



California State Teachers'
Retirement System
Sustainable Investment & Stewardship Strategies
100 Waterfront Place, MS 4
West Sacramento, CA 95605

June 17, 2022

Vanessa A. Countryman
Secretary
Securities and Exchange Commission
100 F Street NE
Washington, DC 20549-1090

RE: File Number S7-10-22, The Enhancement and Standardization of Climate-Related Disclosures for Investors

Dear Ms. Countryman:

California State Teachers' Retirement System (CalSTRS) provides a secure retirement to more than 980,000 members and beneficiaries whose CalSTRS-covered service is not eligible for Social Security participation. Established in 1913, CalSTRS is the largest educator-only pension fund in the world with \$312.2 billion in assets as of April 30, 2022.

CalSTRS welcomes the Securities and Exchange Commission's (Commission) proposed rules for registered companies to disclose climate-related information.¹ The Commission's proposal responds directly to our requests for more reliable, consistent, and comparable information to assess the risk to our portfolio companies from climate change, so that we can act to protect plan assets for the benefit of California's teachers.² We are pleased the proposed rule builds on the Task Force on Climate-related Financial Disclosures (TCFD) guidance. The requirement for Scopes 1 and 2 greenhouse gas emissions disclosure will generate the reliable and comparable data we need to replace the expensive estimates investors have been forced to rely on. Comparable and complete information about company climate targets and plans to reduce emissions will support our work to meet the Teachers' Retirement Board's pledge to achieve a net zero portfolio by 2050 or sooner while meeting our risk-return objectives.³

Before final rulemaking, we respectfully request the Commission prioritize the following changes to make the resulting information more comprehensive, reliable, and comparable for investors like CalSTRS:

¹ <https://www.sec.gov/rules/proposed/2022/33-11042.pdf>

² <https://calstrs-pensionx-web.specialdistrict.org/files/023f94553/secletteronclimatechangedisclosure.pdf>

³ See <https://www.calstrs.com/calstrs-board-commits-to-net-zero-investment-portfolio> and <https://www.calstrs.com/files/6a7a9dcad/GreenInitiativeTaskForce2021.pdf>

1. Add Scope 3 to the greenhouse gas emissions reporting requirement for all registrants instead of only those which reference Scope 3 emissions in targets or determine Scope 3 emissions to be financially material. (Questions 98, 100, 103, 134, and 175)
2. Require attestation of greenhouse gas emissions for non-accelerated filers and smaller companies in addition to the proposed requirement for accelerated filers and large accelerated filers, including a phase-in period for assuring Scope 3 emissions. (Question 135)
3. Use the International Sustainability Standards Board's Climate Standard as the basis for the Commission's rulemaking and add jurisdictional considerations. (Question 3)

The following comments are our answers to selected questions posed by the Commission.

Question 1

CalSTRS supports the provision of climate-related information within SEC filings and under S-K and S-X regulations as the Commission proposed. Seeing climate-related information alongside financial information in regular business reporting will make it easier for our investment staff to assess a company's individual risk from climate change and evaluate the financial impacts. Climate-related information is fundamental to understanding the nature of a company's operating prospects and financial performance. We prefer the information to be included in existing reports instead of additional reports; companies already publish sustainability-related reports or webpages with climate information that is disconnected from financial data. Disclosing data in general purpose financial reports will enable comparisons through the market data research tools we already use, which primarily source from core filings (S-1, 10-K, 20-F).

Question 2, 93

If adopted, we anticipate using climate data disclosed under the proposed rule to manage our risk-adjusted returns in the course of our routine work. For example, we would use climate-related disclosures to:

- Measure emissions, as a proxy for climate risk exposure, of the public equity holdings and corporate credits in our portfolio
- Calculate more accurate industry and sub-industry averages for emissions intensity to determine inter-sector allocations when constructing credit portfolios
- Evaluate the net zero alignment of low-carbon equity indexes and funds
- Compare individual companies against industry averages to, in combination with other analysis, select credits for intra-sector reallocation to lower-emissions companies
- Allocate more capital to lower carbon companies and less capital to higher emitting companies in our risk-controlled equity portfolios
- Use financial impact analysis to identify companies with higher climate-related risk, less effective management, or poor board oversight to inform our proxy voting and engagement activities

