



Sustainable Investments Annual Program Review

November 18, 2024

Summary and Overall Update

- Significant progress advancing the CalPERS Sustainable Investments 2030 Strategy
- The CalPERS Sustainable Investments (SI) model
- Key Highlights
 - Portfolio
 - \$50 billion¹ in climate solutions investments
 - Portfolio emissions reduced by 9% YoY
 - Committed \$6.3 billion to diverse managers and \$2 billion to emerging managers²
 - People
 - Human Capital Management: Implementation of Labor Principles, Responsible Contractor Program (RCP) Policy update under review, completion of Lenox Park DEI survey
 - SI team build-out: meaningful progress on adding 10 new team members
 - Process
 - ESG: Completed external review of our ESG program, appointing 2 new ESG specialists
 - Regulatory advocacy, corporate engagement, CA100+ Steering Committee Chair

SI 2030 Strategy | Objectives

- 1 Generate **outperformance** by investing in climate solutions and emerging and diverse managers
- 2 Increase **portfolio resilience** by fully integrating ESG analysis, including climate risk analysis
- 3 Implement a **thoughtful path to Net Zero** through investments, engagement and advocacy
- 4 Promote greater **inclusion and representation** in the financial industry and the global economy
- 5 Build and promote **efficient and equitable** financial markets through advocacy and regulatory action

Targets and KPIs | Annual Progress Update

Objective		KPI	Target
1	Generate Outperformance	Sustainable Investments performance relative to asset class benchmarks	Outperformance in each asset class
2	Increase Portfolio Resilience	Periodic Total Fund climate risk reporting	At least annually
		Proportion of investments with ESG analysis integrated in diligence process	100% of new investments
3	Pathway to Net Zero by 2050	Investments in Climate Solutions	\$100B by 2030
		Monitor and report carbon footprint and emissions intensity by asset class	At least annually (subject to data availability)
4	Promote Diversity, Equity & Inclusion	Cumulative investments with diverse and/or emerging managers	Provide yearly update
		Completion of DEI external manager survey	Provide yearly update
		Percentage of diverse public corporate board directors	Provide yearly update
5	Improve Financial Markets Efficiency	Compliance with Responsible Contractor Program (RCP) Policy	100% compliance for annual report
		Percentage of Global Public Equity engaged annually	Engage 50% of Global Public Equity AUM
		Proxy voting and corporate engagements update	Provide yearly update

1 Generate Outperformance

Generate **outperformance** by investing in: (1) the transition to a low-carbon economy, including climate solutions; and (2) opportunities through our Emerging and Diverse Manager Program.

Objective	KPI	Target	Status
Generate Outperformance	Sustainable Investments performance relative to respective asset class benchmarks	Outperformance in each asset class	In Progress

- Finalized **asset class business plans**, including thematic review, market mapping, and indicative pacing (subject to market conditions) for climate investment deployment.
- Refining **framework** and developing **process** to track performance across all allocations to climate solution investments, integrating recommendations from engagement with Mercer Investments LLC.
- **Allocated \$5bn** to the CalPERS FTSE Climate Transition custom index in Public Equity.
- **Committed \$2.6bn** to Private Equity and Infrastructure climate solution investments from November 2023 to June 2024.
 - Performance measurement for private market investments is premature at this **early-stage**.
- Performance of **Mosaic Emerging Manager platform¹** will be tracked.

2 Increase Portfolio Resilience

Increase **portfolio resilience** by accelerating the integration of Environmental, Social & Governance (ESG) analysis, including climate risk analysis, into the investment diligence process and portfolio management.

