# THE 21ST CENTURY INVESTOR:

## CERES BLUEPRINT FOR SUSTAINABLE INVESTING

June 2013

**Authored by**

Peter Ellsworth, Ceres
Kirsten Snow Spalding, Ceres

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## FOREWORD

# INVESTORS FACE NEW RISKS IN THE 21ST CENTURY

**Thomas P. DiNapoli**

*New York State Comptroller,*
*Sole Trustee, New York State Common Retirement Fund*

***"Our goal is simple: we want long-term sustainable economic growth. And we have found from experience that comprehensively integrating environmental, social and governance considerations into the investment process is essential to achieving that goal."***

I am pleased to introduce *The 21st Century Investor: Ceres Blueprint for Sustainable Investing.* This report outlines 10 steps that will help institutional asset owners and managers steer a sustainable investment course—one that satisfies fiduciary responsibilities to act on behalf of our beneficiaries in an ever-changing, increasingly interdependent global economy.

The New York State Common Retirement Fund is a highly diversified, global portfolio invested across multiple asset classes traditionally found in institutional portfolios. Ultimately, our goal is simple. We seek long-term sustainable economic growth to meet the obligations of our pension fund for current and future members, retirees and beneficiaries, and to minimize attendant costs to taxpayers. It has been our experience that integrating relevant environmental, social and governance considerations into the investment decision-making process enhances our ability to achieve our objectives.

Investors face new risks in the 21st century that challenge our customary understanding of economic and investment risk. One such risk is climate change. Respected economists and scientists warn that without significant worldwide reductions in greenhouse gas emissions, climate change will produce severe economic disruption in the coming decades. Already, a series of destructive climate-related events have produced unexpected devastation and recovery challenges for significant economic sectors around the world.

The *Blueprint's* 10 steps provide asset owners and investment managers with a framework for reviewing their investment policies and practices to better manage risk, protect principal and enhance investment return.

The Common Retirement Fund is actively pursuing a number of these recommendations, applying them in our decision-making where they are appropriate to the investment and consistent with our fiduciary duty. All organizations will find similar value in applying the *Blueprint's* guidance to their own unique needs and policies.

Investing for both the present and the future in our fast changing world requires fresh thinking and comprehensive, foresighted analysis. This means accounting for risks, some of which are unprecedented, many of which are not identified in financial statements, and all of which are here for the foreseeable future.

Through strategic actions and daily implementation, we fulfill our roles as responsible stewards of the assets we must manage and grow for the benefit of our current and future retirees, members and beneficiaries. I urge you to read this valuable report and to add your voice to critically important discussions taking place within the investment community about how we can achieve long-term sustainable growth.

Thomas P. DiNapoli
*New York State Comptroller*

## LETTER FROM THE PRESIDENT

**Mindy S. Lubber**

*President, Ceres*
*Director,*
*Investor Network*
*on Climate Risk*

# SUSTAINABLE INVESTING

The task of building a sustainable economy—one that meets the needs of people today without compromising future generations—is a monumental undertaking, and an essential one. Today, rapidly accelerating climate change, dwindling water supplies, supply chain breakdowns, population growth and other sustainability challenges pose enormous, unprecedented risks to the global economy. But they also have created enormous economic opportunities in renewable energy, efficiency technologies, resilient infrastructure and other solutions to these challenges. These sustainability-related risks and opportunities will continue to have far-reaching implications for businesses, consumers and investors throughout the 21st century.

One of Ceres' four strategic priorities is to transform the functioning of our economic systems with the goal of a sustainable economy. This requires the engagement of all capital market players from corporations to stock exchanges, credit rating agencies to policy makers. But, critically, it also requires that investors, whose capital shapes the world in myriad ways, integrate sustainability deeply into their investment policies and practices.

*"Sustainable investing… means going beyond traditional financial analysis that fails to account for sustainability risks and opportunities and developing new analytic tools that will."*

For 10 years, through the Investor Network on Climate Risk (INCR), Ceres has been leading a growing movement of institutional investors who recognize that sustainability challenges are, fundamentally, economic challenges and that successful investing in the 21st Century will require investors to fully account for the sustainability risks in their portfolios and in the economy in general.

What we call "sustainable investing" is not a radical departure from traditional investment principles, though it will require investors to think more broadly about risk and opportunity across all asset classes. What prudent investor can afford to ignore the impacts of climate change on the food and agricultural sector, or the economic costs of increasingly common severe weather events? What prudent investor can ignore the estimated $5 trillion market for global clean energy investment?

Simply stated, sustainable investing is about the integration of a new set of risks and opportunities into investment decision-making, and a shift from short-term thinking about earnings and profits to long-term value creation. It means going beyond traditional financial analysis that fails to account for sustainability risks and opportunities and developing new analytic tools that will.

In 2010, Ceres created *The 21st Century Corporation: The Ceres Roadmap for Sustainability*, a tool kit now being used by major corporations worldwide to help them become more sustainable enterprises. This document, *The 21st Century Investor: Ceres Blueprint for Sustainable Investing*, offers 10 key action steps to help investors build the capacity to be successful long-term enterprises that protect their beneficiaries, current and future, in a world facing unprecedented environmental and social challenges. In so doing, investors will be doing their essential part in building a sustainable 21st century economy.

Mindy S. Lubber
*President, Ceres*

# INTRODUCTION: SUSTAINABILITY RISKS & OPPORTUNITIES WILL SHAPE THE 21ST CENTURY ECONOMY

*"Environmental and other sustainability issues are core to business performance in the 21st century."*

**Anne Stausboll**, CEO of the California Public Employees' Retirement System (CalPERS)

This *Blueprint* is written for the 21st Century investor—institutional asset owners and their investment managers—who need to understand and manage the growing risks posed by climate change, resource scarcity, population growth, human and labor rights, energy demand and access to water—risks that will challenge businesses and affect investment returns in the years and decades to come.

These risks can and do influence financial performance and investment returns, yet they are often not considered when investment decisions are based primarily on traditional financial analysis.

This *Blueprint* is designed to help concerned trustees or board members advance a process for better oversight and decision-making that enhances sustainable risk-adjusted returns. It outlines the critical decisions that trustees must make regarding board policies and implementation, and specific steps in the investment process that will benefit from trustee involvement.

It is intended to prompt asset owners and asset managers to consider their investment strategies in light of new systemic risks and to think more comprehensively about risk management and new investment opportunities. The audience for *The 21st Century Investor: Ceres Blueprint for Sustainable Investing* ("the *Ceres Investor Blueprint*") is any trustee, board member, CEO, CIO, portfolio manager, governance staff, analyst or consultant committed to evaluating material risks, maximizing risk-adjusted returns and promoting sustainable long-term value creation.

Even though asset owners and asset managers bear fiduciary responsibility, "the buck stops" at the highest level of fiduciary authority for the asset owner. That may be a board of trustees of a pension fund or the board or investment committee of a foundation, endowment or Taft-Hartley fund. For convenience, we will use the term "trustee" throughout this *Blueprint* with the understanding that we're also referring to any person in a role with primary fiduciary responsibility.

Trustees are empowered and obligated to serve the best interests of the fund, its members and its beneficiaries. That empowerment can take many forms, but if there is no clear communication from the trustees concerning investment objectives and beliefs that should guide investment decisions, the trustees cede important decision-making for the fund to the consultants, managers and staff, who will manage the fund's investments based on their own predispositions and judgments.

Even though much of this document is directed toward the trustees of institutional investors and the staffs they direct, many of the key action steps that support sustainable investing require continual interaction between asset owners and their managers and consultants, and consequently apply to all three.

This *Blueprint* has been developed based on a decade of working with institutional investors and after extensive consultation with a broad cross-section of asset owners and asset managers. It includes 10 key action steps that most investors are familiar with or already doing—and reframes each in the context of a sustainable investment strategy:

1. Establish a commitment to sustainable investment though a Statement of Investment Beliefs
2. Establish board level oversight of sustainability policies and practices
3. Identify sustainability issues material to the fund
4. Evaluate asset allocation for material sustainability risks
5. Select an investment strategy & integrate sustainability criteria
6. Require sustainable investment expertise in manager and consultant procurement
7. Evaluate manager performance against sustainable investment expectations
8. Establish engagement strategies and proxy voting guidelines consistent with sustainable investment goals
9. Support policies and market initiatives that promote a sustainable global economy
10. Integrate sustainable investment criteria across all asset classes and strategies.

*Ceres defines "sustainable investing" as investing to meet the needs of current beneficiaries without compromising the ability to meet the needs of future beneficiaries. It is about sustaining the fund's ability to meet its multi-generational obligations by taking a broader perspective on relevant risks and opportunities. It is not a new method of investing, but a more comprehensive approach to investment analysis, decision-making and engagement that includes full consideration of environmental, social and governance (ESG) risks and opportunities that can impact investment returns.*

# THE BUSINESS & INVESTMENT CASE FOR SUSTAINABLE INVESTING

*"Environmental, social and governance factors can affect the risk and return performance of investment portfolios to varying degrees across companies, sectors, regions and asset classes."*

**Anne Simpson**, Senior Portfolio Manager and Director of Global Governance of the California Public Employees' Retirement System

## RETHINKING RISK-ADJUSTED RETURNS

*The Ceres Investor Blueprint* is designed to help institutional investors and their investment managers and advisors better manage the emerging risks and opportunities of investing in the 21st century.

Risk is hardly new, but the nature of risk facing investors, communities and businesses in the 21st century is different—even unprecedented. Even now, as economies and financial markets rebound from the 2008 meltdown that took many financial institutions to the brink of insolvency and reduced the value of investments in all asset classes, another suite of risks remains embedded in almost every investment portfolio. These risks are the result of a rapidly growing global population that is stressing water availability, demanding more energy and resources, pressuring supply chains and accelerating climate change, which has already triggered widespread physical disruptions and caused hundreds of billions in economic losses. These emerging risks—which we refer to as "sustainability" risks—will almost certainly have more severe and longer lasting economic consequences than the recent financial crisis.

In the run-up to the recent financial crisis, too many investors failed to adequately account for, or even understand, the risks of subprime mortgages, credit default swaps and other derivatives. The pressures to achieve strong short-term returns and invest in instruments the market had judged credible deflected attention from material and longer-term risks. Today, investors face new risks, some not readily apparent, that could have equally disruptive consequences.

When evaluating their portfolios, asset owners and managers should be asking: what environmental and social risks am I taking—or ignoring? What risks do my portfolio companies and investment structures have that I should be aware of? In light of these risks, what is the appropriate investment time horizon for measuring and rewarding investment performance? What analytic tools exist that can add another dimension to our understanding of company, industry, asset, portfolio and fund risk? Does the integration of such additional analysis offer a richer and more comprehensive understanding of risk-adjusted returns? Is our approach to investing contributing to a sustainable economy, which underpins our ability to achieve sustainable long-term investment returns?

### Sustainable Investing

Sustainable investing is about making sure that investment decisions are made with a full understanding of risks and opportunities, over the short-term *and* the long-term. Awareness of material environmental, social and governance (ESG) issues enhances that understanding.

*Financial Analysis + Sustainability (ESG) Analysis = Comprehensive Investment Analysis*

A common misconception is that ESG analysis, a key tool for sustainable investing, is not compatible with optimizing investment returns. To the contrary, when ESG analysis and conventional financial analysis are integrated, the prospects for maximizing sustainable risk-adjusted returns are improved because more material information is examined as part of investment analysis.

SRI, or sustainable and responsible investing, is another conceptual framework for sustainable investing. Many mainstream investors think of SRI as a stand-alone strategy that subordinates investment returns to considerations such as alcohol, tobacco, gambling, weapons, pornography and genocide. The connection to financial performance has not always been clear and the use of exclusionary screens, which can eliminate large segments of the investment universe, has encountered resistance.

While such strategies remain important to many investors, the mainstream investment community has gravitated toward an approach to sustainable investing based on positive attributes (i.e., "best-in-class" assets with positive traits), shareholder advocacy, and general integration of ESG risks and opportunities into broad investment analysis and portfolio construction.

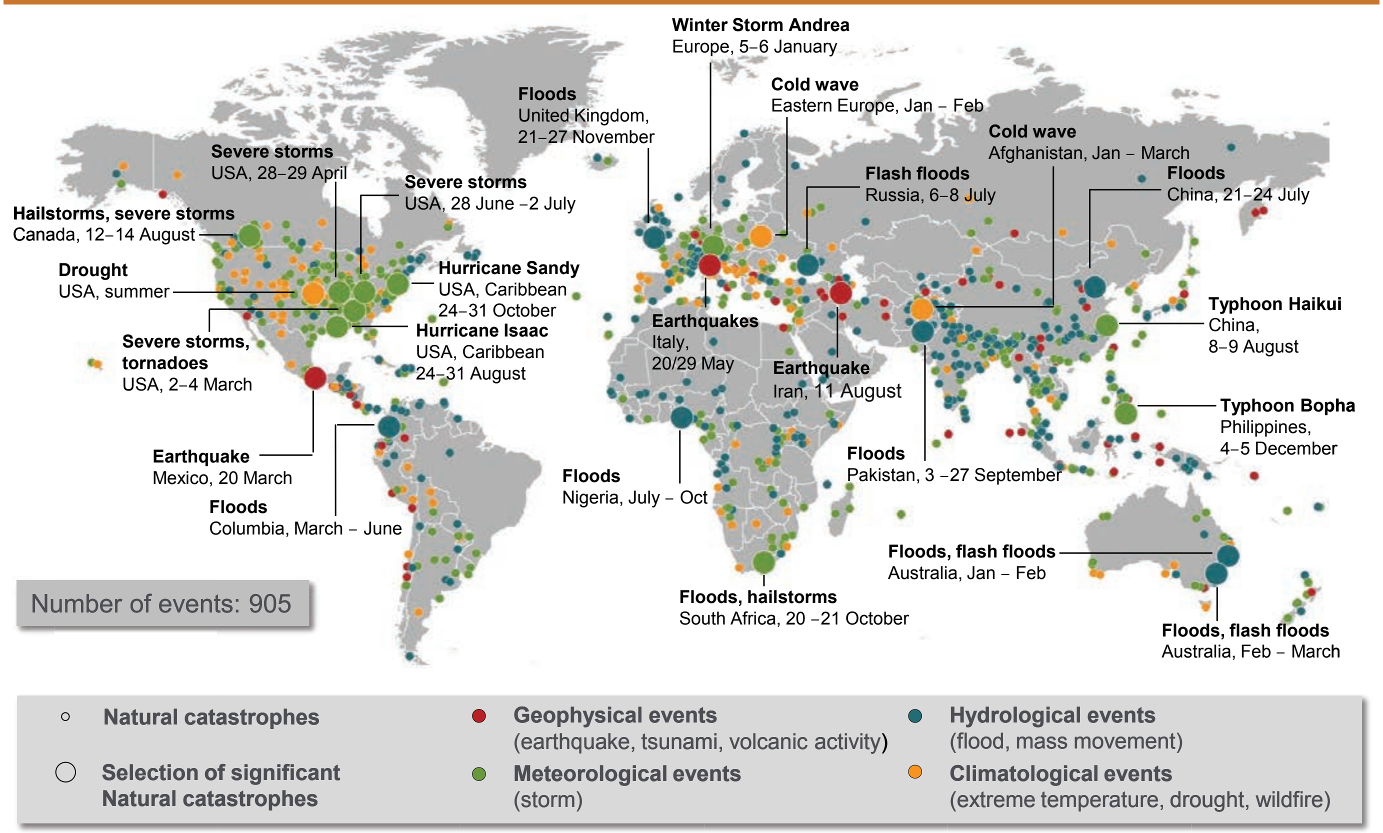
## E, S & G: Essential Elements of Sustainable Investing

**"E" – Environmental analysis** reveals strategies for energy efficiency, better water and waste management, reduction of greenhouse gases and other pollutants, and deployment of renewable energy alternatives. It also reveals business impacts on the local, regional and global environment throughout the product and business life cycle, from sourcing to disposal. A full environmental analysis can also reveal company and portfolio vulnerability to regulatory changes and preparedness for extreme weather trends. In the process of revealing risk, it can also highlight new investment opportunities based on adaptation strategies and innovative solutions to energy, water and pollution control demands.

**"S" – Social analysis** reveals a company's commitment to human rights and well being that extends across global supply chains, from worker health/safety and labor rights, to stakeholder engagement and preparedness for reducing critical operational risks that can adversely impact workers, the company and the community. As competitive pressures increase in a resource constrained global economy, ongoing attention to labor and societal demands will elevate company, consumer, community and investor awareness to sub-standard labor practices, product integrity and disregard for community values. Social criteria, which often elude traditional investment analysis focused on financial metrics only, can have significant consequences for a company's reputational risk and license to operate.

**"G" – Governance analysis** reveals the strength of a company's management systems and its standards and practices for holding itself accountable. This includes board and management commitment to social and environmental performance expectations that reduce risk and reinforce brand integrity from the board room to operations to supply chains; accountability at the board and C-Suite levels for anticipating and managing risks and opportunities, including social and environmental ones, that can affect sustainable business growth and profitability; executive compensation linked to achievement of sustainability goals; and board diversity; gender equality; and transparency and alignment concerning policy positions and political contributions.

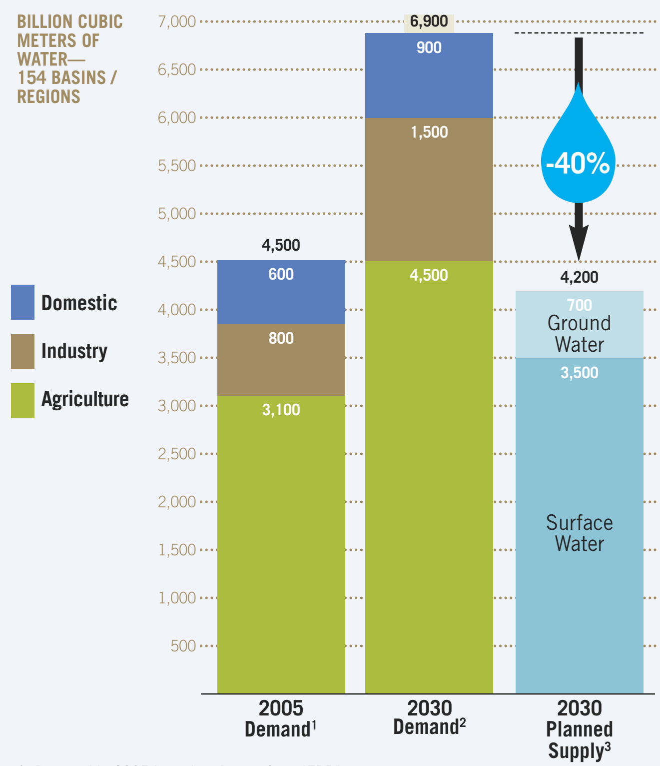
**Figure 1: Natural Catastrophes in 2012**



Some investors are beginning to grapple with these risks and incorporate them into the investment process, but many investors are either ignoring them altogether, in part because they're hard to quantify, or acknowledging them only as extra-financial factors that don't yet warrant serious analysis. These investors will discover at their peril that traditional financial analysis, by itself, no longer provides an adequate assessment of these portfolio risks—nor does it shine sufficient light on the substantial investment opportunities in solutions to these global challenges.

Financial analysis is being supplement by analytic tools that better identify sustainability risks, including those associated with greenhouse gas emissions, energy, water, supply chains, human rights and natural resource scarcity. Data concerning environmental, labor and operational practices are widely available, as are comparative rankings of companies based on performance in key environmental, social and governance (ESG) areas that tend to elude mainstream financial analysis. The participation of investors with more than $30 trillion in assets in investor groups focused on sustainable investment—such as Ceres' Investor Network on Climate Risk (INCR), the UN supported Principles for Responsible Investment (PRI), the Forum for Sustainable and Responsible Investment (US SIF), and European, Australian and Asian investor groups on climate change—is testament to the importance of these new tools for managing emerging ESG risks.

**Figure 2: Global Fresh Water Demand Gap Projected By 2030**




1. Demand in 2005 based on inputs from IFPRI
2. Demand in 2030 based on frozen technology and no increase in water efficiency after 2010
3. Supply at 90% reliability and including infrastructure investments scheduled and funded through 2010; supply in 2005 is 4,081 BCM per year; supply in 2030 under projected technological and infrastructural improvements equals 4,866 BCM per year; net of environmental requirements

*Source: Water 2030 Global Water Supply and Demand model; agricultural production based on IFPRI IMPACT-WATER base case. [extracted from Charting Our Water Future; Executive Summary; McKinsey and Company; 2009; p 12]*

## NEW ECONOMIC & INVESTMENT REALITIES

The complex, interrelated challenges of meeting energy demand, mitigating the worst impacts of climate change and ensuring that future generations have water and other natural resources to sustain their own economies pose enormous short and long term risks for investors.

