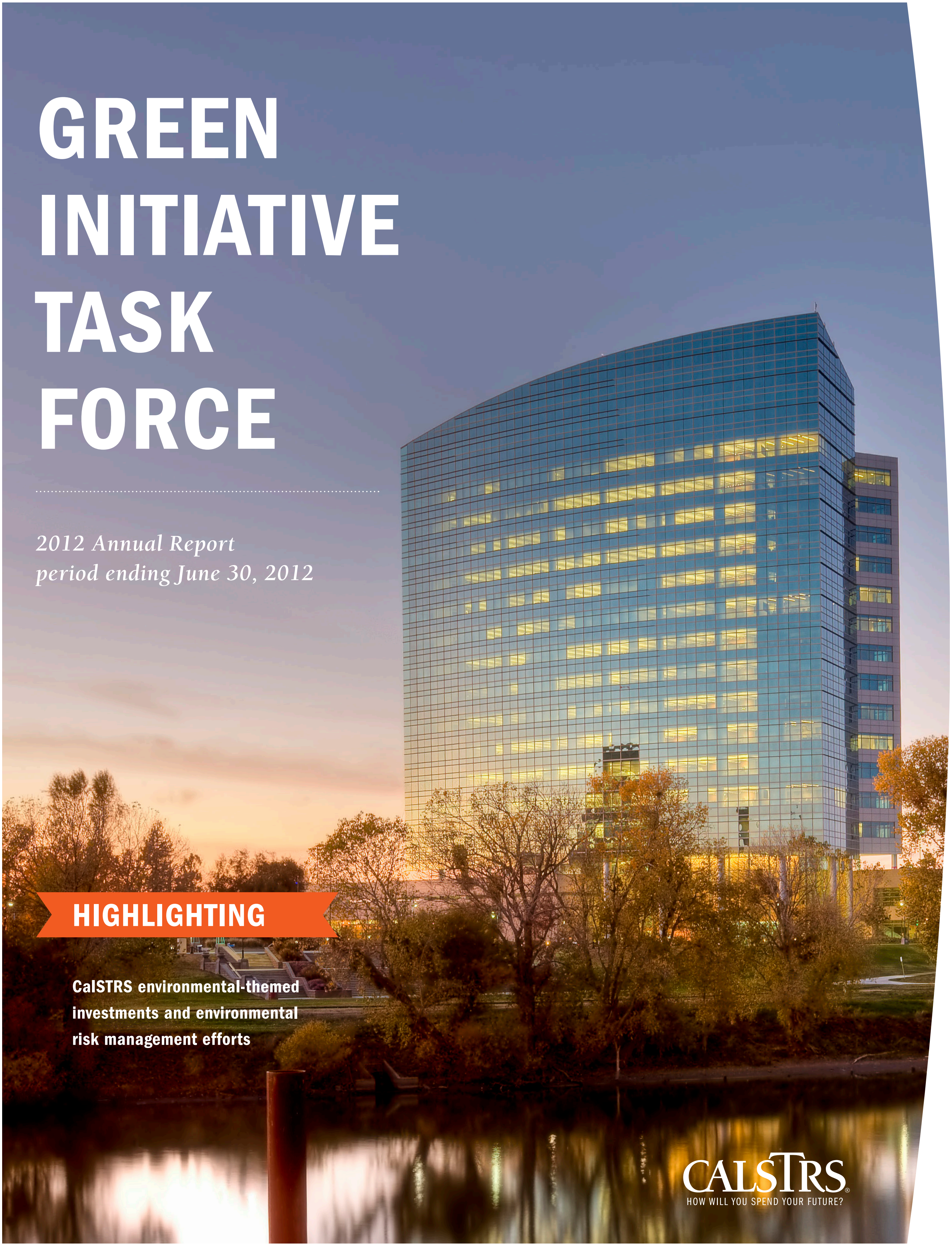
GREEN INITIATIVE TASK FORCE

2012 Annual Report
period ending June 30, 2012



HIGHLIGHTING

CalSTRS environmental-themed investments and environmental risk management efforts

CALSTRS
HOW WILL YOU SPEND YOUR FUTURE?

To manage the risks and capture the opportunities associated with global sustainability issues by identifying environmentally focused strategies intended to enhance the risk-adjusted returns of the CalSTRS Investment Portfolio.

—CALSTRS INVESTMENTS

CALSTRS
HOW WILL YOU SPEND YOUR FUTURE?

California State Teachers'
Retirement System
Christopher J. Ailman
100 Waterfront Place, MS-04
West Sacramento, CA 95605-2807

October 1, 2012

Dear Reader:

I am pleased to present the sixth annual report from the CalSTRS Green Initiative Task Force, or the "Green Team", detailing investment branch activities surrounding environmental risk management and opportunity capture. This report reflects CalSTRS recognition that environmental issues affect the performance of the investment portfolio across companies, sectors, regions, and asset classes. At a time when many institutional investors are only beginning to analyze and incorporate environmental considerations into their investment policies and processes, CalSTRS long-standing efforts continue to help raise awareness on the importance of addressing investment risks and capturing opportunities associated with the multitude of environmental issues global investors face.

In early 2007, I directed representatives from each of CalSTRS asset classes to form the Green Team. The team's objective was to address environmental issues with the initial focus being to identify, analyze and propose potential investment opportunities and risk control strategies related to climate change. Since the inception of the Green Team, broadening concerns over environmental issues have required us to look beyond carbon emissions and also consider risks and opportunities associated with land use, water sourcing, mineral extraction, and waste disposal.

From an investment perspective, each asset class in the CalSTRS Investment Portfolio considers both environmental-related opportunities and environmental-related risk management tools. The Global Equity portfolio includes a sustainable manager strategy and staff actively engages its managers on environmental, social and governance (ESG) considerations. The Fixed Income portfolio is a lead purchaser of green bonds and has developed an internal screen to measure its portfolio's degree of sustainability. The Real Estate portfolio is focusing on improving energy and water efficiency and the Private Equity portfolio includes a commitment to clean technology.

From a governance perspective, the Green Team members work collaboratively with other members of the global investment community on a variety of environmental issues and we support organizations and initiatives that promote environmental awareness and investment. CalSTRS engagements on environmental topics often bring together community representatives, regulatory agents and government officials and allow for open and frank discussions. Additionally, CalSTRS staff sits on advisory boards of organizations that work to establish standards for investment in low carbon vehicles as well as standards for environmental risk disclosure.

Green Team members also meet regularly to discuss strategic initiatives, exchange experiences and share best practices. Through regularly scheduled calls and meetings with environmental experts, Green Team members are routinely connected with leading financial market participants whose environmental expertize helps shape CalSTRS Green Team efforts.

I thank you for taking the time to consider this report and I encourage you to join us and our collaborative partners as we promote environmental risk management and investment awareness throughout the global financial markets.

Sincerely,

Christopher J. Ailman
Chief Investment Officer
California State Teachers' Retirement System

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2012 Annual Report

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CALSTRS HISTORY

OF ENVIRONMENTAL INTEGRATION

Consistent with the goal of achieving a maximum investment return at a prudent level of risk, the CalSTRS Teachers' Retirement Board (TRB) has long recognized the need to address environmental risks and opportunities. Since 1978, CalSTRS has used a written policy to navigate the complex landscape of ESG issues. Prior to developing its current ESG policy, CalSTRS used the Statement of Investment Responsibility (SIR) as a guideline for addressing ESG issues. The long history of this document is testimony to the national leadership of CalSTRS among pension funds in addressing ESG matters.

In 2004, the CalSTRS Environmental Program was formalized through the development of a four-pronged plan that included structuring an environmentally-focused equity program, targeting private investment in clean technologies, auditing the real estate portfolio efficiency to increase long-term value, and demanding environmental accountability and disclosure from portfolio investments. One of the program's early creations was a Clean Technology Advisory Board which led to an initial $250 million commitment to clean technology. That clean technology commitment has since grown to almost $700 million.

Since 1978 CalSTRS has used a written policy to navigate the complex landscape of ESG issues

In an effort to expand its green investment considerations, in 2005, the TRB voted to explore establishing a program that would consider sustainable investments in public equity securities. With the support of CalSTRS general consultant, Pension Consulting Alliance (PCA), CalSTRS staff and the TRB determined that double bottom line expectations of financial and environmental outperformance were achievable

In 2008, CalSTRS became one of the first North American pension funds to formally integrate environmental, social and governance (ESG) considerations into its investment policies.

in the public equity markets. It was then decided that CalSTRS would begin searching for external public equity managers who incorporated environmental, social and governance considerations in their investment selection process. The subsequent manager selection process yielded commitments to four sustainable managers totaling $225 million. Today, this CalSTRS portfolio is valued at approximately $645 million.

Soon after authorizing a sustainable equity manager portfolio, the TRB determined that staff should actively engage equity market participants on environmental awareness. In 2006, the Corporate Governance unit was charged with making climate risk management one of its principal focuses. Staff began analyzing the risks associated with climate change, which risks might impact a large, diverse, global investor such as CalSTRS, and what strategies could be incorporated to help mitigate these risks. Staff then began an in-depth engagement program, focusing on what portfolio companies were doing to manage climate-related risks. Staff later recognized that many other environmental issues presented risks to the portfolio and that engagements with other market participants on these issues were warranted. Today, CalSTRS engages portfolio companies, fellow investors, external fund managers, regulators, and government officials on environmental issues such as air emissions, water use, waste disposal, and sustainable land management.

The TRB and staff felt that it wasn't enough to just consider environmental investments and manage environmental risks and that CalSTRS needed to strengthen its recognition of the importance of managing environmental exposures. Therefore, in 2008, CalSTRS adopted the Investment Policy for Mitigating ESG Risks. Attachment A to the CalSTRS ESG policy is the 21 Risk Factors which identify ESG risks that are considered by staff and external managers as part of the due diligence process associated with investment decisions. Attachment B to the CalSTRS ESG policy is the Statement of Shareowner ESG Responsibility. This document supplements the CalSTRS proxy voting guidelines and provides direction on how to evaluate ESG proposals.

Investment Policy for Mitigating Environmental, Social, and Geopolitical Risks (ESG)

Principles

The fiduciary responsibility of the Board, as described in detail within the overall Investment Policy and Management Plan, is to discharge its responsibility in the sole and exclusive interest of the participants and beneficiaries in a manner that will assure the prompt delivery of benefits and related services.

CalSTRS invests a multi-billion dollar fund in a unique and complex social-economic milieu and recognizes it can neither operate nor invest in a vacuum. The System's investment activities impact other facets of the economy and the globe. As a significant investor with a very long-term investment horizon and expected life, the success of CalSTRS is linked to global economic growth and prosperity. Actions and activities that detract from the likelihood and potential of global growth are not in the long-term interests of the Fund. Therefore, consideration of environmental, social, and governance issues (ESG), as outlined by the CalSTRS 21 Risk Factors, are consistent with the Board's fiduciary duties.

Consistent with its responsibilities to our members, the Board has a social and ethical obligation to require that the corporations and entities in which securities are held meet a high standard of conduct and strive for sustainability in their operations. As an active owner, CalSTRS incorprates ESG into its ownership policies and practices.

Since CalSTRS is a long-term investor and may hold an investment in a corporation or entity for decade after decade, short-term gains at the expense of long-term gains are not in the best interest of the Fund. Sustainable returns over long periods are in the economic interest of the Fund. Conversely, unsustainable practices that hurt long-term profits are risks to the System's investment.

Since CalSTRS must invest huge sums of moneys for long periods of time to pay for future benefits promised to California Teachers, our actions to invest in securities of a corporation predominately reflect a judgment that the ownership will produce a sustainable rate of return which will make it an attractive investment and help CalSTRS meet its long-term obligations. It is important to note that CalSTRS ownership of a security in a company does not signify that CalSTRS approves of all of the company's practices or its products or that CalSTRS believes a particular company is an attractive investment since the security may be owned due to its membership in a particular index or for risk mitigation purposes.

Policy

Geopolitical Risks and Social Risks: To help manage the risk of investing a global portfolio in a complex geopolitical environment, CalSTRS has developed a series of procedures to follow when faced with any major geopolitical and social issue as identified by the 21 Risk Factors. It is important to note that fiduciary standards do not allow CalSTRS to select or reject investments based solely on social criteria.

When faced with a corporate decision that potentially violates CalSTRS Policies; the Investment Staff, CIO and Investment Committee will undertake the following actions:

A. The CIO will assess the gravity of the situation both as an ESG risk and as to the System. The extent of the responsibility of the System to devote resources to address these issues will be determined by: 1) the number of shares held in the corporation, and 2) the gravity of the violation of CalSTRS Policies.

B. At the CIO's direction, the Investment Staff will directly engage corporate management to seek information and understanding of the corporate decision and its ramifications on ESG issues.

C. The CIO and investment staff will provide a report to the Investment Committee of the findings and recommend any further action of engagement or need to commit further System resources. The Investment Committee can marshal further resources given the gravity of the situation.

To assist CalSTRS Staff and external investment managers in their investment analysis and decision-making, CalSTRS has developed a list of 21 Risk Factors that should be included within the financial analysis of any investment decision. This list is not exhaustive and does not attempt to identify all forms of risk that are appropriate to consider in a given investment transaction; however they do provide a framework of other factors that might be overlooked. These risk factors should be reviewed for an investment in any asset class whether within the U.S. or across the globe.

CalSTRS expects all investment managers, both internal and external, to assess the risk of each of the 21 Risk Factors when making an investment. The manager needs to balance the rate of return with all the risks including consideration of the specific investments exposure to each factor in each country in which that investment or company operates.

