Towards Sustainable Investment & Operations

Making Progress

2014 Report

CalPERS

Contents

A Message from CalPERS Leaders

We are pleased to present our second report on CalPERS sustainability work, *Towards Sustainable Investment & Operations.* In our first report we highlighted the importance of taking responsibility. This report focuses on our progress towards the goals we set.

Sustainability continues to be at the heart of what we do. CalPERS employs a "total fund" approach to sustainable investment. The first task in implementing this approach was to develop principles for sustainable investment across the CalPERS portfolio.

To do this, we developed a set of Investment Beliefs that gives CalPERS clear principles to guide all our investment decisions. Included in the Beliefs are statements on sustainability and governance. The Investment Beliefs provide context for CalPERS actions, reflect our values and acknowledge our responsibility as a long-term investor to sustain our ability to pay benefits for future generations. While the Investment Beliefs cover a broad array of issues, sustainability is an integral theme.

We launched the Sustainable Investment Research Initiative (SIRI) to study how sustainability factors impact investment risk and return. SIRI compiled more than 700 academic papers that evaluate environmental, social and governance issues, and their impact on value creation and risk management. With our academic partners, SIRI elevated the best of this research for discussion and debate at the inaugural Sustainability & Finance Symposium. While there is some compelling evidence, much of the research is still in its infancy, and further work is needed to identify and define the relevant factors. That work will continue through SIRI and through the efforts of CalPERS-supported organizations.

To bolster our internal expertise and focus we created the Cross Asset Class Team on Sustainable Investment. This group includes members from all areas of the CalPERS Investment Office, and is responsible for developing clear expectations for our investment managers to ensure our money is deployed in a way that is consistent with CalPERS sustainability beliefs. The Cross Asset Class Team shares insights, evaluates our peers' initiatives and considers global best practices to advance our progress on sustainable investment.

While we continue to make progress working to our goal of achieving sustainability at CalPERS, we acknowledge the growing number of complex and evolving issues around the topic. As a leader in this area, we are moving into uncharted territory. With that in mind, we will continue to report our progress with the understanding that some efforts provide a good indication of success, while others require more work and analysis. We recognize there is much to be done, and look to our partnerships and collaborative efforts to increase our reach and impact.

Lastly, CalPERS is a strong proponent of openness and transparency. It is important for us to disclose what we are doing about sustainability as an organization. We have included sections on our own operational efforts in this report.

We continue to welcome your comments. Please send them to Anne Simpson, our Director of Global Governance, at Global_Governance@calpers.ca.gov.

Rob Feckner
CalPERS Board President

Henry Jones
CalPERS Board, Investment Committee Chair

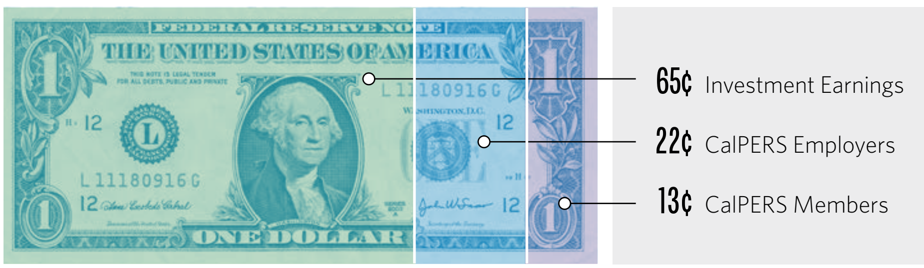
Anne Stausboll
Chief Executive Officer

Ted Eliopoulos
Interim Chief Investment Officer

CalPERS Investments — in Numbers

The CalPERS "Pension Buck"

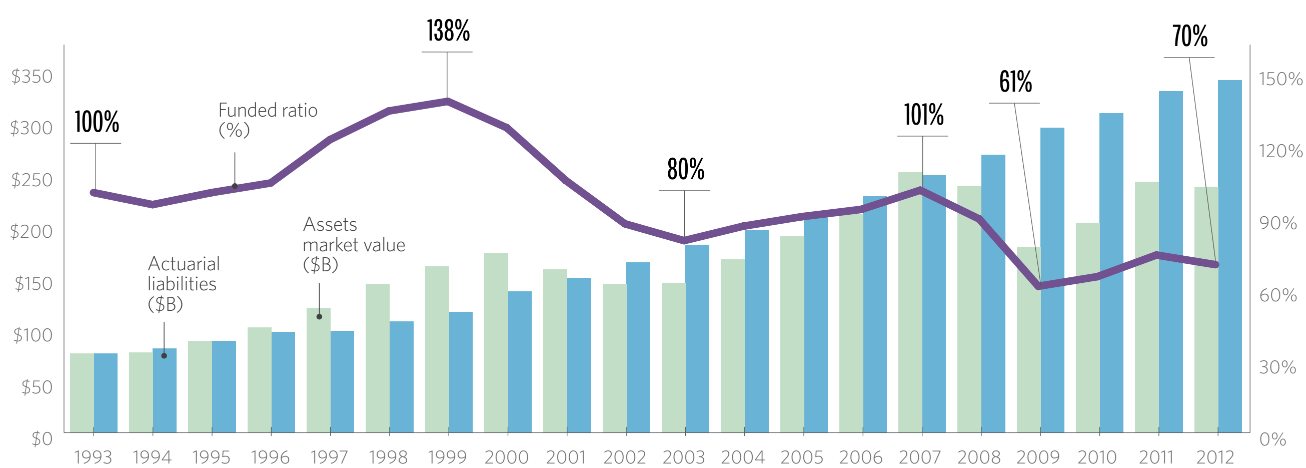
CalPERS has a fiduciary duty to provide health and pension benefits for 1.6 million public employees and their families. Each year we pay out approximately $20 billion in pension benefits. Funding comes from three sources: CalPERS member and employer contributions, and investment returns. Our investments typically provide two-thirds or more of pension payments, which require us to maintain long-term, sustainable returns.



Source: CalPERS, Income over the last 20 years as of June 30, 2013.

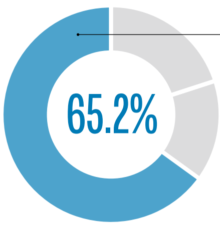
CalPERS Funded Status

A key aspect of sustainability is our funded status, which is defined as the ratio of our assets to our accrued liabilities. Our funded status is based on the market value of our assets, and fluctuates over time in response to market conditions. Balancing our assets and liabilities is a vital role for the CalPERS Board. Full details on CalPERS financials can be found in our *Comprehensive Annual Financial Report* at CalPERS On-Line.



CalPERS Investments

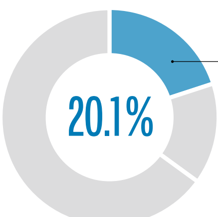
CalPERS investments currently fund 65 cents of every dollar we pay in pension benefits. We earn that amount by investing in different assets. We look for a balance between investments that will grow the fund over the long term, and those that can pay cash. We also have investments that are intended to protect the fund against future uncertainty and volatility in the market, like inflation, which can erode returns.



Growth Assets, $188.3 billion

$157.0 billion | Public Equity
The majority of CalPERS investments are in shares of public companies — or equity. These grow our fund as share prices increase and we receive dividends.

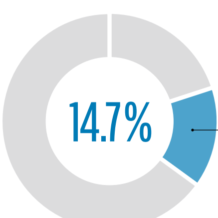
$31.3 billion | Private Equity
CalPERS has a significant amount of money invested in companies that are privately held — and not listed on a stock exchange. We largely invest in these companies using external partners.



Income Assets, $58.1 billion

$44.8 billion | Fixed Income
CalPERS pays more than $20 billion a year in pension benefits, so our cash flow from investments is vitally important. We invest in bonds to produce income and reduce fund volatility. Bonds are issued when either a government or a company wants to raise money.

$13.3 billion | Liquidity
To give CalPERS a buffer in the face of market risk, we have a portfolio of investments, which are considered readily convertible into cash, or represent cash balances.



Real and Other Assets, $42.3 billion

$27.8 billion | Real Assets
CalPERS has major investments in property and forestry, and we are building up our portfolio of infrastructure, which typically includes long-term investments in transportation, electricity, and water supply systems.

$9.5 billion | Inflation
CalPERS inflation-linked asset classes are managed to prudently achieve long-term returns above inflation, diversify CalPERS investments, and hedge against inflation risks.

$5.0 billion | Absolute Return Strategy
CalPERS has a portfolio investing in hedge funds, which we typically use to improve returns or manage risk in the portfolio.

* *As of April 2, 2014*

Introduction

CalPERS' mission is to provide retirement benefits to more than 1.6 million members and their families. Since this responsibility extends to both current and future beneficiaries, our investments must balance the need to meet current obligations with the long-term need to meet obligations into the future. The breadth of our obligations catalyzes our commitment to sustainability.

The concept of sustainability is grounded in economics and the understanding that long-term value creation requires effective management of three forms of capital — financial, physical, and human. This gives us an interest in environmental, social, and governance factors — commonly referred to as ESG. The potential impact of ESG factors on risk and return is complex and varies by sector, geography, and time period. We have a longstanding commitment to ESG issues and a proud history of leadership and innovation in the field. We also appreciate that sustainable investment is an evolving field and standards, strategies, and research are at an early stage of development.

Financial capital — why governance matters
Good corporate governance is vital to ensuring an alignment of interest between a company's management and its shareowners. In our experience, companies with good governance practices deliver better long-term value to investors. We focus on issues such as investor rights, board quality and diversity, reporting, and executive compensation. We also rely on effective regulation to protect our rights, ensure we have reliable information, and give us rights of redress. Governance is important — not just in our company holdings, but in our relationships with external managers and investment vehicles. Our key theme is alignment of interest.

Physical capital — why the environment matters
Companies rely upon inputs from the physical environment like natural resources such as water. They also have an impact on the physical environment. Both inputs and impact will vary by sectors. Managing environmental risk and opportunity is vital for long-term performance.

Human capital — why social issues matter
Companies that employ a diverse range of talent have access to a variety of perspectives that can lead to better decision making. Human resources policies — such as employee incentives to engage in healthy behavior — will impact productivity, attendance, and employee quality of life. Companies also need to be responsible for managing global supply chains to ensure that human rights are protected. Poor decisions in this area can result in disasters that cause loss of life and cost companies billions of dollars.

Core Issues

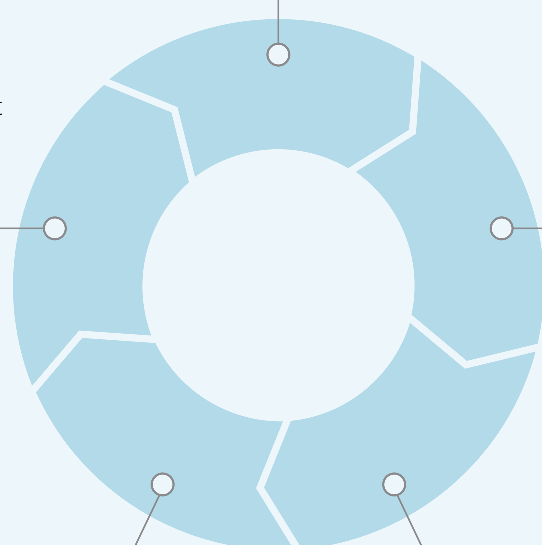
We have identified five core issues that we believe will have a long-term impact on risk and return: investor rights, board quality and diversity, executive compensation, corporate reporting, and regulatory effectiveness. The core issues are the focus of our work in addressing sustainability within the three forms of capital — financial, physical, and human. These issues drive our engagement with the companies we invest in directly, the external managers who invest for us , and with policy makers.

