regulations, or policies that:

- Restrict greenhouse gas emissions or products with high greenhouse gas footprints, including emissions caps; or
  - Require the protection of high conservation value land or natural assets?
- Imposition of a carbon price?
- Changing demands or preferences of consumers, investors, employees, and business counterparts?
- Are there any other transition risks that we should specifically identify for disclosure, if applicable, in the transition plan description? Are there any identified transition risks that we should exclude from the plan description?

Yes. A registrant should be required to provide information on how it plans to address its different transition and physical risks. Such disclosure is key to providing investors with insights on how a company is managing its preparedness for and reducing its climate-related risks, which can translate into reducing financial risks. The transition risks that the commission proposed to highlight are useful examples of common transition risks that most companies across industry sectors face. The commission should require that registrants provide a response to the most common transition risks on whether they are considering or addressing them. Registrants that do not face those specific risks can indicate so in their response. Ensuring that some response is required will enable greater consistency in disclosure across and within industries. Registrants should have flexibility to include additional transition risks specific to their company and/or industry. Registrants should also be provided flexibility in what information they disclose, as there could be competitive risks depending on the level of detail in reporting.
49. If a registrant has adopted a transition plan, when describing the plan, should we permit the registrant also to discuss how it plans to achieve any identified climate-related opportunities, including, as proposed:

- The production of products that facilitate the transition to a lower carbon economy, such as low emission modes of transportation and supporting infrastructure?
- The generation or use of renewable power?
- The production or use of low waste, recycled, or environmentally friendly consumer products that require less carbon intensive production methods?
- The setting of conservation goals and targets that would help reduce greenhouse gas emissions?
- The provision of services related to any transition to a lower carbon economy?

Should we require a registrant to discuss how it plans to achieve any of the above, or any other, climate-related opportunities when describing its transition plan?

Yes. A registrant should have the option to include information on how it plans to achieve any climate related opportunities. Such disclosure can provide investors with key insights on how a company is positioning itself to benefit from a transition to a low carbon economy. Building upon the 2021 TCFD guidance on disclosing climate-related opportunities for select industrial sectors, in March 2022 C2ES issued Recommendations for Improving Disclosure of Climate-Related Opportunities.

50. If a registrant has disclosed its transition plan in a Commission filing, should we require it to update its transition plan disclosure each fiscal year by describing the actions taken during the year to achieve the plan’s targets or goals, as proposed? Should we require a registrant to provide such an update more frequently, and if so, how frequently? Would the proposed updating requirement act as a disincentive to the adoption of a transition plan by the registrant?

We recommend updates to a transition plan annually or every 2-3 years to allow sufficient progress to be made for measurement and disclosure. It can take companies several years to implement changes, depending on the level of investment needed. Not every company will have efforts that can be implemented each year to demonstrate progress as some investments take longer to begin to yield progress. It will be important for the commission to clarify where and how these plans are disclosed and what is expected in these plans so they are consistent across sectors and industries. As an alternative approach, we would encourage the commission to explore where transition plans and updates to these plans and progress tracking can be done through existing systems, filings, or reports so the amount of work to develop these transition plans, update them, and report out on progress is minimized and streamlined.

51. To the extent that disclosure about a registrant's transition plan constitutes forward-looking information, the PSLRA safe harbors would apply. Should we adopt a separate safe harbor for transition plan disclosure? If so, what disclosures should such a safe harbor cover and what should the conditions be for such a safe harbor?

We recommend that safe harbors should apply to the presence and dedication to a transition plan to provide companies with the flexibility to adjust the transition plan without fear of litigation, either by a private third party or subject to action from the commission. Registrants should be required to submit a transition plan, though under the recognition that transition plans can be fluid and may change depending on new scientific fundings, new commitments from business leaders, new technological developments that reduce costs or provide new market opportunities. A transition plan is an important document for companies to communicate to investors their plans to align to and thrive in a low carbon economy. If a company discloses
a plan that they do not faithfully adhere to or revise with new information, then an investor may experience impacts if a low carbon transition occurs. However, without being under a safe harbor that protects registrants from regulatory action or private litigation, companies may experience a chilling effect and be reluctant to adjust their transition plans to accelerate or amend them to become more ambitious.

Safe harbors should also apply to forward-looking assumptions that underly the plan – the timing of a transition, implementation of carbon pricing, availability of low carbon alternatives, for example. This would be in alignment with safe harbors applying to scenario analysis outcomes, for instance. Investors need assurance that companies are faithfully implementing transition plans to the best of their knowledge and ability. A transition plan should be the basis of a discussion between investors and companies on progress towards those plans, aided by required transparency on climate-disclosures in financial reporting.

Section F. Financial Statement Metrics

Financial Statement Metrics

52. Should we require a registrant to provide contextual information, including a description of significant inputs and assumptions used, and if applicable, policy decisions made by the registrant to calculate the specified metrics, as proposed? Should we revise the proposed requirement to provide contextual information to require specific information instead? We provide some examples of contextual information disclosure in Sections II.F.2 and II.F.3 below. Would providing additional examples or guidance assist registrants in preparing this disclosure?

We do not have a response to this question at this time.

53. The proposed rules would specify the basis of calculation for the climate-related financial statement metrics. Is it clear how to apply these accounting principles when calculating the proposed climate-related financial statement metrics, or should we provide additional guidance? Should we require a registrant to report these metrics with reference to its consolidated financial statements, as proposed? If not, how should registrants report these metrics? If we were to establish accounting principles (e.g., the basis for reporting these metrics) in a manner that differs from the principles applicable to the rest of the consolidated financial statements, would the application of those principles to the proposed metrics make climate-related disclosures less clear, helpful, or comparable for investors?

It would be helpful for the commission develop guidance that can help companies understand the calculation of climate-related financial impacts, including the definition of which impacts are considered climate related. Companies might approach estimates or calculate actual impact from severe weather events and natural conditions differently, potentially counteracting the commission’s intent to increase standardization and comparability. A uniform set of principles for climate-related disclosures could help with comparability of the disclosure if every company were to choose the same set of standards. In addition, by creating a common standard or guidance, companies would be more aligned with what counted as part of climate-related financial impact, particularly given that there may be confusion around what could be considered severe weather and natural conditions and whether these incidents involve either acute and chronic risks.

Overall, we believe it may be very difficult, at present, for registrants to produce the proposed information. We would suggest that the commission perhaps not require the information at this time, but work with accounting standards boards and other sectoral-level stakeholder groups to develop clear standards for reporting climate-related financial impacts.

Most of the companies that provided feedback pushed back strongly against such a requirement, recommending that, at minimum, FASB, which sets accounting standards to develop accounting principles
for climate-related disclosures in financial statements. Companies also cited challenges to identify expenditures specifically associated with climate-related events and transition activities, including incrementality. C2ES agrees that the commission should work closely with the FASB to drive comprehensive guidance around this topic.

Since the issue of financial impacts attributed to extreme weather events came up in different discussions with stakeholders, C2ES recommends that the commission clarify that it is not requiring companies to conduct a climate-related financial attribution analysis for every weather event. The registrant should look at whether there were material impacts from weather events they must evaluate and report, though as noted, further guidance and accounting principles are needed.

54. Should we also require such metrics to be calculated at a reportable segment level when a registrant has more than one reportable segment (as defined by the FASB ASC Topic 280 Segment Reporting)? In addition, should we require such metrics to be presented by geographic areas that are consistent with the registrant’s reporting pursuant to FASB ASC Topic 280-10-50-41? How would investors use such information?

The reporting of climate-related financial metrics should not be required at the segment or geographic level at the present time. The commission may wish to encourage – but not require – registrants to disclose metrics at the segment or geographic level if this level of disclosure would be material to investors.

55. The proposed rules would require disclosure for the registrant’s most recently completed fiscal year and for the corresponding historical fiscal years included in the registrant’s consolidated financial statements in the filing. Should disclosure of the climate-related financial statement metrics be required for the fiscal years presented in the registrant’s financial statements, as proposed? Instead, should we require the financial statement metrics to be calculated only for the most recently completed fiscal year presented in the relevant filing? Would requiring historical disclosure provide important or material information to investors, such as information allowing them to analyze trends? Are there other approaches we should consider?

To the extent that climate related financial statement metrics are feasible, disclosure of historical information should not be required at adoption, in order to reduce the reporting burden. Over time, an historical disclosure view will develop as the company reports on its climate-related risks each year.

56. Should information for all periods in the consolidated financial statements be required for registrants that are filing an initial registration statement or providing climate-related financial statement metrics disclosure for historical periods prior to the effective date or compliance date of the rules? Would the existing accommodation in Rules 409 and 12b-21 be sufficient to address any potential difficulties in providing the proposed disclosures in such situations?

We do not have a response to this question at this time.

57. Should we provide additional guidance as to when a registrant may exclude a historical metric for a fiscal year preceding the current fiscal year?

We do not have a response to this question at this time.

58. In several instances, the proposed rules specifically point to existing GAAP and, in this release, we provide guidance with respect to the application of existing GAAP. Are there other existing GAAP requirements that we should reference? Are there instances where it would be preferable to require an approach based on TCFD guidance or some other framework, rather than requiring the application of existing GAAP?
We do not have a response to this question at this time.

Financial Impact Metrics

59. Should we require registrants to disclose the financial impact metrics, as proposed? Would presenting climate-specific financial information on a separate basis based on climate-related events (severe weather events and other natural conditions and identified physical risks) and transition activities (including identified transition risks) elicit decision-useful or material information for investors? Are there different metrics that would result in disclosure of more useful information about the impact of climate-related risks and climate-related opportunities on the registrant's financial performance and position?

While climate-specific financial information based on climate-related events could provide investors with insights on a company’s climate resilience and preparedness, the financial impacts of climate-related events is currently not quantified, and indeed may not be quantifiable into a point metric. Climate opportunities may not always be correlated with a specific event. Where a clear link between the costs of climate-related events and opportunities exists, or where an event has directly correlated costs associated with it, then companies could determine and report financial impact metrics. However, where the costs and opportunities are less clear, implementing the proposed requirement will be difficult. Therefore, a calculation framework is needed; the commission should engage FASB, and other relevant stakeholders, in helping to develop such a framework.

60. Would the impact from climate-related events and transition activities yield decision-useful information for investors? Would the climate-related events (including the examples provided) and transition activities result in impacts that are easier to quantify or disaggregate than climate-related risks more generally? Would a registrant be able to quantify and provide the proposed disclosure when the impact may be the result of a mixture of factors (e.g., a factory shutdown due to an employee strike that occurs simultaneously with a severe weather event)? If there are situations where disaggregation would not be practicable, should we require a registrant to disclose that it was unable to make the required determination and why, or to make a reasonable estimate and provide disclosure about the assumptions and information that resulted in the estimate?

More guidance on the quantification of transition impacts would be needed to yield decision-useful information because the methodology for transition risk assessment and quantification are less robust compared to physical climate-related events. A clearly defined scope of transition activities would benefit investors and facilitate comparison across different registrants.

Additionally, in a transition impact assessment, many aspects of transition activities could be covered such as market, legal and policy, and reputational risk. How would a registrant differentiate a transition activity (e.g., an impact) from general market trend? For example, in the automotive industry, the market is shifting to electric vehicles (EVs), how much financial impact could a car manufacturer attribute to climate change-related transition risk versus changing consumer preferences in response to the cost differences between internal combustion engine and EV vehicles? In this example, it is a gradual market shift that could be hard to quantify in terms of actual dollar impacts. On the other hand, the financial impact of an event-based type of transition activity – such as introducing a new law, or increased price on carbon – may be easier to quantity and disclose.

61. Alternatively, should we not require disclosure of the impacts of identified climate-related risks and only require disclosure of impacts from severe weather events and other natural conditions? Should we require a registrant to disclose the impact on its consolidated financial statements of only
certain examples of severe weather events and other natural conditions? If so, should we specify which severe weather events and other natural conditions the registrant must include? Would requiring disclosure of the impact of a smaller subset of climate-related risks be easier for a registrant to quantify without sacrificing information that would be material to investors?

The disclosure of climate-related risks on financial statements is not clear. Financial statements include data on the current and recent fiscal years according to the individual entity’s disclosure requirements, as well as forward-looking statements. As such, reporting financial information is primarily a backward-looking exercise, reporting on actual financial data.

We believe that tracking and reporting of past climate-related incident data would be helpful though it may be difficult for many registrants (e.g., if such incidents were not identified at the time as climate-related or if the registrant did not record the impact separately from other incidents during the reporting period.).

Risks are inherently forward looking. As such, it is recommended to limit the financial statement data to include actual climate-related events/incidents/impacts which have been realized and have had an impact.