Objective	KPI	Target	Status
Increase Portfolio Resilience	Periodic Total Fund climate risk reporting	At least annually	✓
	Proportion of investments with ESG analysis integrated in diligence process	100% of new investments	✓

- Comprehensive review of CalPERS **ESG policies and procedures** performed by external consultant Newport LLC to further enhance strong and consistent ESG integration current practices.
- **Hiring** of ESG integration specialists (1 public markets-focused, 1 private markets-focused) expected to be finalized by year end.
- Capabilities to identify and manage ESG risks enhanced by the **acquisition of technology**, including climate risk analysis in public markets, physical risk estimation in real assets, and AI-driven news detection of corporate controversies or changes in country risk profiles.
- Continued **growth in EDCI membership** among GPs to drive availability for key ESG metrics on Private Equity portfolio.

2 Increase Portfolio Resilience | Climate Risk Profile¹

- Our portfolio largely mirrors the world economy which is “**running hot**”.
- Using industry-accepted **scenarios**, commercial models estimate a **performance drag** from climate risk exposures.
- The impact on performance from climate change **physical effects** is meaningful and likely **underestimated**.

Net Zero Commitments



Portfolio Value	Portfolio Constituents
33%	13%

Implied Temperature Rise



2.5°C

Performance Impact²



Transition Risk
-0.7% -1.5%
2°C Orderly 1.5°C Disorderly



Physical Risk
-0.4%

¹ Analysis restricted to GPE and GFI's Corporate Credit holdings due to data availability constraints

² Annualized performance impact derived from MSCI Climate VAR estimates

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Increase Portfolio Resilience | A Unified Approach to Labor Principles Implementation

- CalPERS' **Labor Principles apply to ALL asset classes**, with integration tailored to each asset class.
- The Labor Principles form part of CalPERS' strategic approach to Human Capital Management to directly address and mitigate labor risks to the portfolio as part of our fiduciary duty.
- The Sustainable Investments team will continue to collaborate across asset classes to further systematize the identification and management of material labor-related risks and deviations from our principles.

Holistic implementation of the Labor Principles is captured through:

1. CalPERS Active Ownership

- Stewardship: GPE actively engages portfolio companies on ESG risks and opportunities, consistent with CalPERS' Governance and Sustainability Principles. The Corporate Governance team systematically monitors portfolio holdings to identify companies with material ESG risks, and regularly engages on labor issues across both internally managed and externally managed portfolios of publicly listed companies. This is consistent with the stakeholder engagement process.
- The active ownership approach (proxy voting, corporate engagement, and shareowner campaigns) is independent of the portfolio construction process and hence is applied regardless of the investment strategy employed (fundamental, quantitative, active, or indexed) or whether investments are managed internally or externally.

2. Fundamental Actively managed internal portfolios

- EM Sovereign and IG Corps: All actively-managed GFI portfolios use a comprehensive approach to determine relative value with fundamental analysis, security pricing, and ESG factors.

3. Externally managed assets

- Private market managers have been asked to attest to awareness and broad alignment with CalPERS' Labor Principles.
- Public market managers (including Affiliates) attestations are underway.

2 Increase Portfolio Resilience | Labor Principles | GPE

- GPE systematically monitors portfolio holdings to identify companies with material ESG risks, consistent with CalPERS’ Governance and Sustainability Principles. Corporate Governance regularly engages on labor issues.
- GPE will require external managers to attest to their broad alignment with the CalPERS Labor Principles.

Process	Labor-related Engagement Examples (2023-2024)	
<p>1. Monitoring & Identification</p> <ul style="list-style-type: none"> • Daily: Third-party vendor monitoring for negative ESG media coverage (incl. labor/HCM issues) • Monthly: ESG Risk Screen of GPE portfolio to identify red flag/controversies 	<p>Freedom of Association</p>	<ul style="list-style-type: none"> • 2023 freedom of association/labor related shareowner proposals: voted on 11, supported 11, engaged 10 of 11 ; Starbucks’ proposal passed with 52% support
<p>2. Engagement</p> <ul style="list-style-type: none"> • Corp. Governance engages companies with material ESG risks/controversies 	<p>Forced Labor</p>	<ul style="list-style-type: none"> • Monthly ESG Risk screen with a third-party vendor, the screen includes forced labor issues. Staff will engage with companies identified through the screen
<p>3. Proxy Voting</p>	<p>Child Labor</p>	<ul style="list-style-type: none"> • Contacted 12 companies (\$9.5B portfolio value) with recent allegations of child labor issues, including violations tied to “third-party” vendors in company supply chain • Staff message to companies on the need for improved supply chain oversight. Staff will continue to monitor company activity going forward
<ul style="list-style-type: none"> • Vote against Board members when engagement is not successful 	<p>Discrimination</p>	<ul style="list-style-type: none"> • In process of engaging 7 companies with allegations of dropping or modifying DEI programs