Core Issues in Long-Term Value Creation

Investor Rights
CalPERS is a provider of capital to corporations, external managers, and investment vehicles in both public and private markets.

Regulatory Effectiveness
Regulation protects CalPERS as an investor from externalities, maintains fair, orderly, and efficient financial markets, and facilitates capital formation.

Board Quality & Diversity
Corporate boards of companies, investment vehicles, and external managers are accountable for overseeing the use of our capital.



Corporate Reporting
CalPERS expects fair, accurate, and timely reporting on how companies employ and identify risks related to financial, human, and physical capital to generate sustainable economic returns.

Executive Compensation
Well-designed incentives reward and align the users of our capital with CalPERS objectives to achieve sustainable, long-term investment returns.

Asset Liability Management: Ensuring Financial Sustainability

Every three years, CalPERS undertakes a comprehensive asset liability management review. This is designed to ensure our financial sustainability — that contributions plus investment returns are sufficient to pay the benefits promised to our members and beneficiaries. Through this process, the Board ensures that our asset allocation is appropriate in order to meet our long-term rate of return. The importance of this work is reflected in our first Investment Belief that "liabilities must influence the asset structure."

In the past, the Board made actuarial and asset allocation decisions separately. The framework for this year's process applied an integrated approach that enabled the Board to evaluate these pools of information in a unified way. By considering liabilities in conjunction with the asset structure, the Board is better equipped to make sound decisions to ensure the long-term financial sustainability of CalPERS.

For the asset allocation decisions, staff presented the Board with information about the risk and return profiles of potential investments and how the various options could impact the cost of meeting our obligations. For actuarial decisions, new demographic assumptions were presented showing that men and women are expected to live longer. A second actuarial consideration is higher-than-expected rates of retirement for certain member groups, including police officers and firefighters. CalPERS does not decide benefit levels for members. These decisions are made by our more than 3,000 contributing employers after negotiating with their employees.

New asset allocation strategy adopted

On February 10, 2014, the Board adopted an asset allocation strategy that lowers CalPERS' investment risk, but holds our long-term assumed rate of return at 7.5 percent. The strategy establishes investment ranges for various asset classes; defines asset class criteria; identifies performance objectives and benchmarks; and sets broad guidelines for selecting external investment managers. The Board's policy is intended to ensure that staff, managers, consultants, and other participants take prudent action while managing CalPERS investments. It also ensures sufficient flexibility in managing investment risks and returns. Since more than 90 percent of the variation in investment returns of a large well-diversified pool of assets can typically be attributed to asset allocation decisions, the development of this policy is vital to meeting our fiduciary responsibility.

Investment Beliefs

The purpose

The fundamental objective of CalPERS' investment program is to meet our fiduciary responsibility to provide beneficiaries with the pension and health benefits they have been promised.

Managing and investing CalPERS assets is immensely complex. We invest in many asset classes, each of which has a different definition of risk and reward. We utilize a wide range of investment vehicles, and our investments are global in scope. Adding to the complexity is our mix of externally and internally managed funds. The depth and breadth of our exposure requires exercising principled and consistent judgment in an environment of considerable uncertainty.

In October 2013, CalPERS adopted a set of ten Investment Beliefs intended to guide our decision-making, facilitate the management of our complex portfolio, and enhance consistency. The Beliefs create a framework for the strategic management of the investment portfolio and inform organizational priorities. They also ensure alignment between CalPERS Board members, staff, and our external managers. As the Beliefs are integrated into CalPERS culture, they will help maintain continuity within the Investment Office. The Beliefs will be used in Board and Committee orientations and staff communication programs. They will also provide potential new employees a clear understanding of our investment values.

The Investment Beliefs are not a checklist to be applied to every decision. Rather, they are a guide for making judgments and decisions that often require balancing multiple, interrelated factors.

Beliefs to guide our fund

CalPERS' fiduciary duty is paramount to achieving our mission, which is to provide pension and health benefits to more than 1.6 million CalPERS members and their families. We clearly state that our focus is on the long term — which is both a responsibility and an advantage for a fund our size. The Beliefs call out our responsibilities to our stakeholders and explain how we include their input, and prioritize. The Beliefs also elevate our framework for sustainable investment, recognizing that long-term value creation requires the effective management of three forms of capital: financial, physical, and human. This process has evolved our thinking on ESG issues into a core theme across our portfolio. The Beliefs flag important issues such as the multi-faceted nature of risk including climate change and resource availability, and the importance of managing costs. We acknowledge that our own governance, culture, and teamwork will have an impact on performance, which explains our commitment to diversity and inclusion, and talent management.

Since ensuring our fund's sustainability is integral to our fiduciary responsibility, sustainability is woven throughout.

The development of the Investment Beliefs was a joint project of the CalPERS Board of Administration (Board) and Executive Staff who spent time seeking consensus, including input from stakeholders. The Beliefs provided the foundation for the parallel work we completed in our triennial asset-liability review.

The process

Towers Watson was engaged to help develop the Investment Beliefs with the CalPERS Board. The project began with in-depth, one-on-one interviews with Board members, Investment Office staff, executives, and external consultants. The input gathered from these interviews was analyzed and clustered into themes.

Over a two year period, a series of Investment Beliefs Stakeholder Workshops were conducted to provide an opportunity for stakeholders to engage in dialogue and share their perspectives. Participants included employer, labor, and pension management representatives.

The creation of the Investment Beliefs required a great deal of debate and a willingness to compromise. We recognized that if we wanted the process to result in a concrete product, we had to determine where we had a degree of consensus around a concept or statement. The process was iterative — we continually revised and revisited each issue. As the rigorous discussions progressed, each belief became more finely tuned. In some instances, a debate focused on choosing between two key words such as "must" or "may." We understood that our choice between two such words would significantly change the meaning and emphasis of a belief. Our thorough and disciplined process resulted in a set of Investment Beliefs that achieved strong consensus from both the Investment Committee and staff. We believe we are the first U.S. pension fund to adopt specific investment beliefs to help guide our long-term course.

What do the Beliefs address?

The Beliefs define the principles that will guide the key decisions and processes of our Investment Office. Each belief includes a series of sub-beliefs that give context to the primary belief by elaborating on why it is important and describing how it might be reflected in our investment practices. Since ensuring our fund's sustainability is integral to our fiduciary responsibility, sustainability is woven throughout.

To view the full set of CalPERS Investment Beliefs and sub-beliefs, please see Appendix 1 or visit CalPERS On-Line.

CalPERS Investment Beliefs

Belief 1:
Liabilities must influence the asset structure.

Belief 2:
A long time investment horizon is a responsibility and an advantage.

Belief 3:
CalPERS investment decisions may reflect wider stakeholder views, provided they are consistent with its fiduciary duty to members and beneficiaries.

Belief 4:
Long-term value creation requires effective management of three forms of capital: financial, physical and human.

Belief 5:
CalPERS must articulate its investment goals and performance measures, and ensure clear accountability for their execution.

Belief 6:
Strategic asset allocation is the dominant determinant of portfolio risk and return.

Belief 7:
CalPERS will take risk only where we have a strong belief we will be rewarded for it.

Belief 8:
Costs matter and need to be effectively managed.

Belief 9:
Risk to CalPERS is multi-faceted and not fully captured through measures such as volatility or tracking error.

Belief 10:
Strong processes and teamwork and deep resources are needed to achieve CalPERS goals and objectives.

Sustainable Investment Research Initiative

In our 2012 report, we discussed the need for clarity on the definition of sustainability and its impact on investment risk and return across each asset class. This was highlighted during Board and staff discussions that were held throughout the development of our Investment Beliefs. Although a wide range of literature examines how sustainability factors might impact risk and return for long-term investors like CalPERS, there is a lack of consensus about definitions and evidence.

To gain further insight into the issue, we launched the Sustainable Investment Research Initiative (SIRI) in 2013. SIRI was designed to promote innovative thought leadership that would advance and inform our understanding of sustainability factors and the impact they may have on companies, markets, and investment intermediaries. SIRI would also support the Board's development of Investment Beliefs by contributing to discussions about sustainability issues and how best to incorporate them into the Beliefs.

The first phase of SIRI involved a comprehensive review of academic literature on sustainability factors and financial performance. We partnered with the UC Davis Graduate School of Management and Columbia University to seek studies published in leading academic journals, as well as innovative working papers that examined the impact of sustainability factors on risk and long-term value creation. In January 2013, UC Davis and CalPERS issued a global "Call for Working Papers" from scholars and investment practitioners in the fields of finance, economics, accounting, law, and business. Distinguished faculty from Columbia Law School's Ira M. Millstein Center for Global Markets and UC Davis Graduate School of Management served as program committee chairs to the scholarly review of sustainability papers.

Inaugural Sustainability & Finance Symposium

Ninety papers were submitted and seven were selected, and the authors were invited to present their research at the inaugural SIRI Symposium, held at UC Davis on June 7, 2013. The presentations contributed to a rigorous debate, which focused on the relevance and impact of ESG issues on long-term value creation and capital market stability. Symposium participants also identified avenues for future research on sustainability and finance issues.

Review of evidence: bibliography of academic studies

The Review of Evidence: Bibliography of Academic Studies is an online searchable database of more than 700 studies on sustainability factors and investment. The database includes research spanning four decades, and we believe it is the most comprehensive collection of research on sustainability. The research gathered enhances our understanding of the impact of ESG factors on the long-term value of businesses and highlights areas in need of further exploration.

More information on SIRI can be found at www.calpers-governance.org

Active Ownership: ESG

The "Active Ownership" study by Elroy Dimson, Oğuzhan Karakaş, and Xi Li was one of the seven selected and presented for debate at the SIRI Symposium on June 7, 2013.

The study analyzes the impact of environmental, social, and governance engagements between asset managers and companies. The study finds that, on average, successful corporate social responsibility (CSR) engagements give rise to a positive one-year abnormal return of 4.4 percent, whereas there is no market reaction to unsuccessful CSR engagements. Positive abnormal returns are most pronounced for engagements on the themes of corporate governance and climate change.

Cross Asset Class Team on Sustainable Investment

In 2013 we re-launched the Cross Asset Class Team on Sustainable Investment to work collaboratively in support of the integration of ESG risk and opportunity considerations into investment processes across the total fund. The team's activities will be guided by our Investment Beliefs.

The Cross Asset Class Team serves as a resource hub for knowledge sharing and integration. This includes sharing tools that individual asset classes have created to incorporate our Investment Beliefs and integrating ESG considerations into their investment processes. The team meets regularly and includes members from each of the asset classes and investment program areas.

Manager Expectations

A key goal for the team is the development of Manager Expectations. These will be asset class specific, and flexible practices for integrating sustainability considerations throughout the life cycle of the relationship with internal and external managers, from selection to contracting and then monitoring. Where possible, common core practices and considerations will be established across the Total Fund.