AFFILIATIONS & ORGANIZATIONS

Signatory of:

In order to meet the goal of integrating environmental considerations across the CalSTRS Investment Portfolio, staff recognized the need to establish strategic relationships with a multitude of collaborative partners and began to work with data service providers, environmental community organizers, industry standard setters, and other like-minded investors. CalSTRS would like to recognize and thank those organizations that have been instrumental in helping us to achieve our current level of environmental integration.

Carbon Disclosure Project (CDP)

Supported by 655 institutional investors holding a combined $78 trillion in assets, the Carbon Disclosure Project (CDP) is an independent not-for-profit organization working to drive greenhouse gas emissions reduction and sustainable water use by business around the world. The CDP provides a system for thousands of companies to manage and share environmental information. Working with the world's largest investors, businesses and governments, the CDP is uniquely positioned to catalyze action towards a more sustainable economy and has incentivized thousands of companies across the world's largest economies to measure and disclose their greenhouse gas emissions, climate change risk and water strategies.

655 institutional investors support the CDP

$78 trillion in assets support the CDP

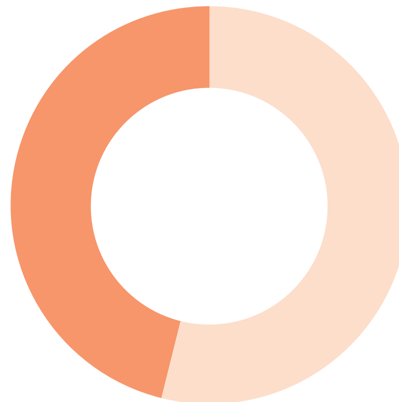
The CDP holds the largest collection globally of self-reported climate change data and collects significant levels of data concerning global corporate water consumption. Through the use of CDP data, investors like CalSTRS are better able to mitigate risk, capitalize on opportunities and make investment decisions that drive action towards a more sustainable world. Every year, the CDP reaches out to thousands of publicly traded companies and requests data on their carbon emissions profiles and water use footprints. The data that is received is then aggregated and analyzed in great detail and that analysis is provided to investors in report form free of charge.

CalSTRS has been a signatory and member of the CDP for many years and was one of the first North American pension funds to endorse the initiative. CalSTRS supports the CDP not only because they promote environmental risk awareness but also because they provide an important layer of coverage across the CalSTRS Global Equity Portfolio. The CDP Global 500 carbon survey is sent to the 500 largest publicly traded companies in the world. As the following table reflects, these 500 companies represent 54% of our global equity portfolio and 27% of our total portfolio.

54%

of CalSTRS Global Equity portfolio is represented by the CDP carbon survey

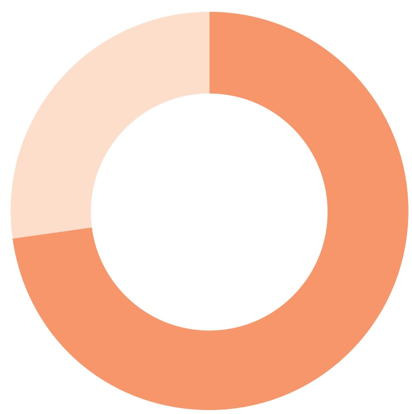
GLOBAL EQUITY PORTFOLIO COVERAGE: CDP CARBON



54% PORTFOLIO COVERED

46% PORTFOLIO NOT COVERED

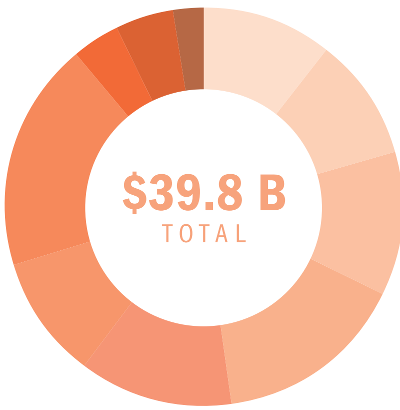
TOTAL PORTFOLIO COVERAGE: CDP CARBON



27% PORTFOLIO COVERED

73% PORTFOLIO NOT COVERED

INVESTMENT VALUE COVERAGE BY SECTOR: CDP CARBON



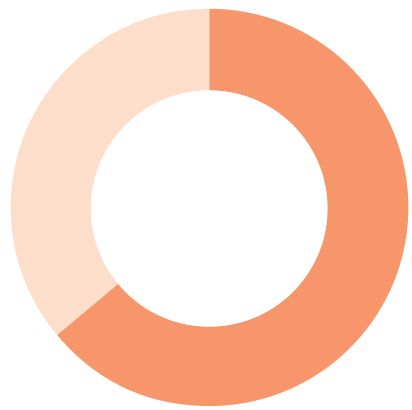
- $4.2 B | CONSUMER DISCRETIONARY
- $4 B | CONSUMER STAPLES
- $4.7 B | ENERGY
- $6.2 B | FINANCIAL
- $4.9 B | HEALTH CARE
- $4 B | INDUSTRIAL
- $7.4 B | INFORMATION TECHNOLOGY
- $1.6 B | MATERIALS
- $1.9 B | TELECOMMUNICATION SERVICES
- $899.4 M | UTILITIES

36%
of CalSTRS Global Equity portfolio is represented by the CDP water survey

The 27 percent of the CalSTRS Investment Portfolio that the CDP carbon survey covers represents approximately $40 billion in assets. The preceding chart shows the breadth of sector coverage and the investment value that is being covered in each sector.

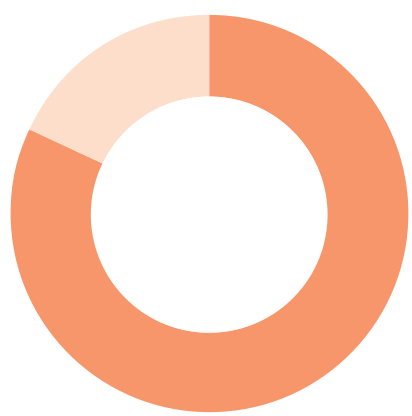
Like the CDP carbon survey, the CDP Water Project survey is sent to the largest companies in the world that either represent industry sectors that are water intensive or are particularly exposed to water-related risk in their supply chains. And like the CDP carbon survey, the CDP Water Project survey provides a very strong layer of risk management coverage to the CalSTRS Global Equity and total fund portfolios. The companies that receive the CDP Water Project survey represent 18% of our total investment portfolio and 36% of our global equity portfolio.

GLOBAL EQUITY PORTFOLIO COVERAGE: CDP WATER



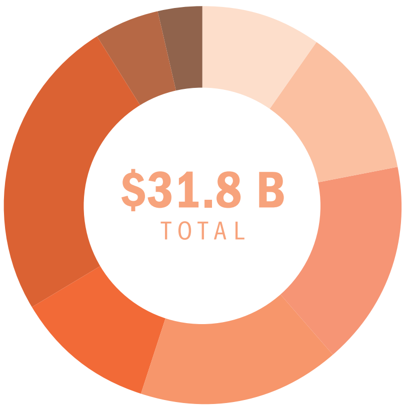
- 36% PORTFOLIO COVERED
- 64% PORTFOLIO NOT COVERED

TOTAL PORTFOLIO COVERAGE: CDP WATER



- 18% PORTFOLIO COVERED
- 82% PORTFOLIO NOT COVERED

INVESTMENT VALUE COVERAGE BY SECTOR: CDP WATER



- $2.7 B | CONSUMER DISCRETIONARY
- $3.2 B | CONSUMER STAPLES
- $4.5 B | ENERGY
- $6.2 B | FINANCIAL
- $4.5 B | HEALTH CARE
- $3.1 B | INDUSTRIAL
- $6.6 B | INFORMATION TECHNOLOGY
- $958.5 M | UTILITIES

The 18 percent of the CalSTRS Investment Portfolio that the CDP water survey covers represents approximately $32 billion in assets. The preceding chart shows the breadth of sector coverage and the investment value that is being covered in each sector.

$7 trillion in invested capital backs the FFD

Forest Footprint Disclosure Project (FFD)

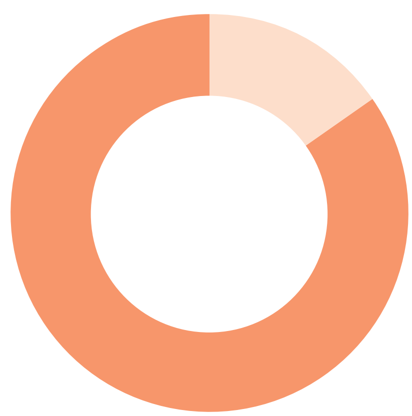
Backed by $7 trillion in invested capital, the Forest Footprint Disclosure Project (FFD) works with companies to help them understand how risks associated with deforestation might manifest themselves in corporate supply chains. Companies dependent on commodities produced through deforestation are at risk from losing the value that access to these artificially low-cost resources brings, should restrictions on their supply be enforced. This exposure to buyer and reputational risk increases as more consumers and pressure groups learn about the impact that a company's use of commodities from deforested land can be.

Distributed on behalf of over 75 financial institutions, the FFD survey is sent annually to 450 of the largest companies, public and private, worldwide. These companies are asked to disclose their direct and indirect exposure to commodities that are produced on deforested lands. FFD staff work collaboratively with these companies to detail strengths and weaknesses and provide means of improving their risk exposure.

15% of CalSTRS Global Equity portfolio is represented by the FFD survey

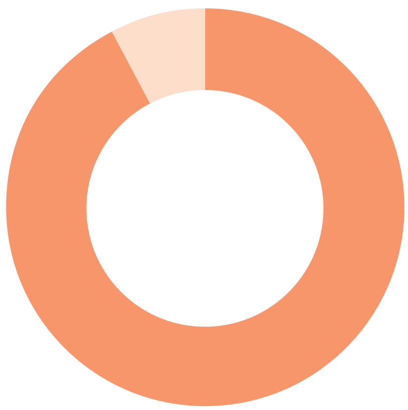
Like the CDP, CalSTRS supports the FFD because the organization works to raise awareness and improve disclosure on environmental risk management. The FFD also provides a layer of risk management coverage to the CalSTRS investment portfolio. As the following charts demonstrate, the FFD survey provides coverage for over 15% of the CalSTRS Global Equity Portfolio and nearly 8% of CalSTRS total portfolio. The accompanying pie chart shows a sector breakdown of this coverage. Not surprisingly, the FFD survey provides the most coverage for the Consumer Discretionary and Consumer Staples sectors as the sectors are most exposed to supply chain inputs from deforested lands.

GLOBAL EQUITY PORTFOLIO COVERAGE: FFD



- 15.31% PORTFOLIO COVERED
- 84.69% PORTFOLIO NOT COVERED

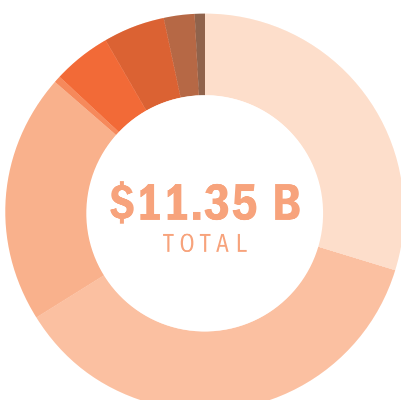
TOTAL PORTFOLIO COVERAGE: FFD



7.7% PORTFOLIO COVERED

92.3% PORTFOLIO NOT COVERED

INVESTMENT VALUE COVERAGE BY SECTOR: FFD



$3.4 B | CONSUMER DISCRETIONARY

$4.1 B | CONSUMER STAPLES

$2.3 B | ENERGY

$80.8 M | FINANCIAL

$528 M | HEALTH CARE

$576.5 M | INDUSTRIAL

$295.7 M | MATERIALS

$71 M | UTILITIES

The 7.7 percent of the CalSTRS Investment Portfolio that the FFD survey covers represents approximately $11.5 billion in assets. The preceding chart shows the breadth of sector coverage and the investment value that is being covered in each sector.

Principles for Responsible Investment (PRI)

The United Nations-backed Principles for Responsible Investment Initiative (PRI) is a network of international investors working together to put six Principles for Responsible Investment (Principles) into practice. The Principles were developed by the investment community and reflect the view that environmental, social and corporate governance (ESG) issues can affect the performance of investment portfolios and therefore must be given appropriate consideration by investors if they are to fulfill their fiduciary (or equivalent) duty. The Principles provide a voluntary framework by which all investors can incorporate ESG issues into their decision-making and ownership practices, and so better align their objectives with those of society at large. Today, over 1,000 investment institutions, with assets under management of approximately $30 trillion, have become signatories to the Principles.

1,000 **investment institutions, with assets under management of approximately $30 trillion, have become signatories to the Principles**

THE SIX PRINCIPLES FOR RESPONSIBLE INVESTMENT

P1	We will incorporate ESG issues into investment analysis and decision making processes
P2	We will be active owners and incorporate ESG issues into our ownerships policies and practices
P3	We will seek appropriate disclosure on ESG issues by the entities in which we invest
P4	We will promote acceptance and implementation of the Principles within the investment industry
P5	We will work together to enhance our effectiveness in implementing the Principles
P6	We will each report on our activities and progress towards implementing the Principles

The PRI Initiative was created after the launch of the Principles to help investors to implement the Principles. The Initiative is managed by the PRI Secretariat and supports investors by sharing best practice, facilitating collaboration and managing a variety of work streams. Signatories to the PRI believe they have a duty to act in the best long-term interests of their beneficiaries and that ESG issues can affect the performance of investment portfolios. CalSTRS shared the belief that considering ESG issues was integral to long-term value maximization and became a signatory to the PRI. Through its work with the PRI, CalSTRS is able to assess the level of ESG integration within each asset class and across its entire investment portfolio. CalSTRS staff continues to be actively involved in the many efforts and initiatives that this organization sponsors. One of the many benefits provided to PRI signatories is an annual assessment of how their organization is working to incorporate ESG considerations into their investment process. As a signatory, CalSTRS participates in this annual survey and assessment and uses the findings to help tailor its subsequent environmental initiatives and activities. The following table shows how CalSTRS ranked in its implementation of the Principles in 2010 and 2011 relative to its peers.

