



California Public Employees' Retirement System

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Ms. Vanessa Countryman, Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

June 15, 2022

Subject: Release Nos. 33-11042; 34-94478; File No. S7-10-22; The Enhancement and Standardization of Climate-Related Disclosures for Investors

Dear Ms. Countryman,

On behalf of the California Public Employees' Retirement System (CalPERS), I write to express our strong support for the Securities and Exchange Commission's (SEC or Commission) proposed new rules to require registrants to provide certain climate-related information in their registration statements and annual reports, including disclosures about greenhouse gas (GHG) emissions and certain climate related financial metrics (Proposed Rules or Proposal).¹

Pursuant to California Senate Bill 964, we supply a climate report to the California legislature every three years. We supplied our first climate report in December of 2019.² In June 2020 we produced a Task Force on Climate-related Financial Disclosures (TCFD) aligned report, "*CalPERS' Investment Strategy on Climate Change*."³ In our TCFD report, we highlight that private sector initiatives to improve climate reporting are insufficient to ensure consistent, comparable, and reliable information, and that we need mandatory reporting requirements to enhance the data provided by companies. Climate change is a substantial risk that is material to investors. Making such a risk part of financial disclosures will improve data quality and allow investors to address such risk through asset allocation, voting, or engagement.

The Proposed Rules directly align with the enhanced disclosures we have been seeking in order to make more informed investment decisions and comply with the requirements of California State Law. As such, we firmly support the Proposed Rules, and given our extensive history of

¹ See Securities and Exchange Commission, [Proposed Rule: The Enhancement and Standardization of Climate-Related Disclosures for Investors](#).

² <https://www.calpers.ca.gov/docs/forms-publications/addressing-climate-change-risk.pdf>.

³ CalPERS' Investment Strategy on Climate Change. First report in response to the https://www.calpers.ca.gov/docs/board-agendas/202006/invest/item08c-01_a.pdf.

advocacy, engagement and integration through partnerships around the effective management of climate risk, we commend the SEC for its Proposal.

As the largest public defined benefit pension fund in the United States, CalPERS manages approximately \$450 billion in global assets on behalf of more than 2 million members. We seek long-term, sustainable, risk-adjusted returns through efficient capital allocation and stewardship in line with our fiduciary duty. We are guided by CalPERS' Investment Beliefs⁴ which recognize that "Long term value creation requires effective management of three forms of capital: financial, physical and human."⁵ Accordingly, we expect fair, accurate, timely, and assured reporting about how companies manage their financial, physical, and human capital to generate sustainable returns, and how they identify, monitor, and mitigate risks to those three forms of capital.⁶ CalPERS' motivation to address climate change is to ensure we meet our long-term requirements to provide retirement, disability and health benefits for our 2 million members.

We expect public companies in which we invest to provide integrated representations of operational, financial, environmental, social, and governance performance in terms of both financial statement and non-financial statement results and prospects. However, the current disclosure regime for corporate reporting falls short of our expectations as investors. We believe that companies should disclose consistent, comparable, and reliable information in regulatory reports so that shareowners can more easily identify, assess, and manage climate risk and opportunity. The Proposed Rules integrate investor-focused climate-related disclosures into the financial reporting process. Integrating the data gathering processes of climate-related information with financial reporting helps us better understand the full financial implications of climate-related data.

CalPERS has a long history of addressing the risks and opportunities, such as investing in emerging technologies related to climate change, responding to climate change through advocacy, engagement, research and integration of climate risk across the portfolio, supported by partnerships, as in Climate Action 100+.⁷ We have seen special gains with these private efforts, but we note that voluntary efforts fall short of getting the information we desire for investment decision-making or complying with our own reporting requirements. Therefore, guided by extensive research, we advocate for sound public policy and corresponding high-quality standards for mandatory climate risk reporting, which is consistent, comparable, and reliably assured.

We have also supported the development of voluntary standards and reporting frameworks such as the TCFD to capture the risks and opportunities driven by climate change, climate policy, and emerging technology.⁸ We carefully monitor material climate risks facing our

⁴ CalPERS Investment Beliefs, <https://www.calpers.ca.gov/page/about/organization/calpers-story/our-mission-vision#investment-beliefs>.

⁵ Id.

⁶ CalPERS Sustainability Principles. <https://www.calpers.ca.gov/docs/forms-publications/governance-and-sustainability-principles.pdf>.

⁷ Climate Action 100+. <https://www.climateaction100.org/>.

⁸ TCFD Website. <https://www.fsb-tcf.org/> https://www.calpers.ca.gov/docs/board-agendas/202006/invest/item08c-01_a.pdf.

portfolio companies and have used the TCFD framework for our own climate risk report.⁹ Further, we engage companies directly on their policies and plans to reduce GHG emissions and manage physical and transition risks. This includes targeted company engagements with those identified as “systemically important carbon emitters” supported through partnerships such as the Climate Action 100+ and the United Nation’s Net Zero Asset Owner Alliance (UN NZAOA).

Finally, we seek to integrate climate risk and opportunity into our investment decision-making across our portfolio. This includes establishing external manager expectations and reporting requirements, as well as curating research based on scientific data and evidence-based economic insights through our Sustainable Investment Research Initiative¹⁰ and related projects in order to develop new tools for investment analysis, such as the Physical Risks of Climate Change reporting framework based on meteorological data.¹¹ The Research and Strategy Group in the CalPERS Investment Office brought in eleven asset managers and data providers across all the asset classes in which CalPERS invests as part of a Master Class on Sustainable Investment series. There were two lessons from the series; first, ESG metrics are relevant and widely used by the many asset managers across asset classes, and second, data providers are becoming more sophisticated in their approaches to integrating existing ESG data.

The current trend towards progress in the management of climate risk is promising. For example, climate is included as a key aspect of the 2021 Federal Administration’s priorities.¹² The global movement on climate risk management also continues to build, with the IFRS Foundation’s creation of the International Sustainability Standards Board (ISSB) being a significant example given the ISSB’s quick and clear actions to develop global climate reporting standards. It is also notable that the International Accounting Standards Board has issued guidance that promotes the inclusion of relevant climate risk consideration in financial statements,¹³ and has placed climate on its research agenda.¹⁴ We commend the SEC for the Proposed Rules. This is a giant step in the right direction.

CalPERS supports the following aspects of the Proposal:

- Adding a new subpart to regulation S-K and a new article to Regulation S-X.
- Using the TCFD, including governance, strategy, risk management, and targets and metrics.
- Providing detailed information if a company sets targets/goals, has a transition plan, sets an internal price of carbon or uses an internal price of carbon.

⁹ CalPERS’ Investment Strategy on Climate Change June 2020, https://www.calpers.ca.gov/docs/board-agendas/202006/invest/item08c-01_a.pdf.

¹⁰ CalPERS SIRI Library. <https://www.calpers.ca.gov/page/investments/sustainable-investments-program/esg-integration/siri-library>.