The team's process for developing Manager Expectations is as follows:

- Acknowledge complex issues and uncharted territory.
- Review what CalPERS already has in place that can be utilized further.
- Look to best practices.
- Asset classes and programs create appropriate draft practices for their programs.
- Pilot with selected managers to leverage their insights and review results before wider rollout.

Examples of asset class ESG integration tools

Private Equity developed an ESG due diligence questionnaire that is used to evaluate external managers to determine the extent to which they incorporate ESG issues into their investment analyses and decisions. Our Infrastructure and Forestland Program (IFG) adapted the questionnaire for use in their evaluations and other programs are considering adapting the questionnaire for their programs as well.

IFG created an ESG risk matrix for its internal due diligence process for reviewing potential investments. The risk matrix is also being used by some of our external managers who work closely with the IFG team on due diligence and do not have their own ESG assessment tools. The matrix ensures we consider sustainability when evaluating an asset and facilitates the identification and assessment of ESG risk and relevant mitigation. It also helps us to consider potential costs of relevant ESG risks when conducting a financial analysis of an asset and to more accurately assess the risk level of a particular investment.

Infrastructure is also refining its process for monitoring sustainability once CalPERS owns an investment. Staff is piloting a set of questions to ask managers annually and including language in new contracts obligating managers to participate in such ESG reviews annually. Additionally, IFG staff is participating in discussions with global peers on common ESG monitoring standards.

Certificate in sustainable investing

The Sustainable Investment Research Initiative (SIRI) provided a thorough map of the current academic research on sustainable investment components and clarified whether there is an impact on risk and return. Next, we needed to look at how to use this evidence in practice. This led us to pilot the Certificate in Sustainable Investment offered by the Robert F. Kennedy Center for Justice and Human Rights Compass Program and Columbia University's Earth Institute. The program provided a set of investment management and risk assessment techniques for sustainable investing with an aim to broaden the depth and breadth of skills and knowledge for examining investment choices.

Further information can be found at rfkcenter.org

Taking the Lead

We believe that staying ahead of the curve can help us capture opportunities and manage risk. This timeline reflects both our history of leadership and present efforts to lead the way with our "total fund" approach to sustainable investment.

1984
Initiated **corporate governance reform program**.

1985
Helped establish **The Council of Institutional Investors**.

1987
Launched our annual **"Focus List"** identifying underperforming companies.

1989
Helped found **Ceres**, a coalition dedicated to integrating sustainability into capital markets.

1994
Developed **Real Estate's Responsible Contractor Program Policy**.

1995
Became a founding member of the **International Corporate Governance Network** (ICGN).

1996
Launched **International Corporate Governance Program**.

1999
Launched **corporate governance website**.

2001
Earmarked $457 million to **11 California emerging private equity firms**.

2002
Launched our **financial market reform initiative** in the wake of the Enron scandal.

2003
With Ceres, launched the **Investor Network on Climate Risk** (INCR).

2004
Adopted the **Energy Efficiency Goal** to reduce energy consumption in Real Estate's core portfolio by 20 percent over a five-year period.

Initiated **Environmental Technology Investment Program**.

2005
Joined a multi-stakeholder group of experts coordinated by the United Nations (U.N.), leading to the formation of the **Principles for Responsible Investment** (PRI).

CalPERS Real Estate Unit joins the **U.N. Environmental Program Finance Initiative** focusing on the Property Working Group.

2007
Forestland Policy revised to incorporate governance, environmental, and social principles.

Joined the Advisory Board for the **Credit Roundtable**.

2008
The **"Global Principles of Accountable Corporate Governance"** were approved by the CalPERS Board and guide corporate engagement and proxy voting.

2009
Helped draft the **Institutional Limited Partners Association (ILPA) Principles**, encouraging governance best practice for private equity investment.

Created the CalPERS **Sustainable Operations Program**.

2010
Formed the **Global Peer ESG Exchange** to benchmark our sustainable investment efforts against 11 leading asset owners.

Participated in developing the Mercer Report, ***Climate Change Scenarios – Implications for Strategic Asset Allocation***.

Backed federal **financial market reform**.

2011
CalPERS Board of Administration decided on a **Total Fund ESG Integration plan**.

Contributed to the United Nations Environmental Programme Finance Initiative's ***An Investor's Perspective on Environmental Metrics for Property*** and ***Implementing Responsible Property Investment Strategies***.

2012
CalPERS Board of Administration approved the implementation plan for **Total Fund ESG Integration**.

Launched the **Cross Asset Class Sustainable Investment Team**.

2013
CalPERS Board of Administration adopted **Investment Beliefs**.

Launched the **Sustainable Investment Research Initiative** (SIRI).

Piloted Robert F. Kennedy Compass **Certificate on Sustainable Investing**.

CalPERS Working with Others

CalPERS works in partnership with others by cooperating and building consensus to promote the ESG goals that contribute to sustainable risk-adjusted investment returns for our fund. Those highlighted are active partnerships where CalPERS representatives hold a Board, committee, working group, or other leadership role.

Ceres

A U.S. investor coalition to integrate sustainability into day-to-day business practices.

Council of Institutional Investors

A group of large U.S. pension funds promoting awareness of good corporate governance and shareowner rights.

Columbia School of Law: Center for Global Markets & Corporate Ownership

Inaugurated on June 17, 2012, to study global financial markets and their diverse, interdependent actors.

The Credit Roundtable

Fixed income manager group seeking to enhance investment-grade bondholder protection.

International Corporate Governance Network

A global membership organization to raise standards of corporate governance worldwide.

International Financial Reporting Standards Advisory Council

Advisory council working to develop a single set of global, high-quality reporting standards.

Principles for Responsible Investment

A global network of international investors launched by the United Nations.

Robert F. Kennedy Center for Justice & Human Rights Compass Program

Advocates for sustainable fiduciary investments.

Sustainability Accounting Standards Board

Aims to develop and maintain industry-based, material sustainability standards to guide U.S. corporations.

Public Company Accounting Oversight Board Investor Advisory Group

Oversees the audits of U.S. public companies in order to protect investors.

Robert Toigo Foundation

Promotes diversity in the financial sector.

United Nations Environmental Programme Finance Initiative

Global partnership to develop and promote linkages between sustainability and financial performance.

Financial Capital
Governance

Governance is the primary tool we use to align interests between CalPERS and the managers of our financial capital — including companies and external managers. Good governance enhances a company's long-term value and protects investor interests.

Through our Global Governance Program we interact with more than one thousand companies annually. This work is framed by the CalPERS Global Principles of Accountable Corporate Governance (Principles). The Principles establish our expectations on a range of governance issues, including shareowner rights, board quality and diversity, executive compensation, corporate responsibility, and market conduct. We ensure alignment of interest by working with regulatory agencies to strengthen financial markets; working with companies to ensure management accountability; and working with investment partners and external vehicles to encourage best practices and earn value for our fund.

"Shareowners can be instrumental in encouraging responsible corporate citizenship. CalPERS believes that environmental, social, and corporate governance issues can affect the performance of investment portfolios."

CalPERS Global Principles of Accountable Corporate Governance

Financial Market Reform

Important business remains to be done to further protect and strengthen shareowner rights and investor confidence in the financial markets. Without comprehensive and effective financial market reform, systemic risk could again go unchecked, making pension fund assets vulnerable.

In CalPERS testimony to the U.S. House of Representatives Financial Services Committee in 2012, we shared our view that "smart regulation" should be structured as follows:

- Regulation needs to be complete and coordinated.
- Regulation needs to allow market players to exercise their proper role and responsibilities.
- Regulation needs to ensure transparency, so that the market can play its vital role in pricing risk.
- Regulation needs to address conflicts of interest and unreasonable incentives, which can undermine the market's ability to allocate capital effectively .
- Regulation needs to ensure it does not prevent institutional investors from financing legitimate strategies and taking advantage of new opportunities.
- Regulation needs to be proportionate.

Principles of Financial Regulation Reform

In conjunction with leading public pension funds and plan sponsors in the U.S., we developed financial regulation principles, aimed at restoring trust in the markets. The *Principles of Financial Regulation Reform* include the following key elements:

1. Greater disclosure and transparency
2. True regulatory independence
3. An increased and effective share-owner voice in the capital markets
4. Earlier identification by regulators of issues that give rise to overall market risk that threaten global markets
5. The preservation of institutional investors' freedom to invest in the full range of investment opportunities

To view the full Principles document visit www.calpers-governance.org

Executive compensation

In September 2013, the U.S. Securities & Exchange Commission (SEC) announced that it would begin rule-making for a key Dodd-Frank requirement — the disclosure of CEO pay ratios. The SEC rule will require companies to disclose the median pay of their employees and show the ratio to the CEO's total pay. This requirement will shed light on an element of pay that is currently hidden from public view. We hope that companies we invest in will welcome the opportunity to articulate their approach to value creation through the transparency of their compensation practices.

1,903 companies engaged through collaborative efforts

Engagement Through Global Partners

Since our equity portfolio comprises a large portion of companies outside of the U.S., corporate governance in international markets is important to us. We are actively involved in the Asian Corporate Governance Association (ACGA). The ACGA, which is one of the several groups we are members of, is working to implement effective corporate governance practices throughout Asia. CalPERS regularly participates in the ACGA delegations that meet with Asian companies and regulators. In engaging Asian companies, we address the same responsible governance practices that have been successful in the U.S. and other global markets. This includes encouraging board independence and assisting companies in implementing best practices. As a result of our participation in the ACGA, Asian companies have expressed an increased interest in meeting with CalPERS to address governance and other issues.

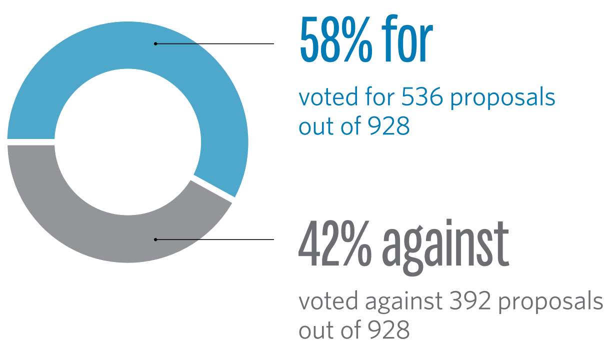
Voting Our Proxy

The voting of proxies is an important mechanism by which shareowners like CalPERS can influence a company's operations and corporate governance. We make our voting decisions based on a full understanding of the information presented to us and in line with our Global Principles of Accountable Corporate Governance.

Majority voting

We advocate for companies to adopt majority voting for board members as a best practice to ensure accountability to the shareowners. In contrast, the plurality model allows candidates to be elected with a single "For" vote — which is generally considered

Shareowner proposals voted for and against by CalPERS in 2013



to be poor governance. Over the past four years, more than 175 companies — largely from the S&P 500 — have adopted a majority voting standard as a result of our engagement efforts. More than 90 percent of companies in the S&P 500, and 60 percent of those in the Russell 1000, have some form of majority voting standard. This trend toward good corporate governance is reflected in CalPERS' positive dialogue with companies in which we invest.