- Analyze a company’s transition plans and progress to determine votes for shareholder proposals and management climate action plan proposals known as “say on climate”
- Monitor company, industry, and market decarbonization rates to evaluate our portfolio’s progress in meeting our goal to achieve a net zero emissions portfolio

CalSTRS deploys capital into investments that meet the risk-return goals of our total fund and accelerate the low-carbon transition. CalSTRS allocated \$4.6 billion to a low-carbon index. This low-carbon index achieves significantly lower emissions than the parent index through over- or under-weighting securities based on carbon emissions intensity, while minimizing tracking error. We also allocated \$1.1 billion to a low-carbon transition readiness strategy—a risk-controlled investment in public companies most prepared to succeed in the transition to a net zero economy. We have made these investments despite inconsistent company data through significant resources and expense for third party estimates.

CalSTRS partners with external managers where inefficient markets have made information or estimates harder to access. Asset managers charge higher fees for climate and sustainability data in part because they too must make use of third party data aggregators and estimates. If we had a complete set of publicly available climate data across our investable universe, we could more efficiently and cost-effectively allocate capital to lower climate risk assets in line with our investment objectives.

CalSTRS is a long-term, active owner and steward of capital. We engage hundreds of companies each year to promote sustainable business practices and decision-useful disclosures in support of our core mission to provide retirement security for California’s educators. When we consider how we will vote sustainability-related proxy items, we look to the company’s current disclosures. This involves hunting across the company’s investor relations, sustainability, and public affairs reports and web pages. We often must consult third party data aggregators to which companies have provided actual data, but where information is only available to subscribers. We base our vote decisions on the quality of management and board practice and the level of information companies disclose. When voting shareholder proposals calling for greenhouse gas emissions reporting or greenhouse gas emissions reduction plans, we look for corporate disclosures with Scopes 1, 2, and 3. For those proposals asking for greenhouse gas reduction plans, we also look for reports prepared using TCFD guidance and Sustainability Accounting Standards Board (SASB) standards. It is rare that we see all these elements. As a result, we vote in favor of many resolutions calling for better corporate disclosure.

When companies do not provide the information we need to make investment or voting decisions, we engage. We ask our portfolio companies to provide high quality, TCFD-aligned reports including plans to reduce greenhouse gas emissions in line with scientifically-agreed recommendations for stabilizing the climate. After years of private and constructive dialogue, we have secured significant emissions reduction commitments from some of our portfolio’s

highest emitters.⁴ Assuming the companies follow through with rigorous plans, these commitments will effectively reduce the transition risk for our holdings in a lower carbon economy. This effort has yielded promising results but has been resource intensive for our staff.

Question 3

Using the TCFD framework as the basis for guiding issuers to more comparable disclosures would help us more easily compare companies on their treatment of the framework's core parts, in a timelier fashion, through a common channel and format, and with the same degree of detail.

We suggest the SEC start with the International Financial Reporting Standards (IFRS) Climate-related Disclosures Standard, once issued by the International Sustainability Standards Board (ISSB), to build from a global baseline. This will increase the quantity of decision-useful climate information for global investors and reduce the reporting burden on companies registered for trade in multiple jurisdictions. Like the Commission's proposed rule, the ISSB Climate-related Disclosures Standard exposure draft is built on the TCFD Framework.⁵ It also shares a focus on enterprise value impacts from climate-related risks which serves the needs of investors. One key difference is that the ISSB's exposure draft proposes to incorporate industry-specific climate reporting requirements developed by the SASB Standards Board. Industry-based climate reporting is essential to complement principles-based reporting because while climate presents a systemic risk to all companies, climate risk manifests in meaningfully different ways for companies in different industries. The ISSB will enhance and evolve the SASB Standards after July 1, 2022, when the SASB Standards will become part of the IFRS Foundation.⁶ Starting from that global baseline laid out by the ISSB, the SEC could build additional requirements to provide for any elements not covered in the ISSB Climate-related Disclosures Standard which would meet the unique needs of U.S. market participants.