¹¹ CalPERS and Wellington. 2020. *Physical Risks of Climate Change (P-ROCC)*. <https://www.wellington.com/en/wellington-news/wellington-news/physical-risks-of-climate-change-p-rocc>.

¹² Biden Administration Priorities. <https://www.bu.edu/articles/2021/bidens-top-four-priorities-explained-by-leading-bu-experts/> (Covid-19, the economy, racial equality, climate change).

¹³ Anderson, N. 2019. IFRS Standards and Climate Related Disclosures. <https://www.ifrs.org/content/dam/ifrs/news/2019/november/in-brief-climate-change-nick-anderson.pdf>

¹⁴ IFRS Climate-Related Disclosures, <https://www.ifrs.org/projects/work-plan/climate-related-disclosures/#current-stage>.

- Including disclosures of Scopes 1 and 2 emissions, and Scope 3 emissions, if material.
- Disclosing physical and transition risk, including zip code data on physical assets.
- Providing a verification mechanism through assurance.

For your review and consideration, we provide our detailed responses to certain questions in the attached, Responses to Questions.

We look forward to providing continued support to the Commission. Please contact James Andrus, Interim Managing Investment Director, at James.Andrus@calpers.ca.gov, if you have any questions or would like to discuss our response.

Sincerely,

Marcie Frost
Chief Executive Officer

cc: James Andrus

RESPONSES TO QUESTIONS

A. Overview of the Climate-Related Disclosure Framework; 2. Location of the Climate-Related Disclosure

1. Should we add a new subpart to Regulation S-K and a new article to Regulation S-X that would require a registrant to disclose certain climate-related information, as proposed? Would including the climate-related disclosure in Regulation S-K and Regulation S-X facilitate the presentation of climate information as part of a registrant's regular business reporting? Should we instead place the climate-related disclosure requirements in a new regulation or report? Are there certain proposed provisions, such as GHG emissions disclosure requirements, that would be more appropriate under Regulation S-X than Regulation S-K?

CalPERS supports the addition of a new subpart to Regulation S-K and a new article to Regulation S-X. Locating the Proposed disclosures in regulation S-K and regulation S-X are consistent with our recommendation in our letter in response to Acting Chair Allison Lee's Public Statement, *Public Input Welcomed on Climate Change Disclosures* and referenced in footnote 66 of the Proposal.¹⁵

2. If adopted, how will investors utilize the disclosures contemplated in this release to assess climate-related risks? How will investors use the information to assess the physical effects and related financial impacts from climate-related events? How will investors use the information to assess risks associated with a transition to a lower carbon economy?

We support the recommended climate disclosure rules and the incorporation of the TCFD framework in developing these rules. The benefits, as the Proposed Rules state, include widespread adoption of the framework across financial markets, usefulness for investors, and consistency and comparability of disclosures globally. Currently, companies report in line with a number of private frameworks, including TCFD, GRI, CDP and SASB/VRF. On top of that there are numerous rating agencies, including ISS, Sustainalytics, Bloomberg, and MSCI. Each of these has different templates and requirements, thereby placing additional burdens on both companies to produce information and on investors to review and process the information. Getting the Proposed Rules in place will streamline the processes even more than what some of the recent mergers and agreements among the frameworks and ratings agencies could provide. The Proposed Rules will provide relevant information in known locations which has great value.

Assessing the climate-related risks of our portfolio companies includes an assessment of both physical risks and transition risks. The utilization of the proposed disclosures would largely be consistent across varying public market strategies, but certain aspects may be more pronounced in specific strategies. Types of strategies would include but are not limited to active, passive, fundamental, quantitative, and factor-based strategies. Within each of these strategies is consideration of climate risk at the individual security level and the aggregated portfolio level.

As a large, globally diversified institutional investor, we utilize passive strategies and have exposure to approximately 5,000 public companies. Our passive exposure does not prevent us from being active owners. Staff, across asset classes and functional program areas, regularly

¹⁵ <https://www.calpers.ca.gov/docs/legislative-regulatory-letters/comment-sec-countryman-jun-12-2021.pdf>

review company filings and review annual, TCFD, climate, and sustainability-related company reports. This information is used to influence which companies we choose to engage and how we vote our proxies.

For our engagements on climate-related risks, our focus includes: A company's net zero targets (long, medium and short-term); Decarbonization strategy; Capital alignment (CAPEX); Climate policy engagement; Climate governance; Just transition; and TCFD disclosure. These focus areas are also shared by the more than 700 other investors representing \$68 trillion in assets in the Climate Action 100+ initiative. [Climate Action 100+](#) is an investor-led initiative to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change.

Some of our internally managed strategies as well as many of our external investment managers utilize a bottom-up fundamental approach. This approach incorporates the risks and opportunities that individual companies face, including physical and transition climate risk. Having the necessary climate disclosures and consistent information across companies are vital to properly assessing how these risks affect companies' financial drivers and ways in which they could impair companies' valuations. Information that comes out of the requirement from the final climate disclosure rule will be used during due diligence and security selection as it will help ensure our ability to compare one company's climate-risk to its peers.

For quantitative and factor-based strategies, the Proposal addresses data disclosure and data integrity issues. The adoption of the Proposal could help strengthen the methodology of such strategies. Some of these strategies use methodologies that are dependent upon assessing the emissions of companies, the transition pathway of companies, or the climate-related value at risk of companies. We need better information to make more informed decisions. The Proposal moves us in the right direction.

3. Should we model the Commission's climate-related disclosure framework in part on the framework recommended by the TCFD, as proposed? Would alignment with the TCFD help elicit climate-related disclosures that are consistent, comparable, and reliable for investors? Would alignment with the TCFD framework help mitigate the reporting burden for issuers and facilitate understanding of climate-related information by investors because the framework is widely used by companies in the United States and around the world? Are there aspects of the TCFD framework that we should not adopt? Should we instead adopt rules that are based on a different third-party framework? If so, which framework? Should we base the rules on something other than an existing third-party framework?

We support using TCFD and including the most recently updated TCFD guidance available.¹⁶ Using TCFD aligns well globally as a foundational framework. It is used almost universally having withstood scrutiny over time. Given its global use, it leads directly to more consistent, comparable and reliable information. Given that the TCFD changes over time, and that there is a need for the Commission to provide more stable regulations that would not be adjusted by outside organizations, the Commission should adopt the most recent TCFD guidance in this rulemaking.

¹⁶ Task Force on Climate-related Financial Disclosures: Guidance on Metrics, Targets, and Transition Plans, https://assets.bbhub.io/company/sites/60/2021/07/2021-Metrics_Targets_Guidance-1.pdf.

CalPERS is required to provide a report to the California legislature every three years. When producing our report, we use the TCFD framework. In a letter provided by George S. Georgiev,¹⁷ he provides an article that he wrote, titled, “The SEC’s Climate Disclosure Proposal: Critiquing the Critics.” As noted by Georgiev, the TCFD is made up of mainstream investors, banks, insurance companies, giant industrial firms, rating agencies, accounting firms, and others. Mary Schapiro, former Chair of the SEC and of the CFTC and former CEO of FINRA heads its secretariat. No environmental NGOs or stakeholder organizations are represented. All of that is said to highlight that TCFD clearly focuses on financial disclosures. There is an issue regarding which draft forms the baseline; we recommend that the Commission use the most recent TCFD guidance.