Climate change in particular—11 of the warmest years on record have occurred since 2000—is already having profound economic consequences around the world. Extreme weather, which is the predictable consequence of climate change, accounted for more than 90 percent of the natural catastrophes worldwide in 2012 (see Figure 1, p. 6), with the biggest losses being in the United States.

In 2011, the United States experienced 14 extreme weather disasters causing more than $50 billion in total damages. In 2012, insured losses from Hurricane Sandy, a historic drought and other climate-influenced extreme weather topped $58 billion.[1] The broader economic ripples were even higher, especially in the case of the ravaging drought where food price inflation and shipping disruptions lasted well into 2013.

Hurricane Sandy alone caused more than $70 billion in economic losses[2] including an estimated $15-$20 billion of insured losses—the second largest catastrophic event on that scale, after Hurricane Katrina in 2005. Sandy's impacts were exacerbated by a record-breaking storm surge abetted by rising sea levels caused by warming global temperatures.

These trends have profound implications for low-lying cities such as New York, Boston, New Orleans, Miami and many others. In the United States alone, nearly five million people live less than four feet above mean high tide. In just three south Florida counties, excluding the most populated, Miami-Dade, $30 billion in taxable property lies less than three feet above mean high tide.

Globally, the economic and investment risks from climate change and other sustainability challenges are increasing as well. Even with accelerated investment in water efficiency and resource management, many countries and continents are on course to suffer major freshwater deficits in the next two decades. (See Figure 2.) A recent McKinsey study estimates that by 2030 global water demand will outpace supply by 40 percent. This shortfall will hit all corners of the world, including the southwest United States, Australia, Africa and East and Southeast Asia.

### The Business & Investment Case for Sustainable Investment

The value of incorporating sustainability into business strategies and investment decisions is not hearsay or anecdotal, but strongly supported by an increasing body of academic research and industry evidence. Recent examples include:

- A meta-analysis by Deutsche Bank Climate Advisors in 2012 found that 89% of the more than 160 academic studies, research papers and meta-studies showed that companies with high ESG performance ratings exhibit market-based outperformance compared to industry peers, and 100% of the academic studies agree that companies with high ratings for Corporate Social Responsibility (CSR) and ESG factors have a lower cost of capital in terms of both debt (loans and bonds) and equity.[4]
- In an 18-year study (1993-2011) conducted by Robert Eccles and George Serafeim of Harvard Business School, 90 companies with strong sustainability policies and practices outperformed a similar sampling of 90 companies having low sustainability standards. "The annual above-market average return for the high-sustainability sample was 4.8% higher than for their counterparts and with lower volatility. The high-sustainability companies also performed much better as measured by return on equity and return on assets[5]," the report concluded.
- Companies on the California Public Employees' Retirement System's Governance Focus List, selected for in-depth engagement because of CalPERS' concerns about weak sustainability performance, produced cumulative returns averaging 39% below their benchmarks in the three years prior to CalPERS engaging with the companies and 17% above their benchmark returns for the five years after the engagement was undertaken.[6]
- A portfolio of 151 SRI funds between 2002 and 2009, a period of high market volatility, outperformed the MSCI World Index.[7]
- In a study of more than 450 companies between 2001 and 2010, Sustainable Asset Management found that a portfolio of sustainability leaders outperformed an overall sample by 1.74% annually, while a portfolio of weak sustainability performers underperformed the overall sample by 1.87% annually.[8]
- In a 2011 white paper, RCM Capital Management found that over a five-year period (2006-2010) a portfolio comprising the top quintile of global best-in-class ESG companies outperformed the benchmark MSCI World Equal Weighted Index by 1.7%, while the bottom worst-in-class portfolio underperformed the benchmark by 1.0%.[9]

A more in-depth discussion of supporting evidence that ESG focused strategies can produce superior results, and do not underperform, for both companies and investors, is provided in Appendix A.

Uncertain water supplies—whether a lack of water, or too much at once—has obvious reverberations across supply chains and can cause severe business interruptions that pose investment risk. More than 160 companies in the global textile industry were affected by Thailand's 2011 floods, stopping about a quarter of the country's garment production and also disrupting auto parts and computer hardware supply chains. Insurance company Munich Re received claims worth more than $350 million from the 2010-2011 Australian floods, contributing to a 38 percent quarterly profit decline.

Government responses to these challenges create additional risks and opportunities for investors. While U.S. lawmakers have failed to enact carbon regulations, much of the world—including California, the world's ninth largest economy—has moved forward on this front. Carbon regulations to reduce the emissions that cause climate change affect one-third of the world's population today, with economic implications for businesses operating in those jurisdictions. Sector-specific carbon regulations are also gaining traction, including more stringent fuel-economy standards for US-made vehicles and widely anticipated greenhouse gas regulations for power generation facilities. As domestic and global pressures build to ward off worst-case climate warming scenarios, all companies and investors should expect to be operating in a carbon-constrained global economy before long.

## STRATEGIC RESPONSES BY FORWARD-LOOKING PORTFOLIO COMPANIES

Many of the world's leading corporations are already integrating sustainability considerations into their business models. Rather than be at the mercy of sustainability pressures that will continue to reshape the global economy, companies are mitigating social and environmental risks and seizing opportunities to invest in solutions, enhance their brands and help assure sustainable earnings.

Building on these trends, Ceres in 2010 created *The 21st Century Corporation: The Ceres Roadmap for Sustainability* ("*the Ceres Corporate Roadmap*"), a virtual owner's manual for the sustainable corporation. Now being used by hundreds of major companies and by investors in corporate engagements, The *Ceres Corporate Roadmap* contains 20 specific expectations in key areas of governance, disclosure and engagement, as well as performance indicators such as reduced greenhouse gas emissions, improved water efficiency, and improvements in human and worker rights in supply chains. Companies that meet these expectations will be best prepared to compete in the 21st century global economy—an economy rapidly being shaped by climate change, resource scarcity, population pressures and related challenges. The *Ceres Investor Blueprint* provides guidance to help investors address these same challenges.

## INVESTOR RESPONSES TO THE CHALLENGES OF SUSTAINABILITY

Investors are increasingly aware that sustainability challenges are investment challenges. Ahead of the 2012 international climate summit on Doha, Qatar, a coalition of the world's largest investors managing $22.5 trillion in assets called on governments to adopt carbon-reducing policies that will accelerate the necessary trillions in clean energy investment that will help slow climate change.

In recent years there has been rapid growth in the number of financial indices that address sustainability, including the S&P/IFCI Carbon Efficient Index, HSBC Climate Index, Prudential Green Commodities Index, the NASDAQ Global Sustainability 50 Index, and full suites of sustainable and environmental indexes by FTSE and MSCI. Some major stock exchanges, including those in London, Rio de Janeiro and Johannesburg are requiring public disclosure of sustainability-related information (such as greenhouse gas emissions) by all listed companies. In response to a petition from Ceres and leading investors, the U.S. Securities and Exchange Commission in 2010 issued climate change disclosure guidance that requires disclosure of material climate-related risks by publicly-held companies.

Despite these encouraging steps, most institutional investors do not yet fully understand how environmental and social forces shaping the 21st century economy will impact their portfolios. And even those investors with an awareness of these trends may not be familiar with available analytic tools or even have made the commitment to become "sustainable investors."

This *Blueprint* is intended to guide asset owners, asset managers and consultants through a step-by-step process that will lead to a more comprehensive understanding of material risks and opportunities that will help maximize sustainable risk-adjusted investment returns.

## INTEGRATING SUSTAINABILITY ANALYSIS INTO INVESTMENT DECISIONS

There is a strong and growing body of objective evidence that companies that integrate sustainability principles into their operations and strategies perform better and, over time, produce superior returns with decreased volatility and risk to shareholders, than companies that do not.[3]

But sustainable investing isn't simply about identifying and investing in companies with proven sustainability performance; it is also about:

- analyzing ESG risks in every asset class and mitigating these risks across the entire portfolio;
- understanding the economic impact of increasingly common severe weather events that are causing hundreds of billions in economic losses and tens of billions in insured losses every year;
- knowing the practices that safeguard worker health and safety, protect human rights and support local communities across the supply chain
- financing the clean energy technologies of the future and understanding the risks in water infrastructure bonds in a world that can no longer take ample supplies of fresh water for granted;
- preparing for the impact of new regulatory frameworks that will inevitably catalyze a shift away from fossil fuels to renewable energy sources;
- understanding the risk to infrastructure, real estate[10] and supply chains that sit on land just a few feet above sea level and are vulnerable to stronger storm surges from rising seas and more powerful storms.

These are just some of the "sustainability" risks and opportunities that often elude traditional financial analysis and overall investor interest.

Sustainability challenges are also opening up large new opportunities for investors. The International Energy Agency has estimated the global clean energy investment opportunities in renewable power, energy efficiency and cleaner transportation at $5 trillion within the next decade.[11] Climate change adaptation will require enormous infrastructure investments related to power generation and distribution, transportation, agriculture and water efficiency. Mercer Consulting estimates the investment opportunities to be as high as $5 trillion over the next 15 to 20 years.[12]

# FIDUCIARY DUTY & ESG FACTORS

***"To ignore the risks around climate and sustainability in your portfolio could be and will be characterized as a dereliction of your fiduciary duties."***

**Kevin Parker**, former Global Head, Deutsche Asset Management

Fiduciaries who manage institutional assets owe a duty of utmost good faith, loyalty and prudence to the beneficiaries whose money they are managing. Integrating material ESG factors into their investment decision-making is fully consistent with the fiduciary duty of institutional investors.

The overriding objective of institutional trustees and managers is to generate sufficient, consistent risk-adjusted returns that enable the fund to pay benefits and meet its liabilities over multiple generations. This goal is embedded in fiduciary duty and is often cited as an obstacle to incorporating ESG factors into the investment process. The argument that ESG-inclusive investing is inconsistent with fiduciary duty is based on the premise that including ESG factors in investment decision-making would compromise returns to achieve extraneous social or environmental objectives. This perspective misses the mark on both the nature and goals of "sustainable investing."

Institutional investors are bound to meet their obligations to their fund's or client's beneficiaries over the life of the fund. Fund trustees and managers must therefore manage their investments to satisfy both long and short-term liabilities, using strategies designed to meet target return rates that provide sustainable benefits over multiple generations.

In the United States, the fiduciary duties of institutional asset owners and asset managers are generally defined by state common law and statutes for public, religious, endowment and foundation funds; and by federal statute (ERISA) and regulations for labor (Taft-Hartley) and corporate plans. Although there are some differences, the essential elements of fiduciary duty are generally quite similar.

While the exact formulation varies among jurisdictions and by type of investor, the two basic elements of fiduciary duty are *duty of care* (or prudence) the *duty of loyalty* (including impartiality among participants and beneficiaries).[13] Generally speaking, fiduciaries must act:

- Solely in the interest of participants and beneficiaries
- For the exclusive purpose of providing benefits
- Impartially, taking into consideration the differing interests of various classes of participants and beneficiaries
- With the care, skill and prudence exercised by similar fiduciaries, including with respect to diversification of investments and monitoring of performance
- Incurring only reasonable and appropriate costs
- In accordance with the governing law, documents and purpose of the trust fund[14]

Under the Employee Retirement Income Security Act (ERISA), the key duties of a fiduciary administering a covered retirement plan, as outlined by the U.S. Department of Labor, similarly include:

- Acting solely in the interest of plan participants and their beneficiaries, with the exclusive purpose of providing benefits to them
- Carrying out their duties prudently
- Following the plan documents (unless inconsistent with ERISA)
- Diversifying investments
- Paying only reasonable expenses[15]

So how is sustainable investing relevant to the discharge of fiduciary duty?

Modern Portfolio Theory (MPT), an approach to portfolio construction first developed in the 1950s, has played a dominant role in prevailing concepts of fiduciary duty—in particular the duty of care and its principles of prudence and diversification—over the past several decades. Briefly, MPT is a mathematical formulation of the concept of diversification of assets in a portfolio, in which higher risk demands higher returns. According to MPT, portfolio risk is reduced by investing in multiple non-correlated asset classes, thereby maximizing risk-adjusted returns.[16]

MPT is based on a number of economic assumptions, including that markets are fully efficient and investors are entirely rational—*i.e.*, that all market players have access to all relevant information and act in their economic self-interest based on that information.

Some commentators have criticized MPT as having various shortcomings and counterproductive effects as applied.[17] However, MPT is not inconsistent with sustainable investing strategies and the incorporation of ESG factors into investment decision-making.

The interpretation of fiduciary duty has evolved significantly over time and must continue to evolve to adjust to changing social and economic realities. For example, rigid rules

***Environmental and social variables can no longer be treated as extraneous "non-financial" matters.***

specifying prohibited and permitted investments gave way to MPT and diversification across multiple asset classes.[18] It is again time to re-examine current concepts of "prudent" institutional investing in light of basic fiduciary duty principles and new factors affecting investment risk and opportunity.[19]

Today, new investment risks and opportunities based on emerging trends like climate change and resource scarcity require consideration by prudent fiduciaries. This approach, which we have termed sustainable investing, adopts a longer-term focus, is less tied to short-term benchmarks as the sole measure of success, and incorporates ESG factors into investment analysis and strategy. This is fully compatible with MPT and provides a clear path for today's fiduciaries to comply with their duties of loyalty and prudence.

The courts and the Department of Labor have permitted consideration of social and environmental issues in investment decisions, provided that the trustees reasonably believed they were acting in the interests of beneficiaries and would not compromise the fund's risk-adjusted returns.[20] A thorough 2005 legal analysis by the international law firm Freshfields surveyed the law of fiduciary duty in a number of leading jurisdictions including the U.S., and concluded, "ESG considerations may be taken into account as long as they are motivated by proper purposes and do not adversely affect the financial performance of the entire portfolio." The Freshfields report noted that the duty of prudence may even *require* investors to consider relevant ESG factors in making investment decisions, and concluded that consideration of climate change in investment analysis is "clearly permissible and is arguably required in all jurisdictions."[21]

Environmental and social variables can no longer be treated as extraneous "non-financial" matters. These drivers of investment risk and opportunity are becoming increasingly important in developing strategies to manage risk and seek adequate risk-adjusted returns. Given the increased availability of ESG data and evidence of its materiality to company and investment performance, we believe that disregarding such information would be inconsistent with the responsibilities of 21st Century fiduciaries.

# 21ST CENTURY INVESTOR: CERES BLUEPRINT FOR SUSTAINABLE INVESTING

## INVESTMENT GOVERNANCE

### Step 1: Develop Investment Beliefs

The Board of Trustees, or highest level of fiduciary authority, will establish core investment principles that include a commitment to sustainable investment.

### Step 2: Implement Trustee Oversight

The Board of Trustees, or highest level of fiduciary authority, will establish oversight of sustainable investment initiatives and accountability for implementation.

## INVESTMENT PRACTICES

### Step 3: Assess Materiality

The trustees, in collaboration with investment and governance staff, consultants, managers, and sector & issue experts will identify the sustainability issues and risk factors that are material to the fund.

### Step 4: Review Asset Allocation

The trustees, in collaboration with the CIO, investment staff, consultants, managers and sector & issue experts will evaluate asset allocation models for material sustainability risks.

### Step 5: Integrate ESG into Investment Strategy

Trustees, investment staff, consultants and managers will select sustainability strategies best suited to the fund's risk-adjusted return objectives.

### Step 6: Incorporate ESG into Manager Selection

Trustees, investment and governance staff and consultants will require sustainable investment and engagement expertise in manager and consultant procurement.

### Step 7: Evaluate Manager Performance

Trustees, investment and governance staff and consultants will monitor manager performance against sustainable investment expectations.

### Step 10: Integrate Sustainability Criteria Across All Assets Classes and Strategies

Trustees, investment and governance staff and consultants will assess ESG risks and opportunities in every asset class and incorporate sustainability criteria into all investment strategies.

## ASSET STEWARDSHIP

### Step 8: Align Active Ownership and Proxy Voting With Sustainable Investment Goals

Trustees, investment and governance staff, and investment managers will establish engagement strategies and proxy voting guidelines consistent with sustainable investment goals.

### Step 9: Support Policies and Market Initiatives that Promote a Sustainable Global Economy

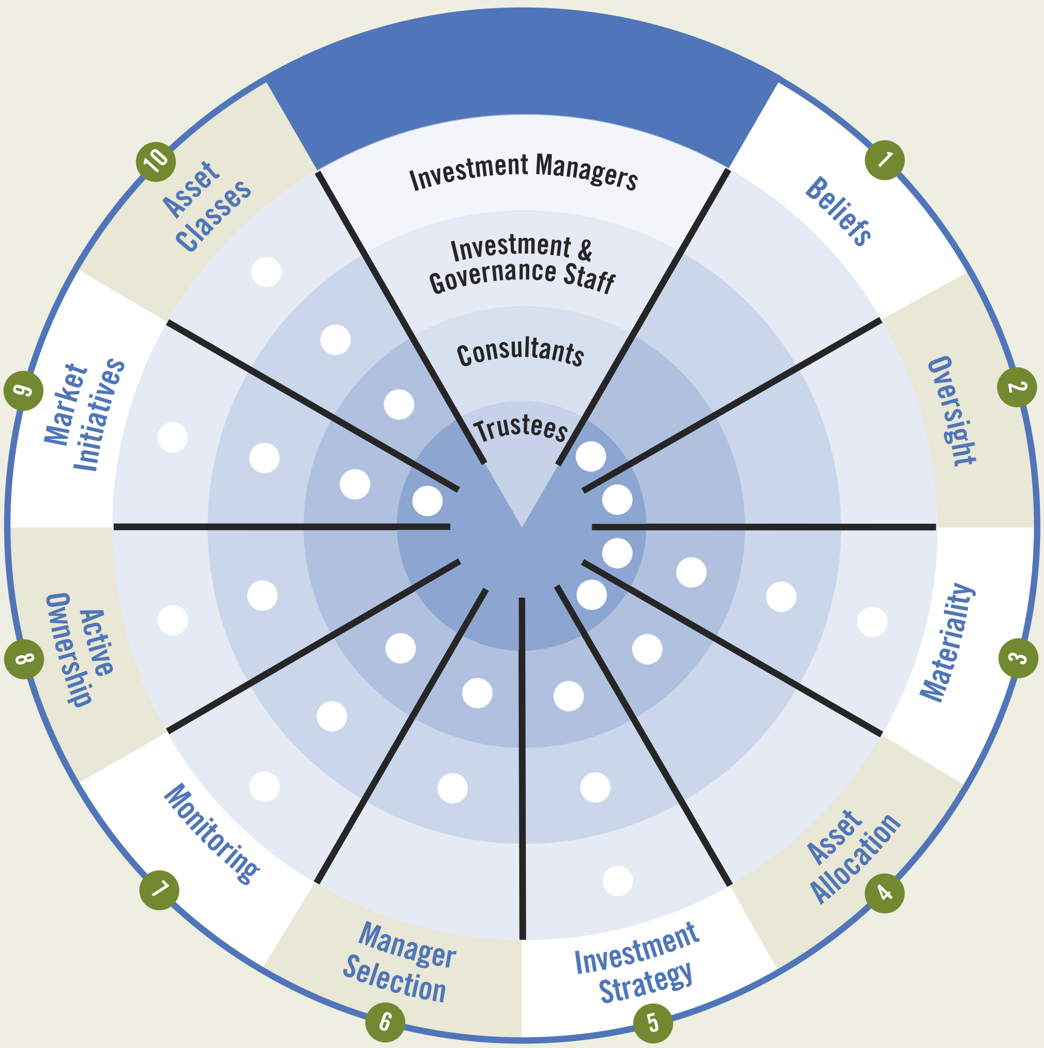
Asset owners & investment managers will support market & policy initiatives that advance sustainable investment initiatives and promote a sustainable global economy.

# CERES INVESTOR BLUEPRINT: 10 ACTION STEPS TOWARD SUSTAINABLE INVESTMENT PRACTICES

*"Every investor needs to work through these 10 steps. By asking these questions, each investor will figure out what issues are material to their particular investment objectives and how to ensure that they are mitigating investment risks and seizing opportunities that might otherwise go unnoticed."*

**Nancy Kopp**, Treasurer, State of Maryland

Based on more than a decade of experience working with institutional investors, and extensive consultation with a broad cross-section of asset owners and managers, this Blueprint recommends 10 action steps for institutional investors seeking to become sustainable investors. While these steps are presented in what we believe is a logical sequence, they can be undertaken in any order.