2 Increase Portfolio Resilience | Labor Principles | GFI

- All actively-managed GFI portfolios use a comprehensive approach to determine relative value with fundamental analysis, security pricing, and ESG factors.
- GFI will require external managers to attest to their broad alignment with the CalPERS Labor Principles.

Segment	Labor Principles Integration Process
Investment Grade & STIF (internal)	<ul style="list-style-type: none"> • Investment process incorporates issuer-specific factors including labor action, operational safety, and labor practices. • Over the years, this has led us to reduce exposure to issuers where these risks are not reflected in valuation. • Conduct quarterly review of several third-party risk metrics that factor in labor issues.
Emerging Markets Debt (internal)	<ul style="list-style-type: none"> • Country willingness & ability to service debt is evaluated using a macro and ESG factor-based scorecard. • Scorecards include economic, political and social rankings and outlooks in addition to World Bank Governance Indicators. Recent enhancements add more granular labor rights data from the ITUC Global Rights Index and the Labor Rights Index. • Labor, along with other social and governance issues, is integrated in our relative-value, risk-return framework.
High Yield	<ul style="list-style-type: none"> • The 10% internally managed is passively managed. Overall ESG integration is covered for all public corporate exposures via the Corporate Governance team.
Mortgage Backed Securities	<ul style="list-style-type: none"> • Exposures are comprised of debt backed by residential mortgage, commercial mortgage, and consumer loan receivables. • ESG is factored into the relative value and comprehensive approach as applicable. While labor principles are not commonly applicable, any relevant issues flagged by the Corporate Governance team would also be incorporated in that approach.
US Treasuries	<ul style="list-style-type: none"> • Exposures are comprised entirely of Treasury debt issued by the U.S. Government and managed to an index.

3 Pathway to Net Zero

Generate **outperformance** and have a **meaningful impact** on the trajectory of global emissions by (i) putting our own portfolio on a pathway to Net Zero by 2050 through **investments in climate solutions**; (ii) taking **shareowner action** to improve the largest emitting companies' net zero strategies; and (iii) **engaging** the investment industry and **government regulators** to support the transition of the broader economy to net zero.

Objective	KPI	Target	Status
Pathway to Net Zero by 2050	Investments in Climate Solutions	\$100B by 2030	In Progress
	Monitor and report carbon footprint and emissions intensity by asset class	At least annually (subject to data availability)	✓

Total Investments in Climate Solutions*

\$50 Billion ↑
(2023: \$47 Billion)

Financed Emissions
(tons of CO2e)

21.1 Million ↓
(2023: 23.2 Million)

Emissions Intensity *
(tons of CO2e/\$MM invested)

PERF	GFI	GPE	Infra	PD	PE	RE
48 ↓	129	48	45	30	24	7



* Calculations as of 7/15/24. For emissions and emissions intensity statistics, GFI covers Corporate Credit, and private markets asset classes are estimated based on reported sectoral composition data and public emissions data for corresponding sectors as a proxy.

3 Pathway to Net Zero | Evolution of Climate Solutions Accounting and CalPERS' Approach

- In 2023, CalPERS played a **leadership role** by targeting \$100 billion in climate solution investments by 2030.
- CalPERS developed a climate solutions taxonomy and asset class-specific internal accounting frameworks to identify investments eligible to be classified as climate solutions.
- We proactively hired Mercer Investments LLC in 2023 and again in 2024 to **review and benchmark**, against leading industry standards, our Net Zero Plan, our Climate Taxonomy, and our Climate Solutions Accounting methodology.
- Climate solution taxonomies and portfolio accounting methodologies **will be evolving** as industry standards evolve, and as data availability improves across public and private markets; our 2024 evaluation reflects such an evolution.