Question 4

The current reporting requirements are insufficient for investors to assess corporate climate risk and the related financial impacts to execute investment decisions. CalSTRS spends approximately \$2,200,000 per year to access climate research, analyze available data, and develop methods to estimate climate risks and opportunities for assets in our portfolio. In addition to two full-time investment staff members, CalSTRS consults external advisors to learn how other global asset owners determine climate risk exposures to their portfolios given

⁴ [California State Teachers' Retirement System Green Initiative Task Force Interim Report for Period Ending December 31, 2020](#)

⁵ <https://www.ifrs.org/projects/work-plan/climate-related-disclosures/exposure-draft-and-comment-letters/>

⁶ <https://www.ifrs.org/news-and-events/news/2022/03/issb-communicates-plans-to-build-on-sasbs-industry-based-standards/>

the lack of reliable, consistent, and comprehensive data. A conservative estimate of the variable cost of these combined human resources is \$550,000 annually. This does not account for the portion of staff time spent by those investment professionals who are not fully dedicated to climate and net zero work for the fund, but who do spend significant time to understand climate risks to assets in their portfolios. In addition, we spend about \$1,600,000 per year for subscriptions to sustainability research and data providers and aggregators, which are currently essential to fill in the gaps left by the roughly 60% of companies and assets in our portfolio which do not report greenhouse gas emissions. We also spend approximately \$50,000 per year for subscriptions and membership fees to organizations which are working to foster more disclosure of climate-related data, helping us engage companies to prepare more robust climate plans and targets, and developing methods for investors to assess climate risk with insufficient data and inputs.

A lack of reliable data impaired our ability to execute our voting decisions across our total portfolio. In 2022, CalSTRS decided to vote against all incumbent board directors if their companies failed to provide what we determined was a minimum level of climate disclosures that would indicate some level of climate risk management: Scopes 1 and 2 greenhouse gas emissions, TCFD-aligned reporting, and, for high emitting companies, appropriate targets to reduce emissions.⁷ We intended to apply this decision to all companies in our portfolio, but we could not find the information at the level of certainty we require before executing such a severe voting action. We consulted the two largest global proxy research providers, Glass Lewis and ISS, and the most reliable data set covered a universe of large companies and companies in focus for the Climate Action 100+ investor coalition, which we actively support. This left approximately 7,000 companies in our portfolio out of reach for our intended voting action. The rule as proposed will significantly improve the availability and reliability of data we need for proxy voting.

Questions 6, 175

Allowing companies to reference other parts within the same filing will avoid duplication if, for example, climate is mentioned as a business opportunity and again as a risk within one report. However, we warn against allowing companies to provide an index or another reference to information disclosed outside of SEC filings. Too often companies reference sources outside of SEC filings such as web pages, climate or sustainability reports, environmental or supplier policies, etc. This can send investors down a path of ineffective searches and wasted resources. We prefer the information be collected and presented in whole within the annual report, or at least reference another report filed with the SEC that is machine readable, such as another year's 10-K or 20-F filing.

⁷ <https://www.calstrs.com/calstrs-will-escalate-proxy-votes-to-achieve-board-diversity-net-zero-progress-and-climate-change-action>

Question 7

The annual report or registration statement is the best place for companies to discuss their climate-related information. The sections pertaining to the board's role in climate governance might be reproduced or referred to within the proxy statement, but the information should not be presented exclusively in the proxy statement because the timeliness with and ties to financial reports are critical for investors to analyze climate risk.

Question 8

We agree the Commission should require registrants to disclose climate-related risks that are likely to have a material impact on a company's business or financial statements. A logical alignment would be to consider setting climate goals at least as far out as the expected useful life of plants and capitalized assets. Consistent definitions across reports would be helpful, especially to compare climate-related targets.

Climate Action 100+ (CA100+), of which CalSTRS is an active member, defines short, medium, and long-term greenhouse gas reduction targets in terms of years as they relate to 2050, a key date for net zero-aligned investors. CA100+ defines reduction targets from the present up to 2025 as short term, targets for 2026 through 2035 as medium-term, and targets for 2036 through 2050 as long term.⁸ We use these definitions in company net zero assessments today. To make these definitions relevant for future reports, the Commission could use five years as short-term, six to 15 years as medium-term, and 16 to 30 years as long-term.