Additionally, it may be challenging for registrants to track chronic climate-related damages and may not be separately identified from other hazards. Chronic impacts such as sea level rise and gradual increase in temperature eventuate over time, in contrast to acute incidents such as flooding and extreme weather events whose impacts may be easier to track and for which financial impacts may be more straightforward to identify and therefore disclose. Finally, it is also impractical to require companies to analyze all weather events and natural conditions.

C2ES recommends that the commission should define what is considered a severe weather event and provide guidance on what is considered climate events and climate-change related events. Such efforts should be connected to accounting principles for assessing the financial impacts of climate-related risks.

62. Should impact from climate-related opportunities be required, instead of optional, as proposed? We are proposing to require a registrant that elects to disclose the impact of an opportunity to do so consistently (e.g., for each fiscal year presented in the consolidated financial statements, for each financial statement line item, and for all relevant opportunities identified by the registrant). Are there any other requirements that we should include to enhance consistency? Should we only require consistency between the first fiscal period in which opportunities were disclosed and subsequent periods?

Disclosure of the financial impacts of climate-related opportunities should be optional. If companies chose to disclose such information, similar to comments in question #60, how would registrants quantify and differentiate the impacts of transition activities such as market, legal and policy, reputation from general market trends? In the example of the automotive industry, the market is shifting to electric vehicles, how much financial impact could a car manufacturer attribute to a climate change-related transition activity?

C2ES supports disclosing the financial impacts of climate-related opportunities, as that information is key for investors to understand how a company is reducing its climate-related financial risks, however, such information should remain optional given competitiveness concerns, and may be better presented in narrative form, rather than via line item reporting.

63. Is it clear which climate-related events would be covered by “severe weather events and other natural conditions”? If not, should we provide additional guidance or examples about what events would be covered? Should we clarify that what is considered “severe weather” in one region may differ from another region? For example, high levels of rainfall may be considered “severe weather” in a typically arid region.
While the concept of severe weather events and other natural conditions is generally clear, when applied to this proposed rule, further guidance is needed on which acute severe weather events and natural conditions are to be associated with climate change, and thus warranting climate-related financial risk disclosure.

As the proposed rule reads, any type of severe weather or other natural condition would fall under the definition – e.g., a tornado event in the Midwest as well as decade-long drought conditions in the Southwest. To reduce the reporting burden, greater clarity is needed on what the commission expects. More guidance would also clarify how best to calculate the impacts from chronic-related conditions. For example, the commission could indicate that a company must disclose when major capital investment is required due to a change in climate patterns e.g. relocating production away from a coastal location that may be exposed to sea level rise over the long-term).

Some companies have suggested providing narrative of climate events and aggregated financial impact if material in MD&A of the relevant periodic report and that the commission look to the development of FASB financial statement standards.

64. Are the proposed requirements for calculating and presenting the financial impact metrics clear? Should the analysis be performed and disclosed in a manner other than on a line-by-line basis referring to the line items of the registrant’s consolidated financial statements?

Based on stakeholder input, the proposed requirements are not clear. Companies relayed that building processes to aggregate and disclose potential impacts at one percent of every financial statement line item would be excessive and would result in focus on immaterial information. In addition, though companies need to understand the potential impacts of climate-related risks on their business and operations, including their financial statements, assigning financial impacts on a line-by-line basis would not necessarily provide useful information to investors and would contribute to reporting burden.

65. We are proposing to allow a registrant to aggregate the absolute value of negative and positive impacts of all climate-related events and, separately, transition activities on a financial statement line item. Should we instead require separate quantitative disclosure of the impact of each climate-related event or transition activity? Should we require separate disclosure of the impact of climate-related opportunities that a registrant chooses to disclose?

We support aggregating the absolute value of negative and positive impacts of climate-related events and, separately, transition activities rather than a separate quantitative disclosure to reduce reporting burden, and to recognize the difficulty in attributing financial metrics to each activity. Where providing an absolute value is not feasible, the commission should propose a path for registrants to be able to disclose an estimated range of financial impacts, with an indication of the relevant timeframe.

Of note, for companies reporting impacts for their supply chain, especially in cases of large companies with multiple tiers and thousands of suppliers, metrics for entire value chain reporting is not practical.

66. The proposed financial impact metrics would not require disclosure if the absolute value of the total impact is less than one percent of the total line item for the relevant fiscal year. Is the proposed threshold appropriate? Should we use a different percentage threshold (e.g., three percent, five percent) or use a dollar threshold (e.g., less than or greater than $1 million)? Should we use a combination of a percentage threshold and a dollar threshold? Should we only require disclosure when the financial impact exceeds the threshold, as proposed, or should we also require a determination of whether an impact that falls below the proposed quantitative threshold would be material and should be disclosed?
While we would generally agree with the idea of a low percent threshold to ensure that all climate-related financial impacts are disclosed, in discussions with several companies in our Business Environmental Leadership Council, operationalizing a one percent requirement will be highly burdensome and currently, not feasible. As noted in responses to earlier questions, it is often difficult to quantify climate impacts on a line-item basis, and one percent threshold is problematic. C2ES agrees with companies who note that the proposed one percent threshold as it is too low to reflect a true materiality assessment— from an investor’s standpoint.

67. For purposes of determining whether the disclosure threshold has been met, should impacts on a line item from climate-related events and transition activities be permitted to offset (netting of positive and negative impacts), instead of aggregating on an absolute value basis as proposed? Should we prescribe how to analyze positive and negative impacts on a line item resulting from the same climate-related event or the same transition activity (e.g., whether or not netting is permitted at an event or activity level)? Should we permit registrants to determine whether or not to offset as a policy decision (netting of the positive and negative impact within an event or activity) and provide relevant contextual information? Should we require the disclosure threshold to be calculated separately for the climate-related events and transition activities, rather than requiring all of the impacts to be aggregated as proposed?

We do not have a response to this question at this time.

68. Instead of including a quantitative threshold, as proposed, should we require disaggregated disclosure of any impact of climate-related risks on a particular line item of the registrant’s consolidated financial statements? Alternatively, should we just use a materiality standard?

The commission should use the existing definition of materiality when determining climate-related financial risks. However, for reasons noted about, disaggregated disclosure will be highly burdensome for registrants and therefore further guidance would need to be developed for effective and efficient implementation.

69. Should we require a registrant to disclose changes to the cost of capital resulting from the climate-related events? If so, should we require a registrant to disclose its weighted average cost of capital or any internal cost of capital metrics? Would such disclosure elicit decision-useful or material information for investors?

This may be helpful information to investors if a registrant already discloses a cost of capital or hurdle rate for decision-making, but the internal cost of capital for registrants that do not disclose this number or range may be deemed as a commercially sensitive matter.

70. We have not proposed defining the term “upstream costs” as used in the proposed examples for the financial impact metrics and elsewhere. Should we define that term or any others? If so, how should we define them?

We do not have a response to this question at this time.

71. Are the proposed examples in the financial impact metrics helpful for understanding the types of disclosure that would be required? Should we provide different or additional examples or guidance?

We do not have a response to this question at this time.

**Expenditure Metrics**

72. Should we require registrants to disclose the expenditure metrics, as proposed? Would presenting the expenditure metrics separately in one location provide decision-useful information to
investors? Is there a different type of metric that would result in more useful disclosure of the expense or capitalized costs incurred toward climate-related events and transition activities or toward climate-related risks more generally?

We do not have a response to this question at this time.

73. Would the disclosure required by the expenditure metrics overlap with the disclosure required by the financial impact metrics? If so, should we require the disclosure to be provided pursuant to only one of these types of metrics?

We do not have a response to this question at this time, however some companies have noted that disclosure required by the expenditure metrics and the financial impact metrics will very likely overlap.

74. Should the same climate-related events (including severe weather events and other natural conditions and identified physical risks) and transition activities (including identified transition risks) that we are proposing to use for the financial impact metrics apply to the expenditure metrics, as proposed? Alternatively, should we not require a registrant to disclose expenditure incurred towards identified climate-related risks and only require disclosure of expenditure relating to severe weather events and other natural conditions? Should we require a registrant to disclose the expenditure incurred toward only certain examples of severe weather events and other natural conditions? If so, should we specify which severe weather events and other natural conditions the registrant must include? Would requiring disclosure of the expenditure relating to a smaller subset of climate-related risks be easier for a registrant to quantify without sacrificing information that would be material to investors?

We do not have a response to most of these questions at this time.

However, C2ES would agree that requiring disclosure of the expenditure relating to a smaller subset of climate-related risks could be easier for a registrant to quantify without sacrificing information that would be material to investors. As stated earlier, disclosure of expenditures related to climate-related risks should be limited to those that are material.

75. Should the proposed rules instead require a registrant to disclose the aggregate amounts of expensed and capitalized costs incurred toward any climate-related risks? Should expenditures incurred towards climate-related opportunities be optional based on a registrant’s election to disclose such opportunities, as proposed?

To the extent that registrants are able to disclose the aggregate amounts of expensed and capitalized costs toward climate-related risks, however expenditures incurred towards opportunities should remain optional due to competitiveness concerns.

76. Should we apply the same disclosure threshold to the expenditure metrics and the financial impact metrics? Is the proposed threshold for expenditure metrics appropriate? Should we use a different percentage threshold (e.g., three percent, five percent) or use a dollar threshold (e.g., less than or greater than $1 million)? Should we use a combination of a percentage threshold and a dollar threshold? Should we only require disclosure when the amount of climate-related expenditure exceeds the threshold, as proposed, or should we also require a determination of whether an amount of expenditure that falls below the proposed quantitative threshold would be material and should be disclosed? Should we require separate aggregation of the amount of expense and capitalized costs for purposes of the threshold, as proposed? Should we require separate aggregation of expenditure relating to the climate-related events and transition activities, as proposed?
As noted in responses to earlier questions, it is often difficult to quantify climate impacts on a line-item basis, which also applies to disclosure of a threshold on expenditure metrics. Disclosure of expenditures related to climate-related risks should be limited to those that are material.

77. Instead of including a quantitative threshold, as proposed, should we require disaggregated disclosure of any amount of expense and capitalized costs incurred toward the climate-related events and transition activities, during the periods presented? Alternatively, should we just use a materiality standard?

As noted in response to question # 68, the commission should use the existing definition of materiality when determining climate-related financial risks. However, for reasons noted about, disaggregated disclosure will be highly burdensome for registrants and guidance would need to be developed for implementation.

78. Are the proposed requirements for calculating and presenting the expenditure metrics clear? Should the analysis be performed and disclosed in a different manner, other than separately based on capitalized costs and amount of expenditure expensed and separately based on the climate-related events and transition activities? Should disclosure of expenditure incurred be required for both the amount of capitalized costs and the amount of expenditure expensed if only one of the two types of expenditure meets the disclosure threshold? Should we require separate disclosure of expenditure incurred toward each climate-related event and transition activity?

We do not have a response to this question at this time.

79. The proposed rule does not specifically address expensed or capitalized costs that are partially incurred towards the climate-related events and transition activities (e.g., the expenditure relates to research and development expenses that are meant to address both the risks associated with the climate-related events and other risks). Should we prescribe a particular approach to disclosure in such situations? Should we require a registrant to provide a reasonable estimate of the amount of expense or capitalized costs incurred toward the climate-related events and transition activities and to provide disclosure about the assumptions and information that resulted in the estimate?

We do not have a response to this question at this time.

80. Are the proposed terms and examples used in the expenditure metrics helpful for understanding the types of disclosures that would be required? Should we provide different or additional examples?

We do not have a response to this question at this time.

**Financial Estimates and Assumptions**

81. Should we require disclosure of financial estimates and assumptions impacted by the climate-related events and transition activities (including disclosed targets), as proposed? How would investors use this information?

Yes, registrants should disclose financial statement estimates and assumptions with a focus on those that are deemed material. Investors would use this information to assess when and to what extent a is exposed to climate impacts, whether there is a potential trend towards increasing climate-related impacts, and what actions the company is taking to mitigate impacts.

82. Should we instead require disclosure of only significant or material estimates and assumptions that were impacted by the climate-related events and transition activities? Alternatively, should we require disclosure of only estimates and assumptions that were materially impacted by the climate-related events and transition activities?
See question 81.

83. Should we instead require disclosure of financial estimates and assumptions impacts by a subset of climate-related events and transition activities, such as not requiring disclosure related to identified climate-related risks or only requiring disclosure with respect to a subset of severe weather events and natural conditions? If so, how should the subset be defined?

We do not have a response to this question at this time.

84. Should we instead utilize terminology and thresholds consistent with the critical accounting estimate disclosure requirement in 17 CFR 229.303(b)(3), such as “estimates made in accordance with generally accepted accounting principles that involve a significant level of estimation uncertainty and have had or are reasonably likely to have a material impact on the financial condition or results of operations of the registrant”? If so, should we only require disclosures of whether and how the climate-related events and transition activities impacted such critical accounting estimates? Should we require only a qualitative description of how the estimates and assumptions were impacted by the climate-related events and transition activities, as proposed? Should we require quantitative disclosures as well? If so, should we require such disclosure only if practicable or subject to another qualifier?