**These 10 action steps are aimed at institutional investor governing boards, investment consultants, internal investment and governance staff, and external asset managers. The dots show who is primarily responsible for each step, and most involve collaboration among these groups.**

# Step 1: Establish a Commitment to Sustainable Investment Through a Statement of Investment Beliefs

**Key Point**

***Trustees assure consistent decision-making by investment staff, consultants and managers by establishing clear core values—values that should include full consideration of material issues that may affect sustainable investment return, including environmental, social and governance factors.***

## ESTABLISH CORE FUND VALUES

Beliefs have consequences for investment decisions made by consultants, staff and asset managers. When trustees articulate the belief that sustainable investing leads to better financial outcomes because all risks and opportunities are considered, “then arguably the role of the fiduciary is clearer. Assessment of beliefs helps to identify distinct views on sustainable investing issues such as climate change and resource scarcity. The strength of the beliefs held will determine how the investment strategy can be adapted to take account of long-term factors.”[22]

If trustees do not articulate principles to guide their approach to investing and risk management—and why those principles matter—they effectively defer key decisions to others (investment managers, consultants and staff) who will manage according to their own policies, practices and prejudgments.[23] When trustees clearly communicate a set of investment beliefs, every person and entity associated with the fund has a framework for understanding what the trustees expect.[24]

### Investment Beliefs Require Self-Examination

Establishing investment beliefs encourages trustees to ask important questions, debate priorities and seek advice from industry experts and peers in similar organizations. The process gives trustees a better understanding of the fund, its beneficiaries, its goals, key challenges for meeting short, medium and long-term obligations, relevant time horizons for investments, and the risk factors that could impact returns over the fund’s life. Consequently, the process of reviewing or formulating investment beliefs is a good moment to evaluate the role of ESG analysis in identifying material investment risks and to commit to integrating ESG considerations into every aspect of the investment process.

A recent survey of 685 asset owners, asset managers and consultants by *Pensions & Investments* found that 57% have formalized Investment Beliefs that provide guidance on such issues as return objectives, risk management, diversification, market efficiency, costs, governance, the goals of longer term investment, reforms that support the integrity of economies and markets, engagement with portfolio companies and the contribution of environmental, social and governance factors to sustainable investment performance.[25]

## COMMITMENT TO UNDERSTANDING ESG ISSUES AS THEY AFFECT THE FUND IS A CRITICAL INVESTMENT BELIEF

Towers Watson, in their 2012 report on sustainable investment, *We Need a Bigger Boat*, advises trustees to consider sustainability beliefs in the context of risk, opportunity and “the longer-term risks and costs associated with sustainability issues such as resource scarcity and climate change.”[26]

There is no template for investment beliefs; they are unique to every fund and will differ depending on such factors as investment objectives and liabilities. Trustees can obtain useful input and guidance from their investment consultants, peers and outside experts but must make and “own” the key judgments on what to include concerning the contribution of ESG factors to the fund’s expectations for sustainable risk-adjusted returns.

Because many trustees do not have an investment background, and those that do are not necessarily familiar with ESG risks, trustee education on these issues is crucial. Such training can be done in-house, preferably in collaboration with experts in relevant aspects of sustainability risks or in off-site sessions conducted by established programs for trustee training, such as those affiliated with Harvard and Stanford Universities. Ceres, the Initiative for Responsible Investing at Harvard, ICGN or PRI are useful resources for identifying or developing trustee training programs.

## EXAMPLES OF INVESTMENT BELIEFS THAT INCORPORATE ESG

▶ **The California State Teachers' Retirement System (CalSTRS) Board of Trustees** links fiduciary duty to critical factors that affect global economic growth and the long term sustainable returns CalSTRS requires. The trustees also support specific policies the staff has developed to support sustainable investment returns:

> *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, considerations of environmental, social, and governance issues (ESG), as outlined by the CalSTRS 21 Risk Factors, are consistent with the Board fiduciary duties.*[27]

▶ **Ontario Municipal Employees' Retirement System (OMERS)** explicitly incorporates ESG factors into its investment analysis for reasons of long-term financial performance:

> ***2.1 Socially Responsible Investing***
> *OAC [OMERS Administration Corporation] believes that well-managed companies are those that demonstrate high ethical and environmental standards and respect for their employees, human rights, and the communities in which they do business, and that these actions contribute to long-term financial performance. As part of its due diligence in researching investments and monitoring performance, OAC incorporates environmental, social and governance factors into its decision-making processes.*[28]

Asset managers should also develop investment beliefs, including attitudes toward ESG factors.

▶ **F&C Investment** has an unequivocal statement about the value of incorporating ESG issues:

> *F&C Investment strongly believes that the prudent management of (ESG) issues is fundamental to creating value for investors. Companies that are successful in avoiding ESG risks, and also at identifying and capitalizing on the opportunities, will outperform over the longer term.*[29]

A larger sampling of investor belief statements that recognize the contribution of ESG factors to investment return is provided in Appendix B.

# Step 2: Establish Board Level Oversight of Sustainability Policies and Practices

**Key Point** ***Trustees need to actively support and oversee key aspects of the investment process to assure that sustainable investment practices are being implemented.***

## OWN THE INVESTMENT PROCESS

Decisions affecting the fund are continually being made at many different levels of the organization. Chief investment officers, investment committees and portfolio managers routinely make decisions that affect asset allocation, portfolio composition and, in many cases, the selection of consultants and external managers.

The active involvement of trustees in ESG integration sends a strong message to investment and governance staff—and to their asset managers and consultants—that investment risks and opportunities are being comprehensively examined in ways that "investing as usual" may not account for. It also alerts investment consultants and managers that the fund will hold its providers accountable for integrating ESG factors into their investment processes, practices and advice.

## ASSIGN OVERSIGHT

The responsibility for overseeing an investment process that incorporates ESG analysis needs to be formalized by appointing a point person (or committee) who is already a member of the board or reports directly to the board. Ideally such individuals have an interest or expertise in sustainable investment and should seek appropriate training about key sustainability risks, especially if someone with limited knowledge of these issues will conduct oversight. Where a fund has a sole trustee (such as the Treasurer of North Carolina or the Comptroller of New York State) with other competing responsibilities, a practical solution to ongoing oversight of sustainable investment practices is to delegate a senior staff member who understands the mandate and has relevant expertise.

## UNDERSTAND RISK

Trustees need sufficient involvement in the fund so they understand where the fund may be vulnerable to strategies, companies, sectors, and industries poorly prepared for future competitive pressures and trends. They should understand ESG factors that impact all asset classes and investment structures. Among the factors that all investors should be looking at: the physical and regulatory impacts of climate change that will affect investment strategies for energy, water, real estate, utilities, agriculture, tourism, forest products and other industries; depletion of water resources that are essential to agriculture, power generation, most industrial processes and human survival; and human rights violations and unsafe or exploitive labor practices that can affect brand value and the legal and ethical license to operate.

## MONITOR IMPLEMENTATION OF SUSTAINABLE INVESTMENT INITIATIVES

Trustees should require investment managers to submit written reports on the implementation and results of sustainable investment initiatives on a regular schedule. The trustees should also require similar formal reporting from investment consultants and internal staff concerned with investment, manager selection and governance. The trustees should review and discuss these reports, ask questions of their service providers and staff, evaluate the progress and success of these initiatives, and periodically consider whether adjustments in strategy and tactics (and potentially service providers) are needed.

# Step 3: Identify Sustainability Issues Material to the Fund

**Key Point** ***Understanding and addressing material sustainability risks is integral to fiduciary duty.***

Investors need to identify issues and risk factors that, for them, are significant enough to influence investment decisions. This process of identifying material risk factors must be undertaken in dialogue among asset owner Boards of Trustees, investment consultants, investment staff and the asset managers who will implement investment strategies.

The U.S. Supreme Court has ruled that a material fact is one whose existence, were it known, "would have been viewed by the reasonable investor as having significantly altered the 'total mix' of information made available."[30] As interpreted by the U.S. Securities and Exchange Commission, "a matter is 'material' if there is a substantial likelihood that a reasonable person would consider it important."[31] ESG analysis can often reveal such material facts that would have gone unnoticed using traditional financial analysis.

The Supreme Court has also established principles that acknowledge the place of uncertainty and contingencies, which skeptics often cite in challenging the materiality of ESG risks:

1. Contingent or speculative events are not immaterial simply because they are contingent or speculative;
2. The materiality of contingent or speculative events depends on the significance the reasonable investor would place on the information;
3. The significance of contingent or speculative events to investors depends on both the likelihood of occurrence and the magnitude of potential impact.[32]

Like other investment risks, those associated with ESG factors can be unpredictable concerning timing and magnitude. That does not make them any less material. Some investment risks and opportunities may be more significant to particular investors and should be carefully analyzed by the investment staff, consultants and managers. For example, while energy consumption of a real estate portfolio would be a material concern for all investors (because it will impact the operating costs and long term value of the real property), it could be of particular concern to a construction industry pension fund because of the impact of this issue on members' jobs and pension contributions as well as investment performance.

## ▶ WHAT GUIDELINES HAS THE INVESTMENT COMMUNITY ESTABLISHED FOR MATERIALITY?

Whether it relates to conventional financial performance measures or ESG factors, "materiality" is a subjective standard. The first effort to codify sustainability indicators, commonly called key performance indicators (KPIs) was undertaken in 1997 by the Global Reporting Initiative (GRI). GRI guidelines place the responsibility on companies to identify their own material issues and recommends that companies use multi-stakeholder engagement, including investors, to determine key issues. While GRI has identified hundreds of KPIs that help companies disclose their sustainability performance, most companies do not consistently follow the GRI guidelines, including disclosure on how companies identify material ESG factors that affect their business. Consequently, many sustainability reports do not provide investors with reliable, actionable information about material ESG risks. The recently released fourth generation of GRI Guidelines (G4) continues to place a strong emphasis on corporate reporting of material ESG issues and performance.

In response to the lack of objective standards for determining materiality, and because company reporting and conventional financial analysis often does not include material ESG risk factors, a group of investment industry experts knowledgeable about sustainability issues convened in 2011 to form the Sustainability Accounting Standards Board (SASB). SASB's objective is to establish "industry-specific accounting standards for material sustainability issues for use by U.S. publicly listed corporations and their investors"[33] and to have its standards become as authoritative as the financial accounting and reporting standards of FASB. The SASB working groups, which include companies, advocacy groups and other stakeholders, in addition to investors, are systematically evaluating material key performance indicators for each industry, a process they hope to complete in 2014.

Also underway is another initiative, Project Delphi, by more than three-dozen global asset managers, asset owners, consultants and ESG service and data providers to identify the material ESG "Super Factors" most likely to influence corporate financial performance, affect investment decisions and impact long-term value. Their report, slated for release in 2013, will focus on identifying risks and the opportunities associated with these ESG Super Factors.

## EXAMPLES OF MATERIAL SUSTAINABILITY ISSUES FOR INVESTMENT & LONG TERM VALUE CREATION

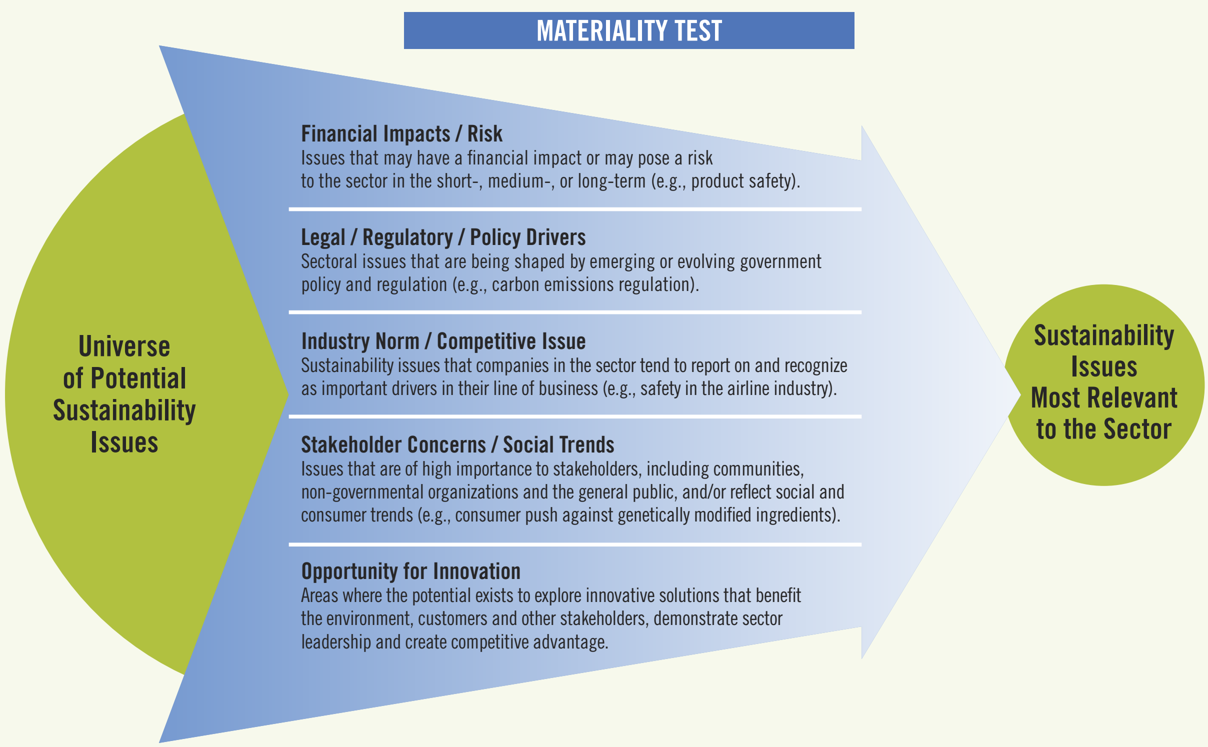
A 2010 report by Harvard's Initiative for Responsible Investment provided an intellectual foundation for SASB through guidance on and tests for materiality.[34] The authors identified a set of representative sustainability issues that investors may find material, including:

- Climate change and the efficient use of energy
- Releases of toxic chemicals into the environment
- Sustainable management of forests, fisheries, and other natural resources
- Safety and decent working conditions
- Equal access to technologies and financial services for all members of society
- Availability of water
- Equal employment opportunities
- The need for sustainable products and services

The authors also recognized that the materiality of ESG issues varies by sector and industry. Instead of settling on a single definition of materiality, they developed a framework for assessing materiality that can be used at the sector, industry or company level, including issues such as regulation of carbon emissions that will affect some sectors more adversely than others and innovative responses to risk and problem solving "that demonstrate sector leadership and create competitive advantage."[35]

Investors can also learn from stakeholder groups that routinely monitor company policies and practices, and from the companies themselves, especially those that are thinking strategically, taking action and communicating about near term and longer term critical success factors for value creation. Companies should be encouraged to report to investors on how their sustainability initiatives affect their financial performance, and investors should consider how a company's disregard for social and environmental risks reflects flawed governance or shortsighted management that could undermine long-term competitiveness and value creation.

The more investors discuss and debate the issues and risk factors they believe may be material to their portfolio or fund, the more probing questions they ask of their consultants, managers and portfolio companies—and the more their governance staff may become aware of a need for shareholder engagement around ESG issues (see Step 8).



# Step 4: Evaluate Asset Allocation for Material Sustainability Risks

**Key Point**

***Decisions about asset allocation directly affect the incurrence and management of material sustainability risks.***

Trustees should review current asset allocation strategies to determine whether they are prepared for risks arising from climate change, supply chain interruption or increased costs from human rights issues, increased demand for energy, political risks, affordable access to water and other resources, foreseeable limits on greenhouse gas emissions and other material sustainability risks. These new risks are typically not an explicit part of fund analysis and asset allocation strategies and are not systematically managed. At best, many of these risks tend to be discussed anecdotally or understood as part of inflation or GDP projections.

## CLIMATE RISK POSES UNIQUE & UNPRECEDENTED CHALLENGES TO ASSET ALLOCATION

Because climate change risk is ubiquitous, commonly used strategies for diversifying risk, such as Strategic Asset Allocation (SAA), may leave entire funds still exposed under certain scenarios. While these asset allocation strategies are generally effective in mitigating risks across traditional and alternative assets, including risks associated with many ESG factors, they will provide limited diversification to carbon risk. For example, when carbon emissions become taxed or regulated, all asset classes that have investment exposure to carbon producers (oil/gas/coal producers) will be affected. That risk extends to investments in heavy users of fossil fuels (utilities, transportation), which, as costs increase, may experience reduced profit margins that will impact investment returns. These risks lack precedent, and asset allocation models that rely on historic quantitative analysis do not adequately account for them.

## UNDERSTAND THE RISKS ASSOCIATED WITH A DIFFERENT REGULATORY ENVIRONMENT

The prevailing investment model that has led most investors to diversify across asset classes did not work particularly well during the financial market breakdown of 2008, and it will not work well when widespread regulatory controls that tax or put limits on carbon emissions (or physical risks) adversely impact investments across many of those same asset classes.

An alternative approach is to diversify across sources of risk. *Climate Change Scenarios—Implications for Strategic Asset Allocation*, a 2011 report by the consulting firm Mercer, estimates that institutional portfolios could be exposed to systemic risks from climate related policies that could affect investment returns by as much as 10% over the next 20 years. Mercer suggests that to "manage climate change risks, institutional investors need to think about diversification across sources of risk rather than across traditional asset classes."[36] According to one of Mercer's scenarios, a typical portfolio seeking a 7% return could manage climate change risk by shifting about 40% of their portfolio into climate-sensitive assets such as infrastructure, real estate, private equity, and timberland.

While there is no single solution for mitigating portfolio risk from regulatory, legislative and other responses to climate change, investors should begin examining climate risks by:

- including climate risk assessments in routine reviews of portfolio and fund strategies;
- increasing allocations to assets that will benefit from growing demand for low carbon, efficient, clean energy solutions, effectively creating a climate hedge;
- boosting engagement with portfolio companies to improve their policies and practices on climate risks.

The Mercer report includes in-depth analysis of existing climate-related risks by asset class and a menu of suggestions for new allocation strategies to help mitigate those risks.

Climate-related risks, both carbon-reducing regulations and physical impacts, were not part of investment dialogues when many institutional investment policies and asset allocations were being formulated. Can investors with multi-decade liabilities afford to ignore them now? Assessment of carbon risk exposure across portfolios is a prudent initial step in understanding and considering appropriate responses, including investments in both climate mitigation (e.g., low carbon energy sources, energy efficiency) and climate adaptation (i.e., resilient infrastructure projects).

*If policy makers act to limit global warming to 2 degrees Celsius, more than half of all oil, coal and natural gas reserves—now classified as valuable assets on balance sheets—will be unburnable unless new technologies for carbon capture are developed.*

## UNDERSTAND HOW ASSETS ARE EXPOSED UNDER A RANGE OF ENVIRONMENTAL & SOCIAL SCENARIOS

Entirely different climate-related investment risks are those associated with physical impacts such as stronger storms, rising sea levels, wildfires, and droughts that can affect broad geographic areas, regional economies and specific sectors.[37] Likewise political instability, national or international worker protections (or lack thereof) can affect a range of industries in geographic regions. There are cross sector risks from international and regional regulatory changes. For example, if policy makers act to limit global warming to 2 degrees Celsius, more than half of all oil, coal and natural gas reserves—now classified as valuable assets on balance sheets—will be unburnable unless new technologies for carbon capture are developed.[38]

Trustees should ask their consultants to "stress test" traditional allocation models by running sustainability scenarios on these issues. A consultant can model factors such as a drought, a particular sea level rise prediction, the impact of civil unrest in a region, resource scarcity or a new regulatory framework for climate change and assess the impact on the portfolio. These scenario overlays may reveal risks that can then be mitigated.

# Step 5: Select an Investment Strategy and Integrate Sustainability Criteria

**Key Points**

- ***Asset Owners should choose investment strategies that will serve the fund's objectives and foster sustainable investments.***
- ***The integration of ESG criteria does not restrict investment options.***

Implementing a sustainable strategy can be a one- or two-step process that follows the larger asset allocation decision.

Trustees and investment staff make choices about investment strategies in public equities—the largest allocation in most funds—that are as basic as active versus passive and as specific as index weighting or investment theme.

In the two-step process, the specific investment strategy will be determined first and the integration of ESG second. Investors new to ESG integration may find this approach closer to their comfort zone, because of familiarity with certain investment strategies not necessarily associated with incorporating ESG factors. Ideally these are done together in one unified process, but either approach is workable. Any chosen strategy can be configured for ESG integration.

Among equity strategies there are two primary approaches—investors with active strategies can use ESG analysis in the stock selection process. Passive investors can license an ESG index or can modify an existing index to incorporate ESG components.