Climate Solutions Accounting Attribute	2023	2024
Accounts for Green Bonds	No	Yes
Sources of Net Zero Plan Validation	SBTi	SBTi, TPI ¹
Number of Green Revenues Data Sources	2	3
Use of Green Patents Data	Yes	No

4 Diversity, Equity & Inclusion

Promote greater **inclusion and representation** in the financial industry and the global economy by promoting Diversity, Equity and Inclusion (DEI) through advocacy and shareowner action.

Objective	KPI	Target	Status
Promote Diversity, Equity & Inclusion	Cumulative investments with diverse and/or emerging managers	Provide yearly update	✓
	Completion of DEI external manager survey	Provide yearly update	✓
	Percentage of diverse public corporate board directors	Provide yearly update	✓

Cumulative Investments with Diverse and/or Emerging Managers¹

- \$4.0 billion to Emerging Managers
- \$13.6 billion to Diverse Managers

New Investments with Diverse and/or Emerging Managers²

- \$2.0 billion to Emerging Managers
- \$6.3 billion to Diverse Managers



(1) From January 1, 2022, through June 30, 2024. Methodology consistent with CalPERS' AB 890 Report and includes co-investments.

(2) From July 1, 2023, through June 30, 2024. Methodology consistent with CalPERS' AB 890 Report and includes co-investments.

4 Diversity, Equity & Inclusion | 2024 Lenox Park DEI Survey

- Conducted by Lenox Park and distributed across 194 public and private asset class managers.
- **91% response rate** (177 managers) – 18% increase over 2023 Survey.
- 152 managers (78%) provided highly detailed demographic and policy information – 18% increase
 - Total workforce: 94,175 (88% increase)
 - **41% are women** (5% increase)
 - **35% are people of color** (8.5% increase)
- Of the respondents, 133 were privately held and **53 managers (40%)** met CalPERS' definitions for **diverse owned**.
- CalPERS' portfolio performs above the median in terms of representation of gender and racial/ethnic representation across ownership and workforce.

5 Improve Financial Markets

Build and promote **efficient and equitable** financial markets through advocacy and regulatory action, including the promotion of responsible business practices for workers.

Objective	KPI	Target	Status
Improve Financial Markets Efficiency	Compliance with Responsible Contractor Program (RCP) Policy	100% compliance for annual report	✓
	Percentage of Global Public Equity engaged annually	Engage 50% of Global Public Equity portfolio AUM	✓
	Proxy voting and corporate engagements update	Provide yearly update	✓

Compliance with RCP Policy

100%
For annual report

Global Public Equity Engaged Annually

51%
of GPE AUM
(through first nine months of 2024)

Proxy Voting and Corporate Engagements Update¹



>9,000 Meetings Voted



Opposed 335 Directors for Climate Oversight Concerns



Opposed 48% Say-on-Pay Proposals



453 Engagements



Climate Action 100+ Lead 20 Companies



Opposed 922 Directors for Board Composition Concerns

5 Improve Financial Markets | Communication, Stakeholder & Partner Development

CalPERS is responsible for preparing reports and conducting several annual assessments

Sustainable Investments Related Reports

- SB 964 / Task Force on Climate-related Financial Risk Disclosure Report
- AB 890 Emerging and Diverse Manager Report
- Responsible Contractor Report
- CalPERS for California Report

Committees

- Climate Action 100+ Steering Committee Chair (Michael Cohen)
- Human Capital Management Coalition Chair
- ESG Data Convergence Initiative
- United Nations Net Zero Asset Owner Alliance
- Healthy Markets and K&L Gates
- Task-force on Inequality and Socially-related Financial Disclosures (TISFD)
- MSCI and S&P Climate Council and Working Groups