We do not have a response to this question at this time.

85. Should the disclosure of financial estimates and assumptions impacted by climate-related opportunities be optional, as proposed?

We would recommend that if registrants are required to address climate-related opportunities, they should do so in narrative form only. While it may be feasible for all companies to disclose significant opportunities, investors will need to understand whether companies’ strategies are resilient to climate change. Several companies voiced competitiveness and liability concerns over disclosing opportunities, and propose that such disclosure be optional.

86. For the proposed financial statement metrics, should we require a registrant to disclose material changes in estimates, assumptions, or methodology among fiscal years and the reasons for those changes? If so, should we require the material changes disclosure to occur on a quarterly, or some other, basis? Should we require disclosure beyond a discussion of the material changes in assumptions or methodology and the reasons for those changes? Do existing required disclosures already elicit such information? What other approaches should we consider?

Generally, we support the proposed requirement to disclose any material changes in estimates, assumptions or methodologies used and reasons for those changes to ensure consistency, comparability, and transparency in climate related financial disclosures. We recommend implementing this requirement in the least burdensome way that provides sufficient consistent, comparable, and transparent information, such as in a narrative statement.

Inclusion of Climate-Related Metrics in the Financial Statements

87. We are proposing to require the financial statement metrics to be disclosed in a note to the registrant’s audited financial statements. Should we require or permit the proposed financial statement metrics to be disclosed in a schedule to the financial statements? If so, should the metrics be disclosed in a schedule to the financial statements, similar to the schedules required under Article 12 of Regulation S-X, which would subject the disclosure to audit and ICFR requirements? Should we instead require the metrics to be disclosed as supplemental financial information, similar to the disclosure requirements under FASB ASC Topic 932-235-50-2 for registrants that have significant oil-
and gas-producing activities? If so, should such supplemental schedule be subject to assurance or ICFR requirements?

Given the lack of clear and present methodological approach for determining the proposed financial statement metrics, we would not propose including these metrics under regulation S-X. The metrics may be more relevant under a section devoted to supplemental financial information.

At present, few companies would have the processes in place to meet ICFR requirements for financial statement metrics. If the commission were to require these metrics to be subject to assurance or ICFR requirements, further guidance and a grace period may be required.

88. Instead of requiring the financial statement metrics to be disclosed in a note to the registrant’s audited financial statements, should we require a new financial statement for such metrics? For example, should a “consolidated climate statement” be created in addition to the consolidated balance sheets, statements of comprehensive income, cash flows, and other traditional financial statements? Would including the proposed metrics in a new financial statement provide more clarity to investors given that the metrics are intended to follow the structure of the existing financial statements (including the line items)? What complications or unintended consequences may arise in practice if such a climate statement is created?

For simplicity and transparency purposes, where feasible over time, we would suggest maintaining the climate-related impacts in the same consolidated financial statement rather than creating a separate “consolidated climate statement.” Doing so could help avoid confusion and to enable investors to see all financial impacts in one statement.

However, C2ES received input from companies that such financial statement metrics should not be included in the consolidated financial statements, as the one percent threshold is currently unworkable and the metrics should not be included in the audited financial statements.

C2ES agrees that the one percent threshold is unworkable and financial metrics should be developed as a next step before inclusion in required reporting.

89. Should we require the disclosure to be provided outside of the financial statements? Should we require all of the disclosure to be provided in the proposed separately captioned item in the specified forms?

See response to question # 88.

90. Should we require any additional metrics or disclosure to be included in the financial statements and subject to the auditing and ICFR requirements as described above? For example, should any of the disclosures we are proposing to require outside of the financial statements (such as greenhouse gas emissions metrics) be included in the financial statements? If so, should such metrics be disclosed in a note or a schedule to the financial statements? If in a schedule, should such schedule be similar to the schedules required under Article 12 of Regulation S-X and subject to audit and ICFR requirements? Should we instead require the metrics to be disclosed as supplemental financial information in a supplemental schedule? If so, should such supplemental schedule be subject to assurance or ICFR requirements?

See response to question #87.

91. Under the proposed rules, PCAOB auditing standards would be applicable to the financial statement metrics that are included in the audited financial statements, consistent with the rest of the audited financial statements. What, if any, additional guidance or revisions to such standards
would be needed in order to apply PCAOB auditing standards to the proposed financial statement metrics? For example, would guidance on how to apply existing requirements, such as materiality, risk assessment, or reporting, be needed? Would revisions to the auditing standards be necessary? What additional guidance or revisions would be helpful to auditors, preparers, audit committee members, investors, and other relevant participants in the audit and financial reporting process?

New guidance or revisions to auditing standards would be needed to apply PCAOB auditing standards to the proposed financial statement metrics; climate-related financial impact disclosure is still emerging field.

As we noted in our submission in June 2021 in response to the commission’s request for information, “the SEC should explore designating a climate disclosure standards board under, or horizontal to, FASB, and ensure the PCAOB can eventually monitor and oversee auditing and assurance. Auditing and assurance concerns requiring attention may include…ensuring that climate-related risk information is correct and verifiable. As disclosure requirements are phased in, the PCAOB will need to develop additional standards and/or guidance for assurance or auditing of these new disclosure requirements.”

92. Would it be clear that the climate-related financial statement metrics would be included in the scope of the audit when the registrant files financial statements prepared in accordance with IFRS as issued by the IASB? Would it be clear that the proposed rules would not alter the basis of presentation of the financial statements as referred to in an auditor's report? Should we amend Form 20-F, other forms, or our rules to clarify the scope of the audit or the basis of presentation in this context? For example, should we amend Form 20-F to state specifically that the scope of the audit must include any notes prepared pursuant to Article 14 of Regulation S-X? What are the costs for accounting firms to provide assurance with respect to the financial statement metrics? Would those costs decrease over time?

See response to question #91.

Of note, regarding the costs to accounting firms to provide assurance with respect to financial statement metrics, C2ES received feedback from companies that cost estimates pose a significant cost burden to companies and that such estimates may underestimate actual costs as they are based on relative costs of assurance for financial statements, and assurance on emissions may differ in important ways. Companies note that these figures could increase given the additional process of requiring assurance over greenhouse gas emissions disclosures (see section H), which are themselves an input to a company’s climate risk assessment.

Section G. Greenhouse Gas Emissions Metrics Disclosure

93. How would investors use greenhouse gas emissions disclosures to inform their investment and voting decisions? How would such disclosures provide insight into a registrant’s financial condition, changes in financial condition, and results of operations? How would such disclosures help investors evaluate an issuer's climate risk-related exposure? Would such disclosures enable investors to better assess physical risks associated with climate-related events, transition risks, or both types of risks?

As the proposed rules references comments submitted, some commenters supported requiring disclosure of emissions, especially quantitative greenhouse gas emissions data, because the data can be useful is assessing a registrant’s (a company’s) exposures to climate-related risks and accordingly its ability to transition to a lower carbon economy. C2ES agrees that greenhouse gas emissions data can provide insights on the extent to which a company would be financially liable should a sector-wide or economy-wide price or other regulatory measures become enacted. A company’s reported greenhouse gas emissions would indicate how much exposure it has to any future regulatory requirements, but also to any future market changes and shifts in consumer preferences for goods and services made with lower carbon footprints. Therefore, greenhouse gas
emissions data can serve as an indicator of transition risks, especially when paired with information on whether a company maintains an internal carbon price, how it is developing its carbon transition plan, and how it is taking steps to reduce its greenhouse gas emissions. Such a narrative, compiled with quantitative and qualitative data can provide insight into a company’s current and future financial condition under different transition scenarios. Greenhouse gas emissions data, as reported over time, can also help guard against reputational risk, should companies make progress against their emission reduction goals.

Greenhouse gas emissions data, however, is less useful for assessing physical risks associated with climate-related events, given that climate impacts are difficult to pinpoint back to individual actors, but are experienced in the aggregate.

94. Should we require a registrant to disclose its greenhouse gas emissions both in the aggregate, per scope, and on a disaggregated basis for each type of greenhouse gas that is included in the commission’s proposed definition of “greenhouse gases,” as proposed? Should we instead require that a registrant disclose on a disaggregated basis only certain greenhouse gases, such as methane (CH4) or hydrofluorocarbons (HFCs), or only those greenhouse gases that are the most significant to the registrant? Should we require disaggregated disclosure of one or more constituent greenhouse gases only if a registrant is obligated to separately report the individual gases pursuant to another reporting regime, such as the EPA’s greenhouse gas reporting regime or any foreign reporting regime? If so, should we specify the reporting regime that would trigger this disclosure?

Registrants should disclose their greenhouse gas emissions, both in aggregate, per scope and on a disaggregated basis for scope 1 and 2, as included in the SEC’s proposed definition of ‘greenhouse gases,’ which also aligns with how the EPA and IPCC define greenhouse gases. First, companies must measure their different greenhouse gas emissions in a disaggregated manner before under scopes 1 and 2 before aggregating them; thus it is not a significantly greater amount of work to aggregate the emissions. Different gasses may provide different vulnerabilities under different future regulatory regimes (i.e. HFCs, methane), and therefore providing a full picture of a company’s greenhouse gas emissions can provide investors with the greatest clarity around different transition risks.

Companies must first conduct a full assessment to be able to determine if some greenhouse gas emissions are de minimus. The EPA’s Greenhouse Gas Reporting Program, (GHGRP) already requires companies with facilities directly emitting (scope 1) more than 25,000 MTCO2e to report their emissions and provides companies with guidance and a reporting platform. Therefore, companies that already report these emissions can include them in their scope 1 inventories, thereby leveraging data calculations for both EPA and SEC reporting. However, those reported emissions serve a different purpose- to help the public understand where the largest emitters are located- rather than to help investors understand the full breadth of transition risks that a company may face. Not all of a company’s scope 1 emissions are included when companies report to the GHGRP, as some smaller facilities that emit less than 25,000 MTCO2e are excluded. The SEC should allow companies to signal which scope 1 emissions were reported to EPA’s GHGRP, as they are subject to EPA’s data assurance requirements, which may differ, and may be more stringent, from other data assurance schemes.

Scope 3 emissions should not be required to be reported by gas. Scope 3 emission factors are not widely available by greenhouse gas, and are commonly already aggregated into units of CO2e. As data quality and sources improve over time this may become more feasible. Where value chains have a specific greenhouse gas that can be pinpointed this should be disclosed by the gas type, or included in the narrative.

95. We have proposed defining “greenhouse gases” as a list of specific gases that aligns with the Greenhouse Gas Protocol and the list used by the EPA and other organizations. Should other gases be included in the definition? Should we expand the definition to include any other gases to the
extent scientific data establishes a similar impact on climate change with reasonable certainty? Should we require a different standard to be met for other greenhouse gases to be included in the definition?

At this time, the commission should align with most recent advances in climate science, as supported by the IPCC and other reputable scientific sources. If they include other gases into the definition of ‘greenhouse gases,’ then the commission can harmonize accordingly to include them. Until then, the commission should maintain the list of gases that leading expert organization such as the IPCC and EPA currently reference as ‘greenhouse gases.’

96. Should we require a registrant to express its emissions data in CO2e, as proposed? If not, is there another common unit of measurement that we should use? Is it important to designate a common unit of measurement for emissions data, as proposed, or should we permit registrants to select and disclose their own unit of measurement?

Registrations should express emissions data in CO2e. Doing so maintains a widely used, global practice of reporting aggregate corporate greenhouse gas emissions inventories and enables comparability across aggregate emissions inventories. In addition, registrants should disclose which global warming potentials (GWP) are used and what time horizon in alignment with the GHG Protocol (e.g., Fifth Assessment Report 100-year time horizon).

97. Should we require a registrant to disclose its total scope 1 emissions and total scope 2 emissions separately for its most recently completed fiscal year, as proposed? Are there other approaches that we should consider?

Registrants should disclose total scope 1 and scope 2 emissions for its most recent year where data are available, either fiscal or calendar year. Many companies have, for years, been reporting their greenhouse gas emissions data according to either their calendar or fiscal years, as allowed by the Greenhouse Gas Protocol. Since greenhouse gas emissions data is not likely to change substantially from within a few months’ times, companies should be allowed to report their emissions data according to how they have been reporting them for years. Many companies’ climate goals are also pegged to a specific end date, sometimes the end of a calendar year, not fiscal year. Companies new to reporting their scope 1 and scope 2 emissions could be encouraged to align their data reporting with their financial reporting cycles for ease.