CASE STUDY

Multiyear Engagement with Apple Improves Shareowner Rights

As of January 31, 2014, CalPERS owned nearly 2.8 million shares of Apple common stock — one of the largest stock holdings in our fund. As an Apple shareowner, we have an interest in advocating for governance policies that protect investor rights. We ran a public campaign in support of Apple management to repel a shareowner resolution put forth by a short-term activist investor.

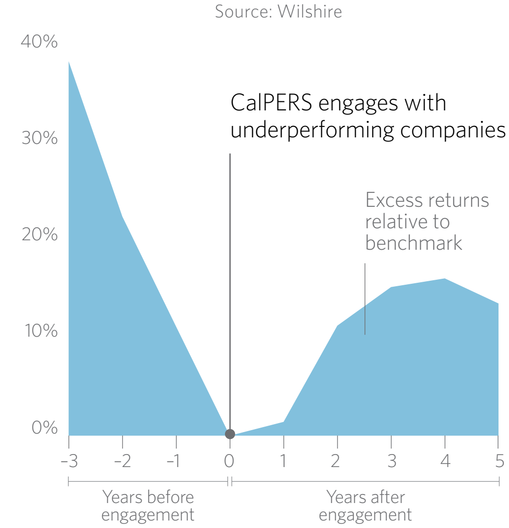
Focus List

Our Focus List Program is a vital part of our engagement on corporate governance. We identify companies from our top 1,000 domestic public equity holdings that are underperforming on both stock returns and governance factors. The governance factors we review include board quality, staggered boards, lack of director independence, shareowner rights, poison pills, executive compensation, and risk management of environmental and social issues. We place underperforming companies on our Focus List, and we engage with them to address areas of concern. We may submit shareowner proposals to encourage necessary change. In the past, our Focus List was public information; however, beginning in 2011, the Focus List and the engagements became private. The confidentiality facilitates the development of constructive relationships.

In 2012, we initiated a program to monetize the Focus List. Each year, after the Board approves staff recommendations for Focus List companies, we increase our investments in those companies. New Focus List companies are added to the portfolio each year, and the portfolio is rebalanced so that our holdings remain equally weighted. The purpose of monetizing the Focus List is to replicate the Wilshire studies — using actual funds to demonstrate and measure the "CalPERS Effect." Monetizing the Focus List also allows us to realize a return on the increased value that typically occurs following our engagements. Thus far, the portfolio has outperformed its FTSE U.S. Large Cap ex-tobacco benchmark.

"The CalPERS Effect"

Source: Wilshire



Driving Change Through Proxy Voting

Every year, we use our shareowner voting rights to ensure our interests and values are aligned with companies across the 47 markets that we invest in. We cast more than 9,000 votes in line with CalPERS Global Principles of Accountable Corporate Governance.

Voted **for**

At **Nabors Industries** we sponsored a proposal to amend the company's by-laws to require shareowner approval of severance benefits that exceed 2.99 times the sum of an executive's base salary and bonus. We also voted for a proposal asking the board to elect an independent chair and a proposal allowing shareowners to nominate candidates for election to the board.

Voted **for**

At **New York Community Bancorp** we sponsored a proposal that would take the necessary steps to institute a majority-voting requirement for the election of directors. The proposal would receive over 50 percent shareowner support and would later be implemented by the company.

Voted **for**

At **Hatteras Financial Corporation** we sponsored a proposal to require that director nominees be elected by the affirmative vote of a majority of the ballots cast. The proposal would receive over 67 percent shareowner support and would later be implemented by the company.

Voted **against**

At **Walmart** we voted against director nominees over concerns surrounding the board's oversight of operational and reputational risk. We also voted in favor of shareowner proposals requesting an independent board chairman and a report surrounding disclosure of recouped executive compensation.

Voted **for**

At **Chesapeake Energy** we sponsored a proposal to eliminate the 67 percent supermajority voting requirement. We also voted for a proposal to allow shareowners the ability to nominate candidates for election to the board. The proposal would receive over 86 percent shareowner support and would later be implemented by the company.

Voted **for**

At **Hospitality Properties Trust** we sponsored a proposal for the fifth consecutive year requesting the company provide for annual director elections. As in years past, the proposal received overwhelming shareowner support. It would later be implemented by the company.

Driving change through proxy voting, *continued*

Voted **for**

At **Apple** we voted for a management proposal to implement majority voting for director elections and other proposals designed to enhance shareowner rights. This is a result of more than two years of engagement with Apple to change its voting standard for board candidates from a plurality model to a majority standard. Following successful CalPERS-sponsored shareowner resolutions supporting majority voting, in February 2013, Apple sponsored Proposal 2, which would amend Apple's charter to provide for majority voting for directors. The proposal would also establish a par value for Apple stock and eliminate Apple's ability to issue preferred shares without shareholder approval. We strongly supported Apple's position that preferred stock should not be issued without shareowner approval.

Voted **for**

At **Petroleo Brasilerio S.A.** (Petrobras) CalPERS supported the election of Mauro Rodrigues da Cuhna as the director representative for minority shareowners. CalPERS believes he possesses the relevant skills and experience to bring an independent perspective to the board. Cunha is also chair of the Brazilian Association of Capital Markets (AMEC).

Voted **for**

At **BHP Billiton** CalPERS supported Ian Dunlop's bid to be elected to the BHP Billiton board. Dunlop argued that by supporting repeal of the carbon tax, the company was inadequately managing the fiduciary risks of climate change and its related impacts. CalPERS support of Dunlop reflects our larger focus on expanding the skills and diversity of the board members who direct large corporations.

Voted **against**

At **JPMorgan** governance reform continues as directors David Cote and Ellen Futter stepped off the JPMorgan board due to high opposition in 2013. CalPERS withheld the vote from each nominee due to their membership on the board's risk committee and related oversight failures during a period when the company experienced significant trading losses. Since 2013, the company has added two new directors and formalized the lead independent director role.

Voted **against**

At the 2013 **Hewlett-Packard** Annual General Meeting CalPERS withheld its vote from Board Chairman Raymond Lane, John Hammergren, and G. Kennedy Thompson due to failures at the company. After receiving a high opposition vote, Lane stepped down as chairman and both Hammergren and Thompson are leaving the board.

External Managers and Vehicles

A portion of each equity program is managed externally by specialized money managers. We choose well-established investment management firms and provide opportunities to new and emerging companies.

Private Equity

CalPERS has been an investor in Private Equity since 1990. We have a wide variety of external partners, from emerging managers to established investment firms. Several of our Investment Beliefs address the importance of ensuring an alignment of interest between CalPERS and our external managers.

In March 2013, CalPERS participated with a group of more than 40 limited partners (LPs), 20 industry associations, and 10 leading general partners (GPs) to publish a new *ESG Disclosure Framework for Private Equity*, available on the UN-PRI website. The framework includes eight questions that LPs might ask GPs about their ESG integration and explains the objective of each question. The framework also summarizes the types of information GPs could include in a response. CalPERS Private Equity has incorporated these questions into its Due Diligence Questionnaire. We expect the framework to stimulate a common language and understanding around what ESG means and advance the dialogue for investing sustainably and profitably.

Global Equity

Global Equity invests with several investment managers across a number of strategies and markets. One of them is Quotient Investors — a domestic investment manager that generates return, risk, and transaction cost forecasts for each stock in its universe. Quotient uses value, growth, momentum, and ESG factors to identify proprietary price drivers unique to companies within an industry. Quotient utilizes a quantitative process that focuses on stock selection driven by unique valuation models, incorporating multiple ESG factors for the 56 industries that comprise the U.S. market. This evaluation provides additional investment in firms with higher ESG scores relative to others in their industry.

CalPERS Global Equity has many portfolios with distinct strategies. We have exclusions at the Global Equity level

ESG Disclosure Framework for Private Equity

Section 1: Disclosures during fundraising

During fundraising, a GP should disclose information sufficient to enable an LP that has expressed an interest in ESG management to:

1. Assess if the GP is aligned with the LP's ESG-related policy and investment beliefs.
2. Assess the GP's policies, processes, and systems for identifying ESG-related value drivers and managing material ESG-related risks and identify possible areas for future development.
3. Understand if and how the GP influences and supports its portfolio companies' management of ESG-related risks and pursuit of ESG-related opportunities.
4. Assess how the GP will help the LP to monitor and, where necessary, ensure that the GP's actions are consistent with the agreed-upon ESG-related policies and practices as set forth at fund formation.
5. Assess the GP's approach to managing and disclosing material incidents at the GP and portfolio companies.

Section 2: Disclosures during the life of a fund

During the life of a fund, a GP should disclose information sufficient to enable an LP that has expressed an interest in ESG management to:

6. Establish if a GP is acting in a manner consistent with the GP's investment policies, processes, and agreed-upon fund terms regarding ESG management.
7. Understand positive and negative ESG-related developments that may impact portfolio companies in the fund.
8. Determine if responses to GP and portfolio company incidents and incident reporting are consistent with relevant investment terms, the fund's policies, and the LP-stated objectives regarding incident disclosure.

that cover all of our portfolios, as well as emerging strategies that have exclusionary screens. Our overarching exclusions are as follows:

Tobacco Divestment

In 2000, the CalPERS Board decided to divest from passively managed tobacco stocks and bonds. This decision was based on a portfolio risk return analysis, including a review of the litigation, regulatory, and reputational risks that could affect the long-term sustainability of the tobacco industry.

Divestment Policy: Sudan & Iran Acts

In response to state legislation, CalPERS aims to mitigate financial and reputational risk related to investing in Sudan and Iran via engagement activities. CalPERS Total Fund Divestment policy, which applies to Global Equity investments, states the System's preference for constructive engagement over divesting.

The Sudan Act requires that CalPERS identify, monitor, and ultimately divest from companies with business activities in Sudan, unless exempt on humanitarian grounds, subject to the plan's fiduciary duty which requires that risks and returns take primacy.

CalPERS diligently and comprehensively implemented the requirements of the Iran Act since January 2007. The Iran Act requires that CalPERS identify, monitor, and ultimately divest from companies in the international nuclear, defense, oil, and gas sectors, subject to the plan's fiduciary duty.

CalPERS continues to actively engage companies as required by the Sudan and Iran Acts and track significant progress toward withdrawing from companies with business in Sudan and Iran.

Divestment Assault Weapon Manufacturers

Following the December 2012 tragedy at Sandy Hook Elementary School in Newtown, Connecticut, CalPERS reviewed its investments in manufacturers of assault weapons that are illegal for sale under California law. Upon review of all asset classes, and in accordance with the CalPERS divestment policy, investment staff identified approximately $5 million invested in two firearms manufacturers, which CalPERS Board directed investment staff to divest from at the February 2013 Investment Committee meeting.

"Carlyle launched its efforts to incorporate environmental, social, and governance considerations into its investment decisions in part because of CalPERS' focus on these issues. Working with CalPERS, we helped lead the effort for the private equity industry to adopt ESG standards. Carlyle believes that incorporating ESG into investment decisions helps to reduce risk, enhances returns for our investors, and fulfills an important responsibility as a key stakeholder in communities around the world."

David M. Rubenstein
Carlyle Co-CEO

Holocaust Era and Northern Ireland

California law requires CalPERS to monitor and annually report on investment holdings in companies and their affiliates that do business in California and that owe compensation to victims of slave or forced labor during World War II. California law also requires CalPERS to investigate and annually report to the Legislature on the extent to which CalPERS domestic and international portfolio companies operating in Northern Ireland are adhering to the principles of nondiscrimination and freedom of workplace opportunity, in compliance with the laws of Northern Ireland.