## ESG INTEGRATION FOR ACTIVELY MANAGED EQUITIES STRATEGIES

Many active managers, such as Boston Common Asset Management, Calvert Investments, ClearBridge Investments, Generation Investment Management, Impax Asset Management, Parnassus Investments, Pax World Investments, Portfolio 21 Investments, RobecoSAM and Trillium Asset Management, among many others, offer dedicated investment products that incorporate ESG analysis with the goal of generating superior investment returns. In many cases client requests for further customization of ESG criteria are possible, but the core investment process is informed by a proprietary approach to analyzing ESG risks and opportunities. Other active managers who do not yet routinely examine ESG factors could be engaged to develop client specific investment strategies that target sustainable holdings or strategies that build ESG analysis into the fundamentals of portfolio construction.

## ESG INTEGRATION FOR PASSIVELY MANAGED EQUITIES STRATEGIES

For those investors who choose a passive strategy, virtually every major index provider has an ESG or sustainability themed offering that is already licensed by an investment manager—or is available for licensing. Many of the passive strategies that integrate ESG are benchmarked against a broad-based investment universe. One example is a best-in-class approach that focuses investment exposure within industries (or regions) to companies demonstrating stronger sustainability practices. This approach is commonly used to help maintain sector and/or geographic neutrality versus the fund's performance benchmark.

Track records now exist for ESG benchmark indexes for most sector, region and market cap strategies, as well as for many style and thematic strategies. The returns of the ESG indexes versus the standard ones show no inherent performance penalty for incorporating ESG analysis, and in come cases the ESG indexes outperform their benchmark. (See Appendix A for examples.)

New ESG indexes for passive strategies are being developed specifically for large institutional investors who by choice or mandate own a cross section of the entire market and have less maneuverability to exclude specific companies based on ESG factors. One approach weights companies in the index according to their ESG "score;" another weights companies according to how those scores are improving over time.[39] Such strategies that tilt portfolio exposure by increasing investment concentrations in companies with higher ESG scores can be structured to retain ownership of the whole market, a priority for so-called universal investors.

If a particular index strategy only exists in a non-ESG form, including so-called smart-beta strategies based on factors such as momentum, volatility and fundamental analysis, it can be customized to incorporate whatever ESG or thematic components the investor would like to have.

## ESG INTEGRATION FOR INVESTORS IN PUBLICLY LISTED REAL ESTATE INVESTMENT TRUSTS (REITS)

Investors in REITs can use ESG analytic and benchmarking tools such as the Global Real Estate Sustainability Benchmark (GRESB) to assess the sustainability performance of real estate portfolios and whether sustainability best practices are likely to enhance and protect shareholder value. GRESB uses seven aspects of sustainability divided into two sustainability "dimensions": 1) Management and Policy and 2) Implementation and Measurement. These two dimensions help to identify and map the property holdings of each participating REIT (or private fund) in the approximately $500 billion U.S. REIT market. Analysis of this type will help investors better understand how their REIT holdings (and private funds) have embedded sustainability into their real estate portfolios and how their sustainability metrics compare to other REITs, regions and sectors.

## ESG INTEGRATION FOR INVESTORS IN EMERGING PUBLIC EQUITIES MARKETS

Investors in emerging markets should confer with their consultants, managers, ESG analysts and index providers concerning the availability of information on ESG issues. Because company and investment information is often less transparent than in developed markets, the importance of identifying and evaluating ESG risks is even greater. To that end Northern Trust has launched an emerging markets index fund that requires the portfolio's companies to adhere to the UN Global Compact, excludes manufacturers of controversial weapons and establishes standards for corporate governance.

Another helpful resource concerning the unique ESG challenges in emerging markets is *The Emerging Markets Disclosure Project*,[40] which addresses issues that include cultural differences in engaging with corporations, different models of ownership structure, different legal structures and approaches to proxy voting, and different leverage points for engaging and changing companies. Emerging markets also vary greatly in their uptake of ESG metrics, with several having stricter mandatory disclosure than North America (e.g. South Africa, Brazil) while others lag far behind.

## TAKE ACTION TO MITIGATE UNWANTED SUSTAINABILITY RISKS

A new investment strategy may be warranted following a portfolio review of ESG risks. Such analysis often identifies specific areas of concern, commonly by sector or more narrowly by industry and company. With this knowledge, the portfolio can be reconfigured in a number of ways.

If the type of existing investment strategy is producing the desired returns, determine with your consultants and investment manager how that general strategy can be adapted to incorporate ESG risks and opportunities—or whether its good performance is unsustainable because of ESG risks that can't be easily mitigated. If the current strategy has been underperforming, trustees and investment staff should have their consultant analyze and recommend options to improve performance and integrate ESG factors.

Other investors may prefer to focus on strategies that more explicitly incorporate sustainability criteria—for example, ones that minimize fossil fuel exposure or focus on companies providing solutions to water management, resource depletion and climate change.

A caveat that should be but is not always obvious is that even though the academic literature shows sustainably managed companies tend to outperform their peers, the net performance of the portfolio will be highly dependent on the specific strategy adopted, the time frame, the fees charged, the skill of the manager and general economic trends.

# Step 6: Require Sustainable Investment Expertise in Manager and Consultant Procurement

**Key Point** ***Managers must demonstrate expertise in ESG in order to implement sustainable investment mandates.***

A growing number of investors are building ESG criteria into their procurement of money managers, including CalPERS, CalSTRS, NYCERS, the State of Connecticut, and the UAW Retiree Medical Benefits Trust. Investors building a sustainable investment strategy need to understand how their managers are incorporating ESG criteria into their investment practices.

A good place to start is requests for proposals (RFPs). Some investors have standard templates for specific strategies in different asset classes, while others write new ones for each manager search. In either case the RFP can be amended or drafted to enquire about a manager's attitudes, expertise and practice for evaluating ESG.

Each investor needs to determine what the RFP should emphasize. General considerations that will help frame the selection process should include:

- whether the provider's investment policies reflect consideration of ESG risks and opportunities over intermediate and longer term time horizons;
- the provider's experience, expertise and tools for evaluating ESG risks and opportunities;
- how the provider's actual investment decisions demonstrate the integration of ESG risks and opportunities.

If the asset owner's expectations are made clear, investment managers and consultants responding to RFPs will understand that "investing as usual" is no longer acceptable.

Risk management practices, which are often very detailed in RFP responses, can provide trustees with good insight into how a prospective manager considers ESG issues in combination with traditional risk management metrics—and how the manager's investment approach may perform under different market conditions or the introduction of new regulations.

## SEEK ANSWERS THAT WILL REVEAL HOW MANAGERS INCORPORATE ESG FACTORS

Key concerns and questions investors should consider for their RFP include:

### Attitudes, Expertise & Implementation Concerning ESG Factors

- What ESG products or services do you offer and how would you suggest applying them in investment strategies, including the one in this RFP?
- How do you think shareholder value can be enhanced or protected by managing and improving ESG performance? Provide examples, including an investment analysis that demonstrates how you've incorporated ESG criteria.
- What internal or external resources do you employ to identify and evaluate ESG risk factors and provide ESG analysis?
- Do you explicitly incorporate climate change risk into your assessment process? If so, explain how that assessment varies by sector and asset class, how you account for climate risk when you make investment decisions, and how climate change issues pertain to the assets you currently invest in.
- How do ESG determinations affect buy/sell decisions? What's your process?
- How do such specific issues as human rights, worker health and safety, product safety and integrity, and community impacts factor into the investment decisions you make?
- What reports do you provide your clients showing ESG characteristics of their portfolios, or specific investment decisions that were affected by their ESG criteria?

### Proxy Voting

- Explain your approach to voting your clients' proxy priorities concerning corporate governance and strategies on environmental and social issues.
- Provide your proxy voting guidelines and other ESG policies and explain how they are applied to your proxy voting activities.

- If an external proxy voting service votes your proxies, is the service required to vote proxies in accordance with the firm's guidelines or do you defer to those adopted by the external service?
- What are your policies and practices for communicating with portfolio companies on voting decisions?

### Engagement with Portfolio Companies

- What is your process for interacting with companies you invest in on ESG issues?
- What are the reasons behind such engagement and on what issues do you typically engage senior management of portfolio companies?
- Do you have a method for evaluating these interactions with companies?
- What specific outcomes have you seen?

### Non-Investment Indicators of Sustainable Business Practices

- Does your firm prepare and issue, periodically, ESG/ sustainability performance reports?
- What organizations are you a member of that advocate for sustainable and responsible investing?

A similar set of questions, tailored for the fund's investment consultants, can help trustees, board members and investment staff better understand how ESG considerations affect the consultant's manager evaluations and asset allocation recommendations. The consultants, in turn, will understand that their client has a more comprehensive set of ESG expectations.

## CREATE A DISCIPLINE THAT EMPLOYS THE ESG RFP RESPONSES IN MANAGER SELECTION

Trustee involvement in the formulation of ESG questions for the RFP and in evaluating the responses is essential. Trustee participation and oversight will help assure that responses to ESG questions in RFPs will affect the choice of finalists and awarding of the contract. Discussions with the finalists during the interview process should explicitly include ESG questions.

## ENGAGE THE INVESTMENT CONSULTANT

In some cases no RFP is issued, and the finalists are chosen by the investment consultant. If the consultant is not instructed to provide a short list of candidates that can deliver on ESG criteria—or if the consultant itself does not have the expertise to evaluate managers or strategies concerning ESG—then it is unlikely the trustees will end up with a strategy that incorporates material ESG factors.

Trustees need to be clear with their investment consultants about their expectations on ESG integration. If the consultant cannot help in this area and is not committed to improving its capabilities, the trustees should issue an RFP for a new or supplementary consultant.

## BUILD INVESTOR EXPECTATIONS INTO THE INVESTMENT MANAGEMENT AGREEMENT (IMA)

Once the manager has been selected, the asset owner and the investment manager will finalize a contract—the IMA—that establishes performance benchmarking, incentive compensation, investment time horizons and a schedule for reports the manager will provide. Because the IMA is critical to the ongoing monitoring of manager performance, it should specify expectations for incorporating ESG factors.

## SEEK GUIDANCE FROM INDUSTRY ORGANIZATIONS

Industry conferences are increasingly including sessions on incorporating ESG into RFPs. Those involved in the RFP process are sharing information on various approaches that other funds are using on this topic. Two resources that address inclusion of ESG criteria in RFPs and IMAs are:

- ➔ *PRI, Aligning Expectations: Guidance for Asset Owners on Incorporating ESG Factors Into Manager Selection, Appointment and Monitoring*[41]
- ➔ *ICGN model mandate initiative: Model contract terms between asset owners and their fund mangers*[42]

Examples of ESG related questions in RFPs can be found in Appendix C.

# Step 7: Evaluate Manager Performance Against Sustainable Investment Expectations

**Key Point** ***Trustees and investment staff must know how investment managers are incorporating the sustainability criteria specified in the Investment Management Agreement.***

## REPORTING

Periodic reviews that trustees conduct with investment managers and consultants should include formal written explanations on how the investment strategy and decisions by portfolio managers align with expectations the asset owner and manager have agreed to in the IMA.

One approach is for the managers to describe the investment process for applying ESG criteria. For example, how it assesses sustainability risks using ESG factors, how those risk findings affect investment recommendations, how recommendations and concerns about ESG risks are communicated to the portfolio managers, and how the manager monitors the actual investment decisions made by its portfolio managers. Additional information that asset owners should request includes how managers measure and incentivize the integration of sustainable investment factors and the time horizons managers use for evaluating performance of sustainable investment strategies.

Another reporting approach is more empirical and will suit the capabilities of some managers more than others. Even though it is sometimes difficult to correlate specific ESG risk factors to overall investment returns, the attribution analysis that managers and consultants have traditionally provided may be supplemented to reveal how sectors, industries and companies may be susceptible to a variety of ESG risks, including reduced access to water, higher energy prices, disruptions to supply chains and concentrations in carbon-related assets that may be vulnerable to changing prices or being stranded. Such audits of ESG risk factors are currently available from a number of ESG research providers, including Trucost, Sustainalytics, MSCI and FTSE.

As the availability of data and the quality of analysis improve, investment managers should be more readily able to show how the due diligence they are exercising around ESG issues is benefitting investment returns.

The reports from managers are also an important element of trustee education about ESG issues, risks and opportunities. Managers, for example, should explain how investment strategies that take full account of ESG risk factors are likely to perform under different market conditions and economic environments. If trustees understand that an investment approach designed to maximize sustainable risk-adjusted returns will undergo occasional short term performance volatility, as most strategies do, they will more likely commit to a long-term strategy that integrates ESG into investment decisions.

Asset owners can also specify reports they want their managers to provide. For example, the Florida State Board of Administration (SBA) includes some very specific reporting requirements in their Investment Protection Principles, which are part of the investment review process. The SBA asks investment managers to identify how “an issuer’s stance and practices related to climate change is assessed, evaluated and factored into our investment decision making processes.” (The document can be found in Appendix D.) Likewise, CalSTRS requires global equities mangers to explain how they have incorporated the CalSTRS “21 Risk Factors” into decision-making.[43]

Investment consultants also have a role to play. As they gather data from managers, the consultants should be prepared to provide the fund with reports that aggregate ESG risks of the fund’s investments within and across asset classes. That information can be the basis for fresh thinking about allocating assets by sources of risk (see Step 4).

## INVESTMENT TIME HORIZONS

Because sustainable investment expectations presume the manager is not just focused on short- term results, the managers should provide the trustees with some measure of performance over time. A good indicator of an investment strategy’s time horizon is turnover, which the trustees and their consultant should review for each investment strategy. Another method for gauging the effectiveness of a sustainable investment strategy is to measure portfolio return over longer time horizons versus the designated performance benchmarks, most of which have at least 3- and 5-year track records. The obligation of having to report investment returns measured

***As the availability of data and the quality of analysis improve, investment managers should be more readily able to show how the due diligence they are exercising around ESG issues is benefitting investment returns.***

over longer time frames will cause more managers to consider longer-term risks and opportunities, including risk factors and return opportunities that ESG analysis can help identify.

## BENCHMARKING

Trustees need to understand, and preferably determine, the benchmarks that investment strategies are based on and managers are being evaluated against.

Performance benchmarks have implications for risk tolerance and tracking error, and many Boards are not ready to change long-standing benchmarks to incorporate ESG factors. A practical intermediate step is for investors to select a secondary performance benchmark from one of the many ESG benchmarks that index providers have created. The use of a secondary benchmark enables the trustees and investment committee to compare three different sets of returns: the investment strategy the fund is pursuing; the primary benchmark the fund's strategy is being measured against; and a secondary benchmark that incorporates specific ESG criteria. Once the Board becomes more acquainted with the composition and performance of the secondary ESG performance benchmark, primary benchmarks can be re-evaluated.

# Step 8: Establish Engagement Strategies and Proxy Voting Guidelines Consistent with Sustainable Investment Goals

**Key Point**

***Active ownership on ESG issues can change corporate policies and practices, improving investment returns and creating long-term investment value.***

Whether investors are pursuing active or passive strategies for their portfolios, all investors should actively engage their portfolio companies and develop clear proxy voting guidelines concerning ESG issues.

Many institutional investors are already engaging with portfolio companies on business practices and risk management. Much of this engagement is directed at business conduct that investors believe can improve long-term investment value. This includes disclosure of ESG risks and the policies and practices for mitigating them. Among these investors is the Florida State Board of Administration:

> *Through our corporate governance activities, the SBA spurs public companies to take action on issues that may affect Floridians, such as the environment and climate change. During the fiscal year, the SBA in many cases supported improved environmental disclosures by companies, shareowner resolutions asking companies to publish sustainability reports, shareowner proposals addressing climate change and global warming and shareowner resolutions asking companies to produce reports assessing the impact on local communities.*[44]

A growing number of investors are using shareholder resolutions to engage with companies on ESG issues. Hundreds of such resolutions are now being filed each year, many of them leading to successful negotiations with the companies.

## 8.1 AN ACTIVE OWNERSHIP FRAMEWORK ON ESG

### Engagement Policy

The Board of Trustees should adopt and publish a policy concerning active ownership,[45] and trustees and staff should establish practical protocols for engagement that gives trustee oversight and authorizes staff to take action on ESG issues.

If the fund has not communicated any investment beliefs to help guide corporate engagement and proxy voting, then the staff will need to identify a set of principles that reflect multi-generational investment objectives and a set of material risk factors that every portfolio company should be paying attention to.

There is no definitive list of material ESG issues that are important to investors. Yet there are key principles that warrant every investors' attention—principles concerning corporate governance and sustainability issues that should inform how proxy votes are cast:

- **Governance Principles:** a qualified Board that is independent and diverse with a commitment to transparency, oversight of sustainability strategies, accountability for sustainability goals, and expertise reflecting the ESG risks material to long term value creation and protection of shareholders
- **Social Principles:** adherence to internationally recognized labor and human rights standards
- **Environmental Performance Principles:** quantitative reporting on environmental risks, policies, performance and goals.

These principles, which provide high-level guidance but do not necessarily determine how fiduciaries should vote on a particular resolution, are described in detail in the Ceres report *Proxy Voting for Sustainability*.[46]

As investors consider how to align engagement strategies with issues that are material to specific companies or entire industries, they can learn from interactions that stakeholders have had with boards and senior management concerning ESG issues and from analysis the companies themselves have conducted concerning material risks and opportunities that can impact long-term profitability.

One way to learn how senior management is thinking about how ESG is linked to long-term value creation is on calls and meetings with investors. Pension funds and investment mangers should encourage staff engaging with companies to inquire about material sustainability risks and opportunities and strategies for mitigating them. The discussion would put investor concerns on the record and should give investors valuable insight into how senior management is thinking about ESG issues.

Investors should also encourage the companies they own to pro-actively advocate for policies that promote a clean energy economy and reduce climate risks. Even forward-thinking companies with strong GHG emissions targets and renewable energy goals often belong to trade associations that oppose policies supporting more sustainable economic growth. Consequently, investors should consider asking their portfolio companies to better reconcile their internal policies and pursuit of sustainability goals with the public policy positions they have taken or that trade associations take on their behalf.

## 8.2 PROXY VOTING GUIDELINES

A challenge for investors, especially for governance staff that oversee proxy voting, is to maintain clear up-to-date guidelines that result in appropriate and consistent votes being cast by fiduciary voters. Unfortunately, too many proxy voting policies generally support management positions on any ESG issues, or generally refer to voting "in the best interests of the company." Revised guidelines should provide clear direction on how voting fiduciaries should cast proxy votes on key ESG issues.[47]

### Proxy Voting & Engagement Protocols

Because many investment management firms assign proxy voting responsibility to a separate business unit with minimal or no reporting lines to the investment team, firms should develop procedures that allow for 1) the voting staff to advise the investment teams and portfolio managers concerning material ESG issues they become aware of and 2) participation by the voting staff in selected engagements initiated by the investment teams with portfolio companies.

## 8.3 TARGETING COMPANIES FOR ESG ENGAGEMENT

Investors engage with companies for many different reasons, including 1) share price performance; 2) concern over corporate practices that may jeopardize future earnings; 3) issues of human rights, child labor and worker health and safety; and 4) environmental challenges. In many instances these issues are linked.

A corporation may be identified as lagging behind industry peers through sustainability-related benchmarking reports, such as those issued by Ceres and other groups. If the company is also suffering from poor financial performance or governance, then the need for investor engagement may be even more warranted.[48]

For many investors engagement begins with poor financial performance by a company. Then they discover that poor sustainability practices are contributing to it. Other investors proactively address potential ESG risks before financial results dictate concern.

Investor engagement, which has traditionally focused on publicly listed companies, is now expanding into fixed income, private equity and real estate markets. Investors recognize that, regardless of the asset class, specific ESG issues require action that engagement can help rectify.

