California Pension Funds: Strategies for Mitigation of Climate Risk

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Executive Summary

The California Public Employees' Retirement System (CalPERS), the California State Teachers' Retirement System (CalSTRS), and the University of California Retirement Plan (UCRP) (collectively, "California Pension Funds"), have been leaders in responding to the material risks related to climate change and fashioning investment and government initiatives to mitigate those risks. However, with ever-increasing climate impacts, the California Pension Funds must do more to prepare for climate-related financial, physical, regulatory, and reputational risks and opportunities, particularly in light of California's recent passage of landmark climate reporting legislation, SB 253 and 261.

Strong climate risk management requires transparency and accountability, concrete planning, and strong corporate governance. As long horizon investors, the California Pension Funds must elevate these principles to ensure they adequately mitigate climate risk. This paper accordingly recommends that the California Pension Funds do the following:

The California Pensions Funds should set net-zero portfolio goals, including interim emissions reduction goals set at no greater than 10-year increments; creating and publicizing plans to achieve those goals; and regularly reporting on the progress of those plans are critical to ensuring targets are met. Laudably, two of the California Pension Funds, CalPERS and CalSTRS, have set net-zero portfolio goals, and have announced public plans creating pathways to reach their goal, CalSTRS in 2021 and CalPERS with the recent release of its Sustainable Investments 2030 Strategy. We recommend the following:

- UCRP should establish a net-zero portfolio goal and should follow in CalPERS' and CalSTRS' footsteps by developing and publicizing public plans to reach net-zero targets.
- CalPERS and CalSTRS should further strengthen their plans by incorporating the recommendations contained in this paper.
- To the extent they are not doing so already, all three funds should report annually on their progress in executing these plans, relying on standardized and quantifiable benchmarks.
- All three funds should incorporate interim emissions reduction targets to their plans, set at no greater than 10-year increments.

The California Pension Funds should build on their plans for sustainable investment by disclosing current climate-related investments and adopting guidelines better defining their positive investment in climate solutions. The California Pension Funds have increasingly adopted goals and strategies intended to increase active investment in transition technologies and sectors to promote decarbonization. To ensure these investments lead to real and permanent emissions reductions, they should be paired with (1) clear and transparent guidelines defining the elements of "climate-friendly" investment and (2) disclosure of the specifics of any existing climate solutions investment.

The California Pension Funds should maintain and expand their commitment to engagement and escalation strategies, specifically targeting financial sector companies that are failing to disclose climate risks, adopt meaningful climate risk mitigation plans, or are lobbying against climate action. By continuing and expanding robust engagement strategies targeted at this sector, the California Pension Funds can help build needed pressure for real results.

The California Pension Funds should establish a set of minimum standards for climate action and disclosure principles applicable to financial institutions, including asset managers, banks, and other entities, with which the State contracts. The California Pension Funds should work with the State Treasurer's Office and the State Controller's Office to adopt standards requiring disclosure of contractor financial institutions' emissions, climate-related risks, and risk mitigation strategies, which those institutions must meet to be eligible to do business with the funds. These standards should also require that financial institutions contracting with the pension funds disclose any recent lobbying efforts that oppose climate disclosure or other forms of progress in other fora.

I. Introduction

The California Public Employees' Retirement System (CalPERS), the California State Teachers' Retirement System (CalSTRS), and the University of California Retirement Plan (UCRP) (collectively, "California Pension Funds"), have been leaders in responding to the material economic risks related to climate change and fashioning investment and governance initiatives to mitigate those risks. While this change has been reinforced, in part, by legislative action like Senate Bill (SB) 964 (Allen, 2018),[1] it has also been prompted by the California Pension Funds' voluntary recognition of the role that climate risk plays in long-term investments and the development of new methods of quantifying and reducing that risk.

The California Pension Funds have already demonstrated their leadership and effectiveness in shareholder governance. These funds have a strong record of targeted engagement with underperforming companies to improve corporate governance, which has resulted in improved returns and mitigation of environmental, social, and governance (ESG) risk.[2] For instance, companies targeted by CalPERS' Focus List—a publicly-available list, maintained between 1999 and 2013, of underperforming companies engaged by CalPERS—saw significantly improved returns relative to their prior performance, generally outperforming other companies in their sector after CalPERS' focused engagement.[3] CalSTRS, in its ESG investment policy, lists both environmental damage and climate change as risk factors "considered as part of the financial analysis of any active investment decision."[4] Similarly, UCRP—through University of California Investments ("UC Investments")—incorporates climate change risk and solutions into the ESG risk factors that it considers when making investment decisions.[5]

In recent years, the California Pension Funds have leveraged their expertise in active investment to directly address climate risk. In 2021, for example, CalSTRS engaged with activist investment funds to replace four members of ExxonMobil's board of directors with members that were more climate-aware.[6] Eight months later, Exxon Mobil announced a 2050 net zero pledge for its Scope 1 and Scope 2 emissions.[7] Similarly, UCRP and CalPERS recently leveraged their Chevron shares to vote against each of the company's current board members, with UCRP noting that "[a] vote AGAINST all current members of the board is warranted as a signal to the board that stronger independent oversight and board management of climate risks at the company are

[1] Now codified at Cal. Gov. Code § 7510.5. SB 964 requires CalPERS and CalSTRS to publicly report an analysis of each fund's climate-related financial risk, including alignment with Paris Agreement targets and California's climate policy goals. Cal. Gov. Code § 7510.5(b), (c).
[2] Andrew Junkin, *Update to The "CalPERS Effect" on Targeted Company Share Prices*, Wilshire 1 (Mar. 19, 2015), https://www.calpers.ca.gov/docs/board-agendas/201505/invest/item08a-03.pdf.
[3] *Id.* at 1.
[4] CalSTRS, Investment Policy for Mitigating Environmental, Social, and Governance Risks (ESG) (last visited June 7, 2023), https://www.calstrs.com/files/b956aa967/calstrs_esg_policy.pdf.
[5] University of California, Sustainable Investment Solutions 11-12 (last visited July 13, 2023).
[6] Leslie Kaufman and Saijel Kishan, *CalSTRS Crucial Phone Call Eased Path For Activists' Exxon Win*, Bloomberg (June 18, 2021), https://www.bloomberg.com/news/articles/2021-06-18/calstrs-s-crucial-phone-call-eased-path-for-activist-s-exxon-win#xj4y7vzkg.
[7] CalSTRS, Path to Net Zero (last visited June 7, 2023), https://www.calstrs.com/path-to-net-zero.

necessary."[8] As leading members of Climate Action 100+, the California Pension Funds have been at the forefront of investor-led engagement with focus company executives and board members, leading to investor roundtables, release of company statements, issuance of public letters, and leadership in shareholder resolutions and proposals.[9]

And the California Pension Funds have increasingly adopted goals and strategies intended to increase active investment in transition technologies and sectors to promote decarbonization. In November 2023, as a key feature of a plan to reduce portfolio emissions by 50 percent by 2030, CalPERS announced that it would commit $100 billion of investment to "climate solutions," more than doubling its existing $47 billion in such investments.[10] CalSTRS previously announced that it would devote up to $3 billion dollars to solutions-oriented investments in high-emitting sectors; 20 percent of its Public Equity Portfolio is already dedicated to a low-carbon index.[11]