4. Do our current reporting requirements yield adequate and sufficient information regarding climate-related risks to allow investors to make informed decisions? In lieu of, or in addition to the proposed amendments, should we provide updated guidance on how our existing rules may elicit better disclosure about climate-related risks?

The current reporting requirements are not adequate to meet our needs. As mentioned in the first paragraph of this letter, we noted the need for mandatory reporting to enhance the voluntary reports in the CalPERS’ Investment Strategy on Climate Change published in June 2020.¹⁸ In 2010, the SEC provided Commission Guidance Regarding Disclosure Related to Climate Change. Such guidance has thus far been broadly ignored. As such, it is not reasonable to assume that companies will act with additional guidance. Mandatory rules are necessary to enhance disclosures.

B. Disclosure of Climate-Related Risks; 2. Proposed Time Horizons and the Materiality Determination

8. Should we require a registrant to disclose any climate-related risks that are reasonably likely to have a material impact on the registrant, including on its business or consolidated financial statements, which may manifest over the short, medium, and long term, as proposed? If so, should we specify a particular time period, or minimum or maximum range of years, for “short,” “medium,” and “long term?” For example, should we define short term as 1 year, 1-3 years, or 1-5 years? Should we define medium term as 5-10 years, 5-15 years, or 5-20 years? Should we define long-term as 10-20 years, 20-30 years, or 30-50 years? Are there other possible years or ranges of years that we should consider as the definitions of short, medium, and long term? What, if any, are the benefits to leaving those terms undefined? What, if any, are the concerns to leaving those terms undefined? Would the proposed provision requiring a registrant to specify what it means by the short, medium, and long term mitigate any such concerns?

Yes. It is important that when referencing identifiable risks, that such disclosures apply to all aspects of the business, which may include cost of capital or enterprise value as well as financial impacts. There would be greater comfort in relying on the financials with more granular disclosure of climate information in the financial results. This is a technical issue but should be covered so companies do not adopt the position that nothing needs to be reported because no climate reporting requirement exists. Granted, the new Regulation S-X disclosure requirement is significant, but it too could be dependent on other requirements that do not yet exist.

¹⁷ https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4068539.

¹⁸ CalPERS Investment Strategy on Climate Change at 35.

It is necessary and significant that the view extends to the short, medium and long term in analyzing such risks. The language as proposed works because the time periods may be different in different industries.

10. We define transition risks to include legal liability, litigation, or reputational risks. Should we provide more examples about these types of risks? Should we require more specific disclosures about how a registrant assesses and manages material legal liability, litigation, or reputational risks that may arise from a registrant's business operations, climate mitigation efforts, or transition activities?

GHG Protocol provides a more expansive list of risks that could be included as transition risks.¹⁹ In addition to legal liability, litigation and reputational risks, there are regulatory, supply chain costs and reliability, product risks and technology risks. There should be a more inclusive list of potential transition risks to guide issuers to provide more productive disclosures.

13. If a registrant determines that the flooding of its buildings, plants, or properties is a material risk, should we require it to disclose the percentage of those assets that are in flood hazard areas in addition to their location, as proposed? Would such disclosure help investors evaluate the registrant's exposure to physical risks related to floods? Should we require this disclosure from all registrants, including those that do not currently consider exposure to flooding to be a material physical risk? Should we require this disclosure from all registrants operating in certain industrial sectors and, if so, which sectors? Should we define "flood hazard area" or provide examples of such areas? If we should define the term, should we define it similar to a related definition by the Federal Emergency Management Agency ("FEMA") as an area having flood, mudflow or flood-related erosion hazards, as depicted on a flood hazard boundary map or a flood insurance rate map? Should we require a registrant to disclose how it has defined "flood hazard area" or whether it has used particular maps or software tools when determining whether its buildings, plants, or properties are located in flood hazard areas? Should we recommend that certain maps be used to promote comparability? Should we require disclosure of whether a registrant's assets are located in zones that are subject to other physical risks, such as in locations subject to wildfire risk?

In cases where a registrant determines that the flooding of its buildings, plants or properties is a material risk, it would be beneficial for investors to know the percentage of those assets that are in flood hazard areas. It would also be beneficial to know the locations of its buildings, plants or properties that have extreme risk of flooding.

One difficulty of mapping and assessing flood risk is the need to have granular data. Zip code-based mapping for flood risk would largely not prove to be useful. As [Rhodium Group](#) states, "FEMA classifies 8.7 million properties as having substantial risk, or within Special Flood Hazard Areas (SFHAs), the [First Street Foundation Flood Model](#) identifies nearly 70% more, or 14.6 million properties with the same level of risk."^{20 21} The First Street Foundation Flood Model was developed by the Rhodium Group and the [Climate Impact Lab](#) with contributions by First Street Foundation; Columbia University; Fathom; George Mason University; Massachusetts Institute of Technology; Rutgers University; The University of California, Berkeley; and

¹⁹ <https://ghgprotocol.org/standards/scope-3-standard>.

²⁰ Rhodium Group. <https://rhg.com/news/new-data-discloses-flood-risk-of-every-home-in-the-contiguous-us/>.

²¹ First Street Foundation Flood Model. <https://floodfactor.com/methodology>.

University of Bristol.²² The model builds upon their decades of peer reviewed research and model outputs, as well as data from FEMA, the USGS, NOAA, and other government agencies. This model provides complete coverage across the United States at 3-meter resolution whereas existing flood models are built for individual municipalities and can rely on widely varying assumptions. Companies could utilize technologies such as First Street Foundation Flood Model when assessing their flood risk as it provides resolution and granular data that exceeds the capabilities of other individual flood maps.

Similar to floods, the Commission should also require information on areas subject to droughts, heatwaves, and wildfires.

C. Disclosure Regarding Climate-Related Impacts on Strategy, Business Model, and Outlook; 4. Disclosure of Scenario Analysis, if Used

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?

Yes, CalPERS agrees that the registrant should be required to disclose the role that offsets and RECs play in strategy. We know that not all offsets or RECs are equal. For example, the use of unbundled renewable energy certificates (also known as renewable energy credits or RECs) may be the most material mischaracterization of a company's Scope 2 emissions. The purchases of RECs are largely not additive to the transition toward a low-carbon economy, do not lower real economy emissions, and do little to increase the number of renewable generating assets. The SEC's final ruling should ensure that unbundled RECs not be allowed to reduce a company's Scope 2 emissions.

I. Just how large of a problem are RECs

[S&P Global](#) highlights that though there are a number of companies that own generating renewable assets or buy a large amount of their renewable electricity through power purchase agreements, there are many companies that prefer to meet their goals through the less effective route of buying unbundled RECs.²³ S&P continues, acknowledging that when a company buys an unbundled REC — one that is acquired without also acquiring its underlying energy — it creates little or no additionality. With no additionality, it means that unbundled RECs are not contributing to the development of new renewable energy assets or the decarbonization of the electricity grid.