## 8.4 DEVELOPING ESG STRATEGIES

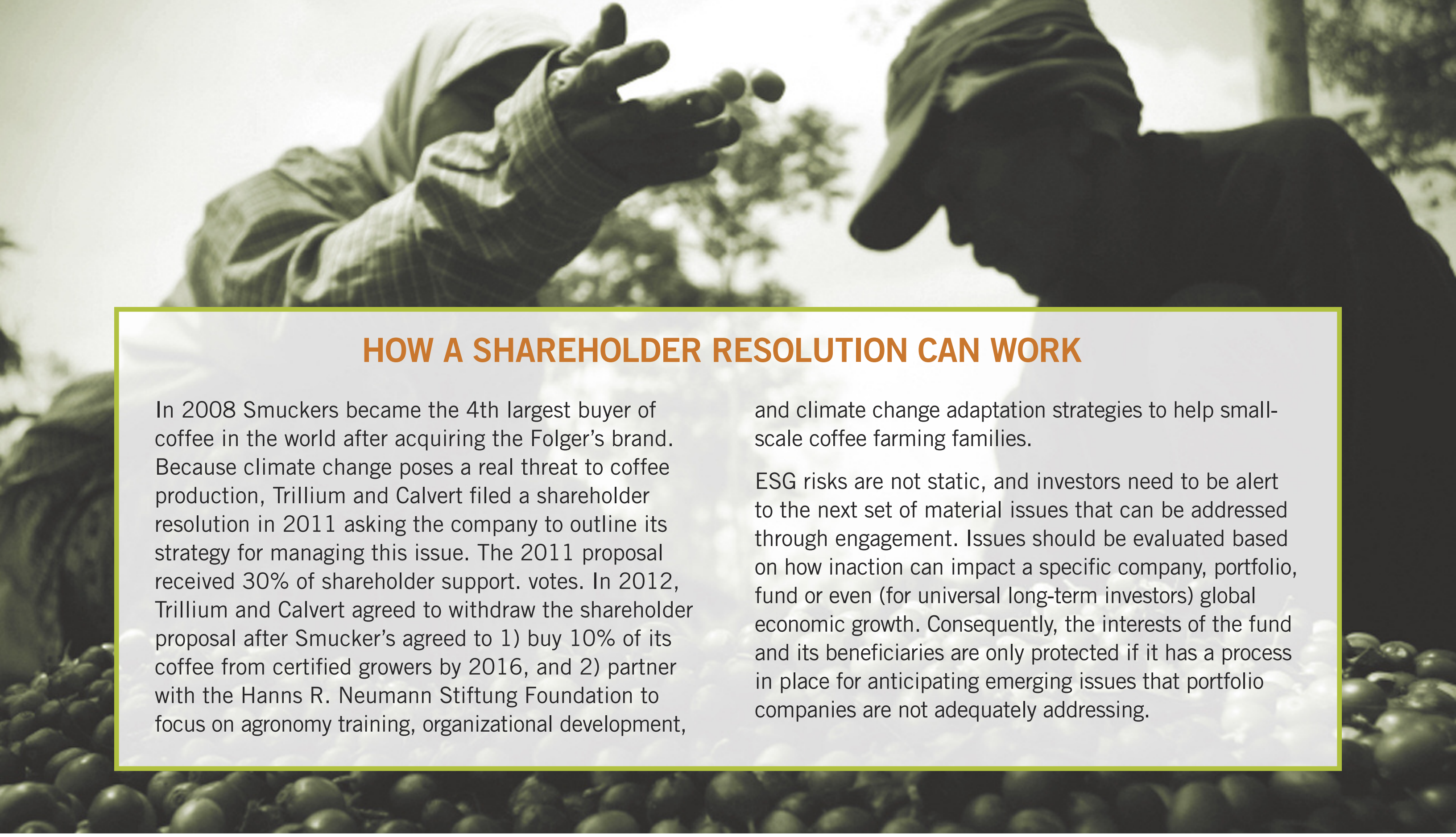
### Create a Focus List

One option for starting an ESG engagement strategy is to put specific companies on a focus list for high-level consultation. The California Public Employees Retirement System (CalPERS) has been very successful utilizing this form of engagement. Issues to be considered include:

- Governance as it relates to environmental and social factors, encompassing issues that may also include traditional governance issues such as separation of the Board Chair and CEO, classified boards, say-on-pay, political contribution disclosure, non-discrimination and diversity
- Adequate disclosure of ESG related risks, policies and goals
- Corporate attitudes and behaviors toward ESG concerns the fund believes are critical to share value.

Once target companies and key issues for engagement are identified, there are a number of ways investors can engage companies or other entities in which they have invested:

- **Direct Dialogue or Letters[50] to the Board or CEO** are tools that investors use, sometimes in combination, to foster constructive dialogue for building trust that leads to change.[51]
- **Corporate Stakeholder Teams:** Groups such as Ceres or Business for Social Responsibility often organize confidential stakeholder meetings, which can include unions, community groups, environmental groups, academics, NGOs and investors. These meetings can focus on wide-ranging issues or on a specific topic.
- **Group Dialogues:** A lead filer of a shareholder resolution may host a group meeting to discuss their requests with a company and whether the firm's commitment to improve practices warrants withdrawing the resolution.
- **Investor Letters:** Investor networks such as CII, ICCR, INCR, PRI and US SIF have coordinated letters to groups of companies and policy makers. For example, in early 2012, INCR coordinated a letter to all of the companies in the Russell 1000 index, asking them to establish comprehensive sustainable business strategies and suggesting use of Ceres' *21st Century Corporation: The Ceres Roadmap for Sustainability*.
- **Filing or Co-filing Shareholder Resolutions:** Any investor with $2,000 in shares held for 12 consecutive months can file a resolution calling on a company to take a particular action. These resolutions, which are a more public form of engagement that openly challenges corporate policies and practices, may go to an annual meeting vote or be withdrawn after a company commits to address the issue of concern. Filing shareholder resolutions is a more frequent form of engagement in the United States and Canada than it is in Europe, where private dialogue at the CEO and Board level is more common.
- **Proxy Voting:** As noted above, proxy voting is part of the fund's fiduciary duty. Investors who have clear policies



## HOW A SHAREHOLDER RESOLUTION CAN WORK

In 2008 Smuckers became the 4th largest buyer of coffee in the world after acquiring the Folger's brand. Because climate change poses a real threat to coffee production, Trillium and Calvert filed a shareholder resolution in 2011 asking the company to outline its strategy for managing this issue. The 2011 proposal received 30% of shareholder support. votes. In 2012, Trillium and Calvert agreed to withdraw the shareholder proposal after Smucker's agreed to 1) buy 10% of its coffee from certified growers by 2016, and 2) partner with the Hanns R. Neumann Stiftung Foundation to focus on agronomy training, organizational development, and climate change adaptation strategies to help small-scale coffee farming families.

ESG risks are not static, and investors need to be alert to the next set of material issues that can be addressed through engagement. Issues should be evaluated based on how inaction can impact a specific company, portfolio, fund or even (for universal long-term investors) global economic growth. Consequently, the interests of the fund and its beneficiaries are only protected if it has a process in place for anticipating emerging issues that portfolio companies are not adequately addressing.

***"Our primary screening tool is to look at the one-, three- and five-year total shareholder return (of questioned companies) compared to their peers. Our only consideration is to file proposals that improve shareholder value over time."***[49]

and guidelines specifically addressing ESG issues will ensure consistent votes by all of their voting fiduciaries. MFS is one of many investors that actively engages companies during the proxy voting period:

> *We believe open communication with our portfolio companies on proxy voting issues is an important aspect of our ownership responsibilities. Our goal when engaging with our portfolio companies is to exchange views on topics ranging from executive compensation to environmental issues, and to potentially effect positive change on such issues. As such, members of the MFS Proxy Voting Committee engaged with representatives from 183 distinct portfolio companies in 10 different markets during the 2012 Proxy Period.*[52]

Some investors take the additional step of notifying companies why they have voted a particular way.

### 8.5 TOOLS FOR ENGAGEMENT

Investors seeking additional guidance about engagement strategies or specific ESG issues that can affect investment returns can refer to the following resources:

- *The 21st Century Corporation: The Ceres Roadmap for Sustainability* outlines 20 key expectations for sustainable business policies and practices related to governance, stakeholder engagement, disclosure and performance and is an important resource for investors, providing a framework to assess how effectively companies are developing and implementing sustainable business strategies and supporting investor's corporate engagements.
- A guide to engagement strategies for investors (a collaboration between BlackRock and Ceres to be released in 2013) will help institutional investors better understand opportunities for engaging companies on environmental and social issues.
- *The Aqua Gauge: A Framework for 21st Century Water Risk Management,* helps investors assess corporate water management practices based on publicly available information. It is a valuable resource on water risks.

### 8.6 ENGAGEMENT WORKS

Engagement outcomes are published by some investors and advocacy groups.[53] The Ceres publication *Investor Power*[54] highlights how shareholder resolutions and company engagements have led to major improvements in how companies and entire industries hare handling ESG issues.

Engagement also gives investors good information about the quality of management, how short-term oriented or strategic they are, and how sophisticated they are in their thinking about various risks and other business critical issues.

# Step 9: Support Policies and Market Initiatives that Promote a Sustainable Global Economy

**Key Point** ***Concerted investor action can help shape public policy and create sustainable capital markets.***

Institutional investors and their asset managers should advocate for capital market reforms and policy initiatives that promote sustainable investment, sustainable capital markets and a sustainable economy. Among the policies and reforms they should be advocating for:

- increased corporate disclosure of relevant ESG risks in financial filings;
- tax and regulatory policies that support market efficiencies and innovation; including solutions for climate change mitigation and sustainable sources of energy,
- stronger stock exchange requirements for disclosure by listed companies of material ESG risks;
- more systematic and transparent incorporation of material ESG factors in the opinions of credit rating agencies;
- collaboration with other investors regarding sustainable capital markets initiatives;
- public disclosure of policies and practices with respect to sustainable investment.

## 9.1 ENGAGE REGULATORY ENTITIES CONCERNING SUSTAINABILITY DISCLOSURE

Investor demand for mandatory environmental and social disclosure is pushing ESG reporting into the mainstream. Seventeen countries already require some form of corporate sustainability disclosure,[55] and there is increasing support for similar requirements in the United States.

The first concerted initiative in the U.S. occurred in June 2009 when investors representing $1.4 trillion in assets called on the SEC to issue interpretive guidance concerning disclosure of material sustainability risks in financial filings. They wrote:

> *Unfortunately, the ad hoc, voluntary approach to ESG reporting in the United States does not serve investors well. In order to build portfolios, we must have the ability to compare company policies and performance to their peers, which requires reporting by all companies, using well-understood protocols for such reporting. In order to retain and expand U.S. competitiveness, help rebuild trust in the capital markets, and enable investors to select and reward firms with superior strategies for long- term value creation, the SEC should integrate reporting of material ESG factors into its disclosure system. Such integration would reaffirm the SEC's role as the central authority for all business reporting and should produce clear disclosure standards that provide uniform and comparable information on ESG issues that are of interest to investors.*[56]

In response to this letter and other investor requests that were initiated as early as 2003, the SEC issued formal guidance on climate risk disclosure in February 2010. A few weeks later 56 investors with over $2 trillion in assets under management praised the SEC for issuing the guidance, but noted "few companies disclose sufficient information about [climate change] issues in SEC filings to allow us to make more informed investment decisions."[57]

Institutional investors and investment managers, by writing letters to the SEC, by focusing attention on companies exemplifying best and worst practices, and by participating in face-to-face meetings with regulators and other policy makers, can help make disclosure of all material ESG risks both mandatory and more complete.

For example, the Florida State Board of Administration (SBA), which manages the state's public employees retirement investments, supported increased disclosure of corporate water risk in SEC filings:

> *Corporations have increasingly acknowledged the importance of water, and its stewardship, as a growing business risk with direct impact on their operations. Because efficient companies can gain an economic advantage by prudently managing their use of water, many investors support clear disclosures surrounding water use and management. As a result, corporate water use has become a more significant corporate governance factor.*[58]

As more investors support mandatory disclosure of sustainability risks, the systematic efforts of other organizations to bring about change in this area will also be strengthened—organizations that include the International Federation of Accountants, SASB, IIRC and the Canadian Institute of Chartered Accountants.

*"Twenty years from now, we will have either successfully transitioned from our current economic growth paradigm to a new model of sustainable capitalism or we will be suffering the calamitous consequences of our failure to do so."*

**Joe Keefe**, President & CEO, Pax World Management

## 9.2 SUPPORT PUBLIC POLICY THAT SUPPORTS MARKET EFFICIENCIES AND INNOVATION

Public policy can either support or impede innovation and sustainable business and investment practices. Under the best circumstances public policy provides the conditions for market-based solutions to succeed. This is particularly important regarding the challenges of greater energy efficiency and development of alternative and renewable energy sources to reduce greenhouse gas emissions and mitigate climate change risks. Investment capital can catalyze innovation and implementation of large-scale solutions to social and environmental problems if policy-makers provide investors with clear, credible and long-term ground rules.

Changes in policy tend to be incremental but those changes, even when small, can lower barriers and create predictability that helps attract new investment capital. An example is the master limited partnership (MLP) structure that is well understood by investors and regularly used for midstream oil and gas investments (e.g., pipelines), but is not available for investments in renewable energy. Expanding MLPs to renewable energy would give investors an immediately accessible framework for new low carbon investment opportunities.

Emerging energy technologies have historically been incentivized through a mixture of government R&D, tax policy, and other incentives. We have seen this most recently with shale gas. While hydraulic fracturing of shale is a recent contributor to increased supplies and lower prices for natural gas, its economic viability came about as the result of incentives given to oil and gas companies willing to experiment with the various technologies needed to unlock the resource.

The wind industry and solar power sectors are poised to repeat a similar story as they become price competitive without subsidies with fossil fuel energy sources. In order to meet the climate challenge, investors need to advocate for policy solutions such as the existing federal Production Tax Credit (PTC) for wind-generated energy that will spur more innovation and investment.

Investor advocacy has paid off as recently as 2012 with the passage of the stringent new fuel economy (Corporate Average Fuel Economy) and greenhouse gas vehicle standards, which will nearly double fuel economy of U.S.-made vehicles by 2025. Ceres partnered with Citi Investment Research on a report showing that stronger standards would benefit the auto industry (particularly domestic manufacturers).[59] Investors also took public positions supporting stronger standards. In addition, in 2012 investors successfully advocated for a short-term extension of the PTC.

Going forward, emissions need to be regulated, both nationally and internationally, through a range of approaches that limit or price carbon emissions. Though parties to the UN Framework Convention on Climate Change have agreed to adopt binding targets by 2015, it is unlikely that a uniform, economy-wide carbon tax or cap-and-trade program will be enacted in the short term. In the United States progress towards an adequate price on carbon is already underway through incremental policies. Some take the form of cap-and-trade programs, such as the Regional Greenhouse Gas Initiative (RGGI) aimed at reducing power plant emissions in the Northeast states and the Low Carbon Fuel Standard (LCFS), which has been adopted in California and is under consideration in other states. A LCFS is a market based, technology-neutral tool, which provides fuel providers with the flexibility to gradually reduce the carbon intensity of their fuels using a variety of strategies, including the use of low carbon fuels such as advanced biofuels or purchase of credits of clean electricity used to power vehicles.

Emission reductions can also be achieved through existing regulatory authority, such as the U.S. Environmental Protection Agency's ability to regulate air pollutants under the Clean Air Act. Many other initiatives are under way around the country, including state Renewable Portfolio Standards now in place in more than two-dozen states.

The urgency for policy-makers to act was made clear in 2011 when 285 institutional investors managing more than $20 trillion in assets issued a *Global Investor Statement on Climate Change*. The statement called for "investment-grade policy," both domestically and through international agreements, to address growing climate change risks and stimulate private sector investment in low-carbon solutions.

## 9.3 SUPPORT STRONGER STOCK EXCHANGE REQUIREMENTS FOR DISCLOSURE OF MATERIAL ESG RISKS BY LISTED COMPANIES

Frustrated by disparate ESG reporting globally, investors are increasingly focused on stock exchanges to spur more comparability and consistency of ESG data in the marketplace. At the same time, stock exchanges are concerned that if they act alone in requiring more robust ESG disclosure through tougher listing rules, it will prompt companies to move to markets with less stringent reporting requirements on sustainability.

To address such concerns, investors are engaging with exchanges in more than a dozen stock markets on ESG issues. In the U.S., investors managing more than $7 trillion in assets are collaborating with NASDAQ OMX on a listing rule mandating ESG disclosure. That effort led NASDAQ OMX to form a coalition with other exchanges to seek a global listing rule on ESG reporting. NASDAQ's vice-chairman observed that:

> *Creating a corporate sustainability reporting standard across all exchanges will encourage a shift in how companies assess the importance of their efforts in environmental, social and governance issues. It is a win-win for both companies and investors, encouraging sound business practices and responsible investing.*[60]

This specific initiative, being led by the Investor Network on Climate Risk (INCR), is part of a broader investor collaboration under the United Nations-sponsored Sustainable Stock Exchanges (SSE) Initiative. Investors are also working closely within the Principles for Responsible Investment through an SSE Investor Working Group. These collaborations have led to listing requirements on Integrated Reporting in South Africa, disclosure of multiple ESG key performance indicators in India and Hong Kong, and recommended ESG reporting and training in Brazil and Singapore.

## 9.4 ENGAGE WITH CREDIT RATING AGENCIES TO EXPLICITLY INCORPORATE SUSTAINABILITY RISKS

Because credit rating agencies are generally not transparent about how they integrate analysis of material ESG factors, investors do not know whether such risks have been properly evaluated and incorporated into overall credit scores. Consequently, investment mandates that have specific credit rating criteria may include in their eligible universe of securities investments whose ESG risks may later lead to a downgrade or impact a bond issuer's ability to repay interest and principal. Until credit rating agencies systematically and transparently incorporate ESG risks into their analysis and ratings, investors in fixed income and credit sensitive financial instruments will not have a comprehensive third-party assessment of investment risks and opportunities.

Asset owners and asset managers must communicate to credit rating agencies the need to elevate ESG issues in their analysis and ratings.

## 9.5 COLLABORATE WITH OTHER INVESTORS

Many issues that affect the safety and soundness of the financial markets are too big to be tackled alone. Investors, such as CalPERS, are responding accordingly:

> *Our governance program has a work stream focusing on financial market stability, in which we work with other long-term investors to advocate regulation and legislation, which protects investors and promotes market stability.*[61]

Some issues derive from global mega-trends, others from regulatory or public policy actions that improve transparency, encourage (or obstruct) new investment opportunities or signal new limits on existing business and investment activities. Examples include tax credits on renewable energy investment and restrictions on carbon emissions.

Organizations such as CII, ICCR, ICGN, INCR, PRI and US SIF and the Global Investor Coalition on Climate Change can leverage more than $30 trillion in collective assets to unite investors and coordinate national and international initiatives that promote sustainable capital markets.

## 9.6 DISCLOSURE OF SUSTAINABLE INVESTMENT POLICIES AND PRACTICES

What gets measured gets managed and what gets disclosed becomes subject to accountability. Strong disclosure reflects strong management and facilitates positive stakeholder engagement. To that end INCR and many investors press corporations to disclose material sustainability risks and opportunities, oftentimes through shareholder resolutions. Similar transparency should be expected from asset owners and investment managers, and will almost certainly be demanded in due course by their stakeholders, including beneficiaries who are increasingly being mobilized to question investment policies that may exacerbate climate change risks and jeopardize sustainable risk-adjusted returns. Three examples of strong investor disclosure that investors may find instructive are offered by the Norwegian Ministry of Finance, TIAA-CREF, and the Dutch pension fund manager PGGM.

**The Norwegian Ministry of Finance** reports annually to the nation's parliament concerning its management of the government pension fund, including responsible investment practice and active ownership activities plus evaluations of material risks by external consultants and internal staff.[62] Where ESG criteria result in the exclusion of companies from the fund's investment universe, the annual report attempts to quantify the financial implications of those decisions.

**TIAA-CREF** uses annual reports specifically devoted to sustainable investment to inform its plan members and stakeholders about ESG issues it integrates into its investment decisions. Its commitment to lead by example concerning disclosure of ESG policies and practices comes from the President and CEO: "We hold ourselves to the same high standards that we expect of the companies in our portfolio."[63]

**PGGM**, which also publishes annual reports on its sustainable investment activities, is exceptionally clear about the importance of transparency:

> *Transparency is an important part of our policy. We aim to be a reliable partner and to be clear about what we are doing and why. We report continuously by publishing quarterly and annual reports on our activities and developments in the field of responsible investment. Every year we give our clients an opportunity to provide their participants with details of the investment portfolio and the parties with which PGGM is doing business on their behalf.*[64]

Their annual review includes a detailed discussion of investment process, ESG investments that they have targeted, engagements undertaken and votes cast on shareholder resolutions.

# Step 10: Integrate Sustainable Investment Criteria Across All Asset Classes and All Strategies

**Key Point** ***Analysis and action to address ESG risks and opportunities is important to every asset class.***

Investors need to review investments in every asset class to manage ESG risks and capitalize on opportunities. This requires evaluating established strategies, or alternatively, looking for new strategies that will focus on ESG investment opportunities and risk mitigation.

The ESG portfolio analysis that once focused primarily on public equities is now available for other asset classes. In private equity and real estate the benefits of energy, water and waste efficiency are measureable, and in fixed income strong governance around sustainability practices boosts investor confidence in the issuer's credit rating and the safety of principal.