It is common for companies to report emissions six months after the end of the reporting period, and for some, attestation of emissions that include scope 3 emissions can take up to nine months. For example, the deadline for CDP is late July, with no extensions. Originally this deadline was in May, but over time has been extended to July likely due to the number of companies requesting-and being granted-extensions. With more registrants reporting, and the proposal to require a reasonable level of assurance, this timeline is likely to extend. We recommend a larger time lag for greenhouse gas emission reporting to allow for sufficient data collection, emissions quantification and third party assurance. This could be in a separate filed greenhouse gas emissions data submissions form, or simply in the next year’s annual forms. Requiring reporting in an annual 10-K filings before all calculations of emissions are complete, and restating differences will introduce an increase in the level of effort and increase the likelihood of confusion with multiple numbers.

Of note, some stakeholders have noted that estimating Q4 emissions should be allowed since much of the data is estimated. However, C2ES maintains that there is a difference between estimating emissions due to lack of data vs. estimating aggregated emissions that will then need to be revised once the full data of both estimated and calculated data becomes available a few months later.
98. Should we require a registrant to disclose its scope 3 emissions for the fiscal year if material, as proposed? Should we instead require the disclosure of scope 3 emissions for all registrants, regardless of materiality? Should we use a quantitative threshold, such as a percentage of total emissions (e.g., 25%, 40%, 50%) to require the disclosure of scope 3 emissions? If so, is there any data supporting the use of a particular percentage threshold? Should we require registrants in particular industries, for which scope 3 emissions are a high percentage of total emissions, to disclose scope 3 emissions?

C2ES agrees with the commission's proposal requiring registrants to disclose its scope 3 emissions for the fiscal year if they are material. The commission should use a quantitative threshold (e.g., 40 percent) as a guide, but not to serve as an absolute number, because some greenhouse gas emissions in the supply chain may be smaller than an agreed upon threshold (e.g., percent) for its overall greenhouse gas emissions footprint, but could reflect a type of transition risk that could be material, such as reputational risk. As of this writing, companies with emission reduction targets under certain programs, most notably the Science Based Targets Initiative, are required to include scope 3 emissions in their overall target if they comprise at least 40 percent of the total aggregate emissions inventory of scopes 1, 2, and 3 emissions combined. C2ES considers 40 percent to be a reasonable threshold, but not an absolute one. The commission should, however, require certain sectors where scope 3 emissions are known to comprise a high percentage of total emissions, such as the transportation and fuels sectors, disclose scope 3 emissions. Doing so would level the playing field to ensure that all companies in known sectors with high scope 3 emissions disclose them. As noted before, companies should only report those scope 3 emissions that are deemed material.

C2ES emphasizes the difficulties and lack of standardized methodologies in calculating and reporting scope 3 emissions. Scope 3 methodologies and data are still evolving and, at present, do not reflect robustness of other standards, such financial accounting standards, found in SEC filings.

99. Should we require a registrant that has made an emissions reduction commitment that includes scope 3 emissions to disclose its scope 3 emissions, as proposed? Should we instead require registrants that have made any emissions reduction commitments, even if those commitments do not extend to scope 3, to disclose their scope 3 emissions? Should we only require scope 3 emissions disclosure if a registrant has made an emissions reduction commitment that includes scope 3 emissions?

A company that has made a greenhouse gas emissions reduction commitment that includes scope 3 emissions has done so, ostensibly, because those value chain emissions are material. If this is the case, then a company’s scope 3 emissions can, as noted in question #93, indicate transition risk. Registrants that have made a greenhouse gas emissions reduction commitment that includes scope 3 emissions should be required to disclose them, as proposed, if those emission are material. If registrants have opted to not include scope 3 emissions in their greenhouse gas emissions reduction goals, they should still be required to disclose them, again, if they are deemed material; not all companies with climate targets elect to include scope 3 in voluntary emission reduction goals.

100. Should scope 3 emissions disclosure be voluntary? Should we require scope 3 emissions disclosure in stages, e.g., requiring qualitative disclosure of a registrant’s significant categories of upstream and downstream activities that generate scope 3 emissions upon effectiveness of the proposed rules, and requiring quantitative disclosure of a registrant’s scope 3 emissions at a later date? If so, when should we require quantitative disclosure of a registrant’s scope 3 emissions?

Scope 3 emissions disclosures should be required if scope 3 emissions are material to a registrant’s climate-related financial risks and/or opportunities. That said, companies currently have different ways of calculating their scope 3 emissions, some qualitatively and some quantitatively. Given that quantifying scope 3 emissions...
remains challenging and fragmented, due to difficulties in gathering the data from suppliers, or needing to amass data from tens of thousands of suppliers (a near-impossible task), or the lack of metrics available to estimate scope 3 emissions data, the commission should provide flexibility and guidance for how registrants can disclose their scope 3 emissions and scope 3 disclosures should be protected by safe harbor.

As C2ES has noted in its responses to the commission’s request for information in June 2021, options for flexibility that the SEC should consider include:

- Companies could report the most material scope 3 greenhouse gas emissions, with noted data sources/estimates.
- For companies that do not track and report their scope 3 emissions, they could describe how they estimate their overall scope 3 greenhouse gas emissions. Many companies have hundreds of thousands of upstream suppliers and data collection remains a challenge. Downstream data collection also presents a challenge to companies in different sectors. For example, in the categories of “use of sold products” where the use location is unknown, or “downstream transportation and distribution” where data are not centrally located, registrants must use assumptions and estimates.

The commission should provide guidance on which emissions metrics/data companies could use to estimate their scope 3 emissions. To improve transparency and understanding among investors, companies should be required to denote which scope 3 emissions were estimated using activity or otherwise directly reported data from suppliers and which emissions were estimated using emission factors or other assumptions. To assist registrants in better assessing their scope 3 emissions data, the commission should work in tandem with other government agencies (e.g., the Environmental Protection Agency) to develop default emission factors that sectors can apply to their scope 3 emissions calculations or estimates.

101. Should we require a registrant to exclude any use of purchased or generated offsets when disclosing its scope 1, scope 2, and scope 3 emissions, as proposed? Should we require a registrant to disclose both a total amount with, and a total amount without, the use of offsets for each scope of emissions?

The use of carbon credits, RECs, and other market instruments can provide a fuller picture to investors of how registrants are contributing to climate solutions and/or seeking to mitigate their climate impacts in the context of their full greenhouse gas inventories. Such contributions can potentially reduce reputational risk or other transition risks. Accordingly, registrants should be required to disclose use of purchased or generated carbon credits, as proposed.

However, disclosure of such instruments should not inhibit providing investors with transparency on scopes 1, 2, and 3 emissions. To that end, registrants should be required to disclose carbon credits and other market-based instruments separately for each scope of emissions, as is common practice in developing corporate greenhouse gas inventories, according to the widely used Greenhouse Gas Protocol. The Greenhouse Gas Protocol provides two options for calculating scope 2 emissions- located based (without use of RECs) and market based (with use of RECs). Scope 1 and 2 GHG emissions should be calculated without carbon credits as is current practice; carbon credits are reported separately.

102. Should we require a registrant to disclose its scope 3 emissions for each separate significant category of upstream and downstream emissions as well as a total amount of scope 3 emissions for the fiscal year, as proposed? Should we only require the disclosure of the total amount of scope 3 emissions for the fiscal year? Should we require the separate disclosure of scope 3 emissions only for certain categories of emissions and, if so, for which categories?
For completeness to determine the extent to which companies face material climate-related financial risks throughout their value chain, companies should attempt to calculate or estimate scope 3 emissions from the 15 categories of scope 3 emissions, as defined by the scope 3 Greenhouse Gas Protocol. Any required scope 3 emissions reporting should be limited to particular categories of scope 3 emissions that are material to the reporting company. There are defined categories within scope 3 which can vary greatly in significance across different types of companies and that differ in how they are calculated. Should companies determine that certain categories of scope 3 emissions are not material -- either because they are not applicable, because emissions from those categories are de minimus in terms of size and risk, or because of any other reasons that result emissions not being material, companies should be allowed to exclude those categories from reporting. The SEC should clarify that companies only need to disclose material categories or subcategories of scope 3 emissions, not necessarily all categories within scope 3. If companies would be required to report on all categories of scope 3 emissions, they would face additional costs and potential difficulties associated with measuring and reporting the scope 3 emissions that are immaterial and that offer little value to investors.

For those categories of emissions that are deemed material, registrants must first estimate scope 3 emissions from each relevant category of upstream and downstream emissions before aggregating them. Therefore, registrants should report scope 3 emissions for each material category to enable investors to understand where climate-related financial risks and opportunities lie.

Of note, the CDP format for classifying the emissions ("relevant, calculated", "relevant, not yet calculated", "not relevant, calculated", "not evaluated") could be adapted to denote which categories are material.

103. Should the proposed rules include a different standard for requiring identification of the categories of upstream and downstream emissions, such as if those categories of emissions are significant to total emissions or total scope 3 emissions? Are there any other categories of, or ways to categorize, upstream or downstream emissions that a registrant should consider as a source of scope 3 emissions? For example, should we require a registrant to disclose scope 3 emissions only for categories of upstream or downstream activities over which it has influence or indirect control, or for which it can quantify emissions with reasonable reliability? Are there any proposed categories of upstream or downstream emissions that we should exclude as sources of scope 3 emissions?

C2ES supports the use of the scope 3 GHG protocol. The current scope 3 greenhouse gas protocol provides categories of emissions, yet more guidance is needed for how companies should account for certain scope 3 emissions, especially certain downstream emissions. For example, in the case of companies that provide products or services that enable energy savings for end users, they can estimate or calculate the greenhouse gas emissions associated with their products.

Registrants should disclose or estimate only those scope 3 categories and emissions that are material; most companies have some nominal control over some categories of upstream emissions and little control over downstream emissions. Therefore, provisions should be enacted to enable companies to use estimated data without penalties to be able to understand broadly the climate impacts and opportunities throughout a company’s value chain. Concurrently, the commission should support multistakeholder efforts to develop better methodologies, data or default metrics that companies can use when assessing their value chain emissions. Such efforts are currently evolving.

104. Should we, as proposed, allow a registrant to provide their own categories of upstream or downstream activities? Are there additional categories, other than the examples we have identified, that may be significant to a registrant’s scope 3 emissions and that should be listed in the proposed rule? Are there any categories that we should preclude, e.g., because of lack of accepted
methodologies or availability of data? Would it be useful to allow registrants to add categories that are particularly significant to them or their industry, such as scope 3 emissions from land use change, which is not currently included in the Greenhouse Gas Protocol’s scope 3 categories? Should we specifically add an upstream emissions disclosure category for land use?

C2ES does not recommend that registrants provide emissions data from their own categories of upstream and downstream activities if there are no standards or widely accepted protocols for measuring the emissions from those activities. Doing so would reduce comparability and add to confusion on the marketplace on how those emissions were measured. Instead, registrants should note where they have emissions for other categories not yet listed in the Greenhouse Gas Protocol and flag for the broader stakeholder community the need to develop methodologies. A methodology for measuring upstream emissions from land use is needed.

105. Should we require the calculation of a registrant’s scope 1, scope 2, and/or scope 3 emissions to be as of its fiscal year end, as proposed? Should we instead allow a registrant to provide its greenhouse gas emissions disclosures according to a different timeline than the timeline for its Exchange Act annual report? If so, what should that timeline be? For example, should we allow a registrant to calculate its scope 1, scope 2, and/or scope 3 emissions for a 12-month period ending on the latest practicable date in its fiscal year that is no earlier than three months or, alternatively, six months prior to the end of its fiscal year? Would allowing for an earlier calculation date alleviate burdens on a registrant without compromising the value of the disclosure? Should we allow such an earlier calculation date only for a registrant’s scope 3 emissions? Would the fiscal year end calculations required for a registrant to determine if scope 3 emissions are material eliminate the benefits of an earlier calculation date? Should we instead require a registrant to provide its greenhouse gas emissions disclosures for its most recently completed fiscal year one, two, or three months after the due date for its Exchange Act annual report in an amendment to that report?

Most companies that have been developing their greenhouse gas inventories for several years usually calculate them for their fiscal years or for their calendar years. The commission should provide flexibility in allowing for a different calculation date, provided that the registrant’s greenhouse gas emissions disclosures are within six months prior to the end of the fiscal year. Allowing for an earlier calculation date could alleviate burdens on a registrant without compromising the value of the disclosure.

106. Should we require a registrant that is required to disclose its scope 3 emissions to describe the data sources used to calculate the scope 3 emissions, as proposed? Should we require the proposed description to include the use of: (i) emissions reported by parties in the registrant’s value chain, and whether such reports were verified or unverified; (ii) data concerning specific activities, as reported by parties in the registrant’s value chain; and (iii) 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, as proposed? Are there other sources of data for scope 3 emissions the use of which we should specifically require to be disclosed? For purposes of our disclosure requirement, should we exclude or prohibit the use of any of the proposed specified data sources when calculating scope 3 emissions and, if so, which ones?