CALSTRS RANK IN IMPLEMENTATION OF THE PRINCIPLES

	2010			2011		
	Your Score Per Principle	**Median Score**	**Your Quartile Rank**	**Your Score Per Principle**	**Median Score**	**Your Quartile Rank**
Total Score	83%	71%	1	85%	73%	1
Principle 1	7%	25%	3	61%	34%	2
Principle 2	82%	62%	2	98%	65%	1
Principle 3	94%	66%	1	96%	71%	1
Principle 4	67%	57%	2	71%	59%	2
Principle 5	100%	71%	1	100%	75%	1
Principle 6	99%	47%	1	99%	52%	1
Number of Peers		**168**				

While CalSTRS showed improvement from 2010 to 2011 in both score per principle and quartile ranking, the total score and scores relating to principles 1 and 4 have room for improvement. Staff will work to improve the methods through which ESG is integrated into the investment decision-making process and work to improve the level of acceptance of the Principles within the investment community.

Ceres

Ceres is an advocate for sustainability leadership. Ceres mobilizes a powerful network of investors, companies and public interest groups to accelerate and expand the adoption of sustainable business practices and solutions to build a healthy global economy. Founded by a small group of investors in 1989 in response to the Exxon Valdez oil spill, Ceres has been working for more than 20 years to weave sustainable strategies and practices into the fabric and decision-making of companies, investors and other key economic players.

130 member organizations make up the Ceres Coalition

Ceres works with more than 130 member organizations that make up the Ceres Coalition to engage with corporations and help advance our goal of building a sustainable global economy. Ceres works with more than 80 companies across a broad range of sectors committed to engaging with diverse stakeholders, improving their performance on social and environmental issues and disclosing strategies and progress publicly. Ceres also works with investors worldwide to improve corporate strategies and public policies on climate change and other environmental and social challenges across the global economy.

Through the various Ceres platforms, and in collaboration with other Ceres-led investors, CalSTRS engages a broad spectrum of U.S. companies on their level of environmental risk management and disclosure. CalSTRS engages on issues such as carbon emissions management, extractive risk management, water sourcing, sustainable land use, and waste disposal risk. Working collaboratively with other investors allows CalSTRS engagement reach to extend further and allows our voice to be more powerful and more meaningful.

Investor Network on Climate Risk (INCR)

The Investor Network on Climate Risk (INCR), a project of Ceres, is a $10 trillion network of over 100 investors that promotes the better understanding of the financial risks and opportunities posed by climate change. INCR partners with investors worldwide to advance the investment opportunities and reduce the material risks posed by challenges such as global climate change and water scarcity.

The INCR is a $10 trillion network of over 100 investors

CalSTRS has been an active member of the INCR for many years. Through its involvement in the INCR, CalSTRS is able to help shape the strategies and policies institutional investors utilize in their efforts to mitigate the risks associated with environmental issues such as climate change. CalSTRS continues to be part of the INCR Policy Working Group and, as such, is able to help shape INCR initiatives, such as the Climate Risk Action Plan and the INCR Manager Survey.

Through the work of the INCR, CalSTRS and other investors have been able to successfully petition the U.S. and Canadian securities regulators to issue formal guidance on climate change-related disclosure, engage major oil and gas companies to strengthen risk oversight measures for deep-water oil drilling, natural gas "fracking" and oil sands production, and persuade dozens of Fortune 500 companies to improve their climate policies, practices and disclosures.

Climate Bonds Initiative

The Climate Bonds Initiative (CBI) is an international network which promotes the development and use of Climate Bonds. Climate Bonds provide for large scale issuance of long-term debt to finance low carbon projects. It is hoped that the use of Climate Bonds will accelerate the global transition to a low carbon economy. The CBI is working to bring the three key market participants – industry, investors and governments – together to develop protocols for interested issuers and investors that will define what green bonds are across a wide variety of renewable energy and efficiency projects. It is the CBI's hope that Climate Bonds will support the rapid

CalSTRS is one of the founding members of the Climate Bond Standards Board of the CBI

application of debt funding for climate change mitigation and adaptation projects.

CalSTRS is one of the founding members of the Climate Bond Standards Board of the CBI. CalSTRS, like the CBI, recognized that the marketplace needed a mechanism of certification for green bond projects, a mechanism that would assure investors that the funds they were providing would be used in a manner that met an accepted standard. Through its participation in this project, CalSTRS is helping to define the process of certification, investor acceptance, and company compliance required for the eventual bond agreement and sale.

Since the formation of the Climate Bonds Standards Board in 2011, participants have developed and approved eligibility criteria for wind-energy projects. Currently, CalSTRS is part of a working group that is developing standards for energy efficiency projects, and work is underway to develop standards for bioenergy, solar, and forest plantation projects.

Energy Star Program

In 2005, CalSTRS entered into a partnership with the Environmental Protection Agency's ENERGY STAR® program. ENERGY STAR is widely accepted and used by leaders within the real estate industry, and the partnership has provided CalSTRS with a tool to take control of energy use by providing the best information and resources for improving energy and environmental performance. More specifically, the partnership has provided CalSTRS with a tracking and audit tool to benchmark and measure energy consumption.

Energy Star uses a scale of 1 to 100 to rate relative energy performance of buildings. A score of 75 or more qualifies a building for an Energy Star label

Energy Star Rating System

ENERGY STAR, a voluntary labeling program for commercial and industrial buildings, is sponsored by the US Department of Energy and the U.S. Environmental Protection Agency (EPA), and is managed by the EPA. It uses a scale of 1-100 to rate the relative energy performance of new and existing buildings. The rating, which is certified by a professional engineer, is based on the amount of energy the building uses over a 12-month period (as evidenced by utility bills), the amount of CO2 it emits, the nature and intensity of its occupancy, and its location.

A score of 75 or more qualifies a building for an ENERGY STAR label. This means the building is in the top 25 percent of like structures in energy efficiency for the year rated.

LEED Green Building Rating System

The LEED (Leadership in Energy and Environmental Design) Green Building Rating System is the nationally accepted benchmark in the U.S. for the design, construction, and operation of high performance green buildings. Established by the U.S. Green Building Council (USGBC), LEED addresses different types of development with distinct rating systems, among them LEED for New Construction and Major Renovation, LEED for Commercial Interiors, and LEED for Existing Buildings: Operations and Maintenance.

The LEED rating systems and the four levels of LEED recognition – Certified, Silver, Gold, and Platinum – reflect projected or actual performance beyond certain prerequisites in five critical areas of environmental sustainability; sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

The rating systems for the various types of development (and from property to property) require and reward somewhat different technologies and strategies and give different relative weight to the sustainability categories, as well. Consistently, however, almost 50 percent of the points are earned in the areas of energy and water conservation.

CalSTRS works with its external managers on environmental risk mitigation

RISK MANAGEMENT

As directed by the Teachers' Retirement Board, staff has developed a variety of techniques and tools that are designed to mitigate the level of environmental risk that the CalSTRS investment portfolio faces. As a large, diversified global investor, CalSTRS needs to be mindful that it is exposed to a variety of environmental risks. Carbon emissions regulations in Europe, water scarcity in Australia and deforestation in Southeast Asia can all present risks to the CalSTRS Investment Portfolio.

Risk management requires knowledge of the risks that exist and how and where they might impact investment value. Therefore, it is important that CalSTRS secure robust sources of information by employing credible environmental data providers. CalSTRS has established relationships with organizations such as MSCI, Trucost, IW Financial, and GMI. These leading environmental data firms provide CalSTRS with the information and analysis needed to consider environmental risks across our global portfolio.

Knowing the country, sector, and industry breakdown of your investment portfolio is important to understanding environmental risk exposure. Through the expert work of the CalSTRS Operations team, staff is able to track the Fund's various global exposures in a real-time manner and this visibility helps staff to better recognize how a particular issue, in a particular region, might impact overall portfolio value.

Engaging with those who invest on your behalf is important and CalSTRS works with its external managers on environmental risk mitigation. Direct engagement with portfolio companies is also an important and effective means of managing risk, and CalSTRS is very active in this regard. CalSTRS understands that working collaboratively with other investors is an excellent way to broaden engagement reach and strives to partner with others whenever possible.

Being active owners and voting proxies also helps reduce risk. CalSTRS routinely submits environmental-related shareholder proposals to companies held in its public equity portfolio in an effort to raise their level of environmental risk awareness. Staff also considers and votes all environmental-related proposals in a manner that aligns with our objectives of improving disclosure and mitigating risk.

21 RISK FACTORS

Adopted in 2008, the 21 Risk Factors represent a variety of ESG risks that CalSTRS believes could impact the value of the investment portfolio. The 21 Risk Factors are considered when undergoing due diligence on new investments. They are also part of the continuous diligence process staff undertakes with existing investments and investment managers. CalSTRS external fund managers are regularly queried on how they are factoring the 21 Risk Factors into investment decisions made on behalf of CalSTRS. Often times, these risk factors are embedded or referenced in contracts with external investment partners.

1

MONETARY TRANSPARENCY

The long-term profitability by whether or not a country or company has free and open monetary and financial data, and its observance of applicable laws.

2

DATA DISSEMINATION

The long-term profitability by whether or not a country is a member of the IMF (or similar organization) and satisfies the conditions for access, integrity, and quality for most data categories.

6

AUDITING

The investment's long-term profitability by whether or not the country uses International Standards on Auditing in setting national standards.

7

FISCAL TRANSPARENCY

The investment's long-term profitability by its exposure or business operations in countries that do not have some level of fiscal transparency such as publication of financial statistics, sound standards for budgeting, accounting, and reporting.

11

RESPECT FOR HUMAN RIGHTS

The investment's long-term profitability from its business operations and activities in countries that lack or have a weak judicial system. Assess the risk to an investment's long-term profitability from its business operations and activities in a country that engages in or facilitates the following: arbitrary or unlawful deprivation of life, disappearance, torture and other cruel, inhuman, or degrading treatment or punishment, arbitrary arrest, detention, or exile, arbitrary interference with privacy, family, home, or correspondence, use of excessive force and violations of humanitarian law in internal conflicts. Consideration should be given to governmental attitude regarding international and non-governmental investigation of alleged violations of human rights.

12

INSOLVENCY FRAMEWORK

The investment's long-term profitability from its business operations and activities in specific countries with regard to bankruptcy reform or insolvency legislation.

13

MONEY LAUNDERING

The investment's long-term profitability from exposure and whether or not a country has implemented an anti-money laundering regime in line with international standards; consideration should be given to compliance with the 40 recommendations in the Financial Action Task Force (FATF) on Money Laundering; and whether it is a member of FATF.

17

DISCRIMINATION BASED ON RACE, SEX, DISABILITY, LANGUAGE, OR SOCIAL STATUS

The investment's long-term profitability from business practices and activities on discrimination, such as discrimination against women, children, and persons with disabilities, national/racial/ethnic minorities, or indigenous people.

18

WORKER RIGHTS

The investment's long-term profitability from management and practices globally in the area of worker's rights; specifically the right of association, the right to organize and bargain collectively, prohibition of forced or bonded labor, status of child labor practices and minimum age for employment, acceptable work conditions, or human trafficking.

3

ACCOUNTING

The long-term profitability by whether or not the accounting standards are formulated in accordance with International Accounting Standards or the U.S. Generally Accepted Accounting Principles.

4

PAYMENT SYSTEM: CENTRAL BANK

The long-term profitability by whether the activities of a country's central bank encompass implementing and ensuring compliance with principles and standards which are established to promote safe, sound, and efficient payment and settlement systems.

5

SECURITIES REGULATION

The long-term profitability by exposure to operations in countries that have not complied with IOSCO objectives, which provide investor protection against manipulation and fraudulent practices.

8

CORPORATE GOVERNANCE

The investment's long-term profitability by whether or not the government recognizes and supports good corporate governance practices and whether it generally adheres to OECD principles.

9

BANKING SUPERVISION

The investment's long-term profitability from its exposure to countries that have not endorsed/complied with the Basel Core Principles. An endorsement includes an agreement to review supervisory arrangements against the principles and bring legislation in line with the principles where necessary.

10

PAYMENT SYSTEM: PRINCIPLES

The investment's long-term profitability by whether a country complies with the 10 Core Principles for Systemically Important Payment Systems, which includes operational reliability, efficiency, real time settlement, final settlement in central bank money; and whether rules and procedures are clear and permit participants to understand the financial risks resulting from participation in the system.

14

INSURANCE SUPERVISION

Whether or not a country has a regulatory framework in line with International Association of Insurance Supervisors (IAIS) Principles.

15

RESPECT FOR CIVIL LIBERTIES

The investment's long-term profitability from operations, activities, and business practices in countries or regions that do not allow freedom of speech and press, freedom of peaceful assembly and association, freedom of religion, freedom of movement within the country, allowance for foreign travel, emigration, and repatriation.

16

RESPECT FOR POLITICAL RIGHTS

The investment's long-term profitability from business practices and activities in countries that do not allow their citizens the right to advocate for change to their government.

19

ENVIRONMENTAL

The investment's long-term profitability from activities and exposure to environmental matters such as; depleting or reducing air quality, water quality, land protection and usage, without regard for remediation. Consideration should be given to how a company is dealing with the impact of climate change, including whether the government is taking steps to reduce its impact, exacerbating the problem, or oblivious to the risk.