Christopher Ailman, Chief Investment Officer at the California State Teachers' Retirement System (CalSTRS), describes how it is possible to include ESG across all asset classes:

> *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.*[65]

## 10.1 FIXED INCOME

When ESG risks are ignored or not identified, fixed income investors unwittingly assume avoidable risks. For example, two comparable "Single A" corporate issuers may issue debt having the same maturity, structure and coupon, yet over time present very different risk profiles because of ESG risks that a full ESG analysis might have revealed. These risks gain importance as the debt instruments increase in maturity or move out of investment grade and consequently pose greater risk for downgrades and default.

The demand for greater attention to ESG risk is coming from investors who understand that traditional financial analysis alone provides an incomplete assessment of investment returns over the longer-term. These investors, including PRI signatories and participants in investor groups such as INCR, CII and US SIF, are incorporating ESG analysis from ESG research providers. They are also developing proprietary approaches for determining the materiality of ESG issues in their portfolios.

MEAG, the investment arm of Munich Re, includes an assessment of environmental, social and governance risk factors in its due diligence for new investments. Breckinridge Capital Advisors, a high grade fixed income manager, has developed frameworks that apply sustainability analysis to corporate and municipal bonds, including the long term sustainability of communities. They also integrate this research into fundamental credit analysis for high-grade bond portfolios.

The first comprehensive suite of ESG fixed income index benchmarks, cobranded by Barclays and MSCI, is scheduled for launch in 2013. The coverage of ESG in these indexes will extend beyond listed issuers to private issuers, sovereigns, supra-nationals, local authorities, agencies and securitized investments, such as covered bonds.

### a) Municipal Bonds

Municipalities borrow in the bond markets to finance vital capital improvement projects for education, transportation, health care, clean water, housing and redevelopment.

Municipal bond investors can benefit from and build upon groundbreaking work by a coalition of groups committed to improving the sustainability of American cities: the U.S. Green Building Council, the Center for American Progress, the ICLEI-Local Governments for Sustainability, and the National League of Cities. In 2008 they launched Star Communities (www.starcommunities.org) to provide a common framework and rating system for evaluating the sustainability of communities.

The Star Communities' pilot program includes more than 30 cities that have agreed to voluntarily report on the state of their economy, environment and society—three areas of critical importance to any community's fiscal and civic well being, and to long-term investors in those cities. As more cities choose to become part of the STAR Community rating system framework, the resulting indicators could become a broad-based and meaningful benchmark for investors evaluating municipal bond issuances.

Investors in municipal bonds have also benefited from research by Ceres that underscores risks that are sometimes overlooked by investors and credit rating agencies in water utility bonds, usually due to flawed assumptions that water supplies will always be plentiful and that demand for water will always increase. *The Ripple Effect: Water Risk in the Municipal Bond Market* and its follow-up study *Water Ripples: Expanding Risks for U.S. Water Providers* examine key issues germane to water utility bond issuers and risks their investors should be aware of.[66]

### b) Sovereign Debt

National governments issue bonds to finance ongoing operations, and while those bonds are rated by the major credit rating agencies, not all risks are fully factored in.

Investors in sovereign debt need to fully assess ESG risks that the credit rating agencies inadequately account for, or may not account for at all.

One assessment concerning the contribution of ESG factors to sovereign risk was provided in a 2012 report[67] that examined natural resource-related risks of Brazil, India, Turkey, Japan and France—five countries with similar credit ratings. A key finding not likely to be picked up using conventional financial analysis was that "a 10 percent reduction in the productive capacity of renewable, biological resources, and assuming that consumption levels remain the same, could lead to a reduction in trade balance equivalent between 1 and over 4 per cent of a nation's GDP."[68]

The study, led by the UN Environment Programme Finance Initiative (UNEP FI) and the Global Footprint Network, reached this key conclusion; "Fixed income investors, credit rating agencies and governments are encouraged to identify not only how natural resource and environmental risks can be integrated into sovereign risk models but also which solutions can address them."[69]

Another perspective on the importance of ESG analysis to a better understanding of sovereign risk is offered by Matt Christensen, head of responsible investment at AXA Investment Managers:

> *Every crisis tends to end up touching ESG. The sovereign debt crisis is no different. Italy's debt problem, for example, has a connection to the bond investing community, which touches on the governance system of the EU and on ESG as a factor.*[70]

Several ESG research providers and advocacy organizations have developed guidelines to help investors identify sovereign ESG risks. Resources to consider include Camradata, EIRIS, Human Rights Watch, Inrate, Maplecroft Limited, MSCI, Oekom Research, RepRisk, Sustainalytics and the U.N. Human Development Index.

### c) Green Bonds

In 2008 the World Bank launched the first in a series of green bond issues that support projects in transportation efficiency, waste management, energy efficiency, reforestation, sustainable forest management, wind and solar power, and technologies to reduce greenhouse gas emissions.

Green bonds offer competitive returns and support a sustainable, low carbon economy. Green bonds have been purchased by investors such as the New York State Common Retirement Fund, Trillium Asset Management, CalSTRS and the California State Treasurer's Office, whose Treasurer Bill Lockyer, upon purchasing $300 million in green bonds noted:

> *Buying these green bonds makes financial sense for California. It strengthens our portfolio's diversity while adding a sound investment with a triple-A rated issuer. And it tells the world that when it comes to battling climate change, California is prepared to contribute not just its policies, but its money, too.*[71]

## 10.2 PRIVATE EQUITY

Investors in private equity are increasingly benefitting from ESG integration that many asset owners have not even asked for, but should be demanding from their managers.

Private equity managers have a long history of introducing operational efficiencies to their portfolio companies, so it was a logical step for managers to consider how better management of energy, water and waste could reduce operating costs and add value. This approach, often referred to as "eco-efficiency," has produced substantial financial and environmental benefits.

KKR, for example, reports having achieved, between 2008 and 2011, more than $600 million of positive financial impact at their participating portfolio companies, as well as reducing more than one million metric tons of greenhouse gas emissions and 13.2 million cubic meters of water usage.[72] KKR, whose Green Portfolio Program began with three companies in 2008 and currently includes 24, nearly a third of KKR's total portfolio, has announced plans for a new "Green Portfolio Program Best Practices Handbook." It is designed to be "a resource for portfolio companies at all stages of planning and development" and "part of a broader effort at KKR to create sustainable long-term value by addressing environmental, social and governance ("ESG") issues in its private equity investments."[73]

The Environmental Defense Fund (EDF), which has worked on ESG strategies with prominent private equity firms such as Carlyle Group, KKR and Oak Hill Capital Partners, has developed an ESG Management Tool for Private Equity[74] that offers guidance for private equity firms to analyze, assess and improve their ESG performance. The free Excel based Tool enables users to evaluate performance across 22 best practice areas, including commitment and leadership from the top, access to ESG resources and expertise, integration of ESG management into the investment process and portfolio company operations, as well as measuring and reporting results.

This EDF initiative is part of a growing trend within private equity to improve communication between the General Partner (GP) and its Limited Partners that will better align investment practices with ESG considerations.[75]

The Institutional Limited Partners Association [ILPA), an industry group comprising more than 260 institutional investors in private equity with more the $1 trillion invested in this sector, has been engaging GPs in developing best practices that reflect "the value that comes with having direct accountability from private ownership of a business, not only to the investment industry but to the ultimate beneficiaries of this value creation—the pensioners, charities, educational foundations, employees and companies."[76] Additional ESG guidance in private equity can be found in publications prepared by the UN PRI.[77]

Private equity managers are recognizing the benefits of strengthening ESG practices and the rightful place of ESG analysis in due diligence of new investment opportunities. Other mainstream investors and managers should ask why they're not doing the same thing.

## 10.3 HEDGE FUNDS

Hedge funds are well suited to incorporate ESG analysis, but few do so because asset owners aren't demanding it. Long/short strategies, in particular, invest in well-managed companies having strong growth prospects and short companies that do not. With hedge fund capital under management exceeding $2 trillion[78] and many pension funds increasing allocations to hedge funds, it is vital for trustees and investment staff to understand how hedge funds govern themselves and how hedge fund returns may be affected by ESG risks. Only by asking questions and insisting on answers from their hedge fund managers will asset owners be investing in something other than a "black box."

The most sensible approach is to require ESG expertise, analysis and implementation from hedge fund managers. An alterative approach is to invest with hedge fund managers that are targeting companies that provide solutions to resource scarcity, better water management, energy efficiency and sustainable infrastructure. In taking the first steps, asset owners need to identify specialist asset managers with strong expertise in specific sectors. For instance, Water Asset Management has a long track record of working with global water companies to meet the growing needs of investors looking to allocate funds in this sector; TerraVerde Capital offers a diversified hedge fund of funds encompassing sustainability solutions in energy, water and infrastructure; Gabelli Asset Management manages a green long/short hedge fund seeking opportunities related to sustainable energy, water, agriculture and natural resources; and K2 Advisors constructs custom ESG hedge fund strategies for specific client needs.

Useful guidance for asset owners concerning ESG and hedge funds can be found in a discussion paper, *Responsible Investment and Hedge Funds*, prepared by PRI.[79]

## 10.4 REAL ASSETS

Real assets, such as real estate, agriculture and infrastructure, offer opportunities to diversify away from equities and reallocate risk away from climate risk factors, especially the consequences of increased regulation of greenhouse gas emissions. A survey of institutional investors by *Pensions and Investments*[80] found that real assets are generating average returns of 6% to 8%. They also represent a very small allocation—less than 3%—in most portfolios.

### a) Real Estate

Real estate investors who integrate sustainability can achieve near-term and long-term benefits.

The U.S. Green Building Council (USGBC) estimates that buildings account for 70% of electricity usage in the U.S.[81] so reducing electricity consumption through energy efficiency measures can generate benefits that are realized quickly and can be sustained over time. Tom Garbutt, Head of Global Real Estate for TIAA-CREF, is clear about the benefits of better energy and resource management:

> *Our experience has proven that energy efficiency can enhance the bottom line while protecting the environment at the same time. For these reasons, aggressive resource management goals are a critical component of how we manage our real estate investments on behalf of our clients.*[82]

Because buildings account for 39% of all carbon dioxide emissions[83] in the U.S., the combination of improving energy efficiency and incorporating renewable sources of energy both improves the bottom line and contributes to reduced greenhouse gas emissions.

In 2011, major global real estate investment managers created a sustainability benchmark to measure the energy efficiency and sustainability of their real estate investments—the Global Real Estate Sustainability Benchmark (GRESB) at www.gresb.com. Based on voluntary reporting of data that is collected, evaluated and published by GRESB, it is rapidly becoming the real estate benchmark for institutional investors who recognize that investment returns and building values can be enhanced through implementing operating efficiencies and basic sustainability measures.

While GRESB provides a sustainability benchmark for real estate portfolios, the Greenprint Foundation provides guidance for reducing energy usage and carbon emissions at the property level. With a membership of more than two dozen institutional investors and real estate managers, Greenprint through its case studies, white papers, toolkits and publicly available "Greenprint Performance ReportTM "provides a consolidated view of participating properties, detailing their current carbon footprint and providing an important benchmark against which the global real estate industry can measure its progress in reducing carbon emissions."[84]

The Property Working Group of the United Nations Environment Programme Finance Initiative provides real estate investors with additional guidance that includes case studies from both asset owners and asset managers.[85] Other entities, such as the real estate arm of Prudential Investment Management, have developed proprietary approaches for identifying sustainability solutions that improve efficiencies and reduce the environmental impact of investment properties.

The efforts of organizations such as GRESB and Greenprint provide investors with actionable information for making investment decisions and increase the investment community's knowledge regarding the business case for sustainability. Armed with such knowledge, it is expected that investors will make smarter decisions. Choosing to ignore this information could place such investors at risk in terms of reduced valuations for their portfolios, diminished prospects of attracting new investment, and exposure to technological obsolescence.

### b) Agriculture

Global population growth creates enormous demands on agriculture for food, clothing and even energy, especially biofuels used for transportation. To date, institutional investors have played only a small role—owning less than 1% of the approximately $2 trillion global farmland market.[86]

In 2011, eight global institutional investors who recognized the need to safeguard the long-term nature of their farmland investments, launched the Farmland Principles,[87] whose guidelines address sustainable management of the land and the environment, respect for the human and land rights of local populations and an overall commitment to transparency and high ethical standards in their farmland activities.

TIAA-CREF, one of the original signatories to the Farmland Principles, in the first paragraph of its 2012 report, *Responsible Investment in Farmland*, gives sustainability a central place in its farmland investing strategy: "TIAA-CREF believes that ethical conduct, responsible stewardship of the environment, and respect for those with whom we do business are critical to the long term performance of our investments."[88] The report outlines how TIAA-CREF assesses key social and environmental factors in advance of investments and throughout the lifetime of the investment.[89] TIAA-CREF applies these sustainability criteria to more than $500 million in farmland investments around the world.

### c) Infrastructure

Infrastructure investment sits at the critical intersection of long-term value creation for investors and the transition to a low carbon economy. Infrastructure investments can provide stable alternative long-term returns, and many asset owners are increasing their allocations to this asset class. As infrastructure projects attract more capital from investors concerned about managing long-term investment risk in the pursuit of investment returns, the lens of ESG will be increasingly focused on key ESG factors that can affect return on investments for projects such as public transit, hospitals, schools, tunnels, bridges, ports, power generation, electric grids, alternative energy sources, energy efficiency, flood mitigation, and water purification, delivery and management.

Among the ESG factors they will have to consider are greenhouse gas emissions, the consequence of reduced access to water and/or higher prices, energy costs and use, the sourcing of materials, new regulatory environments, the impact of new infrastructure projects on local populations, the involvement of community stakeholders in decision-making, and the practices of project developers and managers whose workmanship will directly affect investment returns.

While institutional infrastructure investors have not yet developed "green" standards comparable to those to the Farmland Principles or GRESB, sustainability criteria for infrastructure investments is evolving as coalitions of infrastructure investors and project developers are forming, and infrastructure managers, such as the Dutch pension manager APG, are incorporating ESG factors in their due diligence and ongoing fund management:

> *Various infrastructure investments that contribute to our risk-return objectives also contribute to the manner in which we deal with important social and environmental challenges, such as the battle against climate change. Examples of this include investments in sustainable energy, services in the field of water supply and polluted water, environmental services, schools and hospitals. Directly and indirectly, via our external managers, we try to set up investment projects that add value with regard to these two aspects.*[90]

As investors commit capital to real assets that combine competitive returns with "green," low carbon and other sustainability characteristics, investors will

- benefit from lower correlations to equities,
- diversify risk away from carbon and climate sensitive assets,
- shift expectations for investment return towards a longer time horizon, and
- contribute to an economic growth model less dependent on fossil fuels and resource depletion.

Investors need to remain diligent in this asset class to manage risk, enhance returns and maintain their ESG sustainability principles to ensure that these long-lived assets generate sustainable long-term returns.

## INVEST IN SOLUTIONS FOR SUSTAINABILITY CHALLENGES

New investments will be needed to meet human needs and maintain a sustainable economy. It is estimated that between $750 billion and $1 trillion in annual investment[91] is needed to build a clean energy economy that avoids the worst effects of climate change.[92] In addition, new resilient infrastructure will be needed to provide food, transportation, water and energy to 9-10 billion people, and to adapt to the unavoidable impacts of climate change. The projected population growth will further stress the earth's resources, which we are currently consuming at about 1.5 times the planet's ability to replenish or sustain such consumption. Clearly, the world needs to use natural resources much more efficiently to meet the needs of future generations and maintain viable ecosystems.

Asset owners should be asking their consultants, investment staff and investment managers to be alert for thematic investment opportunities that address climate, clean energy and resource efficiency solutions. Where there is a need for private capital to finance these solutions, there are opportunities for investors to make profits. Many sustainability solutions already exist and can be brought to scale; and others are now routinely coming to market. The opportunity set of sustainable investment strategies is increasing, and evidence of demand by leading asset owners can accelerate the development of such institutional quality investment solutions.

Some examples of sustainable investment opportunities and investors targeting such solutions include:

- $2.5 billion dollar investment by MidAmerican Solar, a subsidiary of Warren Buffett's Berkshire Hathaway, in two photovoltaic projects, which brought their total solar investment over two years to $4.5 billion;
- $600 million investment by New York State Common Retirement Fund with a sustainable fund manager;
- $2 billion investment by TIAA-CREF in farmland in the U.S., Australia and Brazil;
- $230 million investment by the infrastructure group of the Ontario Municipal Employees Retirement System in four U.S. wind farms;
- $1 billion of 3 year AAA bonds issued by the IFC tied to climate investments;
- $500 million of 5 year bonds issued by the Export-Import Bank of Korea to finance green energy projects;
- C$450 million of 17 year BBB bonds issued by Brookfield Renewables in Canada for a 166MW wind farm.

Where risk-adjusted returns are competitive, investing in solutions supports a sustainable economy and the multi-generational interests and fiduciary duty of the fund.

# CONCLUSION

The 10 steps presented in this *Investor Blueprint* will help institutional investors make better judgments concerning new and evolving investment risks and opportunities. Each step in the *Blueprint* offers guidance for integrating environmental, social and related governance factors into investment processes and practices to facilitate truly "sustainable" investing.

The business case and the fiduciary duty case for taking these steps will only grow stronger, and trustees, consultants and investment professionals ignore them at their peril. Our long-term goal is for this *Blueprint* to become unnecessary because attention to sustainability issues will be fully embedded in the decisions investors make.

**Because *The Ceres Investor Blueprint* is a virtual owner's manual for implementing sustainable investment practices, signatories to the PRI should find it a practical tool for implementing the PRI Principles. The *Blueprint* includes many references to various PRI materials that provide useful guidance and additional examples of best practices.**

| PRI PRINCIPLES FOR RESPONSIBLE INVESTMENT | CERES BLUEPRINT FOR SUSTAINABLE INVESTING |
|---|---|
| **Principle 1:** We will incorporate ESG issues into investment analysis and decision-making processes | **Steps 1-7 & 10** |
| **Principle 2:** We will be active owners and incorporate ESG issues into our ownership policies and practices | **Step 8** |
| **Principle 3:** We will seek appropriate disclosure on ESG issues by the entities in which we invest. | **Step 9** |
| **Principle 4:** We will promote acceptance and implementation of the Principles within the investment industry. | **Step 9** |
| **Principle 5:** We will work together to enhance our effectiveness in implementing the Principles. | **Step 9** |
| **Principle 6:** We will each report on our activities and progress towards implementing the Principles. | **Step 9** |

# APPENDIX A

## THE BUSINESS CASE FOR INTEGRATING ESG ANALYSIS

ESG performance criteria often concern corporate policies, processes, behaviors and accountability and cannot be measured as precisely as such traditional financial criteria as sales, revenues, debt to equity, price to earnings, and other traditional financial metrics. Consequently, many investors remain skeptical about the importance of ESG considerations to company analysis and investment returns. For many investors these biases are deep-seated, and until recently there was little evidence to substantiate that ESG risks and benefits are material—or that incorporating environmental, social and governance standards into investment decisions can benefit financial performance and portfolio returns.

During the past few years there has been a steady accumulation of evidence that affirms a positive correlation between sustainable business practices and financial performance. The evidence—both from academic studies and market performance—also shows three important findings concerning the performance of investment strategies that incorporate ESG factors: 1) skilled active managers that employ ESG analysis can outperform standard benchmarks; 2) passive strategies that integrate ESG analysis can outperform traditional benchmarks; and 3) there is no inherent performance penalty from employing ESG analysis.

Recognizing that no single "silver bullet" validates ESG integration as an investment imperative, CalPERS collaborated with the University of California at Davis to convene a sustainable investment symposium[93] of academics and investment professionals who had studied sustainability from different perspectives. The presentations, which are part of an ongoing assessment by CalPERS into ESG's contribution to portfolio return, examined sustainability in the context of financial capital, physical capital and human capital on topics as varied as corporate social responsibility and asset pricing, corporate governance and the environment, stakeholder relations and stock returns, and active ownership.

### EVIDENCE OF MATERIALITY: SUSTAINABILITY AND CORPORATE PERFORMANCE

Most studies concerned with ESG examine how corporate practices concerning ESG issues impact the financial performance of companies. The data supporting this analysis is substantial and growing.

The strongest of these studies examine the relationships between sustainable business strategies and financial performance over periods greater than a decade. The evidence is striking and underscores the value not only of investing in companies that have implemented sustainable strategies, but also of actively engaging companies in the investment portfolio that haven't yet done so, or done it only ineffectually. This process of engagement is particularly valuable for investors having broad market exposures.

One of the most far-reaching studies[94] tracked 180 companies over an eighteen year period between 1993 and 2011. Half of them had adopted high sustainability policies and practices by the start of the study, and half had not. The two sets of companies, which were drawn from the same sectors and were of comparable size, capital structure, and financial performance at the start of the study, showed materially different results over time. The ninety companies that had committed to aspects of sustainability, including reduced carbon emissions, energy and water efficiency strategies, diversity, human rights and green supply chain policies generated an average annual return 4.8% higher than the set of 90 companies that approached similar sustainability issues as externalities not core to the company's strategy.