Emerging Equity Markets Principles

Until 2007, we did not invest in a large number of emerging markets due to risks that we might invest in companies or other entities that abuse labor or violate human rights. We had a "Permissible Country List" that in effect screened out any equity investment in these countries. We reviewed this approach in 2007 and concluded that it both hurt our returns by prohibiting potential investments and reduced our ability to be a positive influence on these markets. We found it would be more effective to exclude individual companies, rather than entire countries.

Where possible, we use engagement to improve standards and generate enhanced performance. This

"KKR has a long-standing commitment to thoughtfully managing environmental, social, and governance issues throughout the private equity investment process. Our approach focuses on creating shared value through initiatives that benefit our private equity limited partners, portfolio companies, the environment, and society in general. It's by working closely with partners who share our commitment, like CalPERS, that we are able to achieve our goals of creating sustainable value."

George R. Roberts
KKR

led to the establishment of our Emerging Equity Markets Principles, which state our basic requirements in terms of productive labor practices, transparency, political stability, corporate social responsibility, market regulation, transaction costs, and capital market openness. Each year, we ask a third party to analyze the emerging market companies we invest in to ensure that there has been no infringement of these principles. This approach has led us to greatly increase our investments in emerging market countries.

Global Fixed Income

Our Global Fixed Income (GFI) staff worked in partnership with the Credit Roundtable to draft a comment letter to the Federal Deposit Insurance Corporation (FDIC) related to implementation of the "bail-in" framework stemming from the Dodd-Frank Act. We also helped develop a survey of Credit Roundtable portfolio managers that explored their understanding and usage of bail-in rules, as well as the rules' effectiveness. The GFI staff supported a letter to the SEC Office of Mergers and Acquisitions, which is researching new guidance on the debt tender and consent solicitation process.

The GFI senior investment officer met with the chairman of the Commodity Futures Trading Commission (CFTC) to provide input regarding benchmarks such as LIBOR and participated in CFTC hearings related to benchmarks and derivatives. CalPERS' structured securities senior portfolio manager and staff participated in meetings with CalPERS legal staff and the California State Attorney General's office. The purpose of the meetings was to provide background information and trade data to assist the Attorney General's office in its pursuit of judgments against JPMorgan — and potentially other financial institutions — related to fraud and misrepresentations of mortgage security data during the financial crisis.

CalPERS credit analysts assisted the Sustainability Accounting Standards Board in developing industry specific 10K reporting requirements that would provide investors with an understanding of how companies assess sustainability-related risk factors.

Real Assets

In Real Estate, we continue to utilize the CalPERS Real Estate Alignment of Interest Principles, which are incorporated into operating agreements for the separate account partnership structures. The principles address key concepts such as investment strategy, control rights to be retained by CalPERS, and manager compensation. The principles give managers the discretion they need to optimize returns of underlying investments while managing risk in a manner consistent with the approved investment strategy and acting in the best interest of CalPERS.

Absolute Return Strategies

CalPERS has developed a policy requiring investment managers within the Hedge Fund Program to vote proxies in a manner consistent with CalPERS' Global Principles of Accountable Corporate Governance. Implementation of the policy is currently underway — demonstrating CalPERS commitment of aligning investment interests with proxy voting responsibilities.

CalPERS Putting Principles into Practice

Strengthening governance

In 2011, the CalPERS Board underwent a governance review that led to the adoption of the six Principles for Effective Public Pension Fund Governance that reflect commitment of Board members to be:

- Effective and capable fiduciaries
- Ethical leaders
- Open and accountable to CalPERS stakeholders
- Risk-intelligent and insightful in their decisions
- Focused on a long-term view for the needs of our members, retirees, and their families
- Committed to continuous learning, while adapting to changing environmental, political and economic conditions

As follow-up, in December 2013, the Board adopted a set of core competencies as another step toward greater accountability, transparency, and ethics. The list of competencies includes more than 20 criteria focused on board governance, health care, pension plans, financial markets, and communication.

Additional governance reforms adopted by CalPERS over the last two years call for:

- Each Board member to sign a statement acknowledging their fiduciary responsibilities in conjunction with fiduciary training and self-assessment processes.
- An independent third party to assess Board performance once every two years.
- New roles and responsibilities for the Board president, vice president, committee chairs, and vice chairs.
- A new structure for the Board and its committees that reserves powers and outlines responsible parties for approvals, standards of conduct, strategy, policy, and performance.

Investment Belief 4 addresses the importance of strong governance in achieving CalPERS goals and objectives.

Physical Capital
Environment

CalPERS believes that encouraging our external managers, portfolio companies, and policy makers to engage in responsible environmental practices is important to risk management. This means making wise use of scarce resources, considering impact, and addressing systemic risks, such as climate change.

In its 2012 "World Energy Outlook," the International Energy Agency predicted that the world is on course to raise the atmospheric concentration of greenhouse gas to a level that could increase global temperatures by 3.6°C (38°F) or more.[1] The World Bank warned that adaptation to such climate change may not be possible and that "a 4°C warmer world must be avoided."[2]

In the operation of our own buildings, CalPERS actively promotes conservation. Many of our investment partners have reported that their organizations and the companies they invest in on behalf of CalPERS have implemented environmental programs and initiatives.

Corporate Reporting

In 2010, the Securities and Exchange Commission (SEC) issued interpretive guidance on climate risk. CalPERS supports the Sustainability Accounting Standards Board (SASB), and we encourage the SEC to continue its dialogue with SASB as they develop industry-specific sustainability accounting standards for publicly listed companies. We urge the SEC to use the SASB standards in review of sector filings; to continue to issue comment letters addressing inadequate disclosure of material climate change issues; and to collaborate with other federal agencies to analyze the material sustainability risks and opportunities.

Carbon Asset Risk Initiative

CalPERS is actively involved in the Carbon Asset Risk Initiative led by Ceres. This investor collaboration draws together 70 global investors who cumulatively manage more than $3 trillion in assets. We are calling on 45 major oil, gas, coal, and electric power companies to stress test financial risks that climate change poses to corporate business plans. We cite the importance of the 2010 Cancun Agreement in which international governments set a long-term goal of limiting global warming to below 2°C (35.6°F).[3] We ask each company to "review both its exposure to these risks and its plans for managing them under at least two main scenarios: (1) a business-as-usual scenario such as that used in current reporting and (2) a low-carbon scenario consistent with reducing GHG emissions by 80 percent by 2050 to achieve the 2°C goal." Companies engaged include ExxonMobil, Royal Dutch Shell, BHP Billiton, Rio Tinto, American Electric Power, and Vale.

For more information about the Carbon Asset Risk Initiative visit: www.ceres.org.

1 International Energy Agency, "World Energy Outlook 2012," (2012).

2 The World Bank, "Turn Down the Heat: Why a 4°C Warmer World Must Be Avoided," (2012).

3 The United Nations Framework Convention on Climate Change, "The Cancun Agreements," December 2010. http://cancun.unfccc.int/cancun-agreements/main-objectives-of-the-agreements/#c33.

Environmental Investment Initiatives

Global Equity

Global Equity invests in several, largely internally managed, strategies and is researching several others that explicitly integrate sustainable investing into the investment process. Each strategy looks to address issues that are expected to have a material impact on the long-term earning potential of the business and strategy. These issues include climate change, low carbon energy production, energy efficiency and energy management, environmental and land use management, resource conservation, and climate finance.

In 2010, CalPERS allocated $500 million to an internally managed environmental index fund made of public stocks. This strategy is modeled on the HSBC Global Climate Change Benchmark Index and invests in approximately 380 securities around the world that derive a material portion of their revenues from environmentally friendly sectors such as low-carbon energy production, energy efficiency management, and carbon trading.

Global Fixed Income

CalPERS basic industries credit analyst participated in a forestry tour and sustainability presentation by Weyerhaeuser, one of our portfolio companies. Weyerhaeuser provided details about its industry-leading approach to sustainable forestry, demonstrated its long-term commitment to the communities in which it operates, and described its vigilance in complying with regulations. CalPERS utility power and energy markets credit analysts attended the Cambridge Energy Research Associates (CERA) Conference as well as other industry-related conferences to better assess the risk of stranded assets and the regulatory risks for CalPERS debt investment in fossil fuel companies in our portfolio.

Real Assets

CalPERS core real estate investment managers joined the Urban Land Institute Greenprint Center for Building Performance (Greenprint), and the managers submitted energy consumption data for selected assets to Greenprint. This data — combined with Greenprint members' data — is included in the Greenprint 2012 Performance Report. A non-profit organization, Greenprint is a worldwide alliance of leading real estate owners, investors, and financial institutions committed to reducing energy consumption and carbon emissions across the global property industry.

45 of the largest fossil fuel companies were engaged through the Carbon Asset Risk Initiative

CalPERS was co-chair of the United Nations Environmental Programme Finance Initiative (UNEP-FI) Property Working Group, which developed "Commercial Real Estate: Unlocking the Energy Efficiency Retrofit Investment Opportunity." Buildings account for approximately one-third of the world's energy consumption and greenhouse gas emissions, and are a high-impact sector for mitigation of climate change factors. One of the most effective mitigation methods is the implementation of energy-efficiency retrofits. The UNEP-FI report presents a seven-step process for reducing energy consumption and potentially increasing the value of real estate assets through energy efficiency retrofits.

The UNEP-FI report can be downloaded at www.unepfi.org

CASE STUDY

Oak Hill Maps Environmental Impacts

The Environmental Defense Fund and Oak Hill Capital Partners worked together to create a methodology that mapped Oak Hill Capital's portfolio of 20 companies according to environmental impacts, financial opportunities, and management readiness. Their priority was to focus on portfolio companies with the most promising opportunities to set an example and build further buy-in and engagement throughout the firm and at additional portfolio companies.

"Protecting the environment of the communities in which we operate is critically important. Responsible environmental stewardship is vital for the health and well-being of local communities, and ultimately ensures the sustainability of the companies in which we invest, on behalf of Blackstone's investors."

Blackstone

CASE STUDY

Renewable Resource Projects

The CIM Group Infrastructure Platform partners with public agencies to make investments to develop and operate clean renewable resource projects that support the sustainability of urban communities. CIM invested in a Southern California natural aquifer with surface agricultural land to develop it as a groundwater storage bank. Once completed, the underground storage bank will have a one-million-acre-feet capacity. It will offer municipal water utilities the ability to add and remove 200,000 acre feet of water annually — storing water during wet years and providing reserves for use during droughts.

CIM also invests in the Toronto-based SkyPower group of companies — Canada's largest owner and developer of solar energy projects. SkyPower owns a 50 percent stake in the 9.0 megawatt First Light energy park, the first operational utility-scale solar energy project in Canada. SkyPower currently has seven operating solar parks, 16 parks in development, and a global pipeline of 18,000 megawatts at various stages of development.