20

WAR/CONFLICTS/ACTS OF TERRORISM

The investment's long-term profitability from business exposure to a country or region that has an internal or external conflict, war, acts of terrorism or involvement in acts of terrorism, and whether the country is a party to international conventions and protocols.

21

HUMAN HEALTH

The risk to an investment's long-term profitability from business exposure to an industry or company that makes a product which is highly detrimental to human health so that it draws significant product liability lawsuits, government regulation, United Nations sanctions and focus, and avoidance by other institutional investors.

90% of these managers are aware of climate issues

10% of the managers considered climate change a primary factor in their investment process

External Manager Engagement

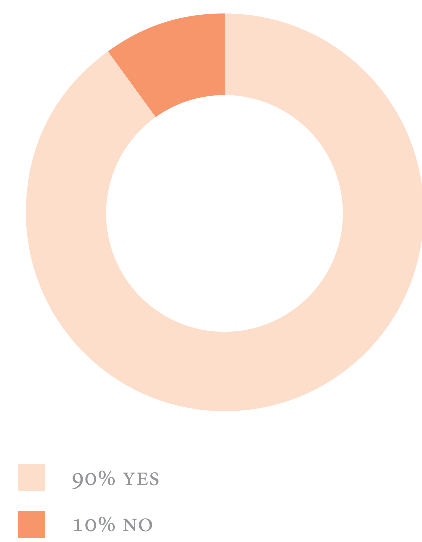
The Global Equity staff actively engages its core investment managers about their continued consideration of CalSTRS' 21 Risk Factors, as set forth by the Investment Policy & Management Plan, when making investment decisions. The equity managers provide their insights on the 21 Risk Factors as they relate to the invested countries and companies. Environmental risk is one of the 21 risks listed in the policy which addresses key themes within the sustainability program – climate change, air quality, water quality and land protection.

In an effort to raise awareness of environmental considerations when investing, all external equity investment managers are surveyed annually to assess how they consider climate change risk in their investment process. Questions asked include:

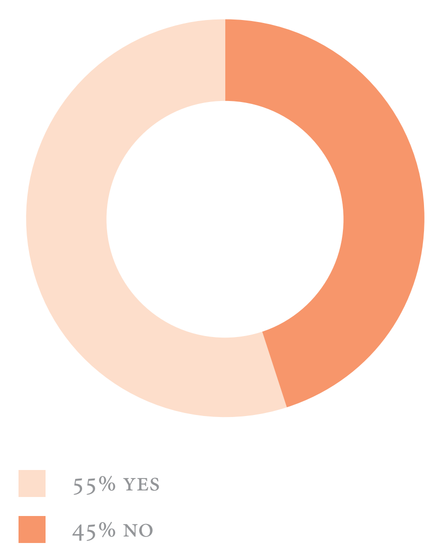
- Are you aware of climate change issues and how they pertain to firms you invest in?
- Do you explicitly incorporate climate risk into your process?
- Is climate change a primary factor?
- What steps have you taken to better incorporate climate risk into your investment process?

The 2011 survey results revealed that 90 percent of these managers are aware of climate issues and how they pertain to the firms in which they invest. Also, approximately half of the managers explicitly incorporate climate risk into their investment process. However, only 10% of the managers considered climate change a primary factor in their investment process.

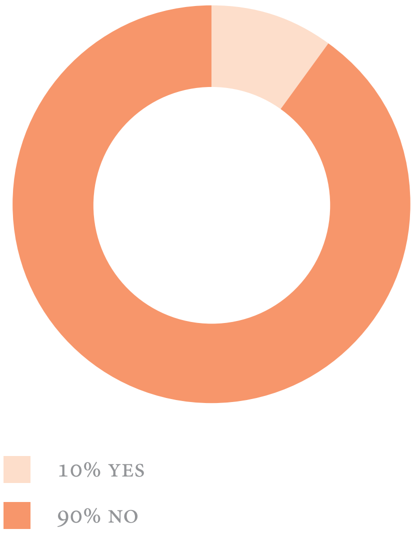
ARE YOU AWARE OF CLIMATE CHANGE ISSUES AND HOW THEY PERTAIN TO FIRMS IN WHICH YOU INVEST?



DO YOU EXPLICITLY INCORPORATE CLIMATE RISK INTO YOUR PROCESS?



IS CLIMATE CHANGE A PRIMARY FACTOR?



When you consider the 2011 survey results versus the 2010 survey results, you see that from 2010 to 2011 there was an increase in the percent of managers that explicitly incorporated climate risk into their investment process (from 49% in 2010 to 55% in 2011). In addition, there was an increase in the percent of managers that said climate change was a primary factor (from 8% in 2010 to 10% in 2011). Staff will continue to consider ways to engage and measure external manager integration of environmental considerations.

Corporate Engagement

Russell 1000 Efficiency Initiative

In an effort to get more portfolio companies focused on carbon emissions management, and at the same time drive cost savings to improve value, staff is focusing on energy and water efficiency at large U.S. companies. Using a variety of data sources, staff performed a detailed analysis of its Russell 1000 Index holdings to determine the 100 companies within the index that were most in need of engagement concerning implementing and disclosing energy and water efficiency efforts.

Investments in energy efficiency are an attractive way to curb volatile energy costs, can help companies respond to potential regulations, and can enhance a company's role as a corporate citizen. When one considers that the energy consumed in industry and buildings represents 73% of all energy used in the U.S.,[1] corporate attention to efficiency can significantly reduce the levels of energy consumed in this country. And investments in energy efficiency are typically highly profitable and low-risk. In 2008, McKinsey estimated that worldwide, $170 billion could be invested yearly in energy efficiency with an average annual Internal Rate of Return (IRR) of 17%.[2] By 2020, these investments would produce $900 billion in annual energy savings. Building retrofits have an equally significant potential to save money. A Deutsche Bank report states that within the U.S., $279 billion "invested across the residential, commercial and institutional market segments...could yield over $1 trillion of energy savings over 10 years."[3] This investment would reduce U.S. electricity spending by 30%, and U.S. greenhouse gasses emissions by nearly 10%.

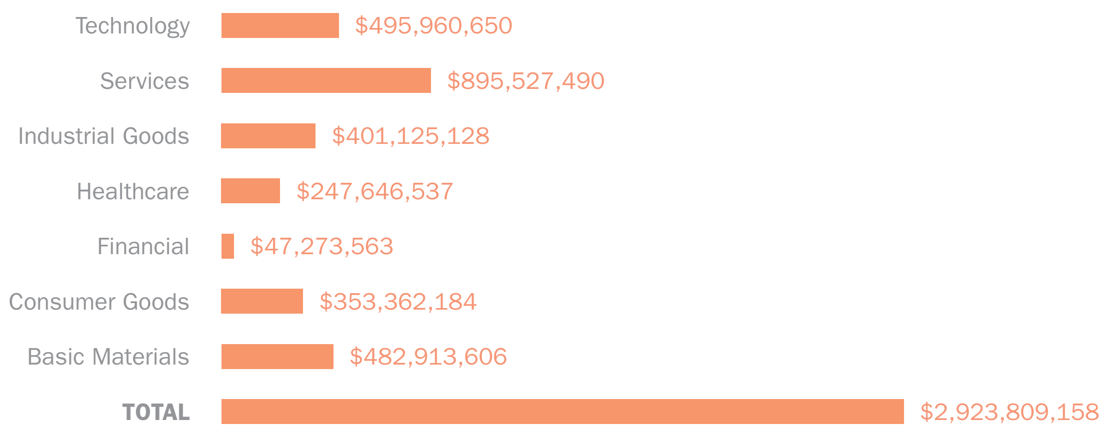
73% of energy used in the U.S. is from industry & buildings

100 companies were engaged on energy & water efficiency efforts

In August of 2012, staff sent engagement letters to the 100 companies identified through its analysis of the Russell 1000 Index. These 100 companies had a combined portfolio value of nearly $3 billion, which represents approximately 6.5% of CalSTRS U.S. Equity Portfolio and 4% of CalSTRS Global Equity Portfolio. The letters outlined CalSTRS belief that companies need to be cost effective, that incorporating efficiency initiatives into business plans would be beneficial from a financial and reputational perspective, and that little disclosure surrounding the company's efforts at efficiency could be found. Staff will be continuing this engagement effort throughout the 2012-2013 fiscal year.

[1] *Annual Energy Review 2003. U.S. Department of Energy, Energy Information Administration. (DOE-EIA)*
[2] *Farrell, Diana, and Jaana Remes. "How the World Should Invest in Energy Efficiency." Industry Today. McKinsey & Company, July 2008.*
[3] *Fulton, Mark, and Ron Herbat. "United States Building Energy Efficiency Retrofits: Market Sizing and Financing Models." Deutsche Bank Group, Mar. 2012.*

EQUITY PORTFOLIO COVERAGE: EFFICIENCY ENGAGEMENT



R1K EFFICIENCY INITIATIVE LETTER

CALSTRS
HOW WILL YOU SPEND YOUR FUTURE?

August 29, 2012

Jane Doe
Chairman
U.S. Corporation
1 Main Street
Anywhere, US 00000

Dear Ms. Doe:

This letter is sent to you on behalf of the California State Teachers' Retirement System (CalSTRS). CalSTRS is a public pension fund that was established for the benefit of California's public school teachers almost 100 years ago. CalSTRS serves the investment and retirement interests of nearly 850,000 plan participants. As of June 30, 2012, the CalSTRS portfolio was valued at approximately $150 billion with about $75 billion of the fund's assets being invested in the public equity markets, on both a domestic and an international basis. A significant percentage of CalSTRS' public equity portfolio is invested in the indexed or passive style of investment management. Therefore, these stocks do not trade on company news or events but are instead held for the long-term. We do use our corporate governance rights to address issues with corporations that are held in our portfolio. In our view, this strategy is more efficient for the investing considerations of diversification, minimizing risks and costs, and maximizing returns than simply selling a security each time we have shareholder concerns. As of June 30, 2012, CalSTRS held XX shares of U.S. Corporation common stock, with an approximate market value of $YY.

Through regular reviews of our equity portfolio, we attempt to ascertain whether the companies we invest in are sufficiently managing risks that may materially affect the value of our investment. When we do not find appropriate disclosure, we engage that company on its risk management efforts. One of the issues we are currently focused on is how effective companies are in identifying, measuring and managing energy and water efficiency within their operations. CalSTRS believes that energy use can be a significant part of a company's expenses, sometimes representing hundreds of millions of dollars in annual costs, and that implementing energy efficiency initiatives can yield significant savings. CalSTRS also recognizes that water shortages are becoming more common, and more severe, and that a disruption to a company's water supply can impact its value. Therefore, CalSTRS believes that companies should be cognizant of their energy and water consumption and should be considering ways of reducing their use of these resources.

It was through a recent review of our equity portfolio that U.S. Corporation came to our attention. We used multiple outside data sources, including MSCI, GMI and Trucost, in an effort to ascertain which of our portfolio companies had high energy or water use profiles that were not being properly managed. This analysis showed that U.S. Corporation had relatively high energy and water usage and that efforts to manage this use were not being considered or were not being disclosed. We then reviewed your website and public filings, but we were unable to find material disclosure on resource use analysis or resource efficiency initiatives.

While we understand that the initial capital outlay required for efficiency initiatives can often impede their adoption, our research on such initiatives has shown that the costs associated with many efficiency projects can be recouped in just a few years and that the longer-term benefits of lowered operating costs make these initiatives attractive means of creating long term value. For example, the Empire State Building's $20 million energy-efficiency retrofit project, completed in June 2011, is on schedule to provide a return on investment of about three years and annual energy cost savings of nearly $4.5 million.

We believe that increased attention to resource efficiency will benefit our investment in U.S. Corporation and we would like to begin a dialogue with you. Please contact Brian Rice, Portfolio Manager, Corporate Governance to discuss this matter at your earliest convenience. I am enclosing his card for your easy reference. We look forward to hearing from you.

Sincerely,

Anne Sheehan, Director Corporate Governance
California State Teachers' Retirement System

CC: John Smith, Chief Executive Officer

The above letter is a replica of the efficiency engagement letter CalSTRS sent to 100 portfolio companies.

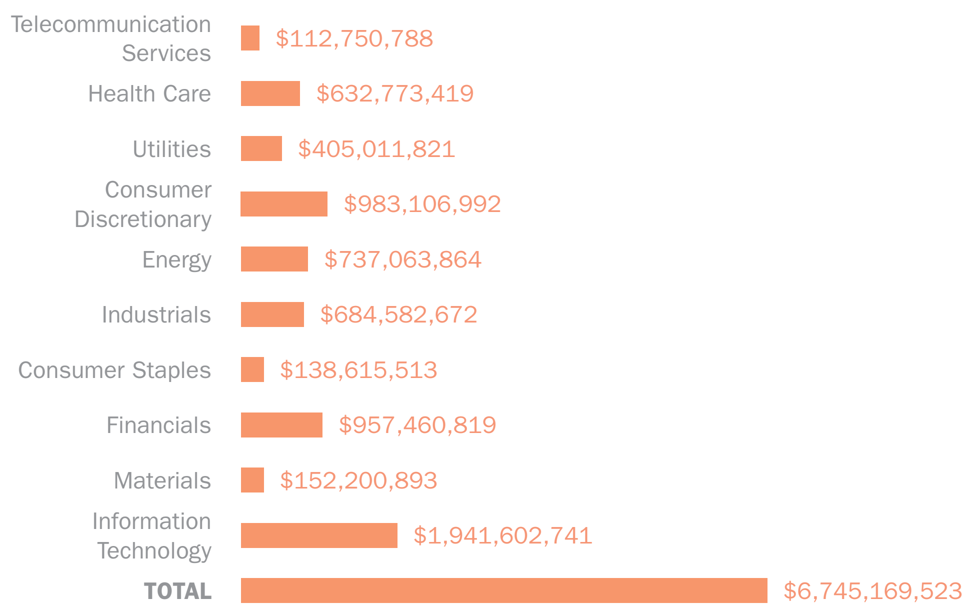
CalSTRS sent letters to 128 U.S. companies that did not respond to the CDP carbon emissions survey

Carbon Disclosure Project (CDP) Non-responders Engagement

Staff continues to actively support the CDP through our engagement of non-responding CDP survey recipients. Over the past several years, staff has sent letters to U.S. companies that failed to respond to the CDP's request to complete the carbon emissions survey. These letters detail CalSTRS support for the CDP, stress the importance of companies measuring and disclosing carbon emissions, and request that the company respond to the next annual survey or provide evidence that carbon risk is being managed by the company.