According to [Lazard Asset Management](#), the reason many companies pursue the use of unbundled RECs is because of how inexpensive they are.²⁴ Some of these unbundled RECs can add as little as a 2% premium to the underlying non-renewable electricity cost.

²² Climate Impact Lab. <https://impactlab.org/>

²³ S&P Global. <https://www.spglobal.com/esg/insights/problematic-corporate-purchases-of-clean-energy-credits-threaten-net-zero-goals>

²⁴ Lazard Asset Management. <https://www.lazardassetmanagement.com/references/fundamental-focus/renewable-energy-credits-carbon-secret>

CalPERS recognizes the goals and accomplishments of [RE100](#), which is the global corporate renewable energy initiative bringing together hundreds of large and ambitious businesses committed to 100% renewable electricity.²⁵ RE100 has more than 350 members across 175 markets and their members drive more than 330 TWh/yr of renewable electricity demand, which is enough to power a medium sized country. The [RE100 annual report](#) shows the sourcing method of renewable energy for its members.²⁶ In 2020, unbundled Energy Attribute Certificates (EACs which are available as RECs in North America) represented a staggering 40% of renewable electricity sourced.



As shown in the RE100 annual report figure above, only about 55% of renewable electricity sourced by RE100 members comes from Power Purchase Agreements (PPAs), green tariffs (a utility offering for renewable energy sourcing), or self-generation.

II. Obfuscation triumphing transparency

The scale of the use of RECs is alarming and presents a significant material risk to investors that rely on GHG emissions reporting as part of their engagement, proxy voting, security selection, and portfolio and index construction that may be dependent on the accuracy of the emissions disclosure. It is most appropriate to address the issues of unbundled RECs by preventing their use in lowering a company's emissions at the onset of the final climate risk disclosure ruling rather than face the potential of policy or regulation changes on the use of these types of RECs that overnight, through policy or regulation changes, could materially increase Scope 2 emissions for a significant number of companies.

David Roberts with [Volts](#) points out that a buyer of a REC “knows how much renewable energy was generated (a megawatt-hour), but not when it was generated.”²⁷ But it turns out that, when it comes to energy sources that come and go with the weather like wind and solar, the timing of generation matters quite a bit.” Roberts continues, “Think of a monthly REC as an extremely low-resolution image of renewable energy production. In temporal terms, it’s one giant month-sized pixel. C&I buyers purchase these low-resolution images, overlay them on their consumption, and hope for the best. But when you look at a higher resolution image of renewable energy production, one with hour-sized pixels, you see that it does not overlap perfectly with consumption. Not even close.” Roberts brings attention to the allowed mismatch of when the renewable energy was generated and when the non-renewable or dirty energy by a company was used and brings to light a glaring problem with RECs that should be addressed.

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

²⁵ RE100. <https://www.there100.org/>.

²⁶ RE100 annual report. <https://www.there100.org/stepping-re100-gathers-speed-challenging-markets>.

²⁷ Volts. <https://www.volts.wtf/p/an-introduction-to-energys-hottest?s=r>.

identified climate-related risks have had a material impact on reported operations, as proposed? Should the discussion include a tabular representation of such metrics?

The Commission should require registrants to provide a narrative of whether and how climate has affected or will reasonably affect consolidated financial statements. The discussion should include the proposed financial statement metrics.

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?

From our view, the PLSRA safe harbor appears to be adequate, but the Commission should be prepared to address issuer concern to make certain that disclosures are protected in a way that promotes transparency.

D. Governance Disclosure; 2. Management Oversight

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?

CalPERS supports requiring registrants to describe the board's oversight of climate risks as proposed. The board, an individual board committee, or specific board members should ultimately own the responsibility of a company appropriately assessing climate risk, including both physical and transition risks. We regularly assess companies' climate risk and engage companies on climate risk. We will continue to work constructively with companies, their management teams, and board members to ensure that they incorporate climate change risks and opportunities into their strategy and capital allocation decisions. As long-term investors, we want our portfolio companies to execute sustainable business models with a credible pathway to successfully transition to, and thrive in, a low-carbon economy.

A company's successful transition to a low-carbon economy starts at the board level and therefore, we support of the Proposed Rules requiring disclosure of a board's oversight of climate related risks. The board members or board committee that provides direct oversight of climate-related risks should be identified and the relevant expertise, skills or experience should be disclosed. If investors do not know which members are responsible for the oversight of climate-related risks, it makes it more difficult to effectively engage the company and use our proxy votes to hold the appropriate board members accountable.

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)?

Our CalPERS Governance and Sustainability Principles²⁸ state that, “Compensation plan structures, including the quantitative and qualitative components, should be thoroughly disclosed in the compensation programs for shareowners to evaluate the compensation practices.” In this regard, if compensation is awarded for achieving climate targets or goals, then such awards should be disclosed. This would aid our efforts in determining the role that managing climate plays in executive pay.

E. Risk Management Disclosure; 2. Transition Plan Disclosure

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?*
- *How it prioritizes climate-related risks?*
- *How it determines to mitigate a high priority risk?*

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?

Registrant disclosure on its rationale to pursue capital expenditure for managing climate-related risk would be beneficial for investors to better assess the company’s capital allocation. Information that would prove useful would include disclosure on the marginal abatement cost of climate-related initiatives that are pursued. This would provide investors with an understanding of the cost of the incremental reduction of emissions and whether companies are pursuing the most cost-effective technology.

There are cases to be made by companies not always pursuing or using the technology with the lowest cost. The multi-decade transition to a low-carbon economy will require trillions of dollars of investments to proven and unproven technologies. The investment of capital in such technologies can help create new proven technologies and will help lower the cost curve that other registrants can benefit from. Investors with diversified portfolios can more clearly see the indirect benefit from such investments.

Stripe, Alphabet, Meta, Shopify and McKinsey launch of [Frontier](#), which plans to purchase \$925 million worth of permanent carbon removal from companies that are developing the technology through 2030 is one example which will stimulate technological innovation, mitigate climate risk, and provide a direct and indirect benefit to other companies.²⁹

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?

²⁸ <https://www.calpers.ca.gov/docs/forms-publications/governance-and-sustainability-principles.pdf>.

²⁹ Frontier. <https://frontierclimate.com/>.

There should be a requirement for registrants to describe their transition plans and include relevant metrics and targets used to identify and manage physical and transition risks. Without this disclosure, it would be difficult to assess the scope of the transition plan and the progress that a company is making. Transition plan disclosure is used by investors in company engagement, proxy voting, security selection, and investment product/strategy selection. Many transition plans are dependent upon technological advancements, a meaningful price on carbon, or other significant policy adoptions. The exact date of these advancements and policy adoptions being realized are not known or guaranteed. This means that variations in a plan's execution should be expected. Such expected variation itself should mitigate concerns of registrants being locked into a prescriptive multi-decade plan.