Question 9

We believe the Commission's definitions of climate-related risks, including physical and transition risks, acute and chronic risks, are reasonable as proposed. We agree with the Commission's interpretation to relate climate risks to their potential impacts on business operations, value chains, and therefore financial performance.

The CalSTRS Investment Policy and Management Plan⁹ guides investment staff's decisions as well as those of external managers we hire to act on behalf of the fund. The Policy includes an Attachment A which states:

CalSTRS expects all investment managers, both internal and external to assess the risk of each of the following factors when making an active investment. The manager needs to balance the rate of return with all the risks including consideration of the specific investments exposure to each factor in each country in which that investment or company operates.

⁸ <https://www.climateaction100.org/net-zero-company-benchmark/>

⁹ <https://www.calstrs.com/files/ab561ce09/InvestmentPolicyandManagementPlan-01272022.pdf>

One of the 25 listed financial risks includes the following definition:

Climate Change

The investment's long-term profitability from inadequate attention to the impacts of climate change, including attention to relevant climate policy considerations and emerging climate risk mitigating technologies.

Question 12

Disclosing physical risk by geographic coordinates would better tie to climate models, is more comparable across global companies, and suits machine-enabled research. High-risk assets, such as oil fields, may cross more than one zip code or postal code or be located outside of a zip or postal code, such as offshore. Weather and atmospheric climate data is available by geographic coordinates. It would be more useful to have company physical asset data by geographic coordinates to evaluate the company's physical risk adaptation and mitigation as well as combine that information with weather data to assess the acuity of extreme weather events on company operations. For example, it would help investors to know the geographic coordinates of assets subject to higher physical risk from climate, such as a refinery or chemical plant on the Gulf Coast, where hurricane risk is high every autumn. It would also then help investors to know how companies mitigate those physical climate risks, such as through property insurance and business interruption coverage, and the corresponding financial information such as deductibles and coverage limits.

Question 14

We agree with the Commission's proposal to require registrants to disclose the magnitude of the material risk to an asset (book value and as a percentage of total assets plus total water used in high water stress regions). It would help us understand the risks of a company's decision to build a new semiconductor fabrication plant in Texas versus Michigan, for example, against the opportunities of building near auto manufacturers based in each region. We support World Resource Institute's definition of water stressed areas.

Questions 19-22

We support the proposed requirements to disclose actual and potential impacts of material climate-related risks on a company's strategy, business model, products and services, value chain, and outlook. A company's expenditure for research and development for new low-carbon solutions can indicate a company's resiliency in a low-carbon economy.

More consistent information about capital allocation across more companies would be particularly useful. CA100+ benchmarks companies on their alignment with Paris Agreement goals, but for a limited number of sectors.¹⁰ CA100+ relies on 2 Degree Investment Initiative for capital allocation assessments of companies in the utilities, autos, steel, cement, and

¹⁰ <https://www.climateaction100.org/net-zero-company-benchmark/>

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aviation sectors. CA100+ uses Carbon Tracker Initiative's assessments on capital allocation in the utilities and oil and gas sectors. We believe the Commission's rule as proposed will strengthen the assessments we use today for the sectors mentioned and support analysis of capital allocation across more sectors we invest in.

Question 30

To best assess the decarbonization pathway of individual companies against our market forecasts, we would prefer the final rule suggest scenarios to allow comparisons between companies who describe their scenario analysis. We would find it most useful if companies used the International Energy Agency (IEA) net zero scenario¹¹ and the Network for Greening the Financial System (NGFS) orderly and disorderly transition scenarios.¹²

Question 34

We do believe it is relevant to understand a corporate board's oversight of climate-related risks. We view climate as one of many wide-ranging and important issues alongside cybersecurity, geopolitics, human capital management, and other issues that fit within the remit of all board members. It is less useful for us to know which individual director or directors is or are responsible for climate oversight. We have the view that all board members should be conversant with the potential or actual impacts to financial performance from climate and review the company's strategic positioning for successful operation in a low-carbon economy, among other aspects. We believe the Commission's rule will serve to better illustrate these potential impacts to board directors.