Sustainable Investments Assessment

- UN Net Zero Asset Owner Alliance assessment
- PRI annual total fund sustainability survey
- External fund manager DEI survey
- Labor Principles implementation

Additional Activities

- Financial, Reg and Leg Headlines Update
- Stakeholder engagement
- Research initiatives
- SI communications
- ILPA and Real Assets ESG working groups
- Energy Optimization Initiative for Real Estate
- Emerging/Diverse Manager stakeholder participation

Next Steps and Team Update

Ongoing

- Responsible Contractor Program Policy refresh

November 2025 and going forward

- Sustainable Investment 2030 strategy progress update provided each November
- CalPERS' Response to the Taskforce on Climate Related Financial Disclosure (TCFD) and Senate Bill 964 to be provided November 2025

Appendix

Labor Principles | Process to Date

Time	Action Items
July 2023	<ul style="list-style-type: none"> Staff presented labor principles benchmarking and current practices Staff recognized CalPERS Board request to better highlight CalPERS labor practices
Sept 2023	<ul style="list-style-type: none"> Staff presented draft of the CalPERS Labor Principles (LP) based on industry leading labor frameworks (American Investment Council, International Labor Organization Declaration on Fundamental Principles and Rights at Work), and CalPERS current language around human capital management
Nov 2023	<ul style="list-style-type: none"> CalPERS Board approved the CalPERS Labor Principles and revisions to the CalPERS Total Fund Policy including Governance and Sustainability Principles
Dec-Mar 2024	<ul style="list-style-type: none"> Initial phase of attestation to LP focuses on Private Markets to address Board concerns associated with specific issues Received feedback from Investment partners on Labor Principles implementation INVO, LEGAL, and IT collaborated on attestation process and portal development
April 2024-Present	<ul style="list-style-type: none"> INVO and IT launched the CalPERS Labor Principles attestation portal and sent out attestation requests to all of CalPERS private asset managers Gathered Private Markets GP's attestations (143 attestations received from existing managers) Enhanced implementation in Public Markets