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 disclosures in Sections II.F.2 and II. F.3. Would providing additional examples or guidance assist registrants in preparing this disclosure?

CalPERS supports the Proposed Rule's requirement that a registrant 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.

F. Financial Statement Metrics; 2. 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?

Yes, the financial impact metrics should be disclosed as proposed. The information becomes more valuable and useful given the location of the disclosure. Disclosure location makes a difference and having key information in the financials elevates the importance of the data. It is subject to review by key executives and the Board and will be audited. Investors will instantly get better information that will be used in determining whether the company is being managed well and in making allocation decisions. Including the impact of extreme temperatures, flooding, drought, wildfires and other climate related activity is important. It is also necessary to properly identify and document the various transition and adaptation activities, as well. The Commission should make use of the updated TCFD guidance in the final rule.³⁰ CalPERS supports requiring registrants to disclose how material climate factors have been incorporated into the audited financial statements in the Notes to those financial statements. Failing to include material climate risks increases the likelihood of capital misallocation and over time raises the risks of market wide disruption.

³⁰ Task Force on Climate-related Financial Disclosures: Guidance on Metrics, Targets, and Transition Plans, https://assets.bbhub.io/company/sites/60/2021/07/2021-Metrics_Targets_Guidance-1.pdf.

60. *Would the impact from climate-related events and transition activities yield decision- useful information for investors?*

If provided, the information will be used in voting, engaging, buying and selling decisions. The information would be used to help determine whether the company is properly oriented to manage for the long-term.

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?*

Some thought could be given to how the information needs to be disclosed or whether it would match with a particular line item. As Shivaram Rajgopal states, “The modern income statement, by and large, reports six lines of information (revenue, cost of goods sold, selling, general and administrative expenses, interest expense, income taxes and net income).”³¹ The reference to line items in the consolidated financial statements does not include enough precision to provide guidance.

66. *The proposed financial impact metrics would not require disclosure if the absolute value of the total impact is less than 1% of the total line item for the relevant fiscal year. Is the proposed threshold appropriate? Should we use a different percentage threshold (e.g., 3%, 5%) 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?*

If the line items are those listed in a normal income statement (e.g., revenue, cost of goods sold, or general and administrative expenses), it is clear that 1% is the proper number to determine materiality given the magnitude of the denominator. If the line item refers to a different number, then there could possibly be an adjustment to higher percentage. In any event, investors would expect companies to do the work to determine whether or not it meets the chosen threshold. If the work is completed, the company might as well report the number given the work has been done. If the number is not reported, investors may be left to wonder whether the company took the requirement seriously and did the work. Similarly, setting the threshold too high would lead companies to just avoid doing the work because the company could comfortably determine there is no way a 5% threshold, for example, would be hit.

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 registrants consolidated financial statements? Alternatively, should we just use a materiality standard?*

The 1% threshold reduces the risk of underreporting. Shivaram Rajgopal states, “The modern income statement, by and large, reports six lines of information (revenue, cost of goods sold,

³¹ Shivaram Rajgopal. “The SEC’s Attempt to Write Generally Accepted Climate Principles- Part II”. April 2022. <https://www.forbes.com/sites/shivaramrajgopal/2022/04/01/the-secs-attempt-to-write-generally-accepted-climate-principlespart-ii/>.

selling, general and administrative expenses, interest expense, income taxes and net income).”³² The line items that would fit include revenue, cost of goods sold or general and administrative expenses. Each of these line items are very large, so 1% may be the right threshold. We know too well that moving to a materiality standard will result in underreporting. In fact, it may lead to not even calculating the numbers and just reporting that it was not material. On balance, given historical experiences, investors are better off with overreporting rather than underreporting. The Commission should clarify the specific denominator prior to determine the threshold percentage, but if it is based on revenue, for example, 1% would be the correct threshold.

F. Financial Statement Metrics; 3. 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?

Yes. The Commission should require registrants to disclose expenditure metrics, as proposed. This would provide useful information to investors regarding amounts spent on climate change and would allow investors to gauge whether the qualitative discussions on climate matches the substance.

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?

Including this information would help investors assess strategy in dealing with climate change. The information would allow investors to determine how much effort is being put forth to achieve the targets and goals that have been set.

F. Financial Statement Metrics; 4. 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. CalPERS, along with others, have asked for this information.³³ We frequently get results that do not appear to be aligned with reality, or we are told that a particular item is not material. This happens when it appears reasonably obvious that climate would have an impact on certain contracts or reserves. First, having to disclose the estimates and assumptions would instantly lead to better disclosures when the registrants know that particular estimates or assumptions could be challenged with scientific data. So, investors would be more likely to get the information and use it in making allocation, engagement and voting decisions.

³² Shivaram Rajgopal. “The SEC’s Attempt to Write Generally Accepted Climate Principles- Part II”. April 2022. <https://www.forbes.com/sites/shivaramrajgopal/2022/04/01/the-secs-attempt-to-write-generally-accepted-climate-principlespart-ii/>.

³³ <https://www.calpers.ca.gov/docs/legislative-regulatory-letters/comment-sec-countryman-jun-12-2021.pdf> (Page 7 stating, “Show all material assumptions they have made which are germane to climate issues”).

F. Financial Statement Metrics; 5. 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?

Yes. The Commission should require financial statement reporting, and it is appropriate that the Commission move forward with having registrants present such information in a note and have that information audited. We expect that the regular auditor will do the audit. This will yield the best result for investors. The Commission has the authority to require the disclosure. The Regulation S-X requirement is the most significant in the Proposal.

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?

The PCAOB was established in 2002 and was set up to operate with “interim standards.” Curiously, half of the standards continue to be interim standards. The PCAOB has much updating to do in numerous contexts. The Commission would have to instruct the PCAOB to prioritize the development and adoption of standards for auditing such metrics.

G. GHG Emissions Metrics Disclosure; 1. GHG Emissions Disclosure Requirement

93. How would investors use GHG 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?

Many investors, including CalPERS, have set net zero or related climate goals to decarbonize our portfolio and decarbonize the real economy. GHG emissions disclosure is needed on each individual security within our portfolio to assess our comprehensive portfolio's GHG emissions. GHG emissions disclosure is a key component to assessing the actions that a company is taking to mitigate climate risks and transition to operate in a low-carbon economy. This information

helps investors assess the climate-related capital allocation of a company and determine if the CAPEX is adequately driving a reduction in climate risk.

Having the necessary climate disclosure, including GHG emissions, and consistent information across companies is vital to assess how these risks affect companies' financial drivers and how they could impair companies' valuations. GHG emissions would be used during due diligence and security selection as it will help ensure our ability to compare one company's climate-risk to its peers.

94. Should we require a registrant to disclose its GHG 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?

Methane is a particular greenhouse gas that has garnered significant attention in recent years, due largely to its consequential global warming potential (GWP). The United States [Environmental Protection Agency \(EPA\)](#) has stated methane is estimated to have a GWP of 27-30 over 100 years.³⁴ The EPA defines the GWP as a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide (CO₂). The larger the GWP, the more that a given gas warms Earth compared to CO₂ over that time period.