Question 40

We strongly support the Commission's proposal to require companies to disclose any connection between executive remuneration and the achievement of climate-related targets and goals. A survey conducted in April 2022 by Pay Governance found that most companies do not disclose the weight of ESG goals although they form part of compensation for most of the companies surveyed.¹³ We have observed managers are more likely to work toward achieving a stated corporate goal if the manager will be compensated for achieving that goal. For those companies that choose to include emissions reduction targets or other climate-related goals in compensation, knowing the likelihood of achieving those goals will help us assess their future climate risk against their industry peers. We encourage the Commission to require registrants to disclose the specific goal used for compensation, what element(s) of compensation the goal influences, what weight the goal has in determining the compensation award, and how the board will evaluate successful achievement of the goal.

¹¹ <https://www.iea.org/reports/world-energy-model/net-zero-emissions-by-2050-scenario-nze#abstract>

¹² <https://www.ngfs.net/ngfs-scenarios-portal/>

¹³ <https://corpgov.law.harvard.edu/2022/03/09/the-perils-and-questionable-promise-of-esg-based-compensation/>

Question 46

We support the proposed requirement to disclose transition plans if companies have adopted them. This is a major goal of our direct engagement with companies through the Climate Action 100+ investor coalition.¹⁴ More comparable and consistent disclosure across registrants would help us determine how to vote on shareholder proposals asking companies to disclose transition plans or more robust transition plans.

Question 49

Learning how a company plans to achieve any identified climate-related business opportunities would be most helpful. In our work to understand our portfolio's current position with respect to our goal to reach a net zero investment portfolio by 2050 or sooner, we are trying to determine which of our current investments is aligned with or is transitioning to net zero. Without consistent information scaled across all our holdings, we have had to create an internal framework to assess individual companies. This is not scalable given the fundamental assessments required to analyze nearly 9,000 companies in our portfolio. The Commission's proposed guidance to permit companies which have adopted transition plans to discuss how they will achieve climate-related opportunities, including products and services that facilitate the transition to a lower carbon economy, would be very useful, and analysis could be more scalable through our market data research tools.

Questions 94-96

It will be useful to have companies report emissions as the Commission has proposed.

Questions 98, 100, 103, 134, and 175

We recommend the Commission revise the rule to require Scope 3 emissions disclosure for all registrants following the same phase-in periods for Scopes 1 and 2, without exemption for small reporting companies and without an additional qualifier such as materiality or target setting reference. Companies should follow the GHG Protocol guidance and categories for comparability.

Scope 3 emissions give investors important signals about the decisions corporate managers make in day-to-day business. These include use of sold products, indicating how a company develops its total addressable market, or, how a company's product portfolio and design can meet customer demand and market expectations for low-carbon solutions—a material question in the company's ability to capture long-term opportunities. How much business travel is required to generate revenue, in combination with employee commuting versus remote work, can give another signal about a company's ability to attract and retain a diverse workforce. Downstream leased assets are another category where a level playing field of disclosure would help us measure climate risk across more of our real estate holdings.

¹⁴ <https://www.calstrs.com/path-to-net-zero>

We have invested time and resources over many years to encourage companies to set climate related business goals, including goals related to Scope 3 emissions. We worry that if the rule is finalized as written, companies may retract their previously disclosed goals and guidance and the rule could have a chilling effect on any new companies disclosing Scope 3 related goals. We understand a great deal of estimation is involved in calculating emissions from the use of a company's products; our understanding is that companies routinely estimate customer use and demand trends. Scope 3 emissions disclosures would help investors (and corporate leaders) evaluate the management of a company's decisions against a decarbonizing world.

We own nearly 9,000 companies across the value chain representing interconnected business relationships upstream and downstream from each other. The proposed rule will provide more controlled emissions reporting (Scopes 1 and 2) which will enable other companies upstream and downstream from reporters to start with a stronger basis for calculating Scope 3 emissions. Covering the whole value chain provides a fuller understanding of our own financed emissions and would aid in our measurement of our total portfolio emissions, and therefore our progress in meeting our own net zero portfolio goal.

Question 135

Attestation of emissions is relevant for large companies and small companies alike. Attestation requirements should cover Scopes 1, 2, and 3. Companies and auditors tell us they are equipped to measure and assure Scope 3 emissions today.