Registrants that disclose scope 3 emissions should be required to describe the data sources used to propose the scope 3 emissions. Data quality is inconsistent throughout scope 3 disclosures, given lack of high-quality activity data and inconsistent use of existing default emissions data. The commission should provide guidance on the types of data sources that companies can use, such as third-party primary activity data from suppliers to estimated emissions using default emission factors or other third party, unverified data. In providing such guidance, the commission would help companies newer to calculating their scope 3 emissions understand
how to approach using the data and provide investors with greater clarity on the type of data used to disclose scope 3 emissions. As data quality improves, companies can be encouraged to use higher quality data sources. However, for most companies, disclosure of scope 3 emissions using activity data from suppliers or widely used emission factors will be limited to specific categories from specific suppliers.

Of note, the commission should reference the US Environmental Protection Agency’s Supply Chain Greenhouse Gas Emission Factors for US Industries and Commodities as one option for using default available emission factors for specific sectors and/or product categories (access emission factors at https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=349324&Lab=CESER)

107. Should we require a registrant to provide location data for its disclosed sources of scope 1, scope 2, and scope 3 emissions if feasible? If so, should the feasibility of providing location data depend on whether it is known or reasonably available pursuant to the Commission’s existing rules (Securities Act Rule 409 and Exchange Act Rule 12b-21)? Would requiring location data, to the extent feasible, assist investors in understanding climate-related risks, and in particular, likely physical risks, associated with a registrant’s emissions’ sources? Would a requirement to disclose such location data be duplicative of any of the other disclosure requirements that we are proposing?

Location data for disclosed emissions is helpful for understanding transition risks, especially if the sources of emissions (i.e., stationary sources) are in regions where clean energy regulations could affect energy prices if using fossil fuels. However, providing location data is only really feasible for scope 1 emissions. Most companies will not be able to provide zip code data for the tens of thousands of upstream suppliers and downstream value chain users that comprise their scope 3 or knowing where their electricity is generated for their scope 2. Therefore, scope 2 and 3 should be removed from consideration here.

Requiring registrants to disclose such location data could be duplicative of other disclosure requirements, as registrants should already be disclosing the extent of their climate-related financial risks and their strategies for managing these risks. While location data can contextualize transition risks, it may be less useful for understanding physical risks from climate change. While the physical location of facilities can illustrate physical vulnerabilities from climate change, which should be disclosed in the narrative of how registrants are managing that risk, the emissions themselves from the location of the sources won’t necessarily explain how companies are reducing their risks.

In addition, the rule as it is currently proposed, is not clear on the level of granularity of the location data. If companies were to provide data for emissions based on zip code, in the case of electric utilities, for example, would companies be required to report the location of every distribution transformer? We do not think that level of detail is the intent of the proposed rule, and may create competitive or security concerns, as would also be unnecessarily burdensome. Further clarification is needed on the level of data granularity proposed. Location data indicating sources and level of risk at a regional, state, or national level may be sufficient.

Whereas the disclosure of the location of scope 1 and scope 2 emissions could, at a very high level, provide useful information to investors that highlights company’s efforts to reduce their climate impacts, similar disclosure of scope 3 emissions would likely not provide similarly useful information, given the challenges in estimating scope 3 emissions.

108. If we require a registrant to provide location data for its greenhouse gas emissions, how should that data be presented? Should the emissions data be grouped by zip code separately for each scope? Should the disclosure be presented in a cartographic data display, such as what is commonly known as a “heat map”? If we require a registrant to provide location data for its greenhouse gas emissions, should we also require additional disclosure about the source of the emissions?
Any required location data should be kept at a high level (region, state, city), and not at the zip code level to reduce reporting level and protect against confidentiality and security concerns. If registrants are required to provide location data, the commission should engage investors to determine how the presentation of data would be most decision useful so that it can be understood in tandem with other data points.

See response to Question #107. Should location data be disclosed, the sources of emissions should also be disclosed, as different sources may be subject to regulatory requirements or other market dynamics, such as increases in electricity or fuel prices.

109. Should we require a registrant to disclose the intensity of its greenhouse gas emissions for the fiscal year, with separate calculations for (i) the sum of scope 1 and scope 2 emissions and, if applicable (ii) its scope 3 emissions (separately from scopes 1 and 2), as proposed? Should we define greenhouse gas intensity, as proposed? Is there a different definition we should use for this purpose?

C2ES agrees with the commission’s proposed definition of “greenhouse gas intensity” (or “carbon intensity”) to mean a ratio that expresses the impact of greenhouse gas emissions per unit of economic value (e.g., metric tons of CO2e per unit of total revenues, using the registrant’s reporting currency) or per unit of production (e.g., metric tons of CO2e per unit of product produced).

Requiring a registrant to disclose the intensity of its greenhouse gas emissions might provide useful information depending on what information investors seek. For example, greenhouse gas emissions intensity tied to unit of production enables some comparability across the most greenhouse gas intensive processes for companies in the same section (e.g., steelmaking, glassmaking, cement production). C2ES agrees with the commission’s assessment that “…the selected unit of production should be relevant to the registrant’s industry to facilitate investor comparison of the greenhouse gas intensity of companies within an industry without regard to registrant size. Investors may find such a comparison to be useful to making informed investment decisions to the extent that a registrant within a particular industry that has a lower greenhouse gas intensity relative to its peers that face fewer climate-related risks.” Examples of comparing emissions intensities can extend to products, such as electronics and automobiles, where companies can estimate the greenhouse gas intensity of their use phase (one of the scope 3 categories). Therefore, C2ES recommends that greenhouse gas emissions intensity is most closely identified with a unit of production for industries where the unit of production is clear and comparable, namely that intensity-based metrics should be industry-specific. A further consultation on which units of production should be used by different industries would be useful.

In addition to disclosure of per unit of production for the fiscal year, the commission proposes to standardize disclosure to facilitate comparability by requiring the disclosure of greenhouse gas intensity in terms of metric tons of CO2e per unit of total revenue. The commission notes that “total revenue is one of the most commonly used and understood financial metrics when investors analyze a registrant’s financial results and applies to most registrants (depending on the nature and maturity of the business) and therefore would be a good common denominator for the intensity calculation.” Emissions intensity based on revenue, would do little to enable comparability across companies that are structured differently (i.e., vertically vs those with extensive supply chains). It is also difficult to assess if the most significant emissions are being addressed when examining a revenue-based intensity metric that encompasses multiple scopes, across multiple business units in the case of conglomerates. Such a metric may also obfuscate where the transition risk lies if the emissions intensity encompasses a mix of emission sources such as mobile sources, stationary sources, and emissions from land use or other high GWP process gases.

An intensity metric based on revenue, expressed in metric tons of CO2e per unit of total revenue, would enable the investor to see greater gains in efficiency within the company itself, which is a useful metric that would show flat or decreasing emissions intensity on a per unit basis, especially if the company is growing
organically and expects to increase absolute emissions. An intensity metric based on revenue will allow investors to assess growth companies’ progress over time in achieving their greenhouse gas emissions management and reduction goals, putting into context any changes to a company’s operations (e.g., organic growth, new acquisitions, and/or divestures). For this reason, C2ES would support a requirement to disclose greenhouse gas intensity based on per unit of total revenue, especially industries where an intensity-based metric based on production is not feasible. Some companies will have greater control to reduce emissions intensity, namely if it is in their scope 1 and 2. Due to low data quality across value chains, investors should anticipate estimated emissions intensities for several categories of scope 3. If registrants are required to report greenhouse gas intensity based on revenue, they should also disclose how they are mitigating absolute emissions to meet any emissions reduction targets.

C2ES recommends that the commission issue guidance for investors in how to interpret greenhouse gas emissions intensities, especially if requiring disclosure of greenhouse gas intensity expressed in metric tons of CO₂e per unit of total revenue, to reduce any impulse to compare companies with different profiles. It is difficult to achieve granularity to see where a company is reducing physical and transition risks. Alternatively, a breakdown of emissions categories and sources to accompany a greenhouse gas intensity metric would be more useful for comparability, but could add to reporting burden, especially if such information is not readily available.

One stakeholder suggested that investors calculate the intensity metric that is important to them based on other metrics reported (e.g., emissions by revenue, by unit of energy, number of employees, etc). If the commission adopts this approach, the commission should provide investors guidance to understand or interpret the greenhouse gas information disclosed.

110. Should we require the disclosed greenhouse gas intensity to be expressed in terms of metric tons of CO₂e per unit of total revenue, as proposed? Should we require a different financial measure of greenhouse gas intensity and, if so, which measure? For example, should greenhouse gas intensity be expressed in terms of metric tons of CO₂e per unit of total assets?

See response to Question #109.

111. Should we require the disclosed greenhouse gas intensity to be expressed in terms of metric tons of CO₂e per unit of production, as proposed? Would such a requirement facilitate the comparability of the disclosure? Should we require a different economic output measure of greenhouse gas intensity and, if so, which measure? For example, should greenhouse gas intensity be expressed in terms of metric tons of CO₂e per number of employees? Should we require the greenhouse gas intensity to be expressed per unit of production relevant to the registrant’s business (rather than its industry)? Is further guidance needed on how to comply with the proposed requirement? Would requiring greenhouse gas intensity to be expressed in terms of metric tons of CO₂e per unit of production require disclosure of commercially sensitive or competitively harmful information?

See response to Question #109.

Disclosing greenhouse gas intensity to be expressed per unit of production relevant to the registrant’s business would provide the most accurate understanding of any climate-related financial risks. Further guidance would be needed to identify the boundaries for production, or how to determine and then disclose the boundaries of production. Further insights from different industry sectors are needed to understand if disclosing such information could expose commercially sensitive information.

112. Should we require a registrant with no revenue or unit of production for a fiscal year to disclose its greenhouse gas intensity based on, respectively, another financial measure or measure of...
economic output, as proposed? Should we require such a registrant to use a particular financial measure, such as total assets, or a particular measure of economic output, such as total number of employees? For registrants who may have minimal revenue, would the proposed calculation result in intensity disclosure that is confusing or not material? Should additional guidance be provided with respect to such instances?

More information on the types of registrants that could find themselves in this position is needed to develop a recommendation.

113. Should we permit a registrant to disclose other measures of greenhouse gas intensity, in addition to the required measures, as long as the registrant explains why it uses the particular measure of greenhouse gas intensity and discloses the corresponding calculation methodology used, as proposed?

Should a registrant determine that a specific greenhouse gas intensity is most pertinent and reflects the most decision useful information, the registrant should have the flexibility to disclose such measures of greenhouse gas intensity. In such instances, a registrant should be required to explain why it uses the particular measure of greenhouse gas intensity and disclose the corresponding calculation methodology used.

114. Should we require greenhouse gas emissions disclosure for the registrant’s most recently completed fiscal year and for the appropriate, corresponding historical fiscal years included in the registrant’s consolidated financial statements in the filing, to the extent such historical greenhouse gas emissions data is reasonably available, as proposed? Should we instead only require greenhouse gas emissions metrics for the most recently completed fiscal year presented in the relevant filing? Would requiring historical greenhouse gas emissions metrics provide important or material information to investors, such as information allowing them to analyze trends?

Registrants should be required to report greenhouse gas emissions data from the most recently available fiscal year, although if companies develop their inventories according to their calendar years in alignment with the Greenhouse Gas Protocol, those inventories could also be allowed, but should not be required. While companies may have been reporting some categories of Scopes 1, 2, and 3, they may not have historical data to match all categories that will be reported going forward. Given the reporting burden of formally reporting historical data, instead, companies that have developed inventories can be encouraged to include an optional narrative discussion of how they have reduced their greenhouse gas emissions over time and should be encouraged to offer this information in how they are addressing greenhouse gas emissions. Doing so will enable leading companies to demonstrate their history in addressing greenhouse gas emissions. Companies with a greenhouse gas reduction target should report their base year (which may be different than the years reported in financial statements) and progress towards the target based on the most recent year of emissions available. The change from the base year to the current year is most reflective of progress towards the target.

115. Should we require a registrant to disclose the methodology, significant inputs, and significant assumptions used to calculate its greenhouse gas emissions metrics, as proposed? Should we require a registrant to use a particular methodology for determining its greenhouse gas emission metrics? If so, should the required methodology be pursuant to the Greenhouse Gas Protocol’s Corporate Accounting and Reporting Standard and related standards and guidance? Is there another methodology that we should require a registrant to follow when determining its greenhouse gas emissions? Should we base our climate disclosure rules on certain concepts developed by the Greenhouse Gas Protocol without requiring a registrant to follow the Greenhouse Gas Protocol in all respects, as proposed? Would this provide flexibility for registrants to choose certain methods and approaches in connection with greenhouse gas emissions determination that meet the particular circumstances of their industry or business or that emerge along with developments in greenhouse
gas emissions methodology as long as they are transparent about the methods and underlying assumptions used? Are there adjustments that should be made to the proposed methodology disclosure requirements that would provide flexibility for registrants while providing sufficient comparability for investors?

