CALSTRS

Investment Committee

Item number 7 – Open session

Subject: Net Zero Portfolio Strategy - Annual Update

Presenter(s): Chairperson

Item type: Consent information

Date and time: May 27, 2026 – 5 minutes

Attachment(s): None

PowerPoint presentation(s): None

Item purpose

The purpose of this item is to provide Investment Committee members with information on progress that has occurred since the May 2025 Investment Committee meeting to advance the CalSTRS pledge to achieve net zero portfolio emissions by 2050 or sooner. This aligns with one of CalSTRS nine Investment Beliefs: *Investment risks associated with climate change and the related economic transition—physical, policy and technology driven— materially impact the value of CalSTRS' investment portfolio.*

Executive summary

At the September 2021 Investment Committee, CalSTRS adopted its pledge to achieve net zero portfolio emissions by 2050 or sooner. Seen as a continuation of CalSTRS long history of climate risk integration into the investment portfolio (going back to 2004), the net zero pledge was grounded in our fiduciary duty to our members and based on overwhelming scientific evidence that climate change presents significant risks to investments. CalSTRS net zero pledge is aimed at mitigating known climate change-related risks and improving long term risk-adjusted return outcomes.

When CalSTRS made its net zero pledge, it was with the understanding that achieving net zero portfolio emissions by 2050 would be challenging and there would be aspects of the pledge we could control (who we invested with and what we invested in) and aspects we could not control (government response, political environment, corporate response) but could seek to influence. It was this understanding, combined with our fiduciary duty to our members, that led staff to carefully and thoughtfully develop its pledge implementation goals, structures and strategies.

Staff is implementing three core strategies to support CalSTRS net zero portfolio emissions pledge: (1) measuring and reducing portfolio emissions, (2) increasing exposure to low-carbon investments that meet our risk-return goals, and (3) using our influence to accelerate the integration of net zero considerations across global financial markets to support a smooth transition. This item provides updates on staff activities, across the Investments Branch, supporting these three strategies.

(1) Measuring and Reducing Portfolio Emissions[1]

Both Global Equity and Fixed Income continue to manage emissions reduction strategies. As these two asset classes both use risk budgeting as a method of controlling risk, these emissions reduction strategies allow staff to consider emissions reductions per unit of active risk.

- The Global Equity team has allocated 20% of the Total Public Equity portfolio to a low-carbon index, approved at the September 2022 Investment Committee meeting. As of March 31, 2026, $31.2 billion is being managed internally against the low-carbon index. Staff estimates this has yielded portfolio emissions reductions of 16.13%.

- The Fixed Income team implemented a 15% low-carbon credit-related index optimization strategy, approved at the May 2023 Investment Committee meeting. The strategy is designed to reduce Fixed Income portfolio emissions at a measured pace, while keeping a tight tracking error to the parent benchmark.

Global Equity, Fixed Income and Real Estate conducted portfolio emissions measurements for calendar year 2024.

CalSTRS Business Unit	2024 Total Portfolio Emissions	2023 Total Portfolio Emissions	Total Portfolio Year Over Year Change	2024 Total Benchmark Emissions	2023 Total Benchmark Emissions	Benchmark Year Over Year Change
Global Equity	5,077,101	6,469,860	-21.5%	6,199,213	6,817,413	-9.07%

CalSTRS Business Unit	2024 Total Portfolio Emissions[2]	2023 Total Portfolio Emissions	Total Portfolio Year Over Year Change	2024 Total Benchmark Emissions[3]	2023 Total Benchmark Emissions	Benchmark Year Over Year Change
Fixed Income	994,000	1,096,000	-9.3%	62 tons / $M	68 tons / $M	-8.8%

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[1] Staff is measuring scope 1 and 2 absolute emissions rather than using other measures, such as emissions intensity, as reducing absolute emissions is the goal of the CalSTRS net zero portfolio emissions pledge. Emissions measurements are reported on a one-year lag due to delays in company-provided debt/equity valuations and emissions data.

[2] Fixed Income emissions were adjusted to reflect increases in assets under management and emissions coverage.

[3] For benchmarking purposes, Fixed Income considered the year-over-year emissions intensity of the benchmark.

[4] Real Estate is able to measure portfolio emissions by leveraging its partnership with GRESB, which provides property level emissions, and utilizing an external consultant.

CalSTRS Business Unit	2024 Total Portfolio Emissions	2023 Total Portfolio Emissions	Total Portfolio Year Over Year Change	2024 Total Benchmark Emissions	2023 Total Benchmark Emissions	Benchmark Year Over Year Change
Real Estate[4]	137,051	176,975	-22.6%	N/A	N/A	N/A

The Global Equity portfolio had total emissions of 5.08M tons of CO_2e, representing a 21.5% decrease compared to the prior year. This year-over-year decline was expected as Global Equity was a net seller during 2024 which explained an estimated 12% of the emissions reduction. The remaining emissions reduction was attributable to an increased allocation to the MSCI Low Carbon Target Index (LCT) from 10% of the Global Equity portfolio to 21% as of December 31, 2024, contributing an estimated 9.5% of the overall emissions reduction.

After adjusting for an increase in MSCI's emissions coverage and an increase in assets under management, Fixed Income's corporate credit portfolio experienced a 9.3% decline in emissions during 2024 compared to an 8.8% decline in benchmark emissions intensity. Emissions reductions were largely due to the low-carbon index optimization strategy.

Real Estate's 22.6% decline in emissions during 2024 was primarily due to turnover in the portfolio, with over 50 properties being sold in 2024. The continuing evolution of emissions measurement practices also contributed to the year-over-year changes. Many assets that had previously recognized emissions as scope 2 are now classifying those emissions as scope 3, which CalSTRS does not report on.

(2) Increasing Exposure to Low-Carbon Investments

SISS Portfolio

The SISS Portfolio was approved by the Investment Committee in 2021 and is structured to invest opportunistically across broad risk and return profiles – from infrastructure to venture capital – to enable CalSTRS to take advantage of new (and emerging) climate solutions across private markets.

As of March 31, 2026, the SISS Portfolio had committed approximately $5.7 billion in dedicated low-carbon solutions in private credit, private equity and infrastructure investments. Examples of the types of climate solutions investments in the SISS Portfolio include:

Case study 1: *(Private Equity Climate)*: A $25 million investment into a company developing autonomous vehicle technology for the $4 trillion global trucking industry. Utilizing a simulation-based AI approach, the company employs a capital-efficient, asset-lite model to rapidly deploy driverless solutions. This technology significantly enhances operational efficiency by improving fuel economy and reducing "deadhead" miles while simultaneously addressing critical labor shortages in a high-turnover industry. With a safety-first focus, the company's performance matches or exceeds key metrics of leading autonomous vehicle competitors.

Case study 2: *(Private Equity Climate)*: A $30 million follow-on investment (+$60 million total) into the leading enhanced geothermal company developing, constructing, and delivering carbon-free, baseload grid power for utilities and hyperscale off takers. The company will complete construction of its inaugural utility-scale power plant this year – and has +5 GW of interconnection, ~1 GW of signed power purchase agreements (PPAs), and ~500k acres of Tier I geothermal resource acreage to enable additional geothermal power in the United States grid at scale.

Case study 3: *(Infrastructure Climate)*: A $50 million preferred equity investment in a 4.7 GW renewable energy developer advancing solar and battery storage projects, supporting next-gen AI data center development. The company partners with leading technology firms to develop and power multi-gigawatt large-scale AI data center campuses. This integrated model strengthens the platform's ability to deliver integrated power solutions for the growing hyperscale market.

Additional Climate Solutions Investment

Private Equity, Fixed Income and Inflation Sensitive continue to increase their investments in low-carbon solutions.

Private Equity has exposure to multiple energy transition and low-carbon investments through both fund investments and co-investments and the team continues to collaborate with the SISS team in exploring new investment opportunities and partnerships.

Case study 1:

$50 million in a 339-mile transmission line that will deliver up to 1,250 MW of renewable power from Québec to New York City, representing about 20% of NYC's total daily power consumption and estimated to reduce CO_2 emissions by about 3.9 million tons annually, or roughly equivalent to removing 44% of NYC's vehicles.

Case study 2:

€20 million investment in a company that provides essential hardware (e.g. smart meters and other smart-grid devices), software and services to electricity infrastructure operators

Inflation Sensitive continues to enhance its exposure to energy transition and low-carbon investments through both indirect and direct investments that are additive to portfolio value. In 2025, Inflation Sensitive closed on commitments including:

Case study 1:

$300 million to a large renewables platform with a diversified portfolio of operating and under-construction assets across North America.

Case study 2:

$150 million to a U.S. energy transition fund focused on a variety of energy opportunities including renewable energy, distributed energy, storage

Fixed Income has been investing in Green and Sustainable bonds for many years. These issuances meet CalSTRS risk/return objectives and provide funding for projects that align with our net zero pledge, including renewable energy, energy efficiency and clean transportation projects.

Case study 1:

A $20 million investment in a utility company's green bond that finances two individual wind power projects and the repowering of existing wind facilities in Iowa.

Case study 2:

A $5 million investment in a European state-owned development bank's green bonds that finance projects mitigating climate change in the categories of renewable energies, energy efficiency and clean transportation.

(3) Using Our Influence to Support the Net Zero Transition

CalSTRS recognizes that meaningful progress towards our portfolio net zero goals will not happen unless the global financial markets and broader economic actors also demonstrate meaningful progress towards prioritizing and integrating net zero considerations. The current political environment has left global financial markets misaligned with the goals and timelines climate experts say are needed to avoid the most serious impacts of climate change. Because of this, staff recognizes the need to be effective as we engage with financial market participants, including portfolio companies, regulators and external fund managers/partners, to influence a more orderly, less disruptive and less costly transition to a net zero emissions economy.

The SISS team provided a detailed update on CalSTRS net zero stewardship activities during the January 2026 Investment Committee meeting. CalSTRS uses its influence as a significant global investor to engage with companies and policymakers on net zero priorities – high emitters and natural gas producers - to drive long term returns and sustainable business practices for the benefit of California's educators. As discussed in the January 2026 meeting, staff employ a variety of tools to influence public companies, including proxy votes, shareholder proposals and meetings with companies and policy makers.

Strategic Plan linkage:

One of the five objectives of the current CalSTRS Strategic Plan is to operationalize sustainable investment beliefs to create long-term value. A three-year progress indicator is that CalSTRS defines appropriate portfolio carbon measurements and sets interim emission reduction targets that meet the Fund's risk-return profile.

Board Policy linkage:

The development of the Investment Committee Work Plan and setting annual objectives and projects is covered by the Teachers' Retirement Board Governance Manual, Section 2 Board Governance, item E4, Strategic Planning Policy, page 20. The CalSTRS' net zero emissions pledge, and the accompanying timeline and activities are part of the Investment Committee Work Plan.