CalSTRS believes it is important to support the work of organizations, like the CDP, that promote environmental risk management across a broad spectrum of our portfolio. CalSTRS also recognizes that our follow-up engagement efforts provide an additional layer of risk management for a significant portion of our equity and total portfolio. As an example, in 2012, CalSTRS sent letters to 128 U.S. companies that did not respond to the CDP carbon emissions survey. As the following table reflects, these 128 companies represented over $6.7 billion in portfolio value which represents approximately 15% of our U.S. equity portfolio and approximately 9% of our global equity portfolio.

EQUITY PORTFOLIO COVERAGE: CDP CARBON ENGAGEMENT

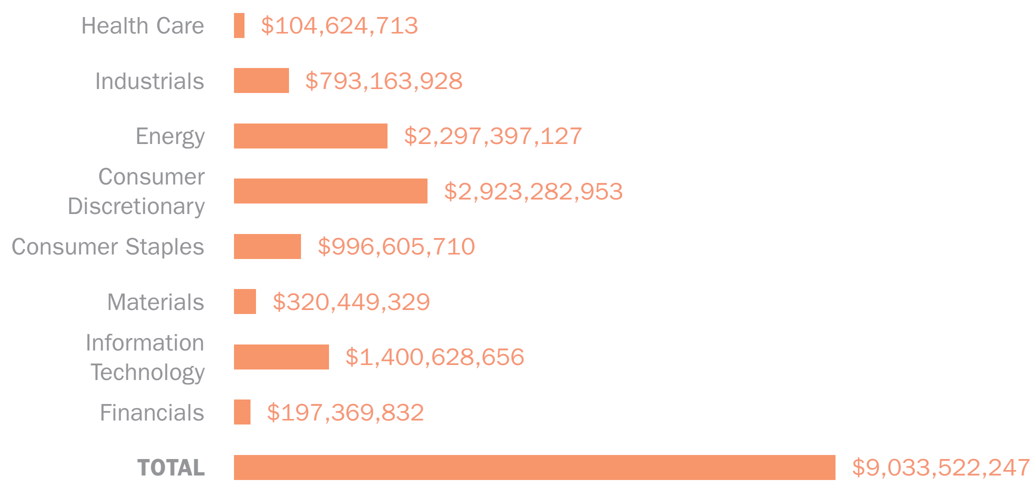


CDP Water Non-responders Engagement

Similar to its efforts with the CDP carbon survey non-responders, CalSTRS engages those U.S. companies that do not respond to the CDP Water Project survey request. The most recent CDP water survey results were released in November, 2011. 43 U.S. companies chose to not respond to the CDP's request for water risk data. These 43 companies received letters from CalSTRS concerning their water use practices. From a coverage perspective, these companies represented approximately $9 billion in aggregate portfolio value which is approximately 20% of the CalSTRS U.S. equity portfolio and 12% of the CalSTRS global equity portfolio.

43 companies, $9 billion in value, 20% of the Global Equity portfolio received letters supporting the CDP water survey

EQUITY PORTFOLIO COVERAGE: CDP WATER ENGAGEMENT

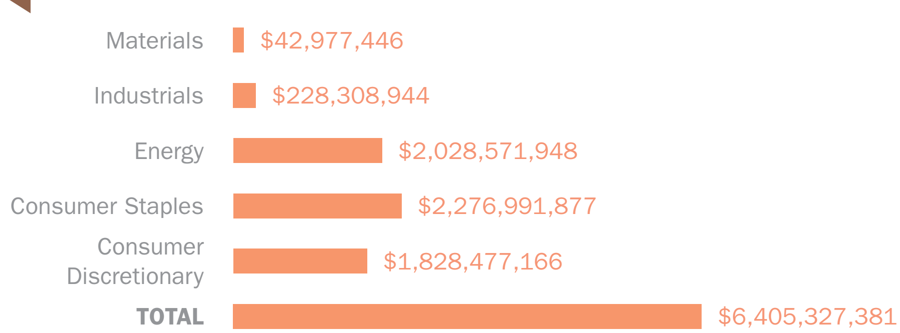


Staff's letter to the CDP water survey non-responders highlighted CalSTRS belief that managing environmental risks leads to long-term value enhancement and that companies who are exposed to water risks should be managing this exposure. The letter stated that the non-responding company had been identified as being exposed to water risk and asked the company to provide assurances that it was indeed managing water-related risks. The letter also asked the company to re-consider its decision to not respond to the water survey. Companies that did not provide assurance that they were managing water risk were considered for more in-depth engagement, including shareholder proposals.

Forest Footprint Disclosure (FFD) Non-responders Engagement

In March 2012, CalSTRS chose to endorse the efforts of the Forest Footprint Disclosure Project (FFD) and agreed to be a signatory to their global survey. CalSTRS believes that many of the more immediate environmental risks will most likely be felt in corporate supply chains and the FFD seeks to help companies recognize the ways that potential commodity disruptions caused by deforestation might impact their supply chains. By working with the FFD, companies mitigate their environmental risk exposure and improve their supply chain management skills.

EQUITY PORTFOLIO COVERAGE: FFD ENGAGEMENT



As was done in support of the CDP surveys, CalSTRS sent letters of engagement to the 73 portfolio companies that failed to respond to the FFD survey. These 73 U.S.-based companies represent almost $6.4 billion in aggregate investment value, or about 14% of the CalSTRS U.S. Equity Portfolio and about 8.5% of the CalSTRS Global Equity portfolio.

CalSTRS Sustainability Risk Shareholder Proposals:

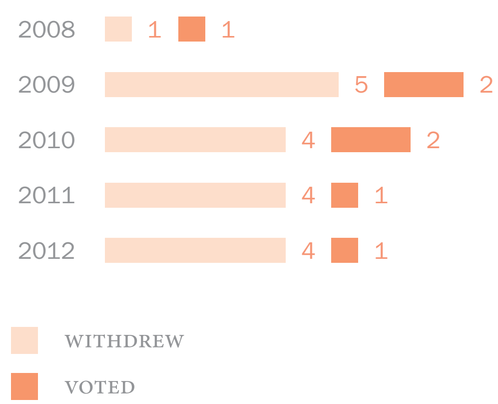
The CalSTRS engagement programs described previously are intended to raise awareness of environmental issues and stimulate a dialogue on managing environmental risks and capturing opportunities, while providing a layer of risk management to the CalSTRS public equity and total fund portfolios. Staff targets companies that are not providing evidence that environmental risks are being managed. Often, staff determines that companies are indeed managing risk, but not disclosing these efforts publicly. On other occasions, staff is able to convince companies that more attention to risk management and disclosure is warranted. The majority of engagement efforts result in an appropriate degree of movement by a company towards being better positioned against environmental risk exposure.

25
environmental related shareholder proposals

However, sometimes an engagement is not as successful as intended, and staff does not believe that the company has made, or is willing to make, the necessary progress towards managing environmental risks. With these engagements, staff will strongly consider exercising the Fund's equity ownership rights by filing a shareholder proposal with the company, calling on it to improve its environmental risk management efforts. The intent of the proposal is to bring CalSTRS concerns to the company's shareholders and get enough support from them to convince the company to commit to CalSTRS recommendations. Often, the filing of a proposal will increase a company's willingness to engage further with staff and lead to a committal to improve risk management and disclose.

Since 2008, CalSTRS has filed a total of twenty-five environmental-related shareholder proposals that called on companies to improve their environmental risk management disclosure efforts. Eighteen of those proposals were ultimately withdrawn before the annual meetings as staff was able to negotiate a mutually agreeable outcome with the company. The seven proposals that have been considered by shareholders have received, on average, approximately twenty-five percent of the votes cast either for or against.

SHAREHOLDER PROPOSALS: HISTORICAL OUTCOMES



Proxy Voting

Voting the proxies of the companies in the CalSTRS Global Equity Portfolio is a fundamental and important way to manage the risks associated with our public equity ownership. Voting proxies is also a duty of all fiduciaries. The responsibility for voting CalSTRS proxies has been delegated by the Teachers' Retirement Board (TRB) to staff. Attachment B to the CalSTRS Investment Policy for Mitigating ESG Risks is called the Financial Responsibility Criteria for Corporate Investments, and is a set of guidelines that CalSTRS staff uses to assist it in making proxy vote decisions. These guidelines provide direction in determining how environmental-, social-, and governance-related proposals should be considered. The TRB regularly reviews, revises and approves the guidelines.

73
companies, $6.4 billion in value,
14%
of the Global Equity portfolio received letters supporting the FFD

Over the course of any fiscal year, staff considers dozens of environmental-related shareholder proposals that cover a variety of issues and levels of action. Environmental proposals cover issues such as carbon emissions, land use, waste disposal, and extractives risk management, and request actions such as report preparation, emissions targets, and waste reduction goals. During the 2011-2012 fiscal year, CalSTRS considered eighty-one environmental proposals, supporting twenty-two of them and voted against fifty-nine.

81

environmental proposals were considered in 2011–2012

The percentage of votes against is not representative of CalSTRS lack of concern on environmental issues. Rather, this vote percentage reflects the Fund's desire to support proposals that staff believes will add value to the investment. Many of the environmental proposals were considered to be lacking shareholder value or were substantially involving the day-to-day management of the company. Traditionally, CalSTRS supports proposals that call for improved environmental risk reporting, unless it is believed that the company already adequately discloses these risks. Generally speaking, CalSTRS does not support environmental proposals that are intended to substitute for management's operational judgments. CalSTRS believes that companies should be managing environmental risk but also believes that companies should be the ones to decide how to design and implement risk management systems.

Portfolio Screens & Environmental Benchmarks

Fixed Income Benchmark Review

In order to address the diversity of definitions regarding what constitutes a "green" or "sustainable" company, we continue to refine our "Green & Sustainable Benchmark" that we manage internally via the BlackRock system which helps automate our review of the portfolio, as well as bring more transparency to our holdings. Of the $45.1 billion in assets that CalSTRS Fixed Income manages (i.e. including those held by internal managers, external managers, and internally controlled securities lending), we hold approximately $11.6 billion, or 25.7 percent of that amount in debt securities that meet the criteria defined by our green-sustainability benchmark[4]. The percentage figure is 420 basis points higher than the 21.5 percent or the $10.2 billion we reported in the last Green Initiative Task Force report. Most of our exposure increase (over $1.0 billion) was the result of an increase in CalSTRS' holdings of names eligible for index inclusion. The rest of the exposure increase was from the entry of new names. Many of these names were in the finance and banking sectors of the index.

$11.6 billion

in Fixed Income assets meet the criteria defined by their green-sustainability benchmark

[4] *The CalSTRS Fixed Income Green & Sustainable benchmark combines definitional criteria of MSCI North American ESG Index, Dow Jones Sustainability Indices, CCX, the Equator Principles and the U.N. Principles.*

INVESTMENT MANAGERS & MANAGER INVESTMENTS

The following are brief overviews of CalSTRS investment managers who are making green investments, or are incorporating green considerations into their investment analysis, along with summeries of investments in their portfolios.

Global Equity Investment Managers
New Amsterdamn Partners

New Amsterdam Partners is a long-only public equity asset management firm founded on an innovative philosophy: an intellectually rigorous and disciplined blend of quantitative and fundamental investment research will produce superior stock selection. New Amsterdam Partners was founded in 1986 to bridge the chasm between the methods of quantitative and fundamental stock analysis. Discerning the strengths and limits of each, Michelle Clayman, CFA, Managing Partner & CIO, developed an approach that integrates both disciplines to yield a decisive and intellectually sound edge in stock selection.

New Amsterdam considers environmental, social, and sustainability factors when making investment decisions. The firm looks at factors which relate to alcohol, tobacco, gambling, military contracting, and nuclear activities, as well as issues surrounding community, diversity, employees, and environmental performance. In their investment process, when building their socially responsible portfolios, they screen each security for the aforementioned factors after it passes through the fundamental phase of the investment process. New Amsterdam has a U.S. mandate.

Ecolab (New Amsterdam)

Ecolab delivers comprehensive programs and services to the food, energy, healthcare, industrial and hospitality markets in more than 160 countries. It is the global leader in water, hygiene and energy technologies and services that provide and protect clean water, safe food, abundant energy and healthy environments. The company offers specialized cleaners and sanitizers for washing dishes, glassware, flatware, foodservice utensils, and kitchen equipment, as well as for laundries and general housekeeping functions; food safety products and equipment, water filters, dishwasher racks, and related kitchen sundries; pool and spa treatment programs; janitorial cleaning and floor care products; chemical dispensing device systems; and dishwashing machines, detergents, and rinse additives. Total revenues in 2011 were $11 billion.