Registrants should be required to use the Greenhouse Gas Protocol or the ISO 14064, 14065 and 14067 standards, which are similar to the Greenhouse Gas Protocol. Doing so will ensure some baseline comparability between how disclosures are structured. Where certain industries have developed more sector-specific methodologies, building off the Greenhouse Gas Protocol, such as PCAF, the commission should allow registrants to use such methodologies. The commission should provide flexibility for registrants to use any emerging or new methods and approaches as they are developed or become available. However, additional oversight is needed to ensure that transparency about the methods and underlying assumptions used are included.

Since the Greenhouse Gas Protocol and any accounting methodologies aligned with the Greenhouse Gas Protocol have, to date, been developed, via a multistakeholder consensus process, the commission should clarify that any new methodologies accepted for use in disclosing greenhouse gas emissions also be developed through a rigorous, expert-led, consensus-based process.

116. Should we require a registrant to disclose the organizational boundaries used to calculate its greenhouse gas emissions, as proposed? Should we require a registrant to determine its organizational boundaries using the same scope of entities, operations, assets, and other holdings within its business organization as that used in its consolidated financial statements, as proposed? Would prescribing this method of determining organizational boundaries avoid potential investor confusion about the reporting scope used in determining a registrant's greenhouse gas emissions and the reporting scope used for the financial statement metrics, which are included in the financial statements? Would prescribing this method of determining organizational boundaries result in more robust guidance for registrants and enhanced comparability for investors? If, as proposed, the organizational boundaries must be consistent with the scope of the registrant's consolidated financial statements, would requiring separate disclosure of the organizational boundaries be redundant or otherwise unnecessary?

C2ES supports the requirement for registrants to disclose their organizational boundaries to enable investors to better understand which emissions result from its entities, operations, assets and other holding that is within its operational or financial control (as opposed to those in its value chain, or scope 3). Such information would enable investors to see which companies have greater operational control over emissions in scopes 1 and 2, as compared to peers that might be structured differently and have less operational control where more of their emissions are in scope 3.

If a registrant has been calculating emissions and already has target, organizational boundaries should be allowed to remain the same. In the future if boundaries can be changed to reflect those used in its consolidated financial statements, as long as greenhouse gas emissions accounting and disclosure remains aligned with the Greenhouse Gas Protocol, such a change could be considered. It would be burdensome for companies to change their organizational boundary and potentially not possible to restate historical years for the new boundary, thereby, causing companies to track two separate emissions numbers, or to abandon their current greenhouse gas reduction target. This would have the unintended consequence of undermining companies current efforts towards emissions reductions and potentially setting new targets.

117. Except for calculating scope 3 emissions, the proposed rules would not require a registrant to disclose the emissions from investments that are not consolidated, proportionately consolidated, or
that do not qualify for the equity method of accounting. Should we require such disclosures for scopes 1 and 2 emissions, and if so, how?

C2ES recommends that registrants be required to disclose greenhouse gas emissions in line with the Greenhouse Gas Protocol and other methodologies aligned with the protocol. Adding new disclosure requirements where there are no methodologies or standards for disclosing that data could lead to less consistency in reporting.

118. Could situations arise where it is impracticable for a registrant to align the scope of its organizational boundaries for greenhouse gas emission data with the scope of the consolidation for the rest of its financial statements? If so, should we allow a registrant to take a different approach to determining the organizational boundaries of its greenhouse gas emissions and provide related disclosure, including an estimation of the resulting difference in emissions disclosure (in addition to disclosure about methodology and other matters that would be required by the proposed greenhouse gas emissions disclosure rules)?

To the extent possible, greenhouse gas emissions accounting and disclosure should align with current standard greenhouse gas accounting methodologies, as companies have been developing their greenhouse gas emissions inventories according to these methodologies, in some cases, for over two decades. See response to question #116 for more information.

119. Alternatively, should we require registrants to use the organizational boundary approaches recommended by the Greenhouse Gas Protocol (e.g., financial control, operational control, or equity share)? Do those approaches provide a clear enough framework for complying with the proposed rules? Would such an approach cause confusion when analyzing information in the context of the consolidated financial statements or diminish comparability? If we permit a registrant to choose one of the three organizational boundary approaches recommended by the Greenhouse Gas Protocol, should we require a reconciliation with the scope of the rest of the registrant's financial reporting to make the disclosure more comparable?

See response to question #118. To assist investors in understanding where one of the three organizational boundary approaches recommended by the Greenhouse Gas Protocol aligns with, or compares to the scope of the rest of the registrant’s financial reporting, the commission should consider providing guidance to facilitate a cross-walk between information.

Of note, some sectors might be better suited to select the equity share approach than others. Financial control could better point to financial risk. However, most companies opt for disclosing operational control, not financial control.

120. Should we require a registrant to disclose its operational boundaries, as proposed? Should we require a registrant to discuss its approach towards the categorization of emissions (e.g., as direct or indirect emissions) and emissions sources (e.g., stationary or mobile) when describing its operational boundaries, as proposed?

C2ES agrees with the proposed approach. Companies must categorize their emissions when developing their greenhouse gas inventories, so it would not be more onerous to disclosing categories of emissions. Doing so can also provide investors with greater clarity on where emissions are concentrated or perhaps subject to risk. Investors are already gathering this information from companies’ sustainability reports, CDP reports, or third-party data aggregators. Disclosing this information in a financial filing would provide investors with the added benefit of having all non-climate and all climate-related financial risk and opportunity data— including greenhouse gas emissions data—together in one filing.
121. The proposed operational boundaries disclosure is based largely on concepts developed by the Greenhouse Gas Protocol. Would requiring a registrant to determine its organizational boundaries pursuant to the GAAP applicable to the financial statement metrics included in the financial statements but its operational boundaries largely pursuant to concepts developed by the Greenhouse Gas Protocol cause confusion? Should we require a registrant to apply the GAAP applicable to its financial statements when determining whether it “controls” a particular source pursuant to the definition of scope 1 emissions, or particular operations pursuant to the definition of scope 2 emissions, as proposed? If not, how should “control” be determined and would applying a definition of control that differs from applicable GAAP result in confusion for investors?

See responses to Questions #118, #119, and #120.

122. Should we require a registrant to use the same organizational boundaries when calculating its scopes 1 and 2 emissions, as proposed? Are there any circumstances when a registrant's organizational boundaries for determining its scope 2 emissions should differ from those required for determining its scope 1 emissions? Should we also require a registrant 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, as proposed? Are there any circumstances where using a different organizational boundary for purposes of scope 3 emissions disclosure would be appropriate?

Registrants should follow framework and methodologies in the Greenhouse Gas Protocol to the fullest extent possible. The purpose of an organizational boundary is to define what assets are included in Scope 1 and 2 versus scope 3. Therefore, mixing organizational boundaries not only would be confusing, but would lead to double counting within a single registrant’s emissions reporting. This would also be in direct conflict with the fundamental principles and purpose of the GHG Protocol.

123. Should we require a registrant to be consistent in its use of its organizational and operational boundaries once it has set those boundaries, as proposed? Would the proposed requirement help investors to track and compare the registrant’s greenhouse gas emissions over time?

Yes, companies should report their organizational and operational boundaries in a consistent manner over time. Following existing greenhouse gas emissions inventorying best practices enables tracking and comparability of a registrant’s emissions over time. Where companies choose to change their boundaries, they should provide an explanation for investors. Notably, organizational boundaries should not change during the time period of a target without significant restatement for the base year to align new boundaries. A thorough narrative describing reasoning for restating the base year should also be disclosed to avoid the potential for “greenwashing.”

124. Should we require a registrant to disclose the methodology for calculating the greenhouse gas emissions, including any emission factors used and the source of the emission factors, as proposed? Should we require a registrant to use a particular set of emission factors, such as those provided by the EPA or the Greenhouse Gas Protocol?

Yes, registrants should disclose the methodology for calculating the greenhouse gas emissions, including any emission factors used and the source of the emission factors, as proposed. In consultation with the EPA, which has developed guidance for calculating emissions factors, default emissions factors for several industries, and emission factors based on economic spend, the commission should provide guidance for how companies should approach using emission factors, encouraging use of emission factors based on primary activity data and providing defaults where activity data is unavailable. Guiding companies to use the same
default emission factors, where estimates are needed, can help create some consistency in reporting data uncertainty across industries.

125. Should we permit a registrant to use reasonable estimates when disclosing its greenhouse gas emissions as long as it also describes the assumptions underlying, and its reasons for using, the estimates, as proposed? Should we permit the use of estimates for only certain greenhouse gas emissions, such as scope 3 emissions? Should we permit a registrant to use a reasonable estimate of its greenhouse gas emissions for its fourth fiscal quarter if no actual reported data is reasonably available, together with actual, determined greenhouse gas emissions data for its first three fiscal quarters when disclosing its greenhouse gas emissions for its most recently completed fiscal year, as long as the registrant promptly discloses in a subsequent filing any material difference between the estimate used and the actual, determined greenhouse gas emissions data for the fourth fiscal quarter, as proposed? If so, should we require a registrant to report any such material difference in its next Form 10-Q if domestic, or in a Form 6-K, if a foreign private issuer? Should we permit a domestic registrant to report any such material difference in a Form 8-K if such form is filed (rather than furnished) with the Commission? Should any such reasonable estimate be subject to conditions to help ensure accuracy and comparability? If so, what conditions should apply?

Yes, the commission should permit a registrant to use reasonable estimates when disclosing its greenhouse gas emissions as long as it also describes the assumptions underlying, and its reasons for using the estimates, since many companies will not have accurate data, especially for scope 3 emissions. While most data is available for scopes 1 and 2, and some scope 3 emissions, companies should explain why they are using estimates. In rare cases, companies may need to estimate their scope 1 and 2 emissions if they are not able to access the necessary information. Many companies are able to report actual scopes 1 and 2 emissions (in 2021, 14,000 companies reported their greenhouse gas inventories to CDP, Source: [https://www.cdp.net/en/articles/media/2-percent-of-companies-worldwide-worth-12-trillion-named-on-cdps-a-list-of-environmental-leaders](https://www.cdp.net/en/articles/media/2-percent-of-companies-worldwide-worth-12-trillion-named-on-cdps-a-list-of-environmental-leaders)).

See response to question #97. We recommend relaxing the timeline to allow for sufficient data collection, emissions quantification and third-party assurance. This could be in a separately filed form specific to greenhouse gas emissions data, filed towards the end of the following year, or simply in the next year’s annual forms. Requiring reporting before emissions are complete, and restating differences will significantly increase reporting burden and increase the likelihood of confusion if there are too many numbers published. It is the nature of greenhouse gas accounting and reporting that estimates will be included. However, we do not think estimating due to a lag in data is necessary and instead recommend allowing time to gather all available primary data and only use estimates where data are not likely to be available.

126. Should we require a registrant to disclose, to the extent material, any use of third-party data when calculating its greenhouse gas emissions, regardless of the particular scope of emissions, as proposed? Should we require the disclosure of the use of third-party data only for certain greenhouse gas emissions, such as scope 3 emissions? Should we require the disclosure of the use of third-party data for scope 3 emissions, regardless of its materiality to the determination of those emissions? If a registrant discloses the use of third-party data, should it also be required to identify the source of such data and the process the registrant undertook to obtain and assess the data, as proposed?

Yes, the commission should require a registrant to disclose, to the extent material, any use of third-party data when calculating its greenhouse gas emissions, including the source and process taken to obtain and assess the data. Doing so will enable investors to better understand the underlying data, helping to create greater transparency while also giving companies flexibility what data they use. As C2ES recommends that only
material scope 3 emissions should be disclosed, the use of third-party data for those emissions should also be disclosed.

127. Should we require a registrant to disclose any material change to the methodology or assumptions underlying its greenhouse gas emissions disclosure from the previous year, as proposed? If so, should we require a registrant to restate its greenhouse gas emissions data for the previous year, or for the number of years for which greenhouse gas emissions data has been provided in the filing, using the changed methodology or assumptions? If a registrant's organizational or operational boundaries, in addition to methodology or assumptions, change, to what extent should we require such disclosures of the material change, restatements or reconciliations? In these cases, should we require a registrant to apply certain accounting standards or principles, such as FASB ASC Topic 250, as guidance regarding when retrospective disclosure should be required?

Per the Greenhouse Gas Protocol, when a company acquires or divests assets, it is required to recalculate its baseline greenhouse gas emissions where it has a stated goal to reduce emissions against that baseline. For this reason, companies should disclose any material change to the methodology or assumption underlying its greenhouse gas emissions disclosure from the previous year. Registrants should provide an explanation of how the data has changed to provide investors with transparency in how the registrant’s emissions have been augmented- and such changes would be visible in a company’s greenhouse gas inventory- however, requiring retrospective disclosure to adjust greenhouse gas emissions data over multiple years is not practical and would add significant reporting burdens to companies acquiring or divesting businesses. A summary explanation of changes would suffice.