In another long-term study Wilshire Associates used a different sampling of companies. Specifically, Wilshire examined a list of companies singled out by the California Public Employees Retirement System (CalPERS) to improve their governance practices during the past two decades. Wilshire found that the companies on the CalPERS Focus List produced cumulative returns averaging 39% below their benchmarks in the three years prior to CalPERS taking action and 17% above their benchmark returns for the five years after the engagement initiative.[95]

The most complete and compelling summary of evidence, focusing on ESG performance, was compiled by Deutsche Bank Climate Change Advisors.[96] Its staff reviewed more than one hundred studies of sustainable investing that looked at both company performance and fund performance. A striking finding at the company level indicated that

> *89% of the studies we examined show that companies with high ratings for ESG factors exhibit market-based outperformance," and "100% of the academic studies agree that companies with high ratings for CSR and ESG factors have a lower cost of capital in terms of debt (loans and bonds) and equity. In effect, the market recognizes that these companies are lower risk than other companies and rewards them accordingly. This finding alone should put the issue of Sustainability squarely into the office of the Chief Financial Officer, if not the board, of every company.*[97]

Thus, companies with strong sustainability strategies, cultures and performance are attractive investments and likely to outperform their less sustainable peers. If the CEO, CFO and the Board are not paying attention to factors that can contribute to financial outperformance and reduce the cost of capital, then investors—whose ownership gives them a clear stake in both—can prompt change through active engagement.

## EVIDENCE OF MATERIALITY: SUSTAINABILITY AND FUND PERFORMANCE

To better understand the impact of ESG on fund performance RCM Capital Management, part of Allianz Global Investors, studied the performance of stocks between 2006 and 2010, a period that encompassed a growing market, a crash and subsequent rebound. Pool selection data was obtained from MSCI ESG Research, which provides ESG profiles for approximately 2,000 companies worldwide. Five different equity portfolios were created based on ESG performance. All stocks in the analysis were members of the MSCI World, MSCI Europe, and/or MSCI US indices, and were weighted equally. The resulting 2011 white paper by RCM, "Sustainability: Opportunity or Opportunity Cost," reported that that the top quintile portfolio of global Best-in-Class ESG companies outperformed the benchmark MSCI Equal World Index by 1.7%, while the bottom Worst-in-Class portfolio underperformed the benchmark by 1.0%.[98] Within the top portfolio, European stocks outperformed the benchmark by 2.3% and U.S. stocks outperformed it by 1.9%. The results of the RCM report provide meaningful evidence that portfolio performance can be positively impacted by the introduction of ESG criteria into the stock selection process.

Another investment manager, Sustainability Asset Management (RobecoSAM) reported in its 2011 white paper, "Alpha from Sustainability," alpha is created by exploiting under-researched factors, such as sustainability initiatives, and integrating them into traditional financial analysis. Based on a data set of almost 500 companies that responded to an annual Corporate Sustainability Assessment between 2001 and 2010, RobecoSAM found a positive relationship between corporate sustainability and financial performance as measured by stock returns. The results revealed a positive relationship during both crisis and post-crisis periods, indicating that portfolios with more high-quality sustainable companies have better risk characteristics. A portfolio of sustainability leaders outperformed an overall sample by 1.74% annually, while a portfolio of sustainability laggards underperformed the overall sample by –1.87% annually.[99] Results also suggest that the best performing investment strategy consists of maintaining long positions on sustainability leaders and short-selling sustainability laggards. RobecoSAM's findings provide credible evidence that adopting corporate sustainability best practices does not contradict or detract from a company's primary objective of maximizing shareholder returns.

A study by academics led by Olaf Weber[100] examined the returns of a portfolio of 151 SRI funds between 2002 and 2009, a period of high market volatility that encompassed both bull and bear markets, and compared those results to the MSCI World Index. They also examined the relation between financial and sustainability ratings to the return of the SRI funds. The study found that "the SRI fund-portfolio had a higher return during all periods compared to the MSCI World Index"[101] and that socially responsible investing combined with in-depth financial analysis suggests an optimal condition "to create a positive financial return for the investor."[102]

Deutsche Bank's analysis of SRI studies also included a review of studies that examined performance of SRI funds, most of which used exclusionary screens. These funds, which pre-date the introduction of "best-in-class" ESG funds designed to reduce tracking error versus the major indexes, have generally been thought to offer their investors a values-based portfolio at the expense of return. The Deutsche Bank analysis rebuts this long-standing misconception, finding "no academic studies that found underperformance at either the security or the fund level."[103] Deutsche Bank concluded that "there are superior risk-adjusted returns for investors, but managers need to take the right approach toward sustainable investing to capture these."[104]

The findings by RCM, RobecoSAM, Weber and Deutsche Bank that strategies incorporating ESG generally deliver returns competitive with non-ESG strategies is borne out by the oldest index that integrates ESG factors: the MSCI KLD 400 Index, originally known as the Domini 400 Index. In the 23 years since its inception (4/30/90), this index has outperformed its benchmark by 42 basis points, 9.94% versus 9.52% annualized, as of April 30, 2013.[105]

The evolution from traditional values-focused SRI funds to best-in-class ESG funds has been a recent development for which no long-term studies are available. However, a comparison of indexes over the short-term is instructive. In 2007 MSCI created the EAFE ESG index, which, to reduce tracking error, has similar sector and region weights as its parent, the MSCI EAFE index. Over the 3-year period ending 4/30/13, the EAFE ESG index bettered the standard EAFE index by an annualized 101 basis points (8.97% vs 7.96%).[106]

The index comparison is particularly useful because it is as close as one can get to a straight apples-to-apples comparison. Other indices may perform very differently, and once new variables are introduced—management fees, the skill of the manager, the fund strategy and risk profile—the ESG impact on investment return can be enhanced or neutralized. In sustainable investing, as in all investing, there are no performance guarantees, but increasingly investors ignore ESG strategies and performance criteria at their peril.

# SUSTAINABLE INVESTMENT STRATEGY FUND RETURNS

This sampling of funds demonstrates that sustainable investment strategies can offer competitive returns and can outperform their benchmarks. This selection from active managers and index providers does not establish that there is a performance premium to such sustainable strategies for these or any other time frames, but it helps to refute the common and increasingly unsupported belief that the integration of ESG criteria has a performance penalty. These examples are for illustrative purposes only and do not constitute recommendations or endorsement by Ceres or INCR of these or any other investment products or strategies.

| Examples of ESG Funds & ESG Indexes That Have Outperformed Their Benchmarks | | | | | | |
|---|---|---|---|---|---|---|
| **Fund Manager** | **Fund** | **Period** | **Fund Return (net of fees)** | **Benchmark Return** | **Benchmark** | **As Of** |
| ClearBridge Investments | International Value Equity ESG | 10 Years | 6.70% | 6.50% | MSCI EAFE | 3/31/14 |
| Impax Asset Management | Specialists Strategy | 10 Years | 10.10% | 6.97% | MSCI ACWI | 3/31/14 |
| Parnassus Funds | Core Equity Fund (Institutional) | 10 Years | 9.71% | 7.42% | S&P 500 | 3/31/14 |
| Portfolio 21 | Global Equity (PORIX) | 10 Years | 7.21% | 6.97% | MSCI ACWI | 3/31/14 |
| RobecoSAM | Smart Energy Strategy | 10 Years | 7.55% | 6.83% | MSCI World | 3/31/14 |
| RobecoSAM | Sustainable Water Strategy | 10 Years | 9.58% | 6.83% | MSCI World | 3/31/14 |
| Ardsley Partners | Renewable Energy Fund | 7 Years | 8.60% | 5.76% | S&P 500 | 4/30/14 |
| Boston Common Asset Management | International Equity | 7 Years | 2.10% | 1.30% | MSCI EAFE | 3/31/14 |
| Trillium Asset Management | Large Cap Core | 7+ Years Inception: 1/1/07 | 6.80% | 6.20% | S&P 500 | 3/31/14 |
| Gabelli / GAMCO | SRI Fund (Class C) | 5 Years | 18.15% | 17.80% | MSCI ACWI | 3/31/14 |
| Impax Asset Management | Water Strategy | 5 Years | 22.20% | 17.80% | MSCI ACWI | 3/31/14 |
| Pax World | Global Environmental Markets | 5 Years | 19.45% | 18.28% | MSCI World | 3/31/14 |
| TIAA-CREF | Social Choice | 5 Years | 13.07% | 13.04% | Composite of Russell 3000, Lehman Aggregate & MSCI EAFE+Canada | 4/30/14 |
| ClearBridge Investments | International Value Equity ESG | 3 Years | 9.70% | 7.20% | MSCI EAFE | 3/31/14 |
| Essex Investment Management | Global Environmental Opportunities (GEOS) | 3 Years | 10.80% | 10.80% | MSCI World | 3/31/14 |
| Terra Verde Capital Management | Terra Verde Capital Partners LP | 3 Years | 11.16% | 7.23% | HRFI | 3/31/14 |
| Essex Investment Management | Global Environmental Opportunities (GEOS) | 1 Year | 38.41% | 19.72% | MSCI World | 3/31/14 |
| Trillium Asset Management | Fossil Fuel Free Core | 1 Year | 24.70% | 22.00% | S&P 1500 | 3/31/14 |

| Benchmark Comparisons | | | | | | |
|---|---|---|---|---|---|---|
| **Index Provider** | **ESG / Sustainable Index** | **Period** | **ESG Index Return** | **Benchmark Return** | **Benchmark** | **As Of** |
| MSCI | MSCI KLD 400 | 24 Years | 10.36% | 9.96% | MSCI USA | 4/30/14 |
| FTSE | Environmental Opportunities USA | 5 Years | 24.00% | 21.20% | FTSE USA | 3/31/14 |
| MSCI | MSCI World ESG | 5 Years | 18.50% | 18.28% | MSCI World | 3/31/14 |
| S&P | US Carbon Efficient | 5 Years | 21.39% | 21.16% | S&P 500 | 3/31/14 |
| MSCI | MSCI EAFE ESG | 3 Years | 8.20% | 7.20% | MSCI EAFE | 3/31/14 |

Disclaimer: The funds cited above are selected examples and should not be considered representative of all ESG funds or any particular subset strategy or theme. Performance varies over time and past performance is not an indicator of future performance. All performance data noted above should be considered estimated and unaudited. Ceres is not responsible for the accuracy of data supplied by third parties or from public sources. Ceres does not endorse any such funds, managers or investment strategies and does not provide investment advice. Investors should not act upon the above information without obtaining professional investment advice.

# APPENDIX B

# EXAMPLES OF INVESTMENT BELIEFS THAT INCORPORATE ESG

## PENSION FUNDS

### *U.K. Environment Agency Active Pension Fund*[107]

#### INVESTMENT STRATEGY

Our investment strategy will seek to take account of the relationship between good environmental management and long-term sustainable business profitability. We will seek to overlay this environmental strategy across our investment portfolio. We recognise that when the strategy is applied to investments in equities, bonds, gilts, property and private equity, this will involve considering different approaches, constraints, risks, opportunities and potential benefits. Our main influence will be through our strategic asset allocation, manager structure, manager election, performance benchmarks, monitoring, and reporting—and not by getting involved in the day-today investment decisions, which is the role of our asset managers. We will encourage our fund managers to use research on various environmental risk and/or "green" performance rating/ranking tools to identify and avoid financial risks attributable to environmental issues, such as climate change, that could impact negatively on investment returns. We will, through monitoring their performance, ask our fund managers to explain and justify financially any investment decisions, for example on stock selection, which in our view are environmentally controversial. We will favour investing on a positive "best in class" selection basis, and encourage the use of engagement rather than negative screening.

### *Norges Bank and the Norwegian Government Pension Fund*[108]

*Section 1. Norges Bank's work on responsible management*

(2) The Bank shall integrate considerations of good corporate governance and environmental and social issues in its investment activities, in line with internationally-recognised principles for responsible investment. Integration of these considerations shall occur in respect of the Fund's investment strategy and role as financial manager. In executing its management assignment, the Bank shall give priority to the Fund's long-term horizon for investments and that these are broadly placed within the markets included in the investment universe.

(3) The Bank shall develop internal guidelines that indicate how the considerations expressed in paragraph two are integrated into the investment activities of the various asset classes, for both the internally and the externally managed parts of the portfolio. In its management of the real estate portfolio, with regard to environmental protection the Bank hall give priority to considerations of energy efficiency, water consumption and waste management.

### *Stichting Pensioenfonds ABP [National Civil Pension Fund, Netherlands]*[109]

#### RESPONSIBLE INVESTMENTS

ABP feels it has an obligation to achieve the highest possible return for participants. In doing so, we believe that companies with strategies which, in addition to financial return, place a high value on the environment, social factors and good corporate governance will perform better in the long term. In addition, we are aware of the far-reaching influence of our investments and the social responsibility that this implies. The reason for this is the large amount of capital that we invest and our substantial position in the capital market. For this reason, we have chosen to implement a strong ESG policy.

#### THE LONG TERM

As a long-term investor, ABP places a priority on the long-term goals of the companies in which it invests. Sustainable economic growth, as well as information on environmental, social and corporate governance issues, are all important factors in our investment analysis. These topics are not always covered in a company's Financial statements, but they are particularly relevant for a long-term investor such as ABP. We believe that the companies in which we invest must take their stakeholders' interests into account. These include shareholders and other suppliers of capital, employees, customers, suppliers and the environment. We believe that companies must take appropriate account of all these parties in their efforts to earn a profit. If stakeholders act in the same spirit we can create a virtuous circle of responsible business. Our activities in the area of ESG do not represent a goal in and of themselves. ESG helps us to discharge primary responsibility by increasing return and lowering risks. We keep implementation of our policy in these areas under constant review.

### *Australian Christian Superannuation Fund*[110]

#### 3.5 RESPONSIBLE INVESTMENT IS CONSISTENT WITH FIDUCIARY DUTY

Ultimately, the ability of investments to deliver return to investors depends on their long-term ability to generate positive earnings. Companies that operate in a responsible and sustainable manner are better placed to continue operation well into the future. Companies that take excessive social or environmental risk are likely to exhibit volatile performance when those risks eventuate. The Fund believes that, all other things being equal, a company that is operating in a sustainable and responsible manner will be better positioned to deliver long term return on investment. The Fund believes this to be true, regardless of the moral imperative from the Fund's members to invest in accordance with biblical values.

### *Australian Super*[111]

As a long-term investor, AustralianSuper is aware that environmental, social and governance (ESG) issues may affect its investments. As trustees, AustralianSuper is required to assess and manage all foreseeable risk factors effectively. AustralianSuper considers ESG as an investment-related risk.

AustralianSuper's general ESG investment beliefs are:

- Our fiduciary duty to members is critical. Appropriate ESG investment activities will be explored, but will not be undertaken at the expense of its fiduciary duty. Usual investment criteria apply.
- We strive to 'think globally, act locally'. We acknowledge that ESG issues can have global consequences, but realise they can have the greatest impact where we have a direct influence.

AustralianSuper understands that:

- ESG can have an impact on investment valuations
- ESG investment considerations will develop over time
- Evolvement within AustralianSuper's investments will be progressive; and
- AustralianSuper does not seek to have an 'exclusionary' approach, but to have an 'engagement' approach towards ESG

## ASSET MANAGERS

### *Generation Investment Management*[112]

#### INVESTING FOR THE LONG-TERM

Numerous studies show that most of a company's value is determined by its long-run performance, and in our view a short-term orientation has significant negative repercussions for businesses and the global economy. If businesses are forgoing value-creating investments to manage short-term earnings, this will damage their long-term prospects. A short-term perspective hinders innovation and research and development, diminishes investment in human capital, encourages financial gymnastics and discourages leadership. We believe outperformance requires a long-term outlook.

#### SUSTAINABILITY AS MATERIAL TO BUSINESS AND MARKETS

Central to our investment philosophy is the explicit recognition that sustainability factors directly affect long-term business profitability. The interests of shareholders, over time, will be best served by companies that maximize their financial performance by strategically managing their economic, social and environmental performance.

#### A SYSTEMIC VIEW OF GLOBAL CHALLENGES

When considering sustainability, Generation focuses on the entire spectrum of interrelated factors. This means judging solutions on a life-cycle basis and considering the complete set of inputs, costs and externalities. Sustainability challenges are increasingly interconnected: the climate crisis and poverty, pandemics and demographics, water scarcity and migration/urbanization. We never consider sustainability challenges in isolation.

#### SUSTAINABLE DEVELOPMENT AS ECONOMICALLY TRANSFORMATIVE

Today, the global context for business is clearly changing—capital markets and capitalism are at a critical juncture. We are convinced that the transition from a high-carbon to low-carbon economy will be the most significant process in modern economic history—matching the Industrial Revolution in scale, and the technological revolution in pace. We believe investors are increasingly aware of the materiality of this transition for business, and we think financial markets have a significant opportunity to chart the way forward. In fact, we believe sustainable solutions will be the primary driver of industrial and economic development for the coming decades.

### *Trillium Asset Management*[113]

We believe companies with strong environmental, social, and governance (ESG) profiles are better managed for the long term, have lower risk profiles, and are positioned to outperform their peers. We engage directly, through shareholder engagement and advocacy, and indirectly, through allocating capital to companies and sectors with positive economic, ecological, and social impact.

### *APG [Dutch manager of pension fund assets]*

APG's commitment is to create value for its pension fund clients—and being a responsible investor is an integral part thereof. We seek to understand how a company creates and sustains value. This is not only its financial performance, but how it manages its workforce and natural resources and whether it has the right incentives to create long-term value for shareholders and stakeholders alike, that matters.[114]

Environmental challenges such as climate change and the depletion of biodiversity; social issues such as human rights and the way that business affects local communities; corporate governance issues such as executive pay and compliance with accounting standards—all these can affect the financial performance of our investments over the long term. Integrating this understanding into our investment decisions is fundamental to serving the participants' financial interests.[115]

### *Portfolio 21*[116]

The business and investment case for environmental sustainability has become increasingly clear and the corporations that are embracing it are strategically positioned to prosper in the 21st Century.

The investment strategy behind Portfolio 21 is an understanding that adaptation to changing global environmental investment risks is inevitable. The earlier this thinking is integrated into business practices, the more natural capital we'll be able to retain for future generations, and the greater the economic stability we will be able to achieve.

We believe companies that prove this understanding by innovating with environmental sustainability strategies have a real competitive advantage today and are poised for further leadership and innovation in the future.

### *Pax World*[117]

The Pax World sustainable investing approach fully integrates analysis of macroeconomic and market trends, fundamental security-specific financial data, environmental, social and governance (ESG) factors, and disciplined portfolio strategies. Our efforts are focused on building investment portfolios comprised of well-managed, forward-thinking companies that are leaders in their industries, are focused on the long term, can anticipate and mitigate risk, and that embrace high standards of corporate responsibility.

Factors that are considered include companies' impact on the environment and policies to mitigate those impacts; corporate treatment of and policies regarding workers, vendors and suppliers, and communities covering such issues as, respectively, diversity and inclusion, workplace standards, and the rights of indigenous peoples; and governance structures, actions and accountability to shareholders. All of these factors, if they are managed well and disclosed publicly, are indicators of the quality of management and the ability of companies to thrive.

### *Boston Common Asset Management*[118]

We believe Environmental, Social, and Governance (ESG) research helps us find companies that could benefit over the long-term from three sources:

- **Visionary management** teams should capitalize on new market opportunities and revenue streams.
- **Productivity and efficiency improvements** should support higher profit margins.
- **Unanticipated costs** stemming from inadequate attention to ESG risks can be avoided.

As a result, we believe we can enhance portfolio quality, return potential, and risk reduction by integrating sustainability with financial research.

### *MFS Investment Management*[119]

Our clients appoint us as fiduciaries to help them achieve their investment objectives over the long term. Generally, our clients' objective is to maximize the financial return of their portfolio within appropriate risk parameters. To help our clients achieve this objective, we employ an investment approach that generally focuses on companies with sustainable, long-term competitive advantages. We are aware that certain environmental, social and corporate governance (ESG) issues often impact sustainable value of businesses. We therefore integrate ESG factors into our investment process and our ownership practices to the extent that the integration of such factors is consistent with our fiduciary duty to help our clients achieve their investment objectives and protect their economic interests.

## FOUNDATIONS

### *Needmor Fund*[120]

#### XI. MISSION RELATED AND SOCIAL GOALS AND RESTRICTIONS

In keeping with its mission of seeking to empower traditionally disadvantaged populations, the Needmor Fund believes it has a responsibility to use its resources to promote health and human dignity and to give special attention to the needs of the poor.