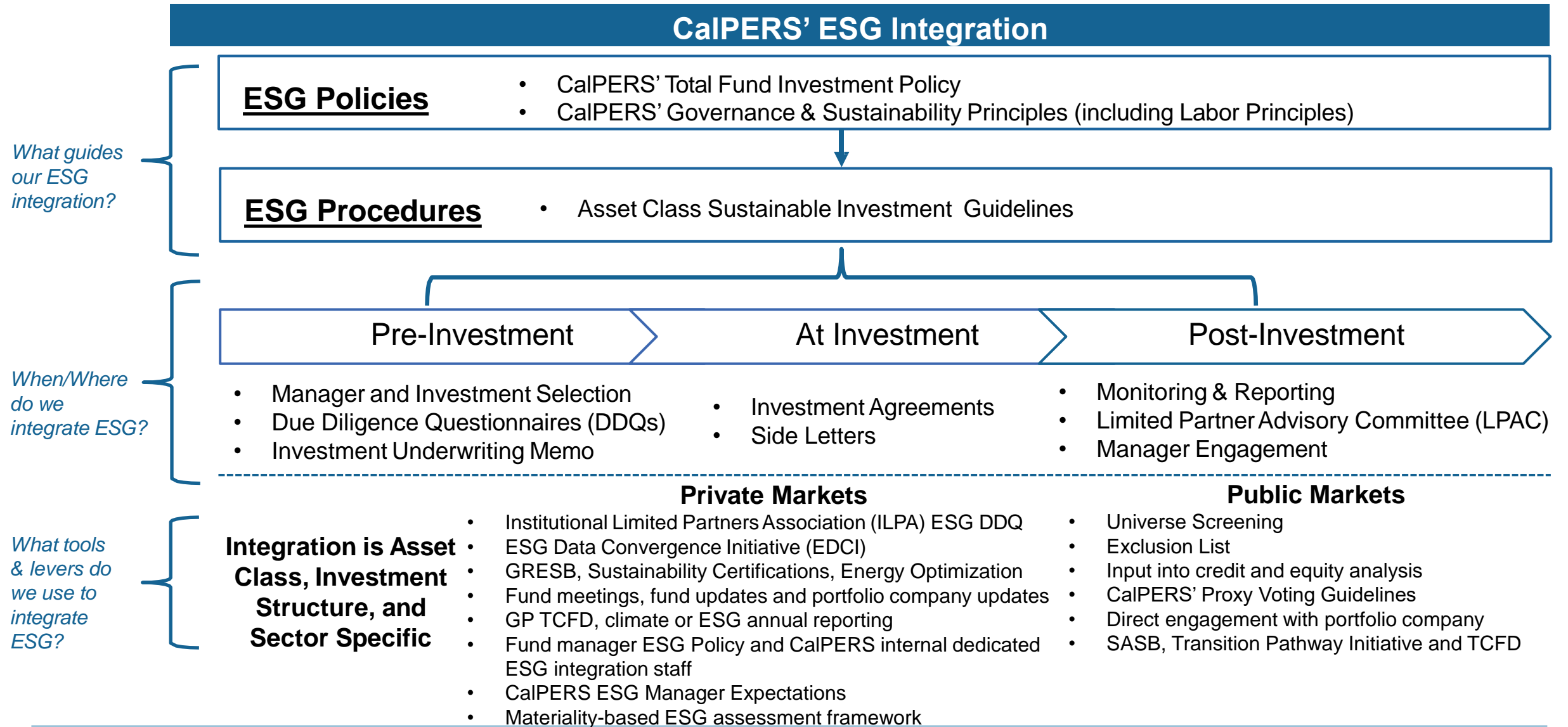
Climate Solutions | CalPERS' Taxonomy

CalPERS considers investments as eligible for **full** or **partial** 'climate solutions' classification if their **underlying activities** or **purpose** fall into one of three categories:

- 1 MITIGATION:** **Directly reduce** or **enable** the **reduction of GHG emissions** at scale.
- 2 TRANSITION:** Operate in **hard-to-abate sectors**¹ with a **credible decarbonization plan**², consistent with the latest state of climate science and technological capabilities.
- 3 ADAPTATION:** Enhance **climate resilience** by **preventing** or **reducing harm** to humans, assets, and natural systems, caused by acute and chronic effects of climate change.