These efforts are laudable. Building on these promising steps, the California Pension Funds can still do more to establish and publicize actionable goals and plans for meeting their climate targets. Indeed, forward progress on climate risk evaluation and response is more important than ever, considering current pushes *against* pension funds' measured and prudent consideration of climate risk, both at the state and federal level.[12] Moreover, with the recent passage of SB 253 and 261—which require large corporations doing business in California to publicly report their Scope 1, 2, and 3 emissions and their climate-related financial risk, respectively—there will be novel opportunities for portfolio companies, asset managers, and the funds to utilize new data to evaluate their climate risk exposure.[13]

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[8] Paul Verney, *CalPERS To Vote Against Chevron Board Members Over CA100+ Engagement Failure*, Sustainable Investor (May 16, 2022), https://www.responsible-investor.com/calpers-to-vote-against-chevron-board-members-over-ca100-engagement-failure/; UCRP, Proxy Voting Dashboard (last visited July 13, 2023), https://vds.issgovernance.com/vds/#/MzY1OQ==/ (located by searching 'Chevron' in company search box, expanding 'Vote Cast by Proposal Category,' and selecting Meeting Date May 31, 2023).
[9] Climate Action 100+, Engagement Process (last visited June 7, 2023), https://www.climateaction100.org/approach/engagement-process/.
[10] CalPERS, Sustainable Investments 2030 Strategy Presentation 3-6 (Nov. 13, 2023), https://www.calpers.ca.gov/docs/board-agendas/202311/invest/item06d-01_a.pdf; CalPERS, Sustainable Investments 2030 Strategy Presentation and Discussion 19-0 (July 17, 2023), https://www.calpers.ca.gov/docs/board-agendas/202307/full/day-1/calpers-sustainable-investments-2030-strategy.pdf.
[11] Kirsty Jenkinson & Aeisha Mastagni, Letter to SEC Chair on Climate Change Disclosures, CalSTRS (June 4, 2021), https://www.sec.gov/comments/climate-disclosure/cll12-8888208-240907.pdf#:~:text=Recognizing%20the%20low-carbon%20transition%20has%20financial%20implications%20for,%243%20billion%20in%20sustainability-focused%20investments%20in%20private%20markets; *see also* CalSTRS, Path to Net Zero (last visited Oct. 13, 2023), https://www.calstrs.com/path-to-net-zero.
[12] *See, e.g.*, Eliyahu Kamisher, *Big California Pension Fund Hands Over Trove of Climate-Related Documents Demanded by House GOP*, Bloomberg (Aug. 17, 2023), https://www.bloomberg.com/news/articles/2023-08-17/house-republicans-take-anti-esg-campaign-to-calpers-the-largest-us-pension#xj4y7vzkg (describing efforts by U.S. representatives to block consideration of climate by pension funds, due to "potentially harmful effects of Americans' freedom and economic well-being.").
[13] *See generally*, Senate Bill 253, Cal. Health & Safety Code § 38532; Senate Bill 261, Cal. Health & Safety Code § 38533.

Given these recent developments, and the worsening impacts of climate change, pension funds must continue to adapt to meet their fiduciary duty to maximize investment returns by considering and reducing climate-related risk. Under-explored climate risks in financial markets may result from fraudulent or overstated carbon reduction credits; uninsurable losses related to companies' failure to adapt to or mitigate physical climate risks; and inaccurate or unverifiable reporting of progress or plans related to companies' net zero commitments. To that end, this memo recommends that the California Pension Funds—to the extent they have not done so already—**set net-zero goals, including interim emissions reduction goals set at no greater than 10-year increments; create and publicize plans to achieve those goals; and regularly report on the progress of their plans to ensure targets are met**. This memo further recommends several strategies that are compatible with, and follow from, this overarching call. These focused strategies include:

- The California Pension Funds should **build on their plans for sustainable investment** by disclosing current climate-related investments and adopting guidelines better defining positive investment in climate solutions.
- The California Pension Funds should **maintain and expand their commitment to engagement and escalation strategies**, specifically targeting financial sector companies that are failing to disclose climate risks, adopt meaningful climate risk mitigation plans, or are lobbying against climate action.
- The California Pension Funds should **establish a set of minimum standards for climate action and disclosure applicable to financial institutions with which the State contracts**, including asset managers, banks, and others.

II. Background

The California Constitution, as well as the California Public Employees' Retirement Law, require pension fund fiduciaries to act exclusively—and prudently—in the interest of retirement plan participants and beneficiaries.[14] As CalPERS recently recognized in its Response to the Recommendations of the Taskforce on Climate-Related Financial Disclosure, California pension funds' obligations to current and future generations of beneficiaries necessarily include the duty to adequately consider the long-term financial impacts of climate change: "climate change is a global challenge and one we cannot afford to ignore as long-term investors, with inviolable fiduciary duty to our members."[15]

Most portfolio companies are likely to face some climate risk, with their overall exposure to this risk depending on sector, capital allocation, and geographic location. Climate change, broadly, carries three types of risk: (1) physical; (2) transition; and (3) liability or reputational risks.[16] **Physical risks** include potential harms to both the natural and built environment, including

[14] Cal. Const. art. XVI, § 17; Cal. Gov. Code § 20150 et seq.
[15] CalPERS, CalPERS' Response to the Taskforce on Climate Related Finance Disclosure (TCFD) and Senate Bill 964 3 (Nov. 2022), https://www.calpers.ca.gov/docs/climate-related-financial-disclosure.pdf.
[16] Sarah Barker, Cynthia Williams, and Alex Cooper, *Fiduciary Duties and Climate Change in the United States*, Commonwealth Climate and Law Initiative 2-4 (Oct. 2021), https://ccli.ubc.ca/wp-content/uploads/2021/12/Fiduciary-duties-and-climate-change-in-the-United-States.pdf.

extreme weather events such as flooding, droughts, storms, and sea level rise.[17] These risks may manifest through damage to assets or supply chains, or through damage that gives rise to breaches of workplace or environmental laws.[18] Despite greater attention paid in recent years to climate-related financial risk, there is little disclosure required of the physical risks associated with climate change.[19] Nonetheless, in 2022, the United States saw 18 climate disasters that each caused damage of over $1 billion, with damages totaling at least $165 billion.[20]

Transition risks arise from entities' failure to keep pace with global, national, and regional transitions toward a net-zero emissions economy. As increasingly affordable and effective low-emission technologies, shifting regulatory incentives and disincentives, and a more climate-conscious landscape emerge, resistance to adapting or transitioning incompatible business models will create considerable risk exposure. Ongoing, and growing, regulatory involvement continues to bolster the shift to a net-zero economy. Jurisdictions across the globe have increasingly committed to phasing out the extraction, exploration, and use of fossil fuels. In 2022, G7 leaders committed to decarbonizing the energy sector by 2035, and jurisdictions across the world have set ambitious goals to reduce both the supply and demand for fossil fuels in the short and long term.[21] Governments are also providing strong incentives to invest in lower-carbon technologies. The Inflation Reduction Act of 2022 and Bipartisan Infrastructure Law provide direct funding or tax credits for such technologies, including electric vehicles, clean hydrogen, solar and wind energy, energy storage, and microgrid controllers; California has adopted its own incentives, including those aimed at building decarbonization.[22] These incentives have already prompted increased adoption of low-carbon technologies that are cost-competitive with fossil fuel or higher-carbon alternatives, with more innovation on the horizon.[23]