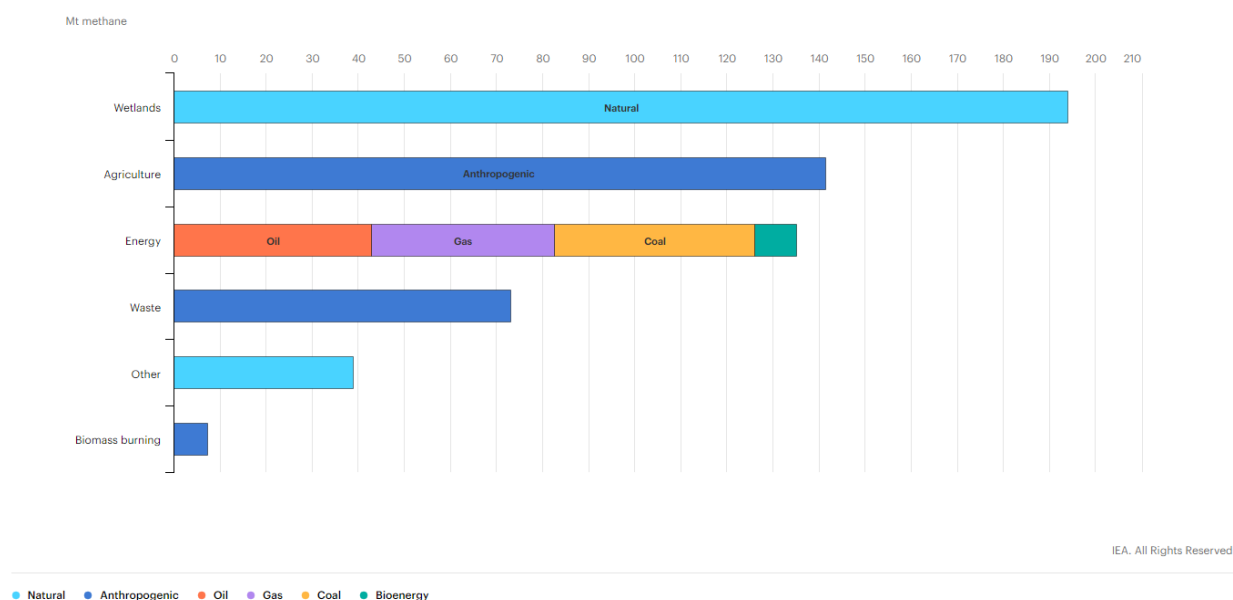
To combat the consequences of methane emissions, in November 2021, the Global Methane Pledge was launched by more 100 countries and led by the European Union and the United States. Participants agreed to reduce methane emissions from human activities – including agriculture, the energy sector, and other sources – by 30% by 2030. This comes after a group of 147 global investors, including CalPERS, representing more than \$5 trillion in assets under management/advisement released a [statement](#) in May 2021 calling for stronger methane regulations and enforcement.³⁵

According to the [IEA's Global Methane Tracker](#), and shown in the graphic below, the energy sector accounts for around 40% of methane emissions from human activity.³⁶ The IEA continues by stating that global methane emissions from the energy sector are about 70% greater than the amount national governments have officially reported.

³⁴ EPA. <https://www.epa.gov/ghgemissions/understanding-global-warming-potentials>

³⁵ Investor methane statement. https://www.iccr.org/sites/default/files/page_attachments/call_for_ambitious_methane_regulation_for_the_oil_and_gas_industry.pdf.

³⁶ IEA's Global Methane Tracker. <https://www.iea.org/reports/global-methane-tracker-2022>.



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Based on the EPA and IEA information combined with the significant call for action by investors, it would be beneficial to have methane emissions included in the aggregate GHG emissions and also separated out for sectors, such as the Energy sector, that significantly contribute to the total methane emission from human activities.

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 be required to disclose Scope 1 and Scope 2 emissions separately as these are two distinct emissions types and come from very different sources. Investors need to have this information and emissions sources separated in order to most effectively use this in their investment management process and decision making.

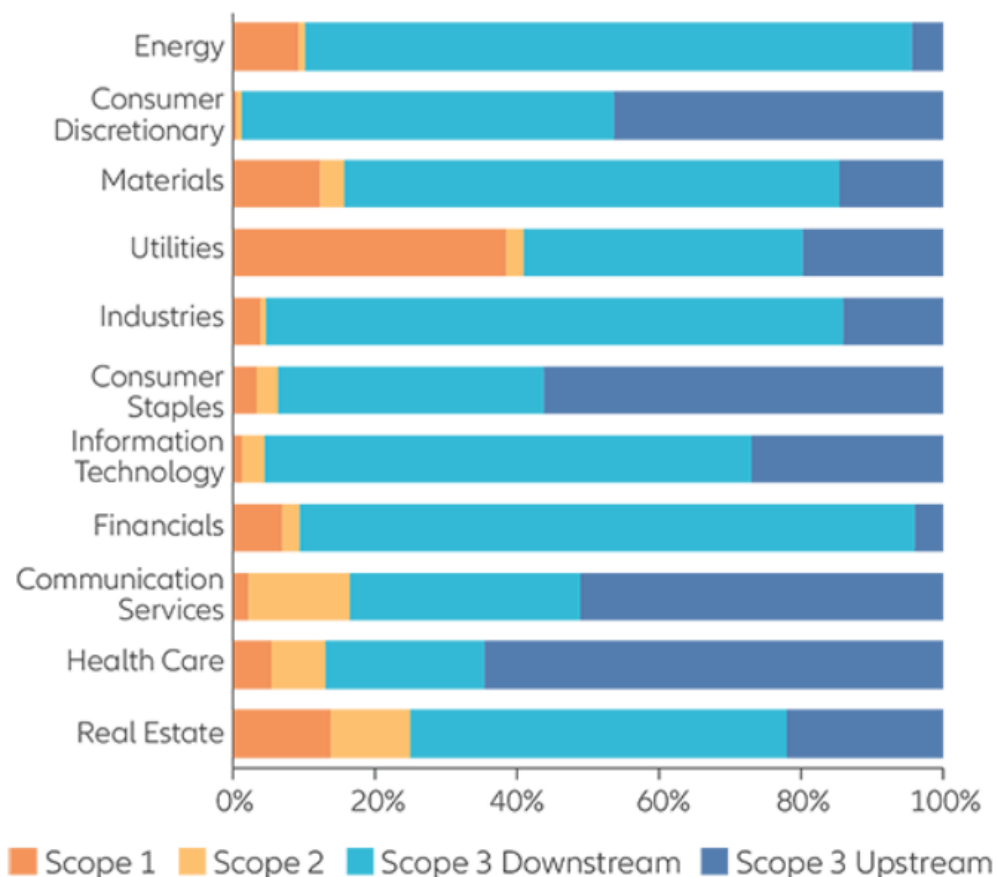
The image below, from [Allianz Global Investors](https://www.allianzgi.com/en/insights/outlook-and-commentary/net-zero), demonstrates the variation of Scope 1 verse Scope 2 emissions based on each sector.³⁸ Having Scope 1 and Scope 2 emissions only reported in an aggregated basis would not provide the detailed level of information that investors need.