CASE STUDY

The Nation's First LEED Silver-Certified Shopping Center

Through our general partner Miller Capital Advisory, we are investors in the nearly one-million-square-foot La Palmera shopping center in Texas, which recently became the first Leadership in Energy & Environmental Design (LEED) Silver-Certified Core and Shell shopping center in the nation. La Palmera was redeveloped in 2010, with 15 percent of materials used coming from recycled products, and 85 percent of construction debris being recycled. The redevelopment installed low-flow toilets and faucets, saving 2,930 gallons of water per day. Exterior landscaping used native plants and drip irrigation systems — with an estimated savings of 356 gallons of water per day. Energy use was reduced 35 percent through the installation of new air conditioning, heating, and ventilation systems and by converting to low-energy lighting. The use of solar tubes and windows situated to bring in natural light reduced electricity use by 1.4 million kilowatts per year. Following the redevelopment, La Palmera was remerchandised to include tenants that are focused on sustainable issues. Restaurant tenant P.F. Chang's received a LEED Gold certification for the use of sustainable materials in its construction. The Aveda Institute of Corpus Christi installed a 60-foot wind turbine, which generates power for its 15,533-square-foot facility.

CASE STUDY

Blackstone Announces Solar Program for Portfolio Companies

Our general partner Blackstone developed a solar program that has the potential to cut energy costs by approximately 10 percent and improve environmental performance across its portfolio. The program will install solar systems on the rooftops of select portfolio companies. Portfolio companies will buy solar power via long-term power purchase agreements that are estimated to significantly lower costs. Installation is free, and the systems will be owned, operated, and maintained by third parties. Blackstone selected Smart Energy Capital to support project development and maintenance. This sustainability initiative complements Blackstone's ongoing success in reducing energy costs and driving environmental performance improvement across its portfolio.

CalPERS Putting Principles into Practice

Water conservation

We have implemented a range of water conservation measures as Northern California faces the worst drought in decades. We are expanding conservation through the following actions:

1. Eliminated window washing, pressure washing, and carpet cleaning, except for spot treatments
2. Cancelled biannual garage scrubbing
3. Replaced traditional flow faucets with low-flow models
4. Replaced the remaining traditional flow shower heads with low-flow heads
5. Drained four decorative fountains
6. Devised water recapture tank for ice from the café to be re-used for exterior irrigation
7. Reduced irrigation days and total watering time on exterior landscaping

All our buildings use computer-controlled watering systems that are tied to an on-site weather station. All Lincoln Plaza buildings have been retrofitted with water sub-meters to help us see where water is being used, spot trends, and respond quickly to any spikes in use.

In addition to our internal conservation efforts, we sent a letter to each of our California real estate and private equity managers asking them to conserve water at the companies they manage for us. The letter recommends the following measures:

1. Establish a goal to reduce total water usage
2. Enlist participation from facility staff and occupants in reporting leaks and other water usage issues
3. Post signage to promote water conservation
4. Adhere to local water ordinances and conservation protocols where applicable

Reducing energy

Each year, beginning in late spring and summer, CalPERS participates in an energy conservation program. Reduced lighting schemes are implemented throughout interior office space and common areas. Staff is encouraged to reduce desk lighting, turn off lights in unoccupied rooms, and minimize equipment use. Additional conservation measures may be implemented on extremely hot days — such as turning off escalators and people movers in our passenger tunnels.

CalPERS Putting Principles into Practice

Green buildings

CalPERS implemented a number of new energy-efficient features at all our buildings as part of the LEED recertification sparked by California Governor Jerry Brown's Executive Order issued in April 2012. At Lincoln Plaza North, we reduced the fifth floor open office lighting by 30 percent, reset heating, ventilation, and air conditioning supply air temperature, and revised operating schedules for the escalator and air handler unit. At Lincoln Plaza East/West, we reset the evaporative cooling unit cooling set point to 85° and heating set point to 60° and replaced high wattage lamps in mechanical and support rooms with extended-life lamps. In all buildings, we reduced parking garage lighting by 50 percent, installed occupant controllers on vending machines, and reset space temperature set points from 75° to 77°.

CalPERS headquarters landscaping includes trees to provide shade, minimize irrigation use, and reduce building heat gain. Drought-tolerant plants and a high-efficiency irrigation system contribute to a 50 percent reduction in water use, while lessening the demand on municipal water supplies and wastewater systems. Sustainable landscaping practices, as well as restroom fixture upgrades, played a key role in CalPERS receiving LEED Gold certification from the U.S. Green Building Council in 2009.

Sustainable Operations Program

The CalPERS Sustainable Operations Program was created in 2009 and is responsible for the implementation of sustainability initiatives at all CalPERS offices. CalPERS has defined sustainability as "meeting our needs while not compromising the ability of future generations to meet theirs." The program addresses issues that will enable CalPERS to operate in a more environmentally responsible manner. For instance, we recognize that purchasing post-consumer recycled-content and environmentally preferred products, minimizing waste, and increasing energy efficiency can have long-term benefits to the environment.

In September 2012, CalPERS established the Green Club — a volunteer group of employees that meets once a month to discuss how CalPERS can be more "green." The goal is for employees to actively participate in improving our workplace. This is a relaxed environment where members have opportunities to volunteer, facilitate meetings, present new information, ask questions, and make suggestions.

Café operations

Beginning December 1, 2012, Compass Group USA took over the food service contract for the Lincoln Plaza Café. The company's sustainability commitments include serving sustainably farmed seafood, buying locally sourced produce, purchasing poultry produced without the routine use of human antibiotics, providing milk that is free of artificial growth hormones, offering packaging made from renewable resources, and featuring socially and ecologically certified coffee.

Human Capital
Social

CalPERS believes that the success and long-term value of the companies we invest in will be impacted by their human capital. This includes fair labor practices, responsible contracting, workplace and board diversity, and protecting the safety of employees directly and through the supply chain.

By valuing employees and encouraging a diverse workforce, companies will attract individuals who can contribute to the company's success. Conversely, companies that engage in poor labor practices, mismanagement of supply chains, and lax health and safety standards will be exposed to reputational risk and potential litigation.

CalPERS works to ensure that the individuals who are responsible for our assets are engaging in human capital practices that contribute to long-term company value. To that end, we engage companies and external managers on a variety of social practices, and we are actively involved in several initiatives to promote worker safety and enhance board quality and diversity. In managing our own human capital, we maintain a robust Diversity and Inclusion Program and encourage employees to pursue healthy lifestyles and personal and professional development.

Corporate Engagement

Human Capital Management Initiative

In 2013, CalPERS co-founded the investor-led Human Capital Management Initiative. The coalition of nine global investors representing more than $1.2 trillion in collective assets developed a set of questions about human capital management that investors can use to engage companies. The initiative is also asking retail companies to enter into a multi-shareowner dialogue to address financial, legal, and reputational risks inherent in human capital management.

The investor coalition developed the following baseline set of questions used to engage each company:

Board oversight

- How does the company's board oversee human capital management throughout the organization? Is oversight designated to a board committee, and if so, which one?
- What categories of information related to human capital management oversight, if any, are received from management and reviewed by the board and/or board committees? If applicable, how often is this information reviewed?

Operational integration

- What resources have the company committed to implement human capital management efforts, both in the short-term and as a vehicle for long-term growth?
- What departments and/or business units are tasked with human capital management and development?
- Has the company identified any human capital management best practices, and if so, what are they?

Data collection, risk management, and accountability

- What are the major challenges or risks for human capital management (e.g., turnover, compensation, skills development, benefits, etc.) that the company has identified? What metrics are measured for each, and who is responsible for monitoring these risks?
- What data does the company collect related to human capital development and management, and how is this data integrated into the company's operations?

Employee engagement

- What data collected by the company related to human capital development and management is disclosed to employees and how?
- What avenues do employees have available to provide feedback to the company on human capital management policies and processes, and their own experiences as employees of the company in general, both while these individuals are employees by the company as well as after their employment with the company has ended? Are employees afforded opportunities to provide such input anonymously, and if so, what are they?
- What information is collected through employee outreach and engagement, and how is this information used by management to improve operational performance?
- Are there any additional metrics the company does not currently measure that it is considering measuring in the future, and if so, why does the company view these metrics as useful for value creation?

"CalPERS has a deep interest in the condition of workers employed by CalPERS and its managers and delegates. CalPERS...supports and encourages fair wages and benefits for workers employed by its contractors and subcontractors, subject to fiduciary principles concerning duties of loyalty and prudence, both of which further require competitive returns on CalPERS real estate and infrastructure investments."

CalPERS Responsible Contractor Program Statement of Investment Policy

Incentives and compensation structure

- Overall, what incentives do managers have throughout your company to implement best practices in the area of human capital management? Conversely, has the company and/or the board established any disincentives to prevent or mitigate the potential financial, regulatory, legal, and reputational impact of poor human capital management practices?
- How does the company's pay structure encourage the execution of the company's human capital management priorities and best practices? What variables does the company measure to ensure these best practices are being implemented satisfactorily throughout the organization?
- Specifically, what proportion of the company's global workforce is eligible for incentive-based compensation? For those employees receiving incentive-based pay, how is incentive pay structured to reward human capital management best practices and mitigate the risks of poor human capital management? If human capital management incentives are included in the company's incentive pay structure, what variables are measured?

Investor engagement and disclosure

- What data, if any, is disclosed to investors pertaining to the company's human capital management? Where is the information available, and how often is it reported?

Protecting worker safety

In mid-2013, following the Rana Plaza building collapse in Bangladesh, the Alliance for Bangladesh Worker Safety was developed and signed by 17 leading apparel companies including Walmart, Gap, J.C. Penney, Kohl's, Macy's, Sears, Target, The Children's Place, L.L. Bean, and Nordstrom. The Alliance released the Bangladesh Worker Safety Initiative, which calls for inspection of all Bangladesh factories, common safety standards, and a worker hotline. The initiative includes a worker safety fund that provides access to low-cost capital for improving fire and structural safety in Bangladeshi factories. The inspection component of the initiative was developed in collaboration with the Bangladesh Accord on Fire and Building Safety.

The Accord is an independent agreement designed to make all garment factories in Bangladesh safe workplaces. It includes common standards to guide factory inspections and public reporting of inspection results. The legally binding agreement has been signed by more than 100 apparel companies from 19 countries in Europe, North America, Asia, and Australia; the global trade unions, IndustriALL and UNI; and many Bangladeshi unions. The International Labour Organisation acts as the independent chair. Many of the companies we invest in are participants in these initiatives, and we support such efforts to protect worker safety.

For more information visit www.bangladeshworkersafety.org and www.bangladeshaccord.org.

*In Fiscal Year 2012-13, real estate, infrastructure and housing program managers reported a **98.6%** compliance rate and paid out **over $700 million** in Responsible Contractor Program contracts.*

CASE STUDY

The Need for Responsible Supply Chain Management

In the past few years, factory disasters in Bangladesh, including the Tazreen fire and the Rana Plaza collapse, together took the lives of more than 1,200 people. Both factories manufactured clothing for Walmart — one of CalPERS large retail investments. As of March 2014 CalPERS holds approximately 5 million shares in Walmart. As a shareowner, we are extremely troubled by this loss of life. This is a vital human capital issue that companies with global supply chains need to address.