Finally, **liability and reputational risks** arise from the attribution of climate impacts to a company's activities. For example, in 2021 a Dutch court ruled that Royal Dutch Shell must

[17] *Id* at 2.
[18] *Id.*
[19] Parker Bolstad et al., *Flying Blind: What Do Investors Really Know About Climate Change Risks in the U.S. Equity and Municipal Debt Markets*, Brookings Inst. (Sept. 16 2020), https://www.brookings.edu/research/flying-blind-what-do-investors-really-know-about-climate-change-risks-in-the-u-s-equity-and-municipal-debt-markets/.
[20] Adam B. Smith, 2022 U.S. Billion-Dollar Weather and Climate Disasters in Historical Context, U.S. Nat'l Oceanic and Atmospheric Ass'n (Jan. 10, 2023), https://www.climate.gov/news-features/blogs/2022-us-billion-dollar-weather-and-climate-disasters-historical-context.
[21] Brady Dennis & Steven Mufson, *Key nations agree to halt funding for new fossil fuel projects*, Wash. Post (May 27, 2022), https://www.washingtonpost.com/climate-environment/2022/05/27/g7-coal-phaseout-fossil-fuel/.
[22] *See generally* U.S. Envt'l Protection Agency, The Inflation Reduction Act and Green Power (last updated May 22, 2023), https://www.epa.gov/green-power-markets/inflation-reduction-act-and-green-power. *See also* Alan Krupnick & Aaron Bergman, *Incentives for Clean Hydrogen Production in the Inflation Reduction Act*, Res. for the Future (Nov. 9, 2022), https://www.rff.org/publications/reports/incentives-for-clean-hydrogen-production-in-the-inflation-reduction-act/ (discussing hydrogen incentives in the Inflation Reduction Act); U.S. Dep't of Energy, DOE Fact Sheet: The Bipartisan Infrastructure Deal Will Deliver For American Workers, Families and Usher in the Clean Energy Future (Nov. 9, 2021), https://www.energy.gov/articles/doe-fact-sheet-bipartisan-infrastructure-deal-will-deliver-american-workers-families-and-0 (discussing clean energy incentives in the Infrastructure Investment and Jobs Act).
[23] Matthew Solomon, *Pension Funds as Climate Investors: the Impact of the Inflation Reduction Act*, Climate Pol'y Initiative (Jan. 24, 2023), https://www.climatepolicyinitiative.org/pension-funds-as-climate-investors-the-impact-of-the-inflation-reduction-act/.

reduce its emissions by 45 percent over 2019 levels by 2030.[24] According to a recent working paper by the London School of Economics, both climate litigation filings and unfavorable court rulings were associated with a reduction in firm value by 0.41 percent, with greater reductions in value when cases were brought against the largest emitters or involved novel legal arguments.[25] The attribution of climate impacts to financial institutions, such as banks or pension funds, also generates risk through reputational damage. These weaknesses, both real and perceived, have prompted legislative and regulatory proposals for increased oversight of financial institutions[26] as well as boycotts.[27]

Climate change will cause the stranding of significant capital in both built assets and unburnable fossil fuel reserves.[28] Currently, this risk may not be fully priced into the value of companies that rely heavily on fossil fuels, and uncertainty related to phase-out timelines and the implementation of climate policies may further increase the volatility of these entities' market values.[29] Conversely, incentives and financial instruments designed to promote increased adoption of low-carbon technologies, including public infrastructure investment, green bonds,[30] carbon pricing, or first-loss tranches will likely continue to promote the efficient and low-risk financing of low-carbon assets and infrastructure.[31]

Owing to these dynamics, CalPERS and CalSTRS have already announced ambitious climate goals. Last summer, CalSTRS' board set a goal to reduce greenhouse gas emissions across its

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[24] Barker et al., *supra* note 13 at 30-31.
[25] Misato Sato et al., Impacts of Climate Litigation on Firm Value, Centre for Climate Change and Economic Policy 1 (May 23, 2023), https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2023/05/working-paper-397_-Sato-Gostlow-Higham-Setzer-Venmans.pdf.
[26] Todd Phillips & Alex Fredman, *Regulators' Efforts To Promote Climate Risk Management by Banks Are a Positive Step Forward*, Center for American Progress (June 14, 2022), https://www.americanprogress.org/article/regulators-efforts-to-promote-climate-risk-management-by-banks-are-a-positive-step-forward/; Cynthia A. Williams, Sarah Barker, & Alex Cooper, *Directors' Fiduciary Duties and Climate Change: Emerging Risk*, Harvard L. School Forum on Corp. Gov. (Dec. 8, 2021), https://corpgov.law.harvard.edu/2021/12/08/directors-fiduciary-duties-and-climate-change-emerging-risks/. Senate Bill 252 (Gonzalez, 2023), proposed language available at https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240SB252; Senate Bill 252 builds on a pension fund divestment proposal that was introduced in the prior legislative session. Senate Bill 1137 (Gonzalez, 2022), available at https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB1173.
[27] Lottie Limb, *Would you boycott your bank for the climate? Over-60s activists aim to hit where it hurts tomorrow*, Euro Knews (Mar. 20, 2023) https://www.euronews.com/green/2023/03/20/would-you-boycott-your-bank-for-the-climate-over-60s-activists-aim-to-hit-where-it-hurts-t.
[28] *See generally* Frederick van der Ploeg & Armon Rezai, Stranded Assets in the Transition to a Carbon-Free Economy, Munich Society for the Promotion of Economic Research (Dec. 2019), https://www.econstor.eu/bitstream/10419/215027/1/cesifo1_wp8025.pdf.
[29] *Id.* at 21-22; London School of Economics, What Are Stranded Assets: Could Stranded Assets Create a Financial Crisis (July 27, 2022) https://www.lse.ac.uk/granthaminstitute/explainers/what-are-stranded-assets/.
[30] Green bonds function similarly to ordinary bonds, except they have the underlying goal of exclusively financing climate- or environment-focused projects; they have similar levels of performance and risk as compared to traditional bonds. Goldman Sachs, How Green Bonds Fit in an Investment Portfolio (Feb. 20, 2023), https://www.gsam.com/responsible-investing/en-INT/professional/insights/articles/how-green-bonds-fit-in-a-fixed-income-portfolio.
[31] First-loss tranches refers to pooled collections of securities, increasingly common in impact investing, in which another investor or grant-maker agrees to bear the first losses in a project to secure other financiers or investors. Mission Investors Exchange, Catalytic First-Loss Capital: Research and Case Studies (Oct. 2013), https://missioninvestors.org/resources/catalytic-first-loss-capital-research-and-case-studies.

investment portfolio by 50 percent by 2030, building on its previous goal of achieving a net zero emissions portfolio by 2050.[32] CalPERS, through its membership in the UN Net Zero Asset Owner Alliance, has committed to achieving emissions reductions in line with Paris Agreement targets—including reducing portfolio emissions by 50 percent by 2030 and to net zero by 2050—as well as sector-specific targets by 2025 and 2030 in energy, transportation, and materials.[33] While UCRP has not made any public commitment to achieving net zero emissions, either in specific sectors or across its portfolio,[34] it has committed to divesting from direct investment in fossil fuel-producing companies.[35]