128. Should we require a registrant to disclose, to the extent material, any gaps in the data required to calculate its greenhouse gas emissions, as proposed? Should we require the disclosure of data gaps only for certain greenhouse gas emissions, such as scope 3 emissions? If a registrant discloses any data gaps encountered when calculating its scope 3 emissions or other type of greenhouse gas emissions, should it be required to discuss whether it used proxy data or another method to address such gaps, and how its management of any data gaps has affected the accuracy or completeness of its greenhouse gas emissions disclosure, as proposed? Are there other disclosure requirements or conditions we should adopt to help investors obtain a reasonably complete understanding of a registrant’s exposure to the greenhouse gas emissions sourced by each scope of emissions?

Registrants should report data gaps, proxy data and other methods to address those gaps, and how the gaps affect the accuracy and completeness of the greenhouse gas emissions disclosure. Identifying gaps helps the commission and investors understand where climate risk exposure may be less understood.

Of note, SBTi and CDP request information about exclusions from reported emissions. The commission could look to following those reporting methods for consistency and simplicity.

129. When determining the materiality of its scope 3 emissions, or when disclosing those emissions, should a registrant be required to include greenhouse gas 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, in addition to emissions from activities in its value chain, as proposed? Would this requirement help ensure that investors receive a complete picture of a registrant’s carbon footprint by precluding the registrant from excluding emissions from activities that are typically conducted as part of operations over which it has ownership or control but that are outsourced in order to reduce its scopes 1 or 2 emissions? Should a requirement to include outsourced activities be subject to certain conditions or exceptions and, if so, what conditions or exceptions?
See response to Question #127. Registrants should note when emissions from their own operations transfer to emissions from outsourced activities, namely going from their scope 1 or 2 to a scope 3 category of emissions. If those emissions remain material, registrants should include them in their full emissions inventory (scopes 1, 2 and 3), enabling investors to see where emissions have transferred out of operational or financial control. This is aligned with the Greenhouse Gas Protocol chapter 5, Tracking Emissions Over Time.

130. Should we require a registrant that must disclose its scope 3 emissions to discuss whether there was any significant overlap in the categories of activities that produced the scope 3 emissions? If so, should a registrant be required to describe any overlap, how it accounted for the overlap, and its effect on the total scope 3 emissions, as proposed? Would this requirement help investors assess the accuracy and reliability of the scope 3 emissions disclosure?

The registrant should adhere to how scope 3 emissions are assessed for different categories of activities to ensure consistency in reporting. The scope 3 categories are defined such that emissions should not overlap across categories.

131. Should we permit a registrant to present its scope 3 emissions in terms of a range as long as it discloses its reasons for using the range and the underlying assumptions, as proposed? Should we place limits or other parameters regarding the use of a range and, if so, what should those limits or parameters be? For example, should we require a range to be no larger than a certain size? What other conditions or guidance should we provide to help ensure that a range, if used, is not overly broad and is otherwise reasonable?

Yes, the commission should permit a registrant to present its scope 3 emissions in terms of a range as long as it discloses its reasons for using the range and the underlying assumptions, as proposed. The commission should work with greenhouse gas accounting experts in other Federal Agencies, namely the EPA, to develop guidance on the use of estimated data.

132. Should we require a registrant to follow a certain set of published standards for calculating scope 3 emissions that have been developed for a registrant’s industry or that are otherwise broadly accepted? For example, should we require a registrant in the financial industry to follow PCAF’s Global GHG Accounting & Reporting Standard for the Financial Industry when calculating its financed emissions within the “Investments” category of scope 3 emissions? Are there other industry-specific standards that we should require for scope 3 emissions disclosure? Should we require a registrant to follow the Greenhouse Gas Protocol’s Corporate Value Chain (scope 3) Accounting and Reporting Standard if an industry-specific standard is not available for scope 3 emissions disclosure? If we should require the use of a third-party standard for scope 3 emissions reporting, or any other scope of emissions, how should we implement this requirement?

Yes, registrants should follow published standards for calculating scope 3 emissions to enable consistency across industries reporting their emissions. At minimum, C2ES recommends currently following the GHG Protocol, though new, separate sectoral standards may be developed over time. Where germane to their industry, registrants should follow standards designed for their sectors (i.e., financial sector should use PCAF’s standard when calculating financed emissions under the “Investments” scope 3 category). The commission should reference and require use of third-party standards that have been developed through an expert multi-stakeholder consensus process. Where such standards are not yet available, where industry-specific standards are not available, registrants should follow the general Greenhouse Gas Protocol’s Corporate Value Chain (scope 3) Accounting and Reporting Standard.
133. Should we provide a safe harbor for scope 3 emissions disclosure, as proposed? Is the scope of the proposed safe harbor clear and appropriate? For example, should the safe harbor apply to any registrant that provides scope 3 disclosure pursuant to the proposed rules, as proposed? Should we limit the use of the safe harbor to certain classes of registrants or to registrants meeting certain conditions and, if so, which classes or conditions? For example, should we require the use of a particular methodology for calculating and reporting scope 3 emissions, such as the PCAF Standard if the registrant is a financial institution, or the Greenhouse Gas Protocol Scope 3 Accounting and Reporting Standard for other types of registrants? Should we clarify the scope of persons covered by the language “by or on behalf of a registrant” by including language about outside reviewers retained by the registrant or others? Should we define a “fraudulent statement,” as proposed? Is the level of diligence required for the proposed safe harbor (i.e., that the statement was made or reaffirmed with a reasonable basis and disclosed in good faith) the appropriate standard? Should the safe harbor apply to other climate-related disclosures, such as scopes 1 and 2 emissions disclosures, any targets and goals disclosures in response to proposed Item 1505 (discussed below), or the financial statement metrics disclosures required pursuant to Proposed Article 14 of Regulation S-X? Should the safe harbor apply indefinitely, or should we include a sunset provision that would eliminate the safe harbor some number of years, (e.g., five years) after the effective date or applicable compliance date of the rules? Should the safe harbor sunset after certain conditions are satisfied? If so, what types of conditions should we consider? What other approaches should we consider?

C2ES supports applying a safe harbor to all climate-related disclosures, including scopes 1, 2 and 3 emissions, targets and goals. Despite thousands of companies publicly reporting their annual greenhouse gas emissions data and goals, data gaps and inconsistencies exist greenhouse gas emissions reduction targets and goals remain fluid, as companies reevaluate their goals regularly. Applying a safe harbor widely would reduce any concerns over liability for low quality data, where no high-quality data exists, and would reduce any dampening effect on companies’ announced greenhouse gas targets.

The commission could propose that the safe harbor be reevaluated every 5-7 years, to determine the extent to which data quality and access has improved. C2ES suggests 5-7 years, given the challenges in developing new data, standards, and methodologies, and/or other practices that would assist companies in strengthening their climate disclosures. On average, based on observations, it can take 1-3 years to develop new emission factors, new methodologies, or evaluate best practices, with another few years for adoption and implementation.

134. Should we provide an exemption from scope 3 emissions disclosure for SRCs, as proposed? Should the exemption not apply to a SRC that has set a target or goal or otherwise made a commitment to reduce its scope 3 emissions? Are there other classes of registrants we should exempt from the scope 3 emissions disclosure requirement? For example, should we exempt EGCs, foreign private issuers, or a registrant that is filing or has filed a registration statement for its initial public offering during its most recently completed fiscal year from the scope 3 disclosure requirement? Instead of an exemption, should we provide a longer phase in for the scope 3 disclosure requirements for SRCs than for other registrants?

C2ES supports providing smaller reporting companies (SRCs) with an exemption for at least 5 years, after which the disclosure requirement could be reassessed. SRCs usually do not have the resources to develop comprehensive greenhouse gas inventories that include scope 3 emissions. However, as data quality improves and best practices emerge, SRCs may find it easier to report their scope 3 emissions.

Section H. Attestation of scope 1 and scope 2 Emissions Disclosure

C2ES has provided responses to only the following questions in Section H:
135. Should we require accelerated filers and large accelerated filers to obtain an attestation report covering their scope 1 and scope 2 emissions disclosure, as proposed? Should we require accelerated filers and large accelerated filers to obtain an attestation report covering other aspects of their climate-related disclosures beyond scope 1 and 2 emissions? For example, should we also require the attestation of greenhouse gas intensity metrics, or of scope 3 emissions, if disclosed? Conversely, should we require accelerated filers and large accelerated filers to obtain assurance covering only scope 1 emissions disclosure? Should any voluntary assurance obtained by these filers after limited assurance is required be required to follow the same attestation requirements of Item 1505(b)–(d), as proposed?

Yes, scope 1 and 2 emissions should require an attestation, including an attestation of intensity metrics where applicable. Many large companies have, for many years, received third party verification for their scopes 1 and 2 emissions. Some choose to have their scope 3 emissions verified. Yet, while these practices are common among many of the S&P 500 companies, they are not yet common across all large publicly traded companies. The commission should therefore consider delaying the reporting of greenhouse gas emissions data by one year.

Of note, for some sectors such as electric utilities, large emissions are already reported to the EPA as well as other federal and state regulatory bodies (where CO2 emissions from power plants are reported to EPA from continuous emissions monitors; such reports are subject to significant penalties for false reporting). As such, it would not be reasonable or necessary to require third-party attestation of emissions that are already reported in this manner.

Of note, based on stakeholder feedback, if the commission accepts the ISO standard for verification, for companies already using the ISO standard (i.e., 14064-3 to verify GHG Emissions data, no modifications would be required.

C2ES does not have a view on whether voluntary assurance obtained by these filers after limited assurance is required be required to follow the same attestation requirements of Item 1505(b)–(d).

136. If we required accelerated filers and large accelerated filers to obtain an attestation report covering scope 3 emissions disclosure, should the requirement be phased-in over time? If so, what time frame? Should we require all scope 3 emissions disclosure to be subject to assurance or only certain categories of scope 3 emissions? Would it be possible for accelerated filers and large accelerated filers to obtain an attestation report covering the process or methodology for calculating scope 3 emissions rather than obtaining an attestation report covering the calculations of scope 3 emissions? Alternatively, is there another form of verification over scope 3 disclosure that would be more appropriate than obtaining an attestation report?

C2ES recommends not requiring that attestation of scope 3 emissions immediately and instead supports requiring that attestation reports covering scope 3 emissions- and only those scope 3 emissions deemed material- be phased in over time, with a suggested timeline of a minimum of three years from the time the rule takes effect to allow for data collection and estimation to improve. Any scope 3 emissions disclosed should be deemed material, and therefore subject to assurance. Since scope 3 data quality is often low or reflects estimated data, an attestation report covering the process or methodology for calculating scope 3 emissions would be necessary to accompany the reported calculated scope 3 emissions themselves. Both the emissions data and a brief narrative explaining how they were developed would assist investors in understanding the rigor conducted in assessing the information, whether the underlying assumptions are uniform across industries, and, ostensibly, could better inform impacts on the registrant’s climate-related financial risks. Without an understanding of how scope 3 emissions are estimated, investors could have difficulty viewing the data as decision useful.
139. Should we require accelerated filers and large accelerated filers to initially include attestation reports reflecting attestation engagements at a limited assurance level, eventually increasing to a reasonable assurance level, as proposed? What level of assurance should apply to the proposed greenhouse gas emissions disclosure, if any, and when should that level apply? Should we provide a one fiscal year transition period between the greenhouse gas emissions disclosure compliance date and when limited assurance would be required for accelerated filers and large accelerated filers, as proposed? Should we provide an additional two fiscal year transition period between when limited assurance is first required and when reasonable assurance is required for accelerated filers and large accelerated filers, as proposed?

Most accelerated and large accelerated filers who have developed their greenhouse gas emissions inventories already seek third-party assurance for their scopes 1 and 2. C2ES supports the current proposal, and timing of the proposal, to implement a limited level of assurance. Doing so would create a uniform reporting condition for all registrants.

Rather than commit to increasing to reasonable assurance, C2ES recommends that the commission assess whether there is a need to increase to reasonable assurance after three to five fiscal years. At the moment, the costs of reasonable assurance are significantly higher than limited assurance. Based on input from stakeholders with expertise in developing greenhouse gas inventories for companies, the level of effort and increase in costs, which could be 2-3 times higher than for limited assurance does not merit the incremental value of reasonable assurance. Conversely, some financial institutions would prefer reasonable assurance, as is current practice for auditing financial statements, and part of the culture of financial institutions. If the SEC chooses to eliminate or pause the proposed requirement for reasonable assurance, C2ES recommends that the SEC provide additional explanation for why limited assurance is acceptable for greenhouse gas emissions, as doing so may diverge from expectations from financial institutions.