³⁷ IEA Sources of methane emissions. <https://www.iea.org/reports/global-methane-tracker-2022/methane-and-climate-change#abstract>.

³⁸ Allianz Global Investors. <https://www.allianzgi.com/en/insights/outlook-and-commentary/net-zero>.

Greenhouse gas (GHG) emissions by sector

Exhibit 1: Share of scope 1,2,3, by sector



Source:

Exhibit 1: GICS sector (based on MSCI World – MSCI 08/06/2021)

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?

All registrants should be required to disclose their Scope 3 emissions because it is material in all companies. Scope 3 emissions represent the largest share of GHG emissions and the majority of emissions for most sectors as shown by [S&P Global](https://www.spglobal.com/esg/insights/it-s-all-within-scope-with-sp-global-scope-3-data).³⁹ Omitting Scope 3 emissions from any sector or individual company would be omitting a significant portion of emissions and would not allow an investor to assess the total emissions profile of such company, or a portfolio or index that the company is included in.

99. Should we require a registrant that has made a GHG 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 GHG emissions reduction commitments, even if those commitments do not extend to Scope 3, to disclose their Scope 3 emissions? Should we only

³⁹ S&P Global Sector Breakdown of Emissions. <https://www.spglobal.com/esg/insights/it-s-all-within-scope-with-sp-global-scope-3-data>.

require Scope 3 emissions disclosure if a registrant has made a GHG emissions reduction commitment that includes Scope 3 emissions?

As documented in our answer to questions 97 and 98, all registrants should be required to disclose their Scope 1, Scope 2, and Scope 3 emissions. Understanding each type of emissions disclosed separately is useful for investors and Scope 3 emissions is material in all companies.

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?

We believe that the use of offsets will increase over time and that proven and permanent offsets will be needed to counter residual emissions by many sectors. We expect the increased use of offsets will also bring more scrutiny to offset markets and the validation methodologies of offsets, especially for avoidance-based and non-permanent offsets. We expect that policy will be developed to address certain issues in offsets and will materially affect certain companies' use of offsets. Because we view this policy development or regulation as inevitable, we believe that registrants who purchased or generated offsets to decrease their Scope 1, 2, or 3 emissions should disclose both a total amount with, and a total amount without, the use of offsets for each scope of emissions.

Additionally, we do not believe unbundled RECs should be allowed to be counted, but if the final ruling allows for unbundled RECs to be counted, then we would expect a registrant to disclose both a total amount with, and a total amount without, the use of unbundled RECs for each scope of emissions. Please see our response to question #24 for our views on the use of unbundled RECs.

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?

We have entered a number of discussions on this point. We do not want a disagreement regarding timing to become a reason to not move forward. Currently, climate information is reported months after financials have been reported, but there is no reason that the timing cannot come in line to integrate the reports. CalPERS advocates for integrated reporting. A significant part of getting integrated reports is to get the reporting times to match. We understand that there would be a need to estimate and apply judgments, but the same is done with financials.

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?

It would be valuable for investors and other companies to know the data sources, or at the very least, external vendors that are used to assist in the calculation of a registrant's Scope 3 emissions. There have been a number of companies that have been created in recent years with the objective of calculating GHG emissions, including Scope 3 emissions.⁴⁰ We expect to continue to see additional new startups and established technological and advisory service companies enter this market. Transparency by registrants on the use of these companies will help provide insight to investors and allow for additional use or scrutiny of registrants and external vendor methodologies. Over time, such transparency will help develop market best practices that others can identify and utilize.

G. GHG Emissions Metrics Disclosure; 1. GHG Emissions Disclosure Requirement - GHG Intensity

109. Should we require a registrant to disclose the intensity of its GHG 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 GHG intensity, as proposed? Is there a different definition we should use for this purpose?

In order to ensure comparability across companies and within a given sector, a registrant should be required to disclose the intensity of its GHG emissions as proposed. This would require a registrant to disclose the sum of its Scopes 1 and 2 emissions in terms of GHG intensity. And if required to disclose Scope 3 emissions, a registrant would also be required to separately disclose its Scope 3 emissions in terms of GHG intensity. We agree with the proposed definition of GHG intensity. When we evaluate GHG intensity we typically use emissions per unit of revenues or per unit of production, with production metric being specific to the sector. The Proposed Rules provide adequate flexibility for registrants depending on the nature of the registrant's business. An example of this would be real estate that would not provide an intensity measure based on production but instead would most likely produce an GHG intensity measurement based on the area (square feet) of coverage. This intensity practice for real estate has been seen through the [Carbon Risk Real Estate Monitor \(CRREM\)](#) project and [GRESB](#).^{41,42}

112. Should we require a registrant with no revenue or unit of production for a fiscal year to disclose its GHG 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?

Investors should be looking at both absolute and relative GHG emissions. Relative GHG emissions would be relevant intensity metrics. It is understandable that some companies will have low revenue or low units of production, which may make their GHG intensities outliers compared to established peers. This information would not be confusing to investors that look at

⁴⁰ <https://corpgov.law.harvard.edu/2021/07/28/managing-esg-data-and-rating-risk/>.

⁴¹ CRREM. <https://www.crrem.org/>.

⁴² GRESB. <https://gresb.com/nl-en/>.

both absolute and relative GHG emissions as it will provide a more comprehensive assessment of a registrant's GHG emissions.

114. Should we require GHG 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 GHG emissions data is reasonably available, as proposed? Should we instead only require GHG emissions metrics for the most recently completed fiscal year presented in the relevant filing? Would requiring historical GHG emissions metrics provide important or material information to investors, such as information allowing them to analyze trends?

CalPERS would be satisfied if GHG emissions begin to be reported for the most recent year and then on an historical basis as the additional years match the financials. In other words, there would not be a need to report historical GHG data that has not been initially reported.

G. GHG Emissions Metrics Disclosure; 2. GHG Emissions Methodology and Related Instructions

115. Should we require a registrant to disclose the methodology, significant inputs, and significant assumptions used to calculate its GHG emissions metrics, as proposed? Should we require a registrant to use a particular methodology for determining its GHG emission metrics?

Yes, CalPERS believes that registrants should disclose the methodology, inputs and assumptions used to calculate its GHG emissions metrics, as proposed. This would help place the data in context and facilitate verification. No particular methodology should be required, but the Commission could provide information on methodologies that it would approve, such as GHG Protocol. Each issuer should be able to leverage the frameworks most appropriate for its industry.

129. When determining the materiality of its Scope 3 emissions, or when disclosing those emissions, should a registrant be required to include GHG emissions from outsourced activities that it previously conducted as part of its own operations, as reflected in the financial statements for the periods covered in the filing, 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?

Yes. A registrant should be required to include GHG emissions from outsourced activities, especially if the activity was previously conducted by the registrant and a contractual relationship continues with the registrant.