The California Pension Funds are not the only pension funds to identify the link between climate change and financial risks and opportunities. In 2020, the New York State Common Retirement Fund committed to meeting a 2040 net zero emissions target, with the New York State Comptroller noting that "investing for the low-carbon future is essential to protect the fund's long-term value."[36] In 2021, the United Nations Climate Change Conference in Glasgow (COP26) convened the Net Zero Asset Owner Alliance, which includes 29 members managing approximately $5 trillion in assets—including 9 pension funds—that have each committed to aligning their portfolios with net zero Paris Agreement targets.[37] Pension funds in other states have taken strong steps to decarbonize their portfolios by divesting from fossil fuels.[38]

Nonetheless, many banks and institutional investors still underestimate the ongoing and impending financial costs associated with continued investment in fossil fuels. For instance, one pair of studies found that if CalSTRS and CalPERS had fully divested from fossil fuel companies from 2009 to 2019, they would have increased returns by $5.5 and $11.9 billion, respectively.[39]

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[32] CalSTRS, Fulfilling Our Mission While Addressing Climate Change (Nov. 2022), https://www.calstrs.com/files/98b807d16/AddressingClimateChange.pdf.

[33] United Nations Environment Programme, Advancing Deliver Delivery on Decarbonization Targets 19-20 (Sept. 2022), https://www.unepfi.org/wordpress/wp-content/uploads/2022/09/AOA-Progress-Report-2022-3.pdf.

[34] Although UC Investments is a member of Climate Action 100+, an investor-led organization that encourages portfolio companies to commit to net zero by 2050, it does not seem to have any portfolio-wide or sector-specific net zero or interim goals. *See* UC Investments, Report To the Task Force on Climate-Related Financial Disclosure: Managing Climate Risks (UCRP TCFD 2022 Report) 12 (2022), https://www.ucop.edu/investment-office/tcfd-report-2022.pdf.

[35] *Id.* at 9; Jagdeep Singh Bachher & Richard Sherman, *Opinion: UC Investments Are Going Fossil Free. But Not Exactly For the Reasons You May Think*, L.A. Times (Sept. 17, 2019), https://www.latimes.com/opinion/story/2019-09-16/divestment-fossil-fuel-university-of-california-climate-change.

[36] Office of the New York State Comptroller, New York State Pension Fund Sets 2040 Net Zero Carbon Emissions Target (Dec. 9, 2020), https://www.osc.state.ny.us/press/releases/2020/12/new-york-state-pension-fund-sets-2040-net-zero-carbon-emissions-target.

[37] United Nations, Financing Climate Action (last visited May 16, 2023), https://www.un.org/en/climatechange/raising-ambition/climate-finance.

[38] UCRP TCFD 2022 Report, *supra*, note 31; Jordan Wolman & Debra Kahn, *Divestment's Uphill Battle*, Politico (July 5, 2022), https://www.politico.com/newsletters/the-long-game/2022/07/05/pension-fossil-money-00044002 (Maine last year became the first state to force its pension funds to divest from fossil fuels via legislation); Lilah Burke, *New York City Pensions to Divest Future Private Equity Holdings from Fossil Fuels*, The City (Apr. 6, 2023), https://www.thecity.nyc/2023/4/6/23673297/public-pensions-divest-fossil-fuels; Ceres, Ceres Investment Network on Climate Risk and Sustainability (last visited June 7, 2023), https://www.ceres.org/networks/ceres-investor-network.

[39] Corporate Knights, California State Teachers' Retirement System (CalSTRS) Pays High Cost for Holding on to Fossil Fuel Stocks (Sept. 2019), https://fossilfreeca.org/wp-content/uploads/2020/08/Calstrs-Report_26_09_2019-

Although these analyses of CalPERS and CalSTRS offer limited insight into the long-term investing horizon considered by pension funds, other studies have consistently found that—even incorporating transaction costs and considering delayed energy transition scenarios—divested portfolios achieve the same or better returns than their benchmark counterparts.[40]

In addition, regulators and global policymakers are increasingly attuned to the need to ensure that net zero pledges and other climate commitments are more than just talk. For example, last year the UN High Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities released its report on net zero commitments by businesses, financial institutions, cities, and regions ("HLEG Report").[41] The HLEG Report identifies its key aim as bringing "integrity, transparency and accountability to net zero by establishing clear standards and criteria."[42] In service of this goal, the HLEG report gives practical recommendations for both non-state actors and regulators. Several of these high-level recommendations are highlighted below:

- "**Non-state actors must publicly share their comprehensive net zero transition plans** detailing what they will do to meet all targets"
- "**Non-state actors must report publicly every year**, and in detail, on their progress, including greenhouse gas data, in a way that can be compared with the baseline they set."
- "To make net zero work and to create a level playing field, **regulators should develop regulation and standards starting with high-impact corporate emitters**, including private and state-owned enterprises and financial institutions."[43]

Citing to the HLEG Report, regulators have steadily begun to take steps to push back against corporate greenwashing practices. For example, both France and the United Kingdom have recently adopted new regulations designed to address misleading claims of carbon neutrality.[44] The Federal Trade Commission is further considering adopting new rules to regulate deceptive

v4.pdf; Corporate Knights, California Public Employees' Retirement System (CalPERS) Pays High Cost for Holding on to Fossil Fuel Stocks (Sept. 2019), https://drive.google.com/file/d/1k27W2oTzaqueEZrvit4RLfve6pvakqMI/view.

[40] *See, e.g.,* Auke Plantinga & Bert Scholtens, *The Financial Impact of Fossil Fuel Divestment*, 21 Climate Pol'y 107-19 (Mar. 5, 2020) (finding that divesting from fossil fuel production does not result in financial harm to investors); Irene Henriques & Perry Sardosky, *Investor Implications of Divesting From Fossil Fuels*, 38 Global Fin. J. 30-44 (Nov. 2018) (finding that portfolios that divest from fossil fuels and utilities and invest in clean energy perform better than those with fossil fuels and utilities); Arjan Trinks et al., *Fossil Fuel Divestment and Portfolio Performance*, 146 Ecol. Econ. 740-48 (Apr. 2018) (same); BlackRock Sustainable Investing, Investment and Fiduciary Analysis for Potential Fossil Fuel Divestment: Phase 3 11 (Mar. 2021), https://ieefa.org/wp-content/uploads/2021/03/BlackRock-Phase-Three.pdf (analysis, incorporating transaction costs, that "show[s] broad outperformance of the divested representative portfolios as compared to the base [non-divested] portfolio with minimal impact to tracking error).

[41] High Level Expert Group on Net Zero Emissions Commitments of Non-State Entities, Integrity Matters: Net Zero Commitments by Businesses, Financial Institutions, Cities and Regions, United Nations (Nov. 8, 2022) ("HLEG Report"), https://www.un.org/sites/un2.un.org/files/high-level_expert_group_n7b.pdf.

[42] *Id.* at 7.

[43] *Id*. at 12.

[44] Richard Black, *Crackdown on Corporate Greenwashing in Offing*, The Asset (May 5, 2023), https://www.theasset.com/article-esg/49104/crackdown-on-corporate-greenwashing-in-offing ("last year's report by the United Nations High-Level Expert Group on Net-Zero Emissions Commitments, which provided detailed recommendations for maintaining the integrity of such pledges, heralds limits on companies' ability to make promises they have no intention of keeping.").