Therefore, the Needmor Fund will include in its investment decisions a consideration of the social impact of corporate behavior. In deciding where to invest its resources, the Needmor Fund will seek to promote social justice and world peace. We encourage transparency and accountability of corporations and encourage disclosure to affected stakeholders. We support corporate cooperation with efforts to require higher standards of public disclosure and to cooperate with independent monitoring and social auditing.

#### C. ENERGY

The Needmor Fund believes that energy should be produced in a safe, clean and efficient manner and that energy conservation should be encouraged. In a growing world with shrinking natural resources, well-conceived energy policies and practices are increasingly important for the economic health and safety of local communities. Until nuclear energy can be produced safely and cost effectively with adequate provisions for long-term waste disposal and plant decommissioning, the Fund regards nuclear power generation as a substantial social and financial risk. The Fund is interested in supporting alternative energy development, the potentially safe use of nuclear energy, and energy conservation.

#### E. ENVIRONMENT

The Needmor Fund wishes to support efforts to produce a cleaner environment. Given that corporations play a substantial role in environmental issues, the Fund wishes to encourage improvements in this area by investing in those firms whose environmental records are average or better for their industry, and avoid investment in those firms that have below average environmental records. We like to invest in companies with Board and management commitment to environmental issues, including an environmental policy statement, incentive packages that reflect positive and negative environmental performance, and demonstrated support for strong public environmental policies.

### G. COMMUNITY RELATIONS

Needmor believes in organizations being accountable to those affected by their actions.

Therefore we prefer to invest in companies that are accountable to all stakeholders, including employees, consumers and the communities in which they are located. This is exhibited by responsiveness to the various stakeholders and a willingness to report on practices. Needmor is concerned about predatory lending practices in poor communities.

# APPENDIX C

## EXAMPLES OF ESG QUESTIONS IN RFPS

### *New York City Employee Retirement System (NYCERS)*[121]

**ESG QUESTIONNAIRE ITEMS**

1. Is your firm a signatory to the Principles for Responsible Investment? What ESG-related organizations are you a member of and/or in what initiatives has your firm participated?

2. What is your firm's position on the investor perspective that environmental, social and governance (ESG) factors are risk factors which can have a material impact on investment performance. Does your firm support the concept that companies can enhance value and long-term profitability by incorporating ESG factors into their strategic plans?

3. Does your firm have a policy that incorporates Environmental, Social and Governance (ESG) issues into the investment decision-making process? Are these issues considered separate and apart from traditional financial criteria. Please elaborate on your policy. If there is no specific attention to ESG issues, explain why.

4. If your firm embraces the importance of ESG factors, has the board of directors or management adopted a related policy and procedures for applying ESG factors in the firm's investment decision-making process?

5. Has your firm established a board or management committee with responsibility for reviewing the firm's ESG investment standards and monitoring compliance?

6. Which ESG issues do you assess in company evaluation and how do you assess their relevance to the company's long-term business prospects? Examples include, but are not limited to, corporate governance structure, climate change, supply chain integrity, labor practices, and human resource management.

7. How do you evaluate and monitor compliance with your ESG policy? Does your firm have staff dedicated to integrating ESG issues in the investment decision-making process? Does your firm have staff dedicated to compliance with the policy?

8. Does your firm allocate resources, including an internal staff and/or external services, to review and evaluate sustainability reports of companies whose securities are held in client accounts and/or are potential investments under consideration? If employ internal staff, please describe how it is positioned and interacts within your firm's organizational structure. Please indicate relative allocation of ESG resources at the country, sector, and company levels.

9. Does the internal structure/staff prepare periodic reports on its review and evaluation of invested company ESG/sustainability reports? If yes, does your firm require that such reports are structured in accordance with generally accepted protocols for compiling, measuring, and presenting information, such as the technical protocols for indicators contained in the GRI (Global Reporting Initiative) Guidelines? Are such reports reviewed by senior management and the board/leadership? In addition, are they also available for viewing by clients?

10. Are you willing to report to the New York City Retirement Systems on the role of ESG issues in your investment process?

11. Do you purchase or outsource ESG ratings? If so, from whom.

12. How, and to what extent, does your firm engage on ESG issues with the companies in which you invest? What are the reasons behind such the engagement and on what issues do you typically engage? Do you have a method of evaluating your engagement with companies? If so, please describe. If you do not engage, explain why.

13. In addition to the application of ESG in its investment decision-making process, has your firm adopted an ESG/ sustainability policy and implementation process and procedures for its overall business operations? If yes, describe the management and /or board structure, process and procedures in place to ensure full implementation and compliance.

14. Does the firm have a proxy voting policy? If yes, does the firm vote its own proxies, or does a third party provider? Who at the firm is responsible for proxy voting? Do vote proxies according to ESG issues?

### *Wespath*

(The investment management division of the General Board of Pension and Health Benefits of The United Methodist Church)[122]

Request for Proposal—ESG Questions

1. Is your organization a signatory to the UNPRI? If not, why?

- The General Board of Pension and Health Benefits helped draft the Principles for Responsible Investment. Signatories make several commitments including incorporating "ESG issues into investment analysis and decision-making processes." In accordance with Principle 4 ("We will promote acceptance and implementation of the Principles within the investment industry")

2. What type of ESG issues do you consider when making investment decisions?

- ESG issues cover a broad spectrum of investor concerns. The RFP gives the investment manager the opportunity to identify the ESG issues that are most important to his/her investing philosophy and strategy.

- One Wespath manager, for example, has identified corporate governance (board make-up, skills and experience) as particularly important. Another has identified climate change.

3. As an organization we pride ourselves on being a socially responsible investor. We require our managers to screen certain issuers and industries. Describe how you would be able to follow these guidelines.

- Long before the *Principles for Responsible Investment* were drafted, the General Board applied social screens to its investment portfolio. Based on statements found in the Church's Social Principles, *Book of Discipline* and *Book of Resolutions*, Wespath generally avoids investing in companies whose primary business is:
  - Alcoholic beverages
  - Tobacco products
  - Pornography
  - Gambling
  - Weapons
  - Ownership/management of prisons

4. How do you measure your success as an asset manager with ESG expertise?

- This question allows managers to identify their ESG strengths, strategies and accomplishments. One Wespath investment manager explained its in-house research process, which covers both financial and non-financial factors.

5. How do you train your investment professionals on ESG issues?

- For some investment managers and financial professionals, the consideration of ESG issues is a relatively new activity. In order to consider ESG issues carefully and thoroughly, some managers might benefit from specific training or education on how to incorporate ESG factors into investment analysis.
- Wespath seeks ESG training opportunities for its own employees and encourages its managers to take advantage of similar educational opportunities—all Wespath investments staff members have completed the Responsible Investing Essentials program offered by the Responsible Investing Academy.

6. Please describe the scope of all ESG activities your parent organization is involved with.

- Some investment managers are subsidiaries of other entities. This question gives the investment manager an opportunity to describe the activities of its parent organization.

## *Australian Super*[123]

ESG in RFP Questions:

i. Environmental, Social and Governance Integration
   a. Do you integrate environmental, social and governance (ESG) issues into your investment process? (Yes/No)
      i. If Yes—Explain how you integrate it into your process and valuations of companies. Please also submit a copy of your ESG investment policies you have and explain how you adhere to your policies.
      ii. If No—please outline why not?
   b. What is your Mercer ESG score? Please provide any relevant comments.

ii. Proxy Voting
   a. Please submit a copy of your Proxy Voting Policy.
   b. How is your proxy voting implemented? Do you use a proxy voting service?
   c. Over the last 12 months, how often have you voted "Against" or "Abstain" on Company/Management resolutions? How did you communicate this to the company?

iii. Engagement
   a. Do you engage on ESG issues with your portfolio companies?
   b. Over the last 12 months, please outline any major ESG issues you have engaged a company on and any outcomes?
   c. How do you monitor and measure your engagement activities?

iv. Research
   a. Do you conduct any in-house ESG research?
   b. What ESG research and/or database do you subscribe to?
   c. Do you pay dedicated brokerage commission for ESG research? Is ESG a factor in selecting your Broker panel? If so, what percentage (%) does it comprise of your panel/vote?
   d. How much brokerage commission have you paid for ESG research in last 12 months?

v. Investor Groups
   a. Which investor groups are you a member of and outline where you are active in the group.
   b. Are you a UNPRI signatory? (Yes/No)
      i. If Yes—please submit your last UNPRI report
      ii. If No—please outline why not.

SBA FLORIDA
INVESTING FOR FLORIDA'S FUTURE

**STATE BOARD OF ADMINISTRATION**
**Investment Protection Principles**
**2009 Compliance Certification**
**Investment Management Organizations**

### Acknowledgement

- ❒ We hereby acknowledge receipt of the December 22, 2009 e-memorandum from the Inspector General of the SBA regarding Investment Protection Principles (IPPs) compliance procedures and reporting requirements.

### Designation of Contact Person

- ❒ We will provide the SBA with changes in the assignment of the IPPs contact person within 15 days of occurrence.

### Client Relationships

- ❒ We certify that in all instances where we have client relationships where SBA assets can be invested in the securities of those other clients, SBA assets are managed in the best interests of the SBA and investment decisions are not made in a manner to advantage other clients to the detriment of the SBA.

### Compensation Structure (Please check only one of the following)

- ❒ We certify that our firm's compensation package for portfolio managers and research analysts is structured in a manner that adequately guards against conflicts of interest and assures analysts' independence.
- ❒ Not applicable as we do not employ distinct research analysts nor publish research recommendations.

### Anti-Influence Safeguard Plan or Policy (Please check only one of the following)

- ❒ We have adopted safeguards to ensure that client relationships with our affiliated companies do not influence the investment decisions of our firm made on behalf of the SBA.
- ❒ Not applicable as we have no affiliates.

### Consideration of Accounting and Financial Data, Auditor Choice, and Corporate Governance
(Please check only one of the following)

- ❒ We have used our best reasonable efforts, as applicable to our investment style/strategy, to implement policies and procedures to comply with the spirit and intent of Principles 5 and 6 of the IPPs, as they relate to investment decisions and consideration of the quality and integrity of an issuer's accounting and financial data, auditor choice, and corporate governance policies and practices.
- ❒ We do not currently have a formal policy and procedures to consider accounting and financial data, auditor choice, and corporate governance policies and practices in the investment decision-making process, but we otherwise have adequate measures in place to comply with the spirit and intent of Principles 5 and 6 of the IPPs. Explanation attached.
- ❒ We have unique circumstances or peculiarities (e.g., an investment strategy which is model driven or involves a technical or quantitative approach, or an investment mandate in non-domestic markets where custom and practice does not lend itself to these considerations or the necessary information is limited or unavailable) that render Principles 5 and 6 inapplicable or of limited application to our firm. Explanation attached.
- ❒ None of the above. Explanation attached.

**STATE BOARD OF ADMINISTRATION**
**Investment Protection Principles Compliance Certification (2009)**
**Investment Management Organizations**

## Prudent Country Restrictions: Investment in Companies with Operations in Countries Listed as State Sponsors of Terror (Please check only one of the following)

❐ We are conscious of the risks (e.g., unstable long-term value; potential fines, penalties or sanctions levied by federal and international authorities; reputational damage; etc.) inherent in investing in companies with operations in or ties to countries that have been designated state-sponsors of terror by the U.S. State Department and have included such factors in our investment decision making processes – which could involve limiting or eliminating SBA asset exposure to such issuers.

❐ We utilize an investment strategy, known to the SBA, which is model driven or involves a technical or quantitative approach which <u>includes</u> consideration of risk factors associated with terrorism accordingly.

❐ We utilize an investment strategy, known to the SBA, which is model driven or involves a technical or quantitative approach which <u>does not include</u> consideration of risk factors associated with terrorism. An explanation regarding why this does not impose risk to SBA assets is attached.

❐ None of the above. Explanation attached.

## Climate Change Related Investment Risks and Opportunities
(Please check only one of the following)

❐ We are conscious of the investment related risks and opportunities associated with climate change (e.g., regulatory changes limiting carbon emissions, extreme weather events, and growing demand for development of new technologies, etc.). Consideration of an issuer's stance and practices related to climate change is assessed, evaluated and factored into our investment decision making processes.

❐ We utilize an investment strategy, known to the SBA, which is model driven or involves a technical or quantitative approach which <u>includes</u> consideration of risk and opportunity factors associated with climate change.

❐ We utilize an investment strategy, known to the SBA, which is model driven or involves a technical or quantitative approach which <u>does not include</u> consideration of risk and opportunity factors associated with climate change. Explanation attached.

❐ Risks and/or opportunities associated with climate change are NOT factored into our investment decision making processes. Explanation attached.

## Ad Hoc Information Requests

❐ We agree, upon request from the SBA Inspector General, to provide the SBA with non-confidential information to support our certification related to any of the preceding principles or topics.

## Signature

❐ We certify that the statements and indications above are true and accurate, and this compliance certification is signed by our firm's chief executive officer or other appropriate senior officer or partner (i.e., a person with authority specifically and directly delegated to him or her by the CEO for this purpose).

____________________ Signature

____________________ Title

____________________ Print Name

____________________ Name of the Firm

____________________ Date

# REFERENCES & NOTES


1 Young Ha, "Munich Re: Sandy Tops 2012 Disasters," *Insurance Journal*, January 14, 2013, http://www.insurancejournal.com/magazines/editorsnote/2013/01/14/276722.htm.

2 "Hurricane Sandy Event Recap Report, Executive Summary," AON Benfield, 3,http://thoughtleadership.aonbenfield.com/Documents/20130514_if_hurricane_sandy_event_recap.pdf.

3 "Sustainable Investing: Establishing Long-Term Value and Performance," DB Climate Change Advisors, June 2012.

4 Ibid.

5 Robert G. Eccles, Ioannis Ioannou, George Serafeim, "The Impact of a Corporate Culture of Sustainability on Corporate Behavior and Performance," *Working Paper 12-035*, Harvard Business School, May 9, 2012.

6 "Investment Committee Agenda," *Global Governance Program Update*, Attachment 3, CalPERS, November 13, 2012, 6, http://www.calpers.ca.gov/eip-docs/about/board-cal-agenda/agendas/invest/201211/item09a-03.pdf.

7 Olaf Weber, Marco Mansfield, Eric Schirrmann, "The Financial Performance of SRI Funds Between 2002 and 2009," June 25, 2010, Available at SSRN: http://ssrn.com/abstract=1630502 or http://dx.doi.org/10.2139/ssrn.1630502.

8 "Alpha from Sustainability," SAM Research, Robeco Quantitative Strategies, 2011, 7, http://www.robecosam.com/images/Alpha_from_Sustainability_e.pdf.

9 "Sustainability: Opportunity or Opportunity Cost?" *RCM Sustainability White Paper*, 2011, 4 https://www.allianz.com/media/responsibility/documents/rcmsustainabilitywhitepaper2011.pdf.

10 Matthew Heberger, Heather Cooley, Pablo Herrera, Peter H. Gleick, and Eli Moore, "The Impact of Sea Level Rise on the California Coast," The Pacific Institute, May 2009, 74-76, http://www.pacinst.org/reports/sea_level_rise/report.pdf.

11 Alex Morales, "Climate Goals Require $5 Trillion Investment by 2020," *Bloomberg News*, April 25, 2012, http://www.bloomberg.com/news/2012-04-25/climate-goals-require-5-trillion-investment-by-2020.html.

12 "Climate Change Scenarios—Implications for Strategic Asset Allocation," Mercer Consulting, February 2011, 11.

13 See Restatement (Third) of Trusts § 227 (1992); National Conference of Commissioners on Uniform State Laws, http://www.uniformlaws.org, *Uniform Management of Public Employee Retirement Systems Act* (1997); *Uniform Management of Institutional Funds Act* (1990); *Uniform Prudent Investor Act* (2006).

14 See Cal. Const. art. XVI, § 17, Connecticut Uniform Prudent Investor Act, Conn. Gen Stat. §§ 45a-541 – 45a-541l; *Donovan v. Bierwirth*, 680 F.2d 263, 271 (2d Cir 1982); Edward C. Halbach Jr., *Trust Investment Law in the Third Restatement*, 77 Iowa L. Rev. 1151 (1992).

15 Employee Retirement Income Security Act of 1974 (ERISA), § 404(a)(1), 29 U.S.C. § 1104(a)(1); U.S. Dept. of Labor, *Meeting Your Fiduciary Responsibilities.* http://www.dol.gov/ebsa/publications/fiduciaryresponsibility.html The U.S. Supreme Court has confirmed that the common law of trusts is applicable to ERISA and establishes an obligation to preserve assets to satisfy future, as well as present, benefit obligations and requires a trustee to take impartial account of the interests of all beneficiaries. *Varity Corp. v. Howe*, 516 U.S. 489 (1996).

16 James P. Hawley & Mehdi Beyhaghi, "Modern Portfolio Theory and Risk management: Assumptions and Unintended Consequences," http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1923774; Keith L. Johnson & Frank Jan deGraaf, "Modernizing Pension Fund Legal Standards for the Twenty-First Century," Rotman International Journal of Pension Management 9, 2 (2009): 44 http://www.rijpm.com/article/modernizing-pension-fund-legal-standards-for-the-twenty-first-century.

17 James Hawley, Keith Johnson & Ed Waitzer, "Reclaiming Fiduciary Duty Balance," *Rotman International Journal of Pension Management 4*, 4 (2011), http://www.rijpm.com/article/reclaiming-fiduciary-duty-balance, Jay Youngdahl, "The Time Has Come for a Sustainable Theory of Fiduciary Duty in Investment Management," *Hofstra Labor & Employment Law Journal 29*, (2012): 115, 124-30, http://hausercenter.org/iri/the-time-has-come-for-a-sustainable-theory-of-fiduciary-duty-in-investment.

18 Hawley, Johnson & Waitzer, note 17, at 7-8; Youngdahl, note 17, at 116-17.

19 In fact, this is essentially what the ERISA Division of the U.S. Dept. of Labor did in 1979 when it incorporated MPT into its prudent investment regulation as "whole portfolio theory" and reinterpreted MPT to allow prudent pension investing. See 29 C.F.R. 2550.404a-1, 44 Fed. Reg. 37225 (June 26, 1979). This allowed fiduciaries to consider new kinds of risks and to invest in newly emerging asset classes. Personal communication with Ian D. Lanoff, Esq., Groom Law Group, March 26, 2013. Mr. Lanoff led the ERISA program at the U.S. Dept. of Labor during the Carter and early Reagan administrations.

20 See "Withers v. Teachers Retirement System," 447 F. Supp. 1248 (S.D.N.Y. 1978), *aff'd mem*, 595 F.2d 1210 (2d. Cir. 1979)(where trustees have reasonable grounds for concluding their actions are in best interests of beneficiaries, their actions are consistent with the exclusive purpose rule); 29 C.F.R § 2550.404a-1. (prudent investment rule, prescribing investment duties of fiduciaries under ERISA).

21 Freshfields Bruckhaus Deringer, "A Legal Framework for the Integration of Environmental, Social and Governance Issues into Institutional Investment" at 13, 109, 114 (UNEP Finance Initiative Asset Management Working Group, 2005); See also UNEP FI, *Legal and Practical Aspects of Integrating Environmental, Social and Governance Issues into Institutional Investment* (2009); Goodman, Kron & Little, *The Case for Integrating Environmental Factors Into Investment Management Policies* (Rose Foundation, 2002).

22 "We Need a Bigger Boat: Sustainability in Investment," Towers Watson, August 2012, 13.

23 Kees Koedijk and Alfred Slager, "Do Institutional Investors Have Sensible Beliefs?" *Rotman International Journal of Pension Management 2*, 1 (Spring 2009): 19.

24 Steve Lydenberg, "Investment Beliefs Statements: IRI Working Paper," Harvard Initiative for Responsible Investment, October 30, 2011 (Revised), http://hausercenter.org/iri/publications/working-papers.

25 Gordon L. Clark, "P&I / Oxford University Long-Term Investment Beliefs Survey Results," *P&I Online*, July 23, 2012, accessed September 27, 2012, http://www.pionline.com/specialreports/other/20120723.

26 "We Need a Bigger Boat," note 22, 13.

27 "Green Initiative Task Force, 2012 Annual Report," CalSTRS, 8, http://calstrs.ca.gov/Investments/green_initiatives_task_force.pdf.

28 OMERS, Enterprise Statement of Investment Beliefs, Section 2.1, p 3; posted 9/5/2012; http://www.omers.com/pdf/Statement_of_Investment_Beliefs.pdf.

29 Lydenberg, note 24, 21.

30 *TSC Indus., Inc. v Northway, Inc.* 426 U.S. 438 (1976).

31 "Staff Accounting Bulletin No. 99," Securities and Exchange Commission, 17 CFR Part 211, August 12, 1999.

32 *