CalPERS' Labor Principles

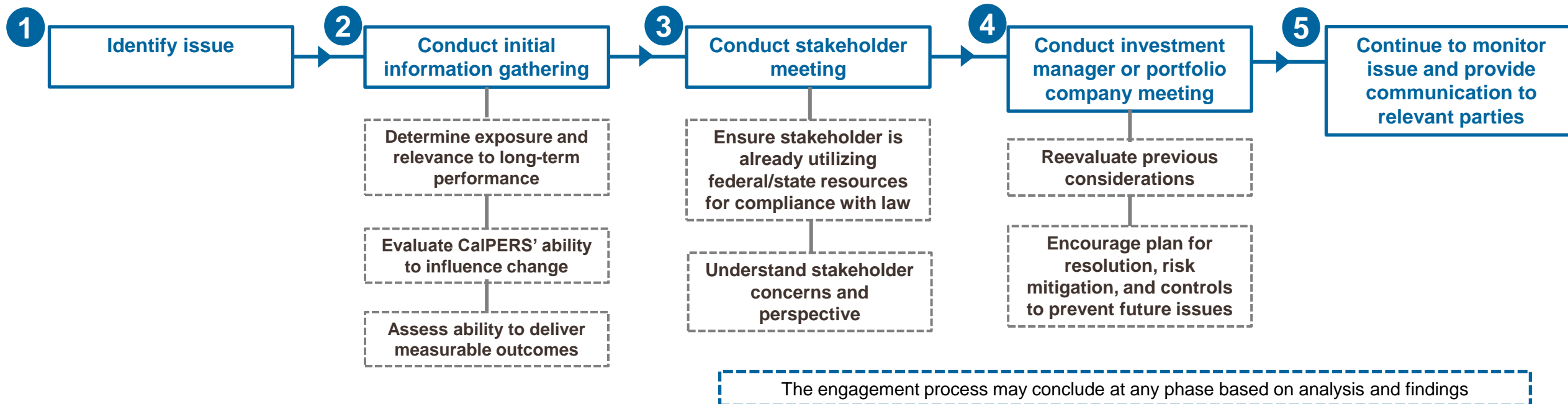
- **Freedom of association and the effective recognition of the right to collective bargaining**
 - Seek to support and improve the well-being of employees as part of human capital management strategy and in compliance with applicable laws
- **The elimination of all forms of forced or compulsory labor**
 - Respect the human rights of those affected by their investment activities and seek to confirm that their investments do not flow to companies that utilize forced labor
- **The effective abolition of child labor**
 - Respect the human rights of those affected by their investment activities and seek to confirm that their investments do not flow to companies that utilize child labor
- **The elimination of discrimination in respect of employment and occupation**
 - Respect the human rights of those affected by their investment activities and seek to confirm that their investments do not flow to companies that maintain discriminatory policies. Seek to improve diversity, equity, and inclusion in portfolio investments to address recruitment, retention, and compensation
- **A safe and healthy working environment**
 - Seek to support and improve the well-being of employees as part of human capital management strategy that includes providing a safe, harassment-free and healthy workplace



Stakeholder Engagement Process

We promote collaboration, support, and transparency through our stakeholder engagement and investor relations initiatives

In doing so, we strive to identify and mitigate risks to our portfolio companies that can negatively affect CalPERS' investment returns, reputation, and trust.



Percentage of diverse public corporate board directors

Diverse Public Corporate Boards:

- Gender - In Q2 2024, **women made up 30.1% of Russell 3000 board seats**, which is the first-time women have represented at least 30% of directorships (Equilar - Q2 2024 Gender Diversity Index)
- Underrepresented Groups - Only two S&P 500 companies lacked a board member with a minority background. Across the Russell 3000 Index, only 12% of composite companies lacked this level of diversity (ISS - Insights)
- Director appointments (S&P 500) - In 2024, 58% of new appointments were diverse directors

Board Diversity Disclosure:

- 85% of Russell 3000 companies disclose their board's racial and ethnic diversity

Improve Financial Markets | Advocacy and Regulatory Action

Comment Letters, Amicus Briefs, Sign-on Statements

- Comment letter to EPA related to methane emissions
- Comment letter to Federal Reserve related to Banking Organizations
- Comment letter to SEC related to definitions
- Sign-on: 2024 Global Investor Statement to Governments on the Climate Crisis (ahead of COP29)
- Amicus Brief supporting related to SEC Climate Disclosure lawsuit
- Declaration of support for CA climate disclosure bills related to US Chamber of Commerce lawsuit
- Letter of support for CA to fund implementation of CA climate disclosure bills

Meetings and Engagements

- Meetings with SEC Commissioners and staff
- Federal Trade Commission (FTC) staff related to rule banning noncompetes
- US Treasury Staff related to Inflation Reduction Act
- Department of Energy (DOE) Loan Program Office Staff
- Members of Congress and CA State Legislature and staffers on existing or potential legislation and regulatory issues impacting CalPERS Investments
- US House hearing and CA Joint Assembly and Senate Hearing
- Meetings and education provided to domestic and international government regulators, pensions, and sovereign wealth funds

Human Capital

- Adoption of CalPERS Labor Principles and education to peer investors
- RCP Policy refresh underway
- Letter to the SEC advocating for human capital disclosures in partnership with the Human Capital Management Coalition
- Education session with SEIU on the impact of climate change on labor health and safety