"green" marketing.[45] Given the risks described above and these emerging regulatory dynamics—both of which will grow as the impacts of climate change become increasingly apparent—the California Pension Funds have a responsibility to their beneficiaries to take immediate and expanded action responding to the various financial risks posed by climate change.

And critically, two landmark corporate climate accountability bills, SB 253 and 261, just became California law. As noted above, SB 253 will require business entities with revenues greater than $1 billion that do business in California to publicly report their Scope 1, 2, and 3 greenhouse gas emissions and requires the California Air Resources Board to develop a greenhouse gas reporting framework;[46] SB 261 requires companies with over $500 million in revenue that do business in California to publicly report on their climate-related financial risk.[47] Under SB 261, the California Air Resources Board will review and publish an analysis of those reports.[48] These dual enactments are likely to provide the California Pension Funds with greater access to climate risk data, and the funds can and should seize the opportunity created by their enactment to encourage further standardization in climate-risk reporting.[49] The next section briefly covers pension funds' fiduciary duties in the context of climate change.

III. Pension Funds' Legal Obligations

The California Constitution places extraordinarily strong emphasis on retirement boards' duties toward the funds of their retirement systems. It gives "plenary authority" to retirement boards, as well as assigning the boards "fiduciary responsibility" toward the beneficiaries of their retirement systems.[50] This authority and duty override any other provision of state law or the California Constitution.[51] While the California Legislature may place restrictions on retirement systems' investment portfolios, it can do so only if those restrictions do not interfere with the retirement boards' fiduciary duties.[52]

The scope of the retirement boards' fiduciary duty is defined by the California Constitution itself, but interpretation is guided by the common law. Under the California Constitution, the boards have duties analogous to the common-law duties of loyalty, care, and prudence.

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[45] Dieter Holger, *Recycling and Regulation Are Hot Issues in Likely Update to U.S. Sustainable Marketing Guides*, The Wall Street J. (June 8, 2023), https://www.wsj.com/articles/recycling-and-regulation-are-hot-issues-in-likely-update-to-u-s-sustainable-marketing-guides-7f59cd8a; Maram T. Salaeldin & Kevin D. Kent, *Cracking Down on Deceptive Green Marketing Claims—Recent Developments in the US and EU* (Mar. 29, 2023).
[46] Cal. Health & Safety Code § 38532(c).
[47] *Id.* § 385333(b).
[48] *Id.* § 385333(d).
[49] While these bills were recently signed into law by Governor Newsom, they will likely be subject to further amendment that may adjust their implementation timelines. *See* Office of Governor Newsom, SB 253 Signing Letter (Oct. 7, 2023), https://www.gov.ca.gov/wp-content/uploads/2023/10/SB-261-Signing.pdf; Office of Governor Newsom, SB 261 Signing Letter (Oct. 7, 2023), https://www.gov.ca.gov/wp-content/uploads/2023/10/SB-253-Signing.pdf.
[50] Cal. Const. art. XVI, § 17.
[51] *Id.*; *see also, e.g.*, *City of Oakland v. Oakland Police & Fire Retirement Sys.*, 224 Cal. App. 4th 210, 245-46 (2014) ("[B]y the express terms of section 17, the fiduciary responsibilities it embodies take precedence over all other provisions of law, including other constitutional mandates.").
[52] Cal. Const. art. XVI, § 17(g); *see also City of San Diego v. San Diego City Employees' Retirement Sys.*, 186 Cal. App. 4th 69, 79 (2010) (Point of giving retirement boards "plenary authority" over assets is to "protect such boards from political meddling and intimidation and to strictly limit the Legislature's power over" retirement funds.).

Retirement boards must manage their investments with a high level of "care, skill, prudence, and diligence,"[53] and must select investments that maximize their return and minimize risk.[54] These duties are "exclusive" of any other consideration, and even a good-faith use of a retirement board's powers can violate them.[55]

Retirement boards are affirmatively required to consider and act on the impacts of climate change when it could affect their funds' performance. Failing to account for substantial risks, such as those posed by climate change, is a violation of a board's duty to act with "care, skill, prudence, and diligence" and to "minimize the risk of loss and to maximize the rate of return" in diversifying their portfolio.[56] Trustees likely also have an obligation to consider and take advantage of any "rights and opportunities" they have as a result of their investment, including the right to vote on shareholder proposals.[57] Even when the choice between investment options has no substantial effect on the return or risk of their funds, retirement boards have authority to select the more socially beneficial choice.[58] Thus, the California Pension Funds should take all actions available to reduce their investments' exposure to climate-change risk.

IV. Recommendations

Given their fiduciary obligations to their beneficiaries and their key leadership role in identifying and reducing portfolio climate risk, the California Pension Funds should take additional steps to manage climate-related risk. Done prudently, reducing direct or indirect investment in carbon-intensive companies and industries fits squarely within pension funds' fiduciary duties, particularly as long horizon investors. Similarly, as CalPERS' recently announced Sustainable Investments 2030 Strategy recognizes, the California Pension Funds can take steps to increase sustainable investments in a manner that maximizes return, minimizes risk, and takes advantage of new incentives and emerging technologies.

Below, this paper provides a set of recommendations to reduce climate risk by building upon the work that CalPERS, CalSTRS, UCRP, and institutions across the globe are already doing in this space. The first recommendation below—to improve transparency and accountability in how the California Pension Funds intend to meet their climate goals—grounds the recommendations that follow, which aim to provide concrete strategies that follow from this core goal.

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[53] Cal. Const. art. XVI, § 17(c); *O'Neal*, 8 Cal. App. 5th at 1210.
[54] Cal Const. art. XVI, § 17(b), (d); *see also, e.g.*, *Krolikowski v. San Diego City Emps.' Retirement Sys.*, 24 Cal. App. 5th 537, 544 (2018) (describing retirement board's duties as "ensur[ing] that through . . . prudent investment, principal is conserved, income is generated, and the fund is able to meet its ongoing disbursement obligations.").
[55] *Id.* § 17(b); *O'Neal*, 8 Cal. App. 5th at 1209 (quoting Rest.3d Trusts, §§ 78(1), 87 com. c)).
[56] Cal Const. art. XVI, § 17(b); *see also* Rest. 3d Trusts § 90, com. e.
[57] A. Sommer, B. Longstreth & P. Loomis, Jr., "Corporate Social Responsibility Panel: The Role of the SEC," 28 The Business Lawyer 215, 219 (March, 1973) (excerpted in Rest. 3d Trusts § 90, reporter com. d).
[58] *See, e.g.*, *Bd. of Trustees of Emps'. Retirement Sys. of City of Baltimore v. Mayor and City Council of Baltimore City*, 317 Md. 72, 103-05, 109-10 (1989), *cert. denied*, 493 U.S. 1093 (1990) (leading state-court decision finding trustees' common-law duties of care and loyalty not violated by making socially beneficial decisions with *de minimis* pecuniary impact); 29 C.F.R. § 2550.404a-1(c)(2) (federal regulations permitting ERISA fund managers to use "collateral benefits" to make choice between two financially equal investment paths).

a. **Increase transparency and accountability for meeting the funds' own climate pledges by setting net-zero goals, including interim emissions reduction goals set at no greater than 10-year increments; creating and publicizing plans to achieve those goals; and regularly reporting on the progress of their plans to ensure targets are met**.