Ecolab's corporate vision is to make the world cleaner, safer and healthier by protecting vital resources and ensuring water and energy are available everywhere. Ecolab's products and services prevent disease and infection, keep food supplies safe, protect the places where people eat, sleep, work, play, and heal. It's more notable recent efforts include: providing funding and serving on the steering committee for the development of Green Seal's* Cleaning Service Standards; implementing a new washing process that captures excess energy and also enables water savings; participating in a major World Health Organization initiative to reduce health care associated infections by improving hand hygiene compliance rates in health care facilities around the world; assisting and supporting BP in the 2010 Gulf of Mexico oil spill cleanup by providing oil dispersants. It ranks 26th in Newsweek's Greenest Companies in America and has been named a Maplecroft** Climate Innovation Leader for the third consecutive year.

Ecolab is attractively valued based on forward earnings and is well positioned for strong growth in the coming months. It continues to benefit from synergies resulting from its acquisition of Nalco (named 2012 Water Technology Company of the Year by Global Water Intelligence) and its R&D efforts provide constant product innovation. Recovery of the hospitality end-markets, margin expansion in Europe, market share gains in the Food & Beverage area as well as growth in emerging markets should contribute to gains going forward.

**Green Seal is a non-profit organization devoted to identifying environmentally beneficial products.*
***Maplecroft identifies companies that demonstrate superior management, mitigation and adaptation in climate innovation.*

Light Green Advisors and Rhumbline

Light Green Advisors and Rhumbline formed a joint venture partnership and were selected to manage a sustainable portfolio using a U.S. mandate. Rhumbline is an investment firm that was formed in 1990 and specializes in managing index based strategies for institutional clients. Light Green Advisors is an independent asset management firm that specializes in managing environmental sustainability mandates for institutional clients. Light Green was founded by Glenn Anderson, Mark Sten, and John Naimon in 1998.

The firm's investment philosophy is that a limited subset of widely varying environmental cost factors are financially material. Light Green Advisors has found that successful environmental programs add economic value to firms in a wide range of industries through operation cost reductions and reduced litigation costs. Light Green Advisors relative value strategy leverages proprietary research on the relationship between environmental excellence and financial return.

Coca Cola (Rhumbline/Light Green Advisors)

Coca Cola has made a corporate commitment to water neutrality that is unparalleled among large beverage companies. The company has made several investments that advance water use efficiency and is now one of the leading investors in water efficiency technologies.

Coca Cola has steadily improved its water use efficiency – decreasing the amount of water used to manufacture its products from 2.67 liters of water per liter of product in 2004 to 2.36 liters per product in 2009. The company produces over 100 billion liters of beverage a year, so its water use efficiency advances have global benefits.

Coca Cola (KO) has developed a system for measuring its "replenishment" process of returning water to aquifers and surface water sources. On a global basis, Coca Cola reports that it replenishes 23% of the water it extracts for beverage production. Developing a quantitative indicator is a vital step to managing water use in a holistic manner. Coca Cola has also developed a treatment train for cleaning water used in its operations to drinking water standards using reverse osmosis, ultrafiltration, ultraviolet light, and other technologies. The Company believes that water recycling using these methods can reduce net water usage by over 35% at many of its facilities.

Acuity's Clean Environment Equity

Acuity's Clean Environment Equity strategy invests in securities which fit their proprietary environmental concept of sustainable development. Their investment strategy employs a thorough due diligence on company fundamentals and emphasizes companies with viable business models derived from sustainable competitive advantages. These companies tend to be categorized as environmental innovators, environmental leaders, and environmentally benign companies. The Fund focuses on four major themes: energy and energy efficiency, water and waste water solutions, waste management and pollution control, and environmental, health and safety.

Acuity pioneered sustainable development investing in Canada with the 1991 launch of Acuity Clean Environment Funds. Martin Grosskopf is the portfolio manager for this strategy and is also the Director of Sustainable Research for Acuity. His prior experience includes Acres International Limited where he was an Environmental Scientist.

Cascades Inc. (Acuity)

Cascades Inc. is a producer, converter, and marketer of packaging and tissue products composed mainly of recycled fibers in North America and Europe. Cascades' two main business segments are Tissue and Packaging, with the latter including box board, container board, and specialty products.

Cascades' production process provides tremendous environmental advantages due to its use of recycled inputs. For instance, approximately 75% of the raw material used by the company is recycled fiber. Moreover, a variety of initiatives have been put in place to manage the company's waste and emissions levels and to reduce the amount of energy used, and many of the company's suppliers are certified by the Forest Stewardship Council (FSC). Cascades Inc. is also very proactive in the development and marketing of environmental friendly products relative to its peer group.

Acuity believes Cascades will continue to benefit from solid industry fundamentals, with the near term demand outlook generally positive as illustrated by a recent round of price hikes by container board competitors. Meanwhile, recent recycled fiber costs have been lower, positively impacting profitability. Also, ongoing box plant consolidation efforts and integration in the Tissue segment following the acquisition of PaperSource in 2011 should continue to support improved margins.

Generation LLP

Generation LLP is structured as a Limited Liability Partnership and was established in April 2004. Former Vice President Al Gore, co-founder and Chairman, has been a leading advocate for confronting the threat of global warming for decades. David Blood is a Senior Partner and previously served as CEO of Goldman Sachs Asset Management. His current role is focused on Generation's commitment to long term investing and integrated sustainability research. Generation is one of CalSTRS non-U.S. sustainable managers.

Generation uses a global investment strategy to identify public equity companies which fit their concept of sustainable investments. Generation believes investment results for equity strategies are maximized by taking a long-term investment horizon. Furthermore, they believe that sustainability issues can impact a company's ability to generate returns and therefore must be fully integrated into their investment process, along with rigorous fundamental equity analysis, to achieve optimal long-term investment results. Generation uses the term "sustainability research" as the analysis of shareholder value implications of long term environmental as well as economic, social and geopolitical challenges.

Kingspan Group Inc. (Generation)

Kingspan is a building products company that manufactures insulation products used in commercial, industrial, and residential applications. Kingspan is a leader in building efficiency technologies and products with significant carbon footprint savings. A well-sealed building envelope using insulation products is the single most cost-effective method of reducing the carbon footprint of buildings. Some of Kingspan's sales are derived from structural and off-site businesses that increase construction speed, reduce on-site construction waste, and reduce the likelihood of construction site hazards. While it participates in a highly competitive and cyclical industry, nearly all of Kingspan's products benefit from strong secular growth resulting from increasingly stringent building efficiency regulations and increasing customer demand for more sustainable buildings. Furthermore, the company distinguishes itself by anticipating future environmental regulatory trends, producing innovative products that meet those demands, and using its early mover status to gain manufacturing economies of scale.

Finally, Kingspan benefits from a very high quality management team that has made sustainability and combating climate change a core driver of its business and company culture. Kingspan has repeatedly demonstrated its commitment to providing building solutions that combat climate change.

Private Equity Investment Manager and Investment

HgCapital

HgCapital is a multi-sector focused European private equity firm, with a dedicated team that invests in renewable power generation assets in Western Europe, under the name of Hg Renewable Power Partners (HgRPP). The HgRPP platform has raised $900 million to date, utilizing two Funds, HgRPP1 and HgRPP2. CalSTRS has invested approximately $120 million across the two funds.

Significantly, as of 1 July 2012, HgCapital became a signatory to the United Nations Principles for Responsible Investment Initiative (PRI). As part of their commitment to "responsible investment" (RI), HgCapital has developed specific policies and guidelines for their investment process which will apply to all new investments made by HgCapital across all its business lines, sectors and geographies.

Although this Policy is not intended to be applied retroactively, the manager acknowledges that legacy issues may arise from existing investments entered into prior to the development of their policies. In response, HgCapital will proactively encourage and support existing portfolio companies to address potentially material ESG issues and to work, over time, to achieve their policy standards. As part of the policy adoption, the manager will also provide to its investors (including CalSTRS), an annual report on the implementation of PRI Policy and on the ESG activities of the portfolio companies.

Bright Source (Vantage Point Venture Partners)

Brightsource Energy Inc. is in the solar power generation business. The investment was made by VantagePoint Venture Partners, a silicon valley based CleanTech Venture Capital fund. The commentary has been provided by VantagePoint Venture Partners.

Brightsource Energy Inc ("Brightsource"), headquartered and operating in California, is a leading solar thermal technology company that designs, develops and sells proprietary systems that produce reliable, clean energy in utility-scale electric power plants. These systems use proprietary solar power tower technology to convert sunlight to electricity and deliver cost-competitive, renewable electricity with characteristics highly valued by utilities, such as reliability and consistency. The systems are also used by industrial companies to create high-temperature steam for use in applications such as thermal enhanced oil recovery.

The Ivanpah solar power facility is located on approximately 3,500 acres of federal land in California's Mojave desert, managed by the U.S. Department of the Interior's Bureau of Land Management (BLM). The 377 megawatt (net output) facility consists of three separate solar thermal power plants that, when constructed, will produce enough clean energy to power 140,000 homes. The power generated from these solar plants will be sold under separate contracts with Pacific Gas and Electric (PG&E) and Southern California Edison (SCE). PG&E will purchase approximately two-thirds of the power generated at Ivanpah and SCE will purchase approximately one-third. In all, BrightSource has contracted with PG&E and SCE to deliver approximately 2,400 megawatts of electric power.

Ivanpah Solar Electric Generating System (SEGS) in California's Mojave Desert is currently the world's largest concentrating solar power (CSP) plant under construction. When completed, it will nearly double the amount of solar thermal electricity produced in the US. Brightsource has received many innovation and cleantech awards and in April Ivanpah SEGS was named "2012 Energy Project of the Year" by the USC-CMAA (University of Southern California-Construction Management Association of America) Green Symposium. Ivanpah commenced construction in October 2010 and is expected to begin delivering power to its utility customers PG&E and Southern California Edison in 2013. At the peak of construction, the project will employ over 1,600 construction workers and on-site project support staff in California.

Real Estate is Building Efficiency

The CalSTRS Real Estate Unit is committed to improving resource efficiency across their separate account office properties. Detailed information on the tremendous success of this program will be provided in the Investment Portfolios & Performance section of this report. What are being provided in this section of the report are case studies on specific properties within the Real Estate portfolio that demonstrate their commitment to efficiency improvement.

REAL ESTATE CASE STUDY—FROST BANK TOWER & METROPOINT II

CHAPTER PROJECT PROFILE

FROST BANK TOWER

Austin's largest high rise office building receives certification

First downtown high-rise to achieve LEED EB O&M certification

ABOUT FROST BANK TOWER

The 33 story Frost Bank Tower, owned by CalSTRS and three other investors, features more than 569,000 square feet of premiere office spaces in the heart of the Austin Central Business District on the corner of Congress Avenue and Fourth Street, just blocks from the Texas State Capitol. On site amenities include conference facilities, a dry cleaner, a full service bank, ATM, deli/carry-out restaurants, coffee shop, overnight courier drop box, and a fitness center. Its center-core, column free design provides for extremely flexible and efficient tenant layouts with ample day lighting and views.

PROJECT BACKGROUND

FROST BANK TOWER, built in 2003. In addition to its efficient design and construction Thomas Properties (TPG) has implemented numerous measures to maximize efficiencies with sustainable and high operational measures. Some of the key energy measures in place include building automation systems, ongoing commissioning program, lighting controls and variable frequency drives. In addition to being energy and water efficient the building offers a healthier and more productive space for its building occupants by having a good indoor air quality program in place, 93% of sustainable cleaning products, and 82% of its occupants with access to daylight and views. Heat island reduction is also achieved by having 97% of its parking spaces under cover.

MAJOR HIGHLIGHTS

Our LEED GOLD certification was worth the effort and gave the building a competitive edge as more and more companies look for sustainable offices from cost savings and other benefits such as better day lighting, ventilation, humidity, individual controls and less pollutants and VOC's.

Recycling: "Anything that Tears" desk side program for all paper products. Additionally we can recycle plastic bottles and aluminum cans. Frost Bank Tower recycles light bulbs and ballasts, batteries and electronics. Overall, it recycled over 65 tons in 2010. 77.35% of all solid waste was diverted from landfills.

Frost Bank received exemplary performance in areas of

- Sustainable purchasing - for reducing mercury in Lamps
- Water Performance - for sub metering several water uses
- Solid Waste Management - for diverting 100% of the building e-waste
- Outreach program in place for educating internal staff, tenants, vendors and building visitors and the real estate community at large about sustainability.

Some of the building policies and programs in place include: (1) Building Exterior & Hardscape Management Plan, (2) Integrated Pest Management, Erosion Control and Landscape Management Plan, (3) Water Efficiency Program, (4) Cooling Tower Management Plan, (5) Refrigerant Management Policy, (6) Energy Efficiency Policy, (7) Ongoing Commissioning Program, (8) Sustainable Purchasing Policy, (9) Solid Waste Management Policy, (10) Lamp Purchasing Plan, (11) Smoking Policy, (12) Green Cleaning Policy, (13) Indoor Air Quality Program and (14) Indoor Integrated Pest Management Plan.

STRATEGIES AND RESULTS

By placing all of the numerous green techniques and programs in place, we expect to reduce building energy and maintenance costs, reduce greenhouse gas emissions and contribute to a healthier and more sustainable environment for tenants and the community.

"We take a long term view of the building we own and manage and we firmly believe that reducing our carbon footprint and cutting operating expenses will give us an even stronger competitive advantage going forward"

James A. Thomas

Owner: TPG-401 Congress, LLC
Architect: Duda Paine Architects/HKS, Inc
Civil Engineer: MEJ & Associates
Contractor: Constructors
LEED Consultant: Daniele Horton
MEP Engineer: MEJ & Associates
Structural Engineer: Brockette, Davis, Dake, Dallas

Project Size: 569345 SQ FT

Photographs Courtesy of: Roy Wright

ABOUT LEED

The LEED® Green Building Rating System™ is the national benchmark for the design, construction, and operations of high-performance green buildings. Visit the U.S. Green Building Council's website to learn more.

www.usgbc-centraltexas.org
512-470-9923

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toward a greener tomorrow

CASE STUDY

METROPOINT II / DENVER, CO

Quick Facts

- Energy Star Rating of 96
- LEED Gold Certified
- BOMA 360 Certified
- Winner of Denver's 2011 Watts to Water Award for Greatest Improvement in Efficiency
- Reduced building energy by 1,174,742kWh

Size

148,965 sq.ft.