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 GHG 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. If available, it would be a good outcome if registrants in an industry adopted industry standards and registrants disclose accordingly.

G. GHG Emissions Metrics Disclosure; 3. The Scope 3 Emissions Disclosure Safe Harbor and Other Accommodations

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 GHG Protocol Scope 3 Accounting and Reporting Standard for other types of registrants?

We support providing a safe harbor for Scope 3 emissions disclosures for a period of time. Currently, there is uncertainty in determining Scope 3 emissions.⁴³ With regulatory reporting, we expect the market for determining Scope 3 emissions to mature and become substantially less uncertain.

H. Attestation of Scope 1 and Scope 2 Emissions Disclosure

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 GHG 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?

We support requiring accelerated filers and large accelerated filers to obtain attestation reports covering their Scope 1 and Scope 2 emissions disclosures. Many issuers already obtain assurance for such information when the disclosure appears in non-regulatory reports. It is appropriate to maintain verification of the data when such disclosures move to regulatory reports. Attestation will produce more reliable data. We also approve the move from limited to reasonable assurance after a time to get the process in place.

⁴³ https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporting-Standard_041613_2.pdf (Appendix B. Uncertainty in Scope 3 Emissions p. 126).

H. Attestation of Scope 1 and Scope 2 Emissions Disclosure; 2. GHG Emissions Attestation Provider Requirements

144. Should we require a registrant to obtain a GHG emissions attestation report that is provided by a GHG emissions attestation provider that meets specified requirements, as proposed?

Yes. The attestation report provider should meet the requirements, as proposed. There is a need to make certain the provider is independent and is an expert in the space.

146. Should we require the GHG 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?

We support requiring the attestation provider to meet certain requirements. This includes making certain that the provider has an appropriate level of expertise and independence.

H. Attestation of Scope 1 and Scope 2 Emissions Disclosure; 3. GHG Emissions Attestation Engagement and Report Requirements

154. Should we require the attestation engagement and related attestation report to be provided pursuant to standards that are publicly available at no cost and are established by a body or group that has followed due process procedures, including the broad distribution of the framework for public comment, as proposed? Is the requirement of “due process procedures, including the broad distribution of the framework for public comment” sufficiently clear? Would the attestation standards of the PCAOB, AICPA, and IAASB meet this due process requirement?

It is not clear why there is a focus on providing the information at no cost. Like in other areas, chances are that a free public option would be made available and then a useable version would be made available at higher cost. Please compare to access to U.S. GAAP. It is not clear that focusing on a free version holds any value if it is not a functional version.

155. Should we require that the attestation standards used be publicly available at no cost to investors, as proposed? Should we permit the use of attestation standards, even if not publicly available at no cost, provided that registrants provide access to those standards at the request of their investors?

More information is needed with regard to the quality of the free version. A useable version may be cheaper if a deficient free version is not offered. For example, the free version should be fully searchable, printable, and contain no advertisements.

I. Targets and Goals Disclosure

168. Should we require a registrant to disclose whether it has set any targets related to the reduction of GHG emissions, as proposed? Should we also require a registrant to disclose 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?

Yes, a registrant should be required to disclose whether it has set any targets related to the reduction of GHG emissions. Many investors, portfolios, and investment products have net zero, decarbonization pathway, or other climate related goals. Investors need to know a company's GHG emissions data and whether a company has plans and/or targets to reduce its GHG emissions. Investors also rely on this information to inform their engagement and proxy voting activity. The Proposal should not discourage registrants from setting such targets or goals because investors have made it clear that they need this information and there are a number of shareholder proposals, with strong investor support, requesting this information from companies that do not currently disclose it. Additionally, there are a number of technology and policy variables that will influence the degree that targets or goals are accomplished. We expect that some of these targets and goals will change to become more or less aggressive over time based on such variables. This expectation should mitigate concern from registrants on setting targets or goals.

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 GHG 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?

Yes, a registrant should be required to discuss how it intends to meet its climate-related targets or goals. A registrant should provide its strategy that also defines progress on what variables, be it technology, costs, policy or others, upon which the company is dependent to successfully meet those targets or goals.

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?

Yes, a registrant should be required to disclose data on its progress in achieving its targets or goals and the progress that is being made. Investors will use this information in a number of ways including engagement and proxy voting as well as security selection and portfolio construction.

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?

We do not believe unbundled RECs should be allowed to be counted, but if the final ruling allows for unbundled RECs to be counted, then we would expect a registrant to disclose both a total amount with, and a total amount without, the use of unbundled RECs for each scope of emissions. Please see our response to question #24 for our views on the use of unbundled RECs. Our response to question #101 has additional views on the use of offsets.

If RECs and offsets are allowed, then the source of each, the location and underlying projects, and the registries or authentication of the offsets and REC, as well as the costs of the offsets or RECs should be disclosed. This will allow investors to better assess the use of capital, the integrity and validity of such offsets or RECs, and the degree that the registrants emissions profile and offsets or RECs could be at risk due to policy or regulation changes.

J. Registrants Subject to the Climate-Related Disclosure Rules and Affected Forms

175. Should the proposed climate-related disclosures be required in Exchange Act reports and registration statements, as proposed?

Yes. The location of the disclosures makes a difference. We support having the disclosures in Exchange Act reports and in registration statements. We understand that there is discussion that certain governance related items might more appropriately be in proxy materials. We do not believe that prevents the disclosures from appearing as proposed.

189. An International Sustainability Standards Board (ISSB) has recently been created, which is expected to issue global sustainability standards, including climate-related disclosure standards. to encompass reports made pursuant to criteria developed by a global sustainability standards body, such as the ISSB? If so, should such alternative reporting be limited to foreign private issuers, or should we extend this option to all registrants? What conditions, if any, should we place on a registrant's use of alternative reporting provisions based on the ISSB or a similar body?

The alternative reporting should be limited to private issuers. If details matter, it is not clear that ISSB reporting would match the requirements of the Proposed Rule. We do not support extending alternative reporting to all registrants.

K. Structured Data Requirement

190. Should we require registrants to tag the climate-related disclosures, including block text tagging and detail tagging of narrative and quantitative disclosures required by Subpart 1500 of Regulation S-K and Article 14 of Regulation S-X in Inline XBRL, as proposed? Should we permit custom tags for the climate-related disclosures?

CalPERS supports tagging as proposed, as tagging makes the information easier to consume.

L. Treatment for Purposes of Securities Act and Exchange Act

194. Should we treat the climate-related disclosures required by proposed subpart 1500 of Regulation S-K and proposed Article 14 of Regulation S-X as filed for purposes of potential liability under the Securities Act and Exchange Act, except for the climate disclosures on Form 6-K, as proposed? Should we instead treat the climate-related disclosures required by both

proposed subpart 1500 of Regulation S-K and proposed Article 14 of Regulation S-X as furnished? Are there reasons why the proposed climate-related disclosures should not be subject to Section 18 liability?

Yes. The disclosures should be treated as filed.