The Bangladesh factory tragedies are just one in a series of events that demonstrate the need for global supply chains to be monitored. We acknowledge that Walmart has formed a retail consortium to address this concern, but other issues still remain, such as the allegations of corruption in Mexico and a guilty plea and fines for hazardous waste disposal. In June 2013, we asked Walmart shareowners to join us in withholding votes from a slate of nominees to Walmart's Board of Directors. We also voted in favor of shareowner proposals to introduce an independent chair to the board and to require disclosure if executive pay awards are recouped. Regrettably, none of these shareowner proposals were successful. We recognize that our efforts to oust board members are largely symbolic since the founding Walton family controls more than half of all shares. We urge the Walmart board to be responsive to its shareowners and address shareowner concern with oversight of operational and reputational risk.

Board Quality and Diversity

Our Global Principles of Accountable Corporate Governance highlight the importance of board quality and diversity as an important step toward challenging "group think" in corporate boardrooms, which we have learned from the financial crisis can have a devastating impact on the ability to question assumptions. We see diversity as a route to innovative and effective decision-making by drawing upon a range of talents, perspectives, and experiences. We applaud the SEC for developing enhanced disclosure requirements on diversity, which will result in greater transparency around the qualifications of board nominees.

In partnership with the California State Teachers' Retirement System (CalSTRS), we engaged 41 companies in the S&P 500 where we saw a lack of diversity. Several companies have responded positively and indicated a willingness to pursue board diversity.

Diverse Director DataSource (3D)

In 2009, CalPERS and CalSTRS collaborated with more than 150 industry leaders to create the Diverse Director DataSource (3D). 3D is a resource for shareowners, company nominating committees, and executive search firms seeking skilled individuals who can bring a fresh perspective to a boardroom, advance a company's business strategy, and help investors achieve long-term, risk-adjusted returns.

3D was officially launched in July 2012 at the New York Stock Exchange, and as of April 2014, it includes profiles of more than 700 individuals. The database is composed of two-thirds women, nearly a quarter of individuals have international experience, a third have board certification training, and combined they speak 41 different languages. 3D allows users to select a range of search criteria to identify candidates with the right background and experience. We will continue to build 3D by attracting candidates, search committees, and executive recruiters. Our goal is for 3D to become a catalyst for improving board diversity across the globe.

For more information, visit www.GMI3D.com

41 languages

spoken by the 700 plus candidates in the Diverse Director DataSource (3D)

The Agenda Digital 50

To remain competitive, companies must recruit board members who understand how new technologies are changing the ways businesses find, sell, and keep customers. These board members need to be able to direct managers responsible for executing five key information technology categories: social media, big data, mobile technology, cybersecurity, and e-commerce. In mid-2013, the Financial Times invited CalPERS to join a 16-member panel that was creating "The Agenda Digital 50"—a directory of board candidates with experience and skills in new technologies. To be included in the directory, candidates had to meet a set of non-negotiable qualifications, including direct experience on at least one transformative project where they changed a company's products or services with digital technology.

To view the Agenda Digital 50 directory, visit http://common.money-media.com.

Supporting women in corporate leadership

In late 2012, we participated in the Women in Leadership Groundbreakers Conference, sponsored by the Toigo Institute. The goal of the conference was to share insights into how women can break into leadership in the financial industry as well as the broader business community. We joined representatives from CalSTRS to lead a session that addressed how individuals can package their experience for board service, identify organizations for possible board seats, connect with targets, and maximize platforms such as Toigo's "All A Board" initiative and 3D.

Asset Class Initiatives

We actively encourage the companies and external managers in which we invest to promote responsible human capital practices. In addition to broad measures supporting human capital initiatives, in March 2014, CalPERS distributed a Diversity and Inclusion Survey to our external managers. The survey focuses on the following:

1. Diversity of ownership, workforce, and key competency positions
2. Decision-making surrounding investments, hiring, and compensation
3. Diversity and inclusion policies and programs

The information provided by our investment partners will contribute to our Diversity and Inclusion Program and outreach efforts.

Emerging markets

CalPERS has significant investments in emerging markets, which are countries classified by the FTSE index as having a low- or middle-income economy. This includes groupings such as the BRICs (Brazil, Russia, India, and China). These countries comprise approximately 80 percent of the global population. Although these countries differ, their markets tend to be characterized by a rising GDP, and they offer opportunities for investment growth. While these opportunities are often attractive, the countries may have higher risks in areas such as human rights and health and safety. Additionally, emerging market companies often have incomplete disclosure on sustainability-related risks.

Prior to 2007, we refrained from investing in a large number of emerging markets due to risks that we might invest in companies or entities that abuse labor or violate human rights. We had a "Permissible Country List" that in effect screened out any equity investment in these countries. In 2007, we concluded that eliminating entire countries limited potential investment opportunities and reduced our ability to have a positive influence on these markets. We determined that when we found unacceptable social practices, it was more effective to exclude individual

CASE STUDY

Global Fixed Income

Our Global Fixed Income sovereign team credit analysis process evaluates sovereign credit worthiness using both quantitative and qualitative factors. Quantitative factors include economic indicators to assess the country's ability to pay back and service its debt. Qualitative analyses assess the countries' willingness to pay back the debt. Willingness to repay debt is measured by policy continuity; governance; voice and accountability; freedom of press; labor rights; rule of law; judicial system effectiveness and efficiency; women's rights; GINI indicator (an economic measure of inequality); corruption indicator; ease of doing business; freedom of association; human rights; human development index; and freedom of religion, among other issues. The table below maps the sources we draw on for these qualitative indicators:

Source	Factor
Transparency International	Corruption Perception Index; control of corruption; Open Budget Index
IMD World Competitiveness Report	Global Competitiveness Index
United Nations	Human Development Index
World Bank	GINI coefficient; Voice and Accountability Index
World Justice Project	Rule of Law Index
Heritage Foundation	International Property Rights Index (IPRI); regulatory efficiency; open markets
Freedom House	Freedom of press
International Labor Organization	Labor rights
Human Rights Watch	Freedom of association; women's rights; freedom of religion
International Finance Corp.	Ease of doing business

"Global Forest Partner recognizes that ignoring human welfare and environmental health does not make sense from an investment perspective. In fact, maintaining a keen focus on ESG not only protects future social, environmental, and financial benefits associated with forestry investments, but can contribute significantly to near-term investment performance."

Global Forest Partner LP (GFP)

companies, rather than entire countries and to use engagement to improve standards and generate enhanced performance. Our Emerging Equity Markets Principles state our basic requirements in terms of productive labor practices, transparency, political stability, corporate social responsibility, market regulation, transaction costs, and capital market openness.

Each year, we procure a third party (currently MSCI) to analyze our emerging market investments to identify potential violations of our principles with the companies we own (see *Putting Our Emerging Market Principles into Practice*). Many emerging markets are developing more enlightened labor practices, and our principles allow us to participate in the dialogue and potentially offer guidance about these important investment issues.

For more information about CalPERS Emerging Equity Market Principles visit CalPERS On-Line

Putting Our Emerging Market Principles into Practice

1 Data provider analyzes all firms in our emerging markets' universe (around 1,700 companies of all sizes) to ensure there is no infringement of international standards, such as the International Labor Organization (ILO) core labor conventions or the Global Sullivan Principles of corporate responsibility. Official filings, media reports, NGO research and other sources are used.

2 Each company is rated with either a "pass," "watch list" or "red flag." A red flag indicates egregious violations of these standards; "watch list" raises serious concerns but means that a violation is not totally clear, and a "pass" indicates full compliance.

3 We invest only in companies which are rated "pass" or "watch list" and do not invest in "red flag" companies.

4 The information from the exercise and results are then fed into the CalPERS investment process.

CalPERS Putting Principles into Practice

CalPERS Diversity Outreach Program

As the nation's largest public pension fund within one of the most ethnically and culturally diverse states, we believe the combined experiences, perspectives, and talents of all employees and stakeholders strengthen our work culture and organization. Diversity and inclusion are part of everything we do at CalPERS — the people who make up our workforce, the culture that defines our workplace, and the way we conduct business in the marketplace.

Through employee resource groups such as the CalPERS Disability Advisory Council and the CalPERS Diversity and Inclusion Group, employees can participate in training and education, volunteer projects in the community, networking events, and cultural heritage celebrations. CalPERS also provides interpreting services for our deaf and hard-of-hearing employees.

In 2012-13, we integrated diversity and inclusion concepts and practices by leading 12 divisions and regional offices through diversity and inclusion workshops. We also provided a series of employee workshops designed to foster sensitivity, trust, appreciation and respect; enhance communication skills; and increase awareness of cultural and generational differences.

Our workplace

We invest in our employees by providing opportunities for growth and professional development through a comprehensive Career Services Program. Our training and learning resources include a Learning Center, an extensive Web-based training catalog, and custom-designed on-site and Web-based training courses. Another way we provide staff opportunities for learning and growth is through an informal mentoring initiative that facilitates knowledge transfer and the sharing of expertise at all levels of our organization. Mentoring gives participants a global perspective, encourages continuous learning, strengthens diversity, and engages employees more fully in CalPERS' mission.

Our leadership

Our leadership team continues to encourage diversity and inclusion through the Diversity Executive Steering Committee, which is responsible for the development and implementation of enterprise initiatives and outreach efforts. In 2012-13, 86 senior leaders and managers completed the "D&I 101" workshop, which was designed to enhance participants understanding of diversity and inclusion and each leader's role in increasing diversity and fostering an inclusive work environment.

Encouraging healthy living

As the nation's second largest purchaser of employee health benefits, behind the federal government, CalPERS strives to be at the forefront of employee health initiatives and promotion. The CalPERS Wellness Program provides employees access to resources on fitness, nutrition, and work/life balance. The program focuses on increasing employee awareness of good health by offering an on-site fitness center and encouraging the adoption of healthy lifestyles through a variety of low and no-cost activities. The program results in improved employee attendance, lower health care costs, lower workers' compensation costs, increased productivity, and reduced employee turnover.

We also provide an on-site day care center and an Alternative Commute Program including a telework option and a bike share program making some bicycles available to employees.

For more information about CalPERS' diversity and inclusion initiatives, see the *CalPERS Commitment to Diversity & Inclusion Report* at CalPERS On-Line.

Appendix 1
Investment Beliefs

An Investment Beliefs Policy (Policy) was adopted in October 2013. The Policy requires that CalPERS develop and maintain a set of Investment Beliefs. In addition, the Policy provides context for how the Investment Beliefs should be used and makes clear that the Investment Beliefs are a framework for making judgmental decisions but are not a checklist to be applied to each decision. For more information on the Policy, visit CalPERS On-Line.