CHALLENGE

Metropoint II is a multi-tenant Class A office building located in the Denver Technical Center office market in Denver. Upon acquiring the building in 2006, CBREGI CalSTRS contracted with CBRE to manage the property. Among some of the challenges CBRE faced were high electrical costs, an obsolete EMS and control system, and high water usage.

SOLUTION

Energy costs were one of the primary concerns of the CBRE Team, therefore the following measures were implemented:

- Replaced the EMS system and VAV controls to improve HVAC control
- Replaced T-12 lamps with T-8 lamps
- Installed LED exit lights as floors and spaces are renovated
- Updated the variable speed drives on all air handler units
- Addition of time clocks to perimeter fixtures in parking deck
- All lights in the building, including tenant spaces, are on motion sensing switches.
- An intelligent irrigation controller was installed.
- Janitorial service was converted to Day Cleaning in June 2011

RESULTS

Since CBRE took over as the management company of Metropoint II, building energy usage was reduced 1,174,742 kilowatt hours in 2011 from the high in 2007.

Since the implementation of the intelligent irrigation controller last June, water consumption was reduced 177,000 gallons over the previous 12-month period.

The conversion to Day Cleaning has saved an additional 528,616 kilowatt hours over the previous 12 month period despite higher occupancy.

CBRE

Fixed Income: Portfolio Company Examples

The CalSTRS Fixed Income Portfolio is largely internally managed. As with our external managers, Fixed Income staff is expected to consider the CalSTRS 21 Risk Factors when making investment decisions. Therefore, environmental risks and opportunities are part of the Fixed Income staff investment analysis process. All things being equal, companies that demonstrate excessive exposure to environmental risks are avoided while companies that demonstrate awareness and adoption of environmental-related issues are favored. What follows are several examples of active investments in the Fixed Income portfolio and the environmental initiatives these investments have undertaken.

Waste Management

In April 2012, Waste Management opened Nevada's first and only gas-to-energy power plant at its Lockwood Landfill which will use landfill gas produced onsite to generate electricity. The project will create enough renewable energy to power more than 1,800 homes. Waste Management owns or operates 131 landfill gas-to-energy facilities across North America which produce enough electricity to power approximately 475,000 homes. Landfill gas has several benefits including endorsement from the Environmental Protection Agency (EPA), it is not dependent on sunlight or wind, it is reliable during peak energy hours and it is an economical alternative to other fuel sources such as natural gas. The company has been developing landfill gas-to-energy technology for over two decades now. Waste Management produces over 9 million megawatt hours of electricity per year with renewable energy projects. The Fixed Income unit currently holds $18.2 million Waste Management bonds.

Home Depot

In May 2012, the EPA named Home Depot® as the 2012 ENERGY STAR® Partner of the Year for their outstanding contribution to reducing greenhouse gas emissions through merchandising and marketing ENERGY STAR qualified products. Key accomplishments during 2011 include:

- Increasing number of ENERGY STAR products available and sold.
- Promoting ENERGY STAR through various sales associate training including web-based training, in store planning guides and internal video broadcasts.
- Highlighting ENERGY STAR throughout the store and in advertising.
- Supporting EPA's "Change the World, Start with ENERGY STAR" campaign.

This is the seventh time Home Depot has been recognized by the EPA for exceptional leadership in promotion of ENERGY STAR qualified products. The Fixed Income unit currently holds $17 million Home Depot bonds.

Sprint Nextel

In June 2012, Sprint Nextel received the "Sustainability Leadership Award" at the International Electronics Recycling Conference and Expo for a third year in a row. They were honored for their outstanding e-waste management program which focuses on the full lifecycle of the electronics they buy and sell. Sprint's Electronic Stewardship Policy, enacted in 2011, outlines four major goals that include reaching a 90 percent collection rate for every phone Sprint sells by 2017 and collecting 100 percent of its own annual e-waste for reuse and recycling also by 2017. Newsweek ranked Sprint number three in their 2011 Ranking of America's Greenest Companies—they were number six in 2010. The Fixed Income unit currently holds $32.9 million Sprint Nextel bonds.

INVESTMENT PORTFOLIOS & PERFORMANCE

1. GLOBAL EQUITY SUSTAINABLE INVESTMENT PROGRAM

All the investments listed in this report were made as part of the normal course of business, received the same level of due diligence as any investment made by CalSTRS, and were made with the primary objective of receiving a maximum rate of return commensurate with an acceptable level of risk.

Within the active components of both U.S. and Non-U.S. public equity, the CalSTRS Global Equity team is pursuing the 'double bottom-line' goals of both competitive returns and sustainable investing through allocations to four investment managers.

Program Summary

In 2007, CalSTRS initiated the Global Equity sustainable investment program with an initial commitment of $250 million. Since that time, the assets under management in this program have grown to $646 million as of June 30, 2012. Managers are normally evaluated over a period of three to five years and the program has reached its five year anniversary. Since inception, the U.S. and Non-US sustainable portfolios have enhanced the return of the Global Equity portfolio by generating 1.2 percent and 2.9 percent of excess return, respectively. Staff will continue to evaluate allocations to and within the sustainable investment program.

$646 million in AUM

PROGRAM ASSETS

Manager Name	Funded	Market Value ($millions)	Benchmark	Comments
New Amsterdam Partners	2007	$74.5	Russell 1000 ex Tobacco	New Amsterdam screens for environmental performance factors after it passes through the fundamental phase of the investment process.
Light Green Advisors & Rhumbline	2007	$56.3	S&P 500 ex Tobacco	Light Green Advisors believes that successful environmental programs add economic value to firms in a wide range of industries through operation cost reductions and reduced litigation costs.
Acuity Investment Management	2007	$171.4	MSCI World ex Tobacco	Acuity invests in companies with viable business models categorized as environmental innovators, environmental leaders, and environmentally benign companies.
Generation Investment Management	2007	$343.7	MSCI World ex Tobacco	Generation believes sustainability issues can impact a company's ability to generate returns; therefore, must be fully integrated with rigorous fundamental equity analysis to achieve optimal long-term investment results.
Total		**$645.9**		

PROGRAM PERFORMANCE

Annualized Performance Since Inception

Manager Name	Inception Date	Portfolio Return	Benchmark Return	Excess Return
New Amsterdam Partners	7/1/2007	0.34	0.15	0.19
Light Green Advisors	5/1/2007	2.11	0.28	1.83
U.S. Sustainable Composite	5/1/2007	1.48	0.29	**1.19**
Acuity Investment Management	8/1/2007	-3.95	-2.76	-1.19
Generation Investment Management	6/1/2007	2.52	-3.11	5.63
Non-U.S. Sustainable Composite	6/1/2007	-0.23	-3.11	**2.88**

Source: State Street as of 6/30/2012

1.19% benchmark outperformance for U.S. portfolio

2.88% benchmark outperformance for Non-U.S. portfolio

These managers are mandated with the 'double-bottom line' goal which includes both a dedication to sustainable investing as well as competitive returns. Evaluating these managers on traditional benchmarks is problematic as these mandates intentionally overweight sustainable stocks which may face short-term headwinds.

While this mismatch is noted, these managers are expected to contribute to the excess return target over the policy benchmarks in the long-term.

2. PRIVATE EQUITY CLEAN TECHNOLOGY AND ENERGY PROGRAM

The Private Equity clean energy portfolio is a diversified portfolio of venture and buyout investments across the clean technology and clean energy universe. Private Equity intends to be a long term investor in the clean technology and energy sector with superior domain expertise. The program is global in scope and includes both fund investments and co-investments.

Potential investments are screened and selected using the same processes and decision making criteria consistent with the Private Equity program as a whole. Investments are considered side-by-side along all other Private Equity opportunities and are held to the same standards with respect to risk-expected return profiles and due diligence procedures and requirements.

$672 million committed to clean technology investments

Portfolio Status as of March 31, 2012

As of June 30, 2012, CalSTRS Private Equity has committed $672.3 million to private equity investments in the clean technology and clean energy sector as follows:

PORTFOLIO STATUS AS OF JUNE 30, 2012

Investment Name	Year	Commitment ($Millions)	Type	Comments
Co-investment #1	2005	$30.0	Co-investment	Start-up company provides financing to small-scale alternative energy projects throughout the U.S.
NGEN Enable Technologies Fund II	2005	$15.0	Venture Capital Fund	Materials sciences focus; headquartered in Santa Barbara.
VantagePoint Cleantech Partners	2006	$15.2	Venture Capital Fund	New practice group for longtime venture capital partner of CalSTRS; headquartered in San Bruno.
Craton Equity Investors I	2006	$30.0	Venture Capital Fund	Los Angeles-based firm specializing in clean technology growth companies.
Carlyle-Riverstone Renewable Energy Infrastructure Fund	2006	$50.0	Boyout Fund	Specialty product for mainline energy investment firm. Finances renewable energy projects globally but primarily in the U.S.
Hg Renewable Power Fund	2006	$61.2	Buyout Fund	Specialty product for London-based buyout firm. Finances renewable energy projects, primarily wind assets in Europe.
Co-investment #2	2006	$12.5	Co-investment	Company installs and operates facilities to convert landfill gas to electrical power.
USRG Power & Biofuels Fund II	2007	$60.0	Buyout Fund	Focus on small renewable power and biofuels projects in North America; headquartered in Santa Monica and White Plains, NY.
Co-investment #3	2008	$6.0	Co-investment	Waste to energy company that utilizes a proprietary plasma technology to convert municipal solid waste into an energy-rich fuel—syngas
Riverstone/Carlyle Renewable & Alternate Energy Fund II	2008	$300.0	Buyout Fund	Focus on worldwide buyout and growth capital control investments involving renewable and alternative energy companies.
Co-investment #4	2010	$28.0	Co-investment	Company is a developer of utility scale solar thermal power plants.
Hg Renewable Power Fund II	2010	$64.4	Buyout Fund	Specialty product for London-based buyout firm. Finances renewable energy projects, primarily wind assets in Europe.
Total		**$672.3**		

82.5% **of the current clean technology portfolio is invested in buyouts**

The current clean technology and clean energy portfolio accounts for 1.6 percent of the overall private equity portfolio in terms of total dollars committed. About 82.5 percent of the current portfolio is invested in buyouts and the remainder is invested in venture capital. Co-investments account for 11.3 percent of the overall clean energy/technology portfolio. CalSTRS has not made any new commitments in the fiscal year 2011-2012 to this strategy.

Portfolio Performance (as of June 30, 2012)

The average age of the underlying investments in the clean technology and clean energy portfolio is approximately 3 years. In general, private equity portfolio companies create value over an average of three to five years and it is therefore too early to conclusively evaluate the overall performance of the portfolio. As of June 30, 2012, approximately 76 percent of total commitments have been called. The majority of the uncalled capital is in recent funds that are still in their investment period.

The total portfolio value is 1.05 times cost, and 25 percent of the investment cost ($130 million) has been realized. Approximately 60 percent of total realizations have come from our investments in buyout funds and the remainder has come from venture capital funds. About one third of the realized capital is attributable to Co-investment #1 – this investment is substantially realized and has returned 1.5 times cost.

The tables below show the clean technology and clean energy portfolio performance by strategy – venture capital and buyout.

CALSTRS CLEAN TECHNOLOGY AND CLEAN ENERGY PORTFOLIO PERFORMANCE

Clean Technology/Energy Venture Capital Portfolio		
Contributions	Portfolio NAV	Multiple
$112.3 M	$126.7 M	1.13x

Clean Technology/Energy Buyout Portfolio		
Contributions	Portfolio NAV	Multiple
$400.3 M	$410.6 M	1.03x

Clean Technology and Clean Energy Portfolio Multiple of Costs		
	June 30, 2012	June 30, 2011
Venture Capital	1.13x	1.16x
Buyout	1.03x	1.04x

As of June 30, 2012, the venture capital portfolio marginally outperformed the buyout portfolio. This difference is primarily attributable to the relative maturity of the venture capital portfolio compared with the buyout portfolio. Both venture capital and buyout portfolio performance remained relatively flat during the 12-month period ending June 30, 2012. Over the same time period, 10.6 percent of the committed capital was called for new and follow-on investments. Buyout funds were more active in making new investments and accounted for approximately 90 percent of called capital. Venture funds experienced a slowdown in new investment activity, with the majority of capital called going to follow-on investments in existing portfolio companies. This slowdown is typical for the funds in the portfolio that are past (or close to) the end of their investment period.

The goal of the program is to increase the risk adjusted returns by incorporating conservation and sustainability in the development and management of the Real Estate portfolio.

3. REAL ESTATE SUSTAINABLE RETURNS PROGRAM

In 2003, CalSTRS Real Estate Staff directed all separate account investment managers to include a "Conservation/Sustainability Assessment" in their annual planning / budgeting process.

STEPS TO SUSTAINABLE RETURNS

1	Incorporate conservation and sustainability into the planning cycle for the existing portfolio
2	Establish benchmarks in order to track energy use, develop capital improvement plans, make energy efficiency upgrades and measure the benefits by reduced consumption of energy. By reducing resource consumption, value is added to the portfolio.
3	Incorporate sustainability measures in investment decisions, including new development projects.
4	Practice conservation and sustainability within the CalSTRS occupied facilities.

PROGRAM SUMMARY

Incorporate conservation and sustainability into the planning cycle for the existing portfolio.