As noted, CalSTRS' board has set goals to reduce greenhouse gas emissions across its investment portfolio by 50 percent by 2030, and to achieve a net zero emissions portfolio by 2050.[59] CalPERS has made the same commitments through its membership in the UN Net Zero Asset Owner Alliance, and has also committed to achieving sector-specific targets by 2025 and 2030 in energy, transportation, and materials.[60] Its Sustainable Investments 2030 Strategy presents a plan for achieving a 50 percent emissions reduction by 2030.

As a starting point, UCRP should explicitly and publicly commit to achieving net zero emissions across its portfolio by or before 2050, particularly in light of University of California's goal of becoming carbon neutral by 2025.[61] While UC Investment's commitment to fossil fuels divestment will set the stage for UCRP to execute future net zero and emissions goals, strong and transparent commitments to portfolio decarbonization remain critical.[62]

Although the funds' climate commitments represent strong goals that align with state, federal, and international targets, the California Pension Funds must take further action to ensure that they are able to achieve their net zero pledges by the target years. To improve integrity, transparency, and measurability in meeting these commitments, we recommend the following suggestions, which draw heavily from—and are discussed in detail in—the HLEG Report[63]:

- All three funds should establish interim portfolio-wide carbon-reduction targets, set at no greater than 10-year increments. For CalPERS and CalSTRS, this would mean, at the very least, setting 2040 emissions reduction goals. As noted above, UCRP should commit to a net zero emissions target, and interim emissions reduction goals should be part of that commitment.

- In addition to committing to emissions reduction targets, UCRP should follow CalPERS' and CalSTRS' lead in announcing an actionable, specific strategy for achieving those targets.[64]

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[59] CalSTRS, Fulfilling Our Mission While Addressing Climate Change (Nov. 2022), https://www.calstrs.com/files/98b807d16/AddressingClimateChange.pdf.
[60] United Nations Environment Programme, Advancing Deliver Delivery on Decarbonization Targets 19-20 (Sept. 2022), https://www.unepfi.org/wordpress/wp-content/uploads/2022/09/AOA-Progress-Report-2022-3.pdf.
[61] University of California, Carbon Neutrality (last visited July 13, 2023).
[62] UCRP TFCD Report 2022, *supra*, note 31; MSCI, *Why Global Fossil Fuels Exclusion Indexes*, Interview with Jagdeep Singh Bachher, CIO at UC Investments (2020), https://www.msci.com/our-solutions/indexes/index-categories/esg-indexes/global-fossil-fuels-exclusion-indexes.
[63] HLEG Report, *supra*, note 36.
[64] We note that the enactment of SB 253 and SB 261 will give the California Pension Funds eventual access to improved emissions and climate-related financial risk data for many of the companies in which they invest, which should assist the funds in evaluating their emissions reduction strategies and risk mitigation frameworks. While disclosures are not required until 2026, the California Pension Funds can begin taking steps now to establish procedures for evaluating how newly-available emissions data align with the funds' climate goals.

- CalPERS and CalSTRS should strengthen their existing plans to meet their net zero goals, with the specificity recommended in this paper.

- All three funds should report annually on their progress in executing these strategies and achieving their climate targets, using public, standardized, and quantifiable assessment benchmarks.

Two types of targeted strategies are available to funds to achieve their stated carbon neutrality targets. First, the funds could alter their mix of investments to prefer companies with smaller carbon emissions profiles. Second, through effective engagement strategies, the funds could help to ensure that portfolio companies shrink their carbon emissions profiles. Both strategies must rely on candid engagement with the public, portfolio companies, and asset managers through published reports and progress updates targeted at beneficiaries, the public, and decisionmakers. Recommendations related to each of these two strategies follow.

b. Funds should adopt guidelines defining positive investment in climate solutions.

In recent years, the California Pension Funds have increasingly adopted goals and strategies that focus on active investment in transition technologies and sectors. These strategies aim to achieve the California Pension Funds' long-term net zero goals through positive investment in low-carbon climate solutions and promotion of decarbonization throughout the economy, rather than solely within funds' portfolios.

For instance, CalPERS' Sustainable Investments 2030 Strategy emphasizes the need for investment in "climate solutions," committing to $100 billion in such investments by 2030 as means of generating above-market returns, improving portfolio resilience, and achieving CalPERS' 2050 net zero targets.[65] Similarly, CalSTRS has increasingly emphasized the importance of sustainable, climate-focused investment.[66] CalSTRS has announced its intention to dedicate $2.5 to $3 billion dollars into low-carbon solutions relating to several high-emitting sectors and has dedicated 20 percent of its Public Equity Portfolio to a low-carbon index.[67] CalSTRS has also recently committed to allocating up to five percent of the CalSTRS Total Fund

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[65] CalPERS, Sustainable Investments 2030 Strategy Presentation 3-6 (Nov. 13, 2023), https://www.calpers.ca.gov/docs/board-agendas/202311/invest/item06d-01_a.pdf; CalPERS, Sustainable Investments 2030 Strategy Presentation and Discussion 19-0 (July 17, 2023), https://www.calpers.ca.gov/docs/board-agendas/202307/full/day-1/calpers-sustainable-investments-2030-strategy.pdf.

[66] The July 2023 Sustainable Investment & Stewardship Strategies (SISS) Portfolio snapshot from CalSTRS describes an approach to portfolio decarbonization that emphasizes investment in climate infrastructure, climate solutions in hard-to-abate sectors, and growth-oriented early-stage technology. CalSTRS, SISS Private Portfolio Snapshot 4 (July 26, 2023), https://www.calstrs.com/files/0f87021b2/SISS+Private+Portfolio+Strategy_Board+Offsite_0723+.pdf.

[67] Kirsty Jenkinson & Aeisha Mastagni, Letter to SEC Chair on Climate Change Disclosures, CalSTRS (June 4, 2021), https://www.sec.gov/comments/climate-disclosure/cll12-8888208-240907.pdf#:~:text=Recognizing%20the%20low-carbon%20transition%20has%20financial%20implications%20for,%243%20billion%20in%20sustainability-focused%20investments%20in%20private%20markets; *see also* CalSTRS, Path to Net Zero (last visited Oct. 13, 2023), https://www.calstrs.com/path-to-net-zero.

market value to the SISS Portfolio.[68] And UCRP announced in 2020 that it had already surpassed its five-year goal of investing $1 billion in clean energy projects.[69]

A climate-friendly investment approach can be an effective strategy to reduce long-term portfolio-wide carbon emissions—and can be used in conjunction with strategic engagement and escalation with high-emitting entities. However, securing a strong return and mitigating climate risk necessarily relies on investment in technologies with provable climate benefits and value accretion.[70] As such, "climate solutions" investment approaches must account for factors such as carbon reduction potential, technological readiness, infrastructure requirements, and economic feasibility. Moreover, to be effective in achieving net zero targets, the California Pension Funds' climate solutions investments must result in real, measurable emissions reductions.[71]

With these goals in mind, it is critical that the California Pension Funds take steps to adopt and publish clear and concrete guidelines that guide their sustainable investment decisions in a manner that is prudent, consistent, and publicly accessible. Otherwise, the funds run the risk of investing in technologies that mitigate climate risk ineffectively, fail to meet investment return goals, or facilitate greenwashing. While the California Pension Funds have published definitions of "sustainable investments" and associated terms, these definitions are often broad or unclear.