Also, as noted above, emissions from power plants are already subject to disclosure to the EPA under the Clean Air Act and EPA’s Mandatory Greenhouse Gas Reporting Rule and therefore, those emissions should not be subjected to the attestation requirements.

141. Under prevailing attestation standards, “limited assurance” and “reasonable assurance” are defined terms that we believe are generally understood in the marketplace, both by those seeking and those engaged to provide such assurance. As a result, we have not proposed definitions of those terms. Should we define “limited assurance” and “reasonable assurance” and, if so, how should we define them? Would providing definitions in this context cause confusion in other attestation engagements not covered by the proposed rules? Are the differences between these types of attestation engagements sufficiently clear without providing definitions?

C2ES recommends providing a definition for both “limited assurance” and “reasonable assurance” to reduce any confusion in the market. Doing so would ensure those familiar with greenhouse gas accounting principles and third-party validation/verification for greenhouse gas inventories can more easily translate to either limited or reasonable assurance. Also, see response to question #39.

144. Should we require a registrant to obtain a greenhouse gas emissions attestation report that is provided by a greenhouse gas emissions attestation provider that meets specified requirements, as proposed? Should one of the requirements be that the attestation provider is an expert in greenhouse gas emissions, with significant experience in measuring, analyzing, reporting, or attesting to greenhouse gas emissions, as proposed? Should we specify that significant experience means having sufficient competence and capabilities necessary to: (a) perform engagements in accordance with professional standards and applicable legal and regulatory requirements and (b) enable the service provider to issue reports that are appropriate under the circumstances, as proposed? Should we
instead require that the greenhouse gas emissions attestation provider have a specified number of years of the requisite type of experience, such as 1, 3, 5, or more years? Should we specify that a greenhouse gas emissions attestation provider meets the expertise requirements if it is a member in good standing of a specified accreditation body that provides oversight to service providers that apply attestation standards? If so, which accreditation body or bodies should we consider (e.g., AICPA)? Are there any other requirements for the attestation provider that we should specify?

Instead, should we require a greenhouse gas emissions attestation provider to be a PCAOB-registered audit firm?

C2ES supports requiring that the attestation provider is an expert in greenhouse gas emissions with significant experience as proposed. Prescribing a number of years of experience may limit new businesses who have employees with long term experience, therefore we do not recommend instead requiring a specified number of years of experience.

146. Should we require the greenhouse gas emissions attestation provider to be independent with respect to the registrant, and any of its affiliates, for whom it is providing the attestation report, as proposed? Should we specify that a greenhouse gas emissions attestation provider is not independent if such attestation provider is not, or a reasonable investor with knowledge of all relevant facts and circumstances would conclude that such attestation provider is not, capable of exercising objective and impartial judgment on all issues encompassed within the attestation provider's engagement, as proposed? The proposed provision is based on a similar provision regarding the qualification of an accountant to be an independent auditor under Rule 2-01 of Reulation S-X. Is Rule 2-01 an appropriate model for determining the independence of a greenhouse gas emissions attestation provider? Is being independent from a registrant and its affiliates an appropriate qualification for a greenhouse gas emissions attestation provider?

The greenhouse gas emissions attestation provider should be sufficiently independent to not present a conflict of interest, and under no circumstance should they be involved in developing the emissions inventory. However, it may be acceptable for a third party to provide additional services beyond greenhouse gas emissions attestation.

C2ES is not familiar with Rule 2-01 and therefore cannot comment on the appropriateness.

153. As proposed, the greenhouse gas emissions attestation provider would be a person whose profession gives authority to statements made in the attestation report and who is named as having provided an attestation report that is part of the registration statement, and therefore the registrant would be required to obtain and include the written consent of the greenhouse gas emissions provider pursuant to Securities Act Section 7 and related Commission rules. This would subject the greenhouse gas emissions attestation provider to potential liability under Section 11 of the Securities Act. Would the possibility of Section 11 liability deter qualified persons from serving as greenhouse gas emissions attestation providers? Should we include a provision similar to 17 CFR 230.436(c), or amend that rule, to provide that a report on greenhouse gas emissions at the limited assurance level by a greenhouse gas emissions attestation provider that has reviewed such information is not considered part of a registration statement prepared or certified by a person whose profession gives authority to a statement made by him or a report prepared or certified by such person within the meaning of Section 7 and 11 of the Act?

The proposed requirements as written are likely to significantly reduce the number of providers that are willing to provide greenhouse gas verification services. Those that are willing are likely to be high-cost providers. This will have the effect of reducing choice and competition and significantly increasing the
verification cost for responding companies. We support the suggested provision to reduce the likelihood of this outcome.

156. Should we require the greenhouse gas emissions attestation report to meet certain minimum requirements in addition to any form and content requirements set forth by the attestation standard or standards used by the greenhouse gas emissions attestation provider, as proposed? Should we instead require that the attestation report solely meet whatever requirements are established by the attestation standard or standards used?

In common practice the attestation reports deliver a statement explaining the items reviewed, findings, a list of the metrics as verified and statement of independence. This is sufficient for an attestation report. We recommend against requiring additional minimum requirements for attestation reports. The requirements from the attestation standard used should be sufficient.

Section I. Targets and Goals Disclosure

168. Should we require a registrant to disclose whether it has set any targets related to the reduction of greenhouse gas emissions, as proposed? Should we also require a registrant to disclose, e.g., letter from Dimensional Fund Advisors. 284 whether it has set any other climate-related target or goal, e.g., regarding energy usage, water usage, conservation or ecosystem restoration, or revenues from low-carbon products, in line with anticipated regulatory requirements, market constraints, or other goals, as proposed? Are there any other climate-related targets or goals that we should specify and, if so, which targets or goals? Is it clear when disclosure under this proposed item would be triggered, or do we need to provide additional guidance? Would our proposal discourage registrants from setting such targets or goals?

Registrants should be required to disclose climate-related targets and goals. Such information can enable investors to understand the direction of companies’ greenhouse gas emissions reduction efforts and help contextualize how companies are addressing their climate-related financial risks and opportunities, as outlined in their strategies.

Most large companies today who are developing their greenhouse gas inventories have developed a climate goal to reduce their emissions, where several companies across sectors have been developing greenhouse gas reduction goals in the early 2000s. In 2001-2011, under EPA’s Climate Leaders program (which is no longer available), nearly 200 large, blue-chip companies developed inventories for their scopes 1 and 2 emissions and developed reduction goals. In the decade, thousands more companies have set targets; in the last two years alone, we have seen a significant growth in the number of companies setting net zero targets. According to findings in GreenBiz, examining the Science-Based Targets Initiative, “As of 2021, more than a third of S&P Global 1200 companies have set or committed to setting a science-based target, according to figures from the Science Based Targets initiative, or SBTi, which has developed a standard for corporate net-zero target setting. Of those companies, 39 percent have also pledged to achieve net zero. In 2016, just 13 companies had set or committed to a science-based target.” (Source: Richard Mattison. The State of Net Zero, for Now, GreenBiz, February 14, 2022. https://www.greenbiz.com/article/state-net-zero-now). Within C2ES’ Business Environmental Leadership Council, 38 out of the 40 members have a publicly stated climate goal of reaching net zero or carbon neutrality for some or all of their scopes 1, 2, and 3 emissions.

If registrants’ climate targets and goals are included under a safe harbor, registrants may be less discouraged from setting them. It is important that any required disclosure not dampen any efforts to strengthen and increase companies’ climate commitments.
169. Should we require a registrant, when disclosing its targets or goals, 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, 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 intervening targets set by the registrant; and • How it intends to meet its targets or goals, each as proposed? Are there any other items of information about a registrant’s climate-related targets or goals that we should require to be disclosed, in addition to or instead of these proposed items? Are there any proposed items regarding such targets or goals that we should exclude from the required disclosure? If a registrant has set multiple targets or goals, should it be permitted to establish different base years for those targets or goals?

Yes, when disclosing their targets, registrants should be required to disclose some of the elements proposed, reflecting current practice among companies with greenhouse gas emissions targets, which include, at minimum, the base year and time horizon for the goal, which is necessary to provide context around the target or goal. Registrants should retain flexibility to establish different base years for multiple targets and goals, as some goals merit longer vs shorter time horizons and baseline emissions and time periods. Registrants often report progress towards their goals over time in a summary, narrative format.

However, C2ES received feedback from companies that these specific disclosures around targets and goals are both too expansive and too prescriptive and may discourage companies from setting goals. However, since most targets are set at the corporate-wide level, it is assumed that they are material to the company as a whole. The commission should explore if there are instances where greenhouse gas emissions targets are not material to the company as a whole.

170. Should we require a registrant to discuss how it intends to meet its climate-related targets or goals, as proposed? Should we provide examples of potential items of discussion about a target or goal regarding greenhouse gas emissions reduction, such as a strategy to increase energy efficiency, a transition to lower carbon products, purchasing carbon offsets or RECs, or engaging in carbon removal and carbon storage, as proposed? Should we provide additional examples of items of discussion about climate-related targets or goals and, if so, what items should we add? Should we remove any of the proposed examples of items of discussion?

A registrant should provide a narrative for how it plans to achieve its climate goals through different activities and initiatives. Much of this information may align with companies’ transition plans or other ways they are reducing their climate-related financial risks. Most companies with greenhouse gas emission reduction targets include a discussion of how they are reducing their greenhouse gas emissions through their sustainability reports, CDP reports, or via other ESG reporting. For example, over 9,000 companies report to CDP, answering questions on how they are reducing their greenhouse gas emissions. The commission could include a list of common activities, but should allow for free form responses as each registrant will need to reflect its specific industry’s emissions reduction efforts.

171. Should we require a registrant, when disclosing its targets or goals, to disclose any data that indicates whether the registrant is making progress towards meeting the target and how such progress has been achieved, as proposed?

Registrants should disclose the extent to which they are making progress towards meeting the target- much of that information becomes evident year after year when reviewing companies’ greenhouse gas emissions inventories. However, providing that information should also be part of a registrant’s explanation of how it is addressing its climate risks.
172. Should we require that the disclosure be provided in any particular format, such as charts? Would certain formats help investors and others better assess these disclosures in the context of assessing the registrant’s business and financial condition? What additional or other requirements would help in this regard?

We do not have a response to this question at this time.

173. If a registrant has used carbon offsets or RECs, should we require the registrant 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, the nature and location of the underlying projects, any registries or other authentication of the offsets or RECs, and the cost of the offsets or RECs, as proposed? Are there other items of information about carbon offsets or RECs that we should specifically require to be disclosed when a registrant describes its targets or goals and the related use of offsets or RECs? Are there proposed items of information that we should exclude from the required disclosure about offsets and RECs?

To improve completeness and transparency, registrants should disclose the amount of greenhouse gas reduction, avoidance, or removal represented by carbon credits; the amount of generated renewable energy represented by RECs, or other renewable electricity procurement options with environmental attributes retained; and the amount of greenhouse gas reduction or other climate benefit represented by other similar voluntary market-based instruments, such as credits for sustainable aviation fuel, that may emerge as the market matures.

Registrants should also be required to disclose the source, nature, vintage, and authentication of credits, RECs, and other market instruments, in order to help investors determine if such market-based instruments are of high quality. For example, in the case of voluntary carbon credits, registrants should report the standard and methodology under which credits were generated, as well as whether they meet broadly recognized standards in the marketplace (such as the Core Carbon Principles being developed by the Integrity Council for the Voluntary Carbon Market).

Cost data should only be considered if the cost of other mitigation and resilience efforts are considered by investors. The cost of different renewable electricity options varies based on instrument type and market conditions. Cost data may be misleading given the impacts of different instruments and the market price at time of purchase.

The commission should engage expertise from across the federal government, including CFTC as well as EPA, to develop basic guidance for both registrants and investors to understand which offsets and RECs constitute high quality. Such guidance should take into account efforts already underway in the voluntary carbon market, such as by the Integrity Council for the Voluntary Carbon Market (mentioned above).

174. Should we apply the PSLRA statutory safe harbors as they currently exist to forward-looking statements involving climate-related targets and goals, or other climate-related forward-looking information? Should we instead create a separate safe harbor for forward-looking climate-related information, including targets and goals? Should we adopt an exception to the PSLRA statutory safe harbors that would extend the safe harbors to climate-related forward-looking disclosures made in an initial public offering registration statement?

C2ES recommends that all forward-looking climate related information statements and goals be subject to a safe harbor, and supports applying PSLRA statutory safe harbors as they currently exist and extend them to disclosures made in an IPA registration statement. Companies have expressed concern that they could be liable for climate-related information and that they need a safe harbor to be able to adapt their forward-
looking climate statements to reflect new data availability, technologies and policies that enable greater climate action, and increased ambition from leadership. Companies are likewise concerned that they could be held liable for data submitted, when the data quality is low and where they lack clarity and transparency, especially across their scope 3 categories of emissions.