In 2003, CalSTRS Real Estate Staff directed all separate account investment managers to include a "Conservation/Sustainability Assessment" in their annual planning / budgeting process. The goal was to enhance value, create awareness, and become more socially responsible investors. The planning process challenges managers to assess strategies relating to "green buildings" which are defined as: "A structure that is designed, built, renovated, operated, or reused in an ecological and resource-efficient manner."

While we encourage green-related programs in the planning/budgeting process, all capital expenditures must be supported by appropriate return on investment measures and payback periods.

Establish benchmarks in order to track energy use, develop capital improvement plans, make energy efficiency upgrades and measure the benefits by reduced consumption of energy. By reducing resource consumption, value is added to the portfolio.

TRACKING AND AUDIT TOOL

Report Date	Total SF (milliions)	Percentage Energy Reduction*	Reduction in Green House Gas MtCO2-e Emissions
Fall 07	9.0	3.5%	9,070
Fall 08	9.0	4.5%	8,100
Fall 09	9.0	9.9%	3,800
Fall 10	9.0	10.3%	12,700
Fall 11	8.0	9.8%	11,612
Summer 12	8.0	11.6%	12,820

*Based on Separate Account office properties, percentage reductions compare the current measurements to each properties baseline measurement.

Using the Greenhouse Gas Equivalency Calculator on the U.S. Climate Technology Cooperation Gateway, the most recent results are equivalent to one of the following:

- 755 passenger cars not driven for one year.
- 98,000 tree seedlings grown for 10 years; or
- 480 household's electricity use for one year.

Energy Star Rating System Results:

As of June 30, 2012, 93% of these CalSTRS' Separate Account office buildings are Energy Star certified and ranked in the top quartile of energy-efficient buildings. (The criteria for achieving an Energy Star rating are detailed in the Affiliations & Organizations section of this report.)

93% of CalSTRS' Separate Account office buildings are Energy Star certified and rank in the top quartile of energy-efficient buildings

ENERGY STAR RATING SYSTEM RESULTS

Report Date	Number of Separate Account Properties	Number of Buildings with an Energy Star Rating at or above 75	Percentage of Buildings with an Energy Star Rating at or above 75
Fall 07	28	13	46%
Fall 08	28	22	79%
Fall 09	28	23	85%
Fall 10	33	28	85%
Fall 11	31	26	93%
Summer 12	28	26	93%

The LEED Certification Green Building Rating System

The following table displays the CalSTRS assets in this Separate Account portfolio that have achieved the LEED certification as of June 30, 2012. (The standards for LEED Certification are detailed in the Affiliations & Organizations section of this report.)

THE LEED CERTIFICATION GREEN BUILDING RATING SYSTEM

79% have LEED certification

Report Date	Number of Separate Account Properties	Number of Buildings with LEED Certification	Percentage of Buildings with LEED Certification
Fall 07	28	0	0%
Fall 08	28	1	4%
Fall 09	28	9	32%
Fall 10	33	13	39%
Fall 11	31	22	71%
Summer 12	28	22	79%

4. FIXED INCOME GREEN PROGRAM

In keeping with CalSTRS' commitment to manage the risks and create opportunities from climate change, as well as other global sustainability issues across the portfolio, the following summary is intended to provide an update on key metrics and issues affecting the Fixed Income unit.

26%

of the CalSTRS Fixed Income portfolio met the criteria defined by Green & Sustainable Benchmark

Program Summary

The CalSTRS Fixed Income Unit continues to screen and monitor its holdings for companies involved with sustainability initiatives. As more companies accept the global warming thesis and realize the potential for cost savings in their organizations, the adoption of sustainability architecture as part of a company's business operations becomes more commonly observed and accepted in the marketplace. Good business practices both lead and follow sustainability issues for many companies. The initiatives don't have to be large in scale. Small initiatives from other industry leaders get noticed and have led to changes in a competitors approach to sustainability and green initiatives.

As was discussed in the Risk Management section of the report, CalSTRS Fixed Income staff utilizes an internally developed benchmark to track the percentage of the fixed income portfolios that are considered "green" or Sustainable." As of June 30, 2012, approximately 26% of the CalSTRS Fixed Income Portfolio met the criteria defined by Green & Sustainable Benchmark. This percentage is 420 basis points higher than the level reported last year.

Green Bond Portfolio

The Fixed Income unit continues to purchase green bonds as part of its Investment Grade portfolio. Green bond investments occur when both the issuer and CalSTRS' needs align. The Fixed Income unit currently holds a total of $30 million in green bonds. We have received periodic updates from sponsors which have highlighted some of the projects that have benefitted from the proceeds. Funds have been used for

The Fixed Income unit currently holds a total of $30 million green bonds

local dispute resolution, the teaching of agricultural diversification techniques, infrastructure construction and training for women in some of the poorest 148,000 villages in China. The Dominican Republic has received funding to help rebuild its damaged electricity, irrigation, and water supply sectors after experiencing two destructive tropical storms in 2007. Other projects include a bus and transportation modernization program in Mexico and a solid waste collection and transportation project in Amman, Jordan. We will continue to receive periodic reports as to projects undertaken and will share that information with the TRB in these reports.

Green bond proceeds are set aside and accounted for separately by participating agencies. Investors like CalSTRS receive periodic updates on projects and their progress. In 2008, the World Bank launched the Strategic Framework for Development and Climate Change in order to help stimulate and coordinate public and private sector activity to combat climate change. The World Bank green bonds are part of this framework. Fixed Income currently owns $15 million green bonds issued through the International Bank for Reconstruction and Development. An example of an ongoing project with green bond proceeds is the Sustainable Urban Transport Project in India. The project focuses on public and non-motorized transportation and is expected to reduce 12,800 metric tons of CO2 annually over the next 10 years. Another project includes increasing access to electricity in the poorest Southern states of Mexico. The goal is to electrify 47,000 rural households with renewable energy technology. Fixed Income also owns $15 million green bonds through the International Finance Corporation (IFC). Projects for those bonds include hydro power plants and energy efficiency improvements around the world. IFC issued its first green bond in 2010. It appears green bonds have picked up some momentum—we are expecting more frequent and larger issuances and other issuers have expressed interest in establishing green bond programs.

ISSUES, OUTLOOKS & INITIATIVES

Cross-State Air Pollution Rule: Impacts on Fixed Income

In our last update we reported that the Environmental Protection Agency (EPA) finalized the Cross-State Air Pollution Rule (CSAPR) with the first phase set for January 1, 2012. However, on December 30, 2011, the United States Court of Appeals for the D.C. Circuit issued its ruling to stay the CSAPR pending judicial review. The court's decision is not a decision on the merits of the rule. On June 5, 2012, the EPA issued the final set of minor adjustments to CSAPR which will increase state budgets making the changes less costly for the states. A final decision by the D.C. Circuit Court is expected late in 2012.

CSAPR requires states to significantly improve air quality by reducing power plant emissions that contribute to ozone and/or fine particle pollution in other states. CSPAR could hurt the credit quality of unregulated power supply companies because they do not have a cost recovery mechanism in place as part of the rate structure as do regulated companies. Companies such as Exelon Corporation, Public Service Enterprise Group and Calpine Corporation should benefit from the new rule because they already have clean energy power generation. Unregulated companies such as Edison International and GenOn Energy, Inc., and regulated companies American Electric Power Co. and Progress Energy, face the toughest road ahead with the most reductions needed. We expect more bond issuance from these companies as they strive to meet emission goals. Due to the current stay on CSAPR, these companies have had more time to prepare for the pending changes.

ESG Fixed Income Index

On May 4, 2012, Barclays and MSCI announced an agreement to create a family of co-branded environmental, social & governance (ESG) fixed income indices. Investors will soon have the ability to apply ESG investment strategies to bond portfolios. This was exciting news for the Fixed Income unit as there is no true ESG fixed income index currently available. We have had preliminary discussions with both MSCI and Barclays about the index criteria and components and will monitor their progress towards implementation. We will keep the Board apprised of this ESG index.

2011 saw up to 40% declines in most clean-tech public market indexes

In Europe, 90% of new power and fuel generation installations in 2011 came from renewable sources

Current Industry Overview & Future Investment Outlook for Private Equity

The private equity industry continued to face challenges at both micro and macro levels during the past year. Severe government budget shortfalls in developed economies have extended the debate on the reliance of the industry on government financing, development institutions and state-backed capital providers. The now-infamous bankruptcy of Solyndra raised concerns about the efficacy of the Federal Loan Guarantee program, leading to investigations into some of the companies that received the loan guarantees. On the public market side, performance of publicly traded clean-energy stocks has been extremely volatile. Calendar year 2011 saw an overall decline of most clean-tech public market indexes by as much as 40%, compared to a relatively flat S&P 500 index. The relative lack of public market exit opportunities, and the lack of financing, further delayed the growth cycle for companies in the sector.

As highlighted last year, the outlook for the industry in the medium term is somewhat dependent on how policymakers manage the above mentioned immediate term issues. It is important to note that the traditional fossil fuel industry has always received subsidies and continues to do so, hence, withdrawing government support for the renewable sector is not purposeful and highly unlikely.

Besides policy, the sector requires significant amounts of public and private funding sources in the coming decade to enable countries to meet their renewable targets. Innovative financing ideas, such as traditional master limited partnerships (MLPs) that have worked in the past for fossil-fuel infrastructure and real estate, will be needed to attract private investors.

Despite these concerns, the longer term prospects for the sector remain positive as both developed and developing economies maintain focus on the key issues surrounding global warming, sustainable development and energy independence. As evidence, in Europe, 90 percent of new power and fuel generation installations in 2011 came from renewable sources, whereas coal was about five percent. Globally in 2011, investments in clean-energy projects reached an all-time record of $260 billion (Source: Bloomberg New Energy Finance). In the United States, Venture Capital investments in the sector grew by 30% from $5.1 billion in 2010 to $6.6 billion in 2011 (Source: Cleantech Group and PWC data). Venture Capital investments are generally higher on the risk spectrum for investors; however, they have a place vis-à-vis the development of new technologies. Hence, the growth trend in the sector bodes well for the long term prospects of the industry.

Feed-in Tariff

A feed-in tariff is a policy mechanism designed to accelerate investment in renewable energy technologies. It achieves this by offering long-term contracts to renewable energy producers, typically based on the cost of generation of each technology. Technologies such as wind power, for instance, are awarded a lower per-kWh price, while technologies such as solar PV and tidal power are offered a higher price, reflecting higher costs.

In addition, feed-in tariffs often include "tariff degression", a mechanism according to which the price (or tariff) ratchets down over time. This is done in order to track and encourage technological cost reductions. The goal of feed-in tariffs is to offer cost-based compensation to renewable energy producers, providing the price certainty and long-term contracts that help finance renewable energy investments.

On the recent government action front, it is important to note that following the nuclear disaster at Fukushima, Japan signed a feed-in tariff (FIT) law in August 2011 that took effect in July 2012, in an effort to help Japan achieve its goal of 20 percent renewable power by 2020. A key feature of the FIT program is that its levels will be reviewed every three years to avoid the type of clean-energy bubble caused by FITs in Spain, Italy, and elsewhere. Also, the German government has announced that it will completely eliminate their reliance on nuclear energy in the coming years, replacing it with other renewable resources like solar, wind and hydro.

Based on the investment environment highlighted above, we continue to carefully review the fund offerings and focus on the risk-reward of each investment opportunity on a case-by-case basis, alongside the geography, sector and strategy diversification needs of the overall private equity portfolio.

Real Estate: Looking Forward

The Real Estate unit is evaluating a partnership with the Urban Land Institute's ("ULI's") Greenprint Center, and a benefit of this potential new partnership will be a refreshed performance report format. The Greenprint Center is a worldwide alliance of leading real estate owners, investors, financial institutions and other stakeholders committed to reducing carbon emissions across the global property industry. Participation in the partnership provides members the benefit of and participation in: The Greenprint Performance Report, ULI Greenprint Center Innovation Roundtable, Pilot programs and other future initiatives including those centered on Regulatory Trend Reports, Green Leases and Green Finance.

Green Team Strategic Plan

Now that the Green Team has a solid five years of experience and performance, team members believe it is time to develop new long-term goals that will help drive the Green Team's plans and actions during the next five years. Team members anticipate that these goals will be achieved over varying time periods. Going forward, and as part of the Green Team's annual self-evaluation and report, team members will measure progress towards these goals, adjust goals as necessary, and consider additional goals.

- Increase knowledge of environmental risk management techniques and environmental-themed investment opportunities.

Better knowledge comes from education and the Green Team expects to continue its practice of meeting regularly to discuss environmental issues and share best practices, while increasing our contact with environmental experts and industry leaders. Green Team members will participate in conferences and seminars that provide forums for discussions and debate on environmental issues.

- Integrate environmental risk factors into external manager and consultant procurement processes and into core manager monitoring and evaluation.

The Green Team will be looking to leverage the work of the CalSTRS Global Equity Unit as we expand our efforts at integrating environmental considerations into manager selection and monitoring. Team members believe that the CalSTRS 21 Risk Factors, which include environmental considerations, are an appropriate way to codify to external investment partners the importance that CalSTRS places on environmental issues.

- Increase allocation to existing environmental-themed investments and consider allocations to new environmental-themed investments.

Team members meet regularly with external managers representing a wide variety of environmental-themed strategies. Experienced, accomplished managers who present strategies that meet CalSTRS allocation and risk parameters will be considered for possible allocations. Existing investments that have demonstrated sustainably superior performance will be considered for increased allocations.

- Integrate environmental considerations into asset allocation considerations.

CalSTRS recognizes that environmental considerations should be part of asset allocation discussions and processes. Building on the work done through CalSTRS participation in the Mercer climate change asset allocation study, Green Team members will work to integrate environmental factors into CalSTRS asset allocation processes.

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