For instance, CalPERS defines "climate solutions" investments as allocations to companies that "exhibit the greatest potential to benefit from the growth in demand for low-carbon footprint products and services supporting the decarbonization of the global economy."[72] It identifies three categories of solutions investment: mitigation investments, which "aim to directly reduce or enable the reduction of GHG emissions at scale"; adaptation investments, which "aim to reduce harm or exploit opportunities associated with adjustments in natural or human systems resulting from actual or expected climatic effects"; and transition, or brown-to-green, investments, which "operate in hard-to-abate sectors with a credible decarbonization plan, consistent with the latest

[68] Sustainable Investment & Stewardship Strategies Program and Portfolio Policy, CalSTRS C-9(May 4, 2023), https://www.calstrs.com/files/cebe42e31/INV+052023+Item+05a.01+-+SISS+Program+and+Portfolio+Policy+%E2%80%93+Clean+Version+-+Attachment+1.pdf.
[69] UC Office of the President, UC's investment portfolios fossil free; clean energy investments top $1 billion (May 19, 2020), https://www.universityofcalifornia.edu/press-room/ucs-investment-portfolios-fossil-free-clean-energy-investments-top-1-billion.
[70] *See generally* Investing in Climate, Investing in Growth, Organisation for Economic Co-operation and Development (May 2017), https://www.oecd.org/environment/cc/g20-climate/synthesis-investing-in-climate-investing-in-growth.pdf.
[71] The Case for Simplifying Sustainable Investment Terminology 2-3 (Oct. 2019), https://www.iif.com/portals/0/Files/content/IIF%20SFWG%20-%20Growing%20Sustainable%20Finance.pdf (describing conflicting or confusing terminology used in sustainable finance fields).
[72] CalPERS, Response to the Taskforce on Climate Related Financial Disclosure (TDFC) and Senate Bill 964 32 (Nov. 2022), https://www.calpers.ca.gov/docs/climate-related-financial-disclosure.pdf; To determine the companies included under this definition, CalPERS uses MSCI's Low-Carbon Transition Risk framework, which re-weights securities based upon the opportunities and risks associated with the transition to a lower carbon economy. *Id.* MSCI Climate Change Indexes Methodology 1 (May 2023), https://www.calpers.ca.gov/docs/private-equity-sustainable-investment-guidelines.pdf.

state of climate science and technological capabilities."[73] But without further guidance[74], these definitions provide little information on which specific sectors and business activities are considered to be climate solutions. And although CalPERS reports it has invested $47 billion in climate solutions to date, specific information about the nature of those investments is limited, making it challenging to assess how the fund is applying these definitions in practice.

In more transparently defining climate solutions investment, the California Pension Funds should emphasize clear sector- and business-specific criteria. Where the funds are already engaged in climate solutions investment, they should publicly disclose the specifics of that investment, to enable a better understanding of how the funds' definitions are being applied in practice. Further, just as the California Pension Funds must consider portfolio companies' emissions disclosures in targeting their engagement efforts, a failure to adequately disclose emissions should preclude companies from receiving funding dedicated to or counted as "climate-friendly" investment. The California Pension Funds can also take advantage of existing frameworks to guide *quantities* of investment in decarbonization pathways to meet portfolio- and economy-wide decarbonization goals. For instance, several institutions, such as the International Energy Agency and the International Panel for Climate Change, have published energy supply investment ratios that align with various net zero goals and scenarios.[75] The California Pension Funds can take steps to align their investments in climate solutions with these investment ratios. And the funds should disclose internal modeling that demonstrates their climate solutions investment strategies keep them on track to meet overall portfolio emissions reduction goals.

c. Expand upon existing engagement and escalation strategies by specifically targeting financial sector companies that are failing to disclose climate risks, adopt meaningful climate risk mitigation plans, or are lobbying against climate action.

Although the California Pension Funds—independently and through initiatives like Climate Action 100+—have consistently engaged with portfolio companies on issues related to climate risk, portfolio companies have largely failed to take necessary steps to reify their existing commitments to reducing emissions. As acknowledged by Climate Action 100+ in its 2022 Progress Update, absolute emission reductions have failed to keep pace with companies'

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[73] CalPERS, Sustainable Investments 2030 Strategy Presentation 24 (Nov. 13, 2023), https://www.calpers.ca.gov/docs/board-agendas/202311/invest/item06d-01_a.pdf

[74] For instance, JP Morgan has incorporated a set of Sustainable Investment Inclusion Criteria to identify individual investment opportunities to promote its Sustainable and Inclusive Economy Investment Framework. Sustainable and Inclusive Economy Investment Framework, JP Morgan (last visited Oct. 12, 2023), https://am.jpmorgan.com/pt/en/asset-management/institutional/investment-strategies/sustainable-investing/sustainable-and-inclusive-economy-investment-framework/. These criteria require JP Morgan's sustainable investment team to analyze particular investment opportunities to determine (1) alignment with industry-specific sustainability goals and (2) whether portfolio companies are undertaking targeted sustainable business activities for a given product. Juan Lois et al., Allocating Capital To Drive Positive Change, JP Morgan 10-11 (Apr. 20223), https://am.jpmorgan.com/content/dam/jpm-am-aem/global/en/sustainable-investing/sustainable-inclusive-economy-framework.pdf.

[75] *See* Caluio Lubis, David Doherty & William Young, Investment Requirements of a Low-Carbon World: Energy Supply Investment Ratios, BloombergNEF 10-11 (Oct. 6, 2022), https://assets.bbhub.io/professional/sites/24/BNEF-EIRP-Climate-Scenarios-and-Energy-Investment-Ratios.pdf (considering energy supply investment ratios under several climate scenarios).

increasing acceptance of climate disclosures and commitments.[76] Fewer than 10% of targeted companies have established adequate short-term targets, and almost none have planned their capital expenditure and production capacity to align with climate change scenario pathways for their sectors.[77]

As such, it is critical that the California Pension Funds continue to take action to ensure that portfolio companies' actions on climate risk match their public commitments. Here, it is worth noting that the nature and extent of engagement with portfolio companies varies across the three funds, and that CalPERS and CalSTRS have engaged in far more robust direct engagement efforts than UCRP. Nonetheless, all three funds should reevaluate their engagement and escalation frameworks to include stronger consequences for portfolio companies' failure to take concrete and measurable action on climate risk.

The California Pension Funds can also augment their existing engagement efforts by pursuing focused engagement with financial sector companies that have either (1) refused to disclose emissions, (2) not adopted meaningful climate risk mitigation plans, or (3) actively lobbied to block climate disclosure and carbon reduction regulations or legislation. Increased scrutiny of financial institutions' ESG efforts has demonstrated that purported sustainable investment practices can, in reality, amount to little more than greenwashing. For example, building on its establishment of a Climate and ESG Task Force[78] to identify ESG-related misconduct, the SEC has assessed millions of dollars in fines against financial institutions like Goldman Sachs Group Inc.[79] and BNY Mellon Corp.[80] for ESG-related failures within their investment management units. And in many cases, financial institutions that claim to be on net-zero pathways and have publicly endorsed the Paris Agreement's goals are lobbying against Paris-aligned policies.[81] To promote transparency about and accountability for their climate claims, the California Pension Funds should commit to targeted public engagement with financial sector companies, employing a set of clearly-defined escalatory steps as stronger consequences for companies' failure to take concrete and measurable action on climate risk.