Investment Belief 1

Liabilities must influence the asset structure

Sub-beliefs:

- Ensuring the ability to pay promised benefits by maintaining an adequate funding status is the primary measure of success for CalPERS
- CalPERS has a large and growing cash requirement and inflation-sensitive liabilities; assets that generate cash and hedge inflation should be an important part of the CalPERS investment strategy
- CalPERS cares about both income and appreciation components of total return
- Concentrations of illiquid assets must be managed to ensure sufficient availability of cash to meet obligations to beneficiaries

Investment Belief 2

A long time investment horizon is a responsibility and an advantage

Long time horizon requires that CalPERS:

- Consider the impact of its actions on future generations of members and taxpayers
- Encourage investee companies and external managers to consider the long-term impact of their actions
- Favor investment strategies that create long-term, sustainable value and recognize the critical importance of a strong and durable economy in the attainment of funding objectives
- Advocate for public policies that promote fair, orderly and effectively regulated capital markets

Long time horizon enables CalPERS to:

- Invest in illiquid assets, provided an appropriate premium is earned for illiquidity risk
- Invest in opportunistic strategies, providing liquidity when the market is short of it
- Take advantage of factors that materialize slowly such as demographic trends
- Tolerate some volatility in asset values and returns, as long as sufficient liquidity is available

Investment Belief 3

CalPERS investment decisions may reflect wider stakeholder views, provided they are consistent with its fiduciary duty to members and beneficiaries

Sub-beliefs:

- As a public agency, CalPERS has many stakeholders who express opinions on investment strategy or ask CalPERS to engage on an issue. CalPERS preferred means of responding to issues raised by stakeholders is engagement
- CalPERS primary stakeholders are members/beneficiaries, employers and California taxpayers as these stakeholders bear the economic consequences of CalPERS investment decisions
- In considering whether to engage on issues raised by stakeholders, CalPERS will use the following prioritization framework:
  - Principles and Policy — to what extent is the issue supported by CalPERS Investment Beliefs, Principles of Accountable Corporate Governance or other Investment Policy?
  - Materiality — does the issue have the potential for an impact on portfolio risk or return?
  - Definition and Likelihood of Success — is success likely, in that CalPERS action will influence an outcome which can be measured? Can we partner with others to achieve success or would someone else be more suited to carry the issue?
  - Capacity — does CalPERS have the expertise, resources and standing to influence an outcome?

Investment Belief 4

Long-term value creation requires effective management of three forms of capital: financial, physical and human

Sub-beliefs:

- Governance is the primary tool to align interests between CalPERS and managers of its capital, including investee companies and external managers
- Strong governance, along with effective management of environmental and human capital factors, increases the likelihood that companies will perform over the long-term and manage risk effectively
- CalPERS may engage investee companies and external managers on their governance and sustainability issues, including:
  - Governance practices, including but not limited to alignment of interests
  - Risk management practices
  - Human capital practices, including but not limited to fair labor practices, health and safety, responsible contracting and diversity
  - Environmental practices, including but not limited to climate change and natural resource availability

Investment Belief 5

CalPERS must articulate its investment goals and performance measures and ensure clear accountability for their execution

Sub-beliefs:

- A key success measure for the CalPERS investment program is delivery of the long-term target return for the fund
- The long time horizon of the fund poses challenges in aligning interests of the fund with staff and external managers
- Staff can be measured on returns relative to an appropriate benchmark, but staff performance plans should include additional objectives or key performance indicators to align staff with the fund's long-term goals
- Each asset class should have explicit alignment of interest principles for its external managers

Investment Belief 6

Strategic asset allocation is the dominant determinant of portfolio risk and return

Sub-beliefs:

- CalPERS strategic asset allocation process transforms the fund's targeted rate of return to the market exposures that staff will manage
- CalPERS will aim to diversify its overall portfolio across distinct risk factors / return drivers
- CalPERS will seek to add value with disciplined, dynamic asset allocation processes, such as mean reversion. The processes must reflect CalPERS characteristics, such as time horizon and size of assets
- CalPERS will consider investment strategies if they have the potential to have a material impact on portfolio risk and return

Investment Belief 7

CalPERS will take risk only where we have a strong belief we will be rewarded for it

Sub-beliefs:

- An expectation of a return premium is required to take risk; CalPERS aims to maximize return for the risk taken
- Markets are not perfectly efficient, but inefficiencies are difficult to exploit after costs
- CalPERS will use index tracking strategies where we lack conviction or demonstrable evidence that we can add value through active management
- CalPERS should measure its investment performance relative to a reference portfolio of public, passively managed assets to ensure that active risk is being compensated at the Total Fund level over the long-term

Investment Belief 8

Costs matter and need to be effectively managed

Sub-beliefs:

- CalPERS will balance risk, return and cost when choosing and evaluating investment managers and investment strategies
- Transparency of the total cost to manage the CalPERS portfolio is required of CalPERS business partners and itself
- Performance fee arrangements and incentive compensation plans should align the interests of the fund, staff and external managers
- CalPERS will seek to capture a larger share of economic returns by using our size to maximize our negotiating leverage. We will also seek to reduce cost, risk and complexity related to manager selection and oversight
- When deciding how to implement an investment strategy, CalPERS will implement in the most cost effective manner

Investment Belief 9

Risk to CalPERS is multi-faceted and not fully captured through measures such as volatility or tracking error

Sub-beliefs:

- CalPERS shall develop a broad set of investment and actuarial risk measures and clear processes for managing risk
- The path of returns matters, because highly volatile returns can have unexpected impacts on contribution rates and funding status
- As a long-term investor, CalPERS must consider risk factors, for example climate change and natural resource availability, that emerge slowly over long time periods, but could have a material impact on company or portfolio returns

Investment Belief 10

Strong processes and teamwork and deep resources are needed to achieve CalPERS goals and objectives

Sub-beliefs:

- Diversity of talent (including a broad range of education, experience, perspectives and skills) at all levels (Board, staff, external managers, corporate boards) is important
- CalPERS must consider the government agency constraints under which it operates (e.g., compensation, civil service rules, contracting, transparency) when choosing its strategic asset allocation and investment strategies
- CalPERS will be best positioned for success if it:
  - Has strong governance
  - Operates with effective, clear processes
  - Focuses resources on highest value activities
  - Aligns interests through well designed compensation structures
  - Employs professionals who have intellectual rigor, deep domain knowledge, a broad range of experience and a commitment to implement CalPERS Investment Beliefs

Appendix 2
CalPERS Sustainability Awards

Environmentally responsible activities earn global recognition

In late 2013, CalPERS earned a AAA grade from the Asset Owners Disclosure Project (AODP) — one of only five organizations to receive the high ranking. We were pleased to improve our 2012 results, jumping from number 15 to number 3 on the list of the world's 1,000 largest asset owners. The improvement reflects our commitment to integrating climate change and sustainability across our total fund. The AODP is an independent nonprofit global organization whose objective is to protect members' retirement savings from climate change risks by improving disclosure and industry best practices.

Sustainability report wins award

CalPERS' 2012 publication *Towards Sustainable Investment: Taking Responsibility* received a Responsible Investor Commendation for the Best Responsible Investment Report by a Large Pension Fund. We were the only North American fund to be honored with an award in all pension categories. *Responsible Investor* is a respected sustainable finance and governance news source. The awards were based on research into more than 1,000 pension funds from around the world and recognized funds that are most transparent about how they put responsible investment into action.

National Association of Corporate Directors Directorship 100: governance professionals and institutions recognition

CalPERS Senior Portfolio Manager and Director of Global Governance was again named to the Directorship 100. Compiled by The National Association of Corporate Directors (NACD), the Directorship 100 honors the nation's most influential boardroom leaders. CalPERS was recognized as a leader of Corporate Governance. The NACD is the recognized authority focused on advancing exemplary board leadership and establishing leading boardroom practices.

CalPERS recognized as Green Groundbreaker

CalPERS was also recognized by the U.S. Green Building Council's Northern California Chapter (USGBC-NCC) in the "Green Groundbreaker" category for its leadership role in sustainability efforts. The USGBC is a nonprofit organization that is best known for its development of the Leadership in Energy and Environmental Design (LEED) green building rating systems.

CalPERS recognized for Data Center conservation program

CalPERS headquarters operates a 17,614 square foot Data Center within a Class A (high quality) building. Although the Data Center represents only 3 percent of the building's square footage, it accounts for approximately 35 percent of total annual electrical usage (based on 2011 data). The implementation of server hot aisle containments prevents the commingling of incoming chilled air with server hot air exhaust, which increases the efficiency of the cooling system and reduces energy consumption. The improvements resulted in an annual reduction of 931,898 kilowatt-hour, a savings of $101,577 annually (based on 2011 average kilowatt-hour costs) as well as reduced greenhouse gas emissions. At the Sacramento Business Environmental Resource Center (BERC) 2013 Sustainable Business of the Year Award ceremony, we received the following recognition for our Data Center conservation efforts:

- A tabletop award from BERC
- A *Certificate of Appreciation* from Doris Matsui, United States Congresswoman
- A *Certificate of Recognition* from Richard Pan, California Assemblyman
- A *Certificate of Recognition* from Darrell Steinberg, California Senate President Pro Tempore
- A wall plaque *Resolution* from the Sacramento County Board of Supervisors

Appendix 3
PRI Index

CalPERS Commitment to the UN-backed Principles for Responsible Investment

The following index offers an indication of how items in this report relate to our implementation of the six Principles of the PRI.

Examples of best practice	Where you'll find illustrations in this report
Principle 1: We will incorporate ESG issues into investment analysis and decision-making processes	
Address ESG issues in investment policy statements	Page 7, 11, 19 and 20, 34–38
Support the development of tools and metrics for benchmarking the integration of ESG issues	Page 9 and 10, 22 and 23
Assess the capabilities of external investment managers to incorporate ESG issues	Page 10, 18, 20 and 23
Ask investment service providers (such as financial analysts, consultants, brokers, research firms or rating companies) to integrate ESG factors into evolving research and analysis	Page 19, 31 and 32
Principle 2: We will be active owners and incorporate ESG issues into our ownership policies and practices	
Develop and disclose an active ownership policy consistent with the Principles	Page 7, 13–20
Exercise voting rights consistent with long-term ESG considerations and monitor compliance of outsourced voting service providers	Page 14–17 and 20
Engage with companies on ESG issues	Page 14–17, 22 and 23, 27–30
Participate in collaborative engagement initiatives	Page 12
Ask investment managers to undertake and report on ESG-related engagement	Page 10 and 23
Principle 3: We will seek appropriate disclosure on ESG issues by the entities in which we invest	
Ask for ESG issues to be integrated within annual financial reports	Page 22
Ask companies for ESG information—where possible using standardized reporting tools	Page 23, 27 and 28
Support shareowner initiatives and resolutions promoting ESG disclosure	Page 14–17 and 22
Disclose annual voting records, with an analysis of key votes	Page 14–17
Principle 4: We will promote acceptance and implementation of the Principles within the investment industry	
Include Principles-related requirements in requests for proposals. Also align investment mandates, monitoring procedures, performance indicators and incentive structures	Page 7, 8, 10, 18 and 20
Engage in dialogue or support government policy or industry regulations related to ESG issues	Page 13 and 14, 20, 22
Communicate ESG expectations to investment service providers	Page 11, 18, 22, 27 and 30
Principle 5: We will work together to enhance our effectiveness in implementing the Principles	
Support/participate in networks and information platforms to share tools, pool resources and make use of investor reporting as a source of learning	Page 12 and 14
Collectively address relevant emerging issues	Page 9, 14 and 30
Develop or support appropriate collaborative initiatives	Page 11, 18, 22, 27 and 30
Principle 6: We will each report on our activities and progress towards implementing the Principles	
Disclose active ownership activities (voting, engagement, and/or policy dialogue)	Page 13–17
Communicate with beneficiaries about ESG issues and the Principles	Throughout report
Make use of reporting to raise awareness among a broader group of stakeholders	Throughout report

For comments and questions about this publication,
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