Greenhouse gas emissions are the basic unit of input for all our individual company, industry, and market climate risk assessments, and our decarbonization forecasts rely on this basic unit. Our staff makes investment decisions in part based on whether a company is reducing emissions over time, and whether it is meeting its reduction targets. We assess an individual company's emissions profile and trend no matter where it is headquartered, and no matter how small or large the company is. Currently, about 60% of the data we have is estimated by third party research firms. The Commission's proposed rule addresses the most urgent need to have all registrants provide the actual data to help shift away from relying on third party estimates. Assurance provides investors with greater confidence that this essential data is prepared faithfully and in line with globally accepted standards. Emissions are uniquely essential to the work of climate risk analysis, and so requiring companies to deliver the highest quality data is important for our work. We need reliable numbers for small companies as well as for large companies; we have the same responsibility to vote proxies and monitor small companies as we do large companies. A phase-in schedule could provide more time for non-accelerated filers and smaller companies to reach limited assurance, and later reasonable assurance than the one and two years, respectively, afforded to accelerated filers.

Question 168

As mentioned above, we execute votes and make other investment decisions based in part on whether a company has set greenhouse gas emissions reduction targets and how it is meeting

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them. Other climate-related goals can be complementary especially if provided in an industry-specific context and in alignment with industry innovation, such as the marine transportation industry's move toward alternative fuels and energy efficient design. We would encourage the Commission to foster comparable disclosure through the reference of SASB Standards, which the ISSB will enhance and evolve over time.

Questions 189

We support the Commission's proposal to allow foreign private issuers which comply with the future ISSB Climate-related Disclosure Standard to satisfy the requirements of the Commission's rule.

The Commission's rule proposal notes the efforts of jurisdictions in the EU and elsewhere to strengthen corporate climate disclosures. We appreciate the SEC collaborated, through IOSCO, with others to develop the ISSB's climate standard prototype, which the ISSB has since revised and exposed for public comment. The Commission points to the global alignment with TCFD as the common core of both the ISSB's proposed Climate Standard and the Commission's proposed climate disclosure rule.

Questions 197-201

We view the Commission's proposed phase-in periods as very reasonable, or even generous to companies, given the decades of investor demand for decision-useful climate action, and the six years intervening from the launch of the TCFD framework. We would not suggest lengthening any of the timeframes. Investors understand that companies must continuously review and enhance their controls environments to ensure relevant financial and non-financial data are accurately collected, reviewed, and presented to keep up with changing market expectations. Climate is no exception. We would encourage the Commission to consider setting all phase-in dates to the earliest possible since we must continue to make investment decisions based on modeled estimates until such time as we receive more reliable data directly from issuers.

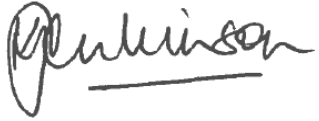
CalSTRS has published annual updates on our sustainability-related investment activities for the past 15 years. Chapter 731, Statutes of 2018 (California Senate Bill 964) mandated that we publish a report every three years describing the climate-related financial risks of our public market portfolio. This law did not exclude small capitalization companies, nor did it allow our fund to defer meeting our obligation while companies had the benefit of an extended implementation period to supply the data we required.

We wish to thank the Commission for addressing the issue of insufficient, irregular, and unreliable climate data. For years, CalSTRS has recognized climate change as a real financial risk to the value of our plan assets. Available methods to size and forecast that risk have been stunted by a lack of reliable, company generated climate data. We appreciate the Commission's work to close this gap, which we expect will greatly enhance our ability to

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account for climate risk when selecting partners, indexes, funds, securities, and companies for investment, engagement, and proxy action.

Sincerely,

A handwritten signature in black ink that reads "Kirsty Jenkinson". The signature is written in a cursive style with a horizontal line underneath the name.

Kirsty Jenkinson
Investment Director

A handwritten signature in blue ink that reads "Aisha Mastagni". The signature is written in a cursive style.

Aisha Mastagni
Portfolio Manager

CC: The Honorable Gary Gensler, The Honorable Allison Herren Lee, The Honorable
Caroline A. Crenshaw, The Honorable Hester M. Peirce