The California Pension Funds' escalation hierarchy should include particular actions that may trigger engagement, including companies': (1) failure to make affirmative long-term and interim climate change commitments; (2) failure to adhere to existing commitments; (3) failure to

[76] Climate Action 100+, Progress Update 2022 : Five Years of Climate Action 7 (Feb. 2023), https://www.climateaction100.org/wp-content/uploads/2023/01/CA-100-Progress-Update-2022-FINAL-2.pdf.
[77] *Id.* at 12. Climate Action 100+'s alignment assessments are based on the Rocky Mountain Institute's PACTA methodologies for analyzing companies in the utility, automotive, aviation, cement, and steel sectors. Rocky Mountain Inst. & Climate Action 100+, Analysis and Methodology for Measuring Company-Level Alignment for Climate Action 100+ (Oct. 2021), https://www.climateaction100.org/wp-content/uploads/2021/11/2DII-CA100-Benchmark-Alignment-Indicators-Methodology_Oct21-2.pdf.
[78] U.S. Securities and Exchange Commission, SEC Announces Enforcement Task Force Focused on Climate and ESG Issues (Mar. 4, 2021), https://www.sec.gov/news/press-release/2021-42.
[79] U.S. Securities and Exchange Commission, SEC Charges Goldman Sachs Asset Management for Failing to Follow its Policies and Procedures Involving ESG Investments (Nov. 22, 2022), https://www.sec.gov/news/press-release/2022-209.
[80] U.S. Securities and Exchange Commission, SEC Charges BNY Mellon Investment Adviser for Misstatements and Omissions Concerning ESG Considerations (May 23, 2022), https://www.sec.gov/news/press-release/2022-86.
[81] Ceres, Responsible Policy Engagement Benchmarking for Banks (Aug. 24, 2023), https://www.ceres.org/resources/reports/responsible-policy-engagement-benchmarking-banks.

disclose Scope 1, 2, and 3 emissions; (4) participation in lobbying activities designed to weaken or impede climate accountability and disclosure rules; and (5) failure to engage with the California Pension Funds in good faith. The consequences for failure to remedy these actions should also include strong, well-publicized escalatory steps, including public hearings with top executives and exclusion of holdings in particularly bad actors.[82]

d. Adopt minimum standards for climate action and disclosure applicable to financial institutions with which the State contracts.

The Pension Funds can and should do more to ensure that the financial institutions with which the State does business, including asset managers, banks, and others, have practices that are aligned with the Funds' climate goals and do not undermine them. Currently, while many of the largest financial institutions with which the California Pension Funds do business have adopted climate strategies or targets, identifying specific actions and comparing progress toward those targets is difficult because they are presented inconsistently or incompletely. For the California Pension Funds to evaluate and make decisions on the basis of these entities' climate performance, more robust frameworks for identifying climate actions and measuring success are needed.

To this end, the California Pension Funds should work with the State Treasurer's Office (STO) and the State Controller's Office (SCO) to advocate for minimum standards requiring disclosure of financial institutions' emissions, climate-related risks, and risk mitigation strategies. These standards should also require contractor financial institutions to disclose any recent efforts to oppose climate disclosure or other forms of progress in other fora. Standards could be based on existing disclosure systems; for example, the Sustainability Accounting Standards Board provides a system for identifying metrics that can be compared across institutions.[83] As many of these frameworks recognize, comparative standards should not be limited to the use of quantitative metrics, as it is unlikely that quantitative measurements alone can capture the full spectrum of climate risks and mitigation strategies. Numerous prospective climate disclosure frameworks—including regulatory proposals—explicitly call for a balance of qualitative and quantitative information to facilitate comparability between organizations and sectors, and to

[82] Isobel Mitchell & Katie Stewart, Power in Numbers? An Assessment of CA100+ Engagement on Climate Change, ShareAction 37 (May 2022), https://cdn2.assets-servd.host/shareaction-api/production/resources/reports/ShareAction_CA100_2022.pdf.

[83] *See* Sustainability Accounting Standards Board, *SASB Implementation Supplement: Greenhouse Gas Emissions and SASB Standards* (2020), https://www.sasb.org/wp-content/uploads/2020/10/GHG-Emmissions-100520.pdf; The Climate Registry, *General Reporting Protocol* (2022), https://climatereg.wpengine.com/wp-content/uploads/2022/11/General-Reporting-ProtocolV3.pdf. Systems for disclosing climate goals have also been created by several other organizations. *See* Carbon Disclosure Project, *Scoring Introduction 2023*, https://cdn.cdp.net/cdp-production/cms/guidance_docs/pdfs/000/000/233/original/Scoring-Introduction.pdf; Climate Disclosure Standards Board, *CDSB Framework for Reporting Environmental & Social Information* (2022), https://www.cdsb.net/sites/default/files/cdsb_framework_2022.pdf; Task Force on Climate-Related Financial Disclosures, *Final Report* (2017), https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf.

review singular institutions' progress toward managing climate risk over time, through consistent and regular reporting.[84]

Using such best practices, the California Pension Funds should adopt standards and review processes when making decisions regarding the financial institutions with which the funds, STO, and SCO are willing to contract, in a manner similar to the Investment Protection Principles adopted in 2002 by the STO, CalPERS, and CalSTRS, which required investment banks and money managers to meet new standards of disclosure and eliminate their conflicts of interest or risk losing the right to do business with the three entities.[85] The standards could initially be limited in scope to the largest institutions with which the California Pension Funds do business (so as to focus on the most impactful points of leverage). Among those institutions, those that meet the minimum standards, including disclosure of clear, internally and (to the extent possible) externally consistent strategies—as well as their progress toward meeting those strategies—would be eligible for contracting, while others would be excluded from doing business with the California Pension Funds, STO, or SCO, with due regard to the fiduciary duties of the state entities involved.

V. Conclusion

To mitigate climate risk and capitalize on opportunities related to the climate change transition, it is critical that the California Pension Funds build on their leadership in this arena and take additional steps to improve accountability and transparency in their portfolios.

While the above recommendations are not intended to capture the full suite of options available to fulfill the funds' fiduciary duty in mitigating climate change-related risk, they would be important steps forward in meeting existing climate commitments. Further, as the regulatory landscape around corporate climate accountability rapidly evolves, the California Pension Funds can continue to demonstrate their leadership as pacesetters in strong corporate governance practices.

[84] Climate Disclosure Standards Board, *supra* note 65 at 18; Office of the Superintendent of Financial Institutions Canada, Regulation B-15: Climate Risk Management (Mar. 2023), https://www.osfi-bsif.gc.ca/Eng/Docs/b15-dft.pdf.
[85] Silicon Valley Bus. J., *California Pressures Investment Banks* (Oct. 25, 2002), https://www.bizjournals.com/sanjose/stories/2002/10/21/daily78.html (discussing STO's order to suspend HSBC Securities from further dealings with the state for failure to comply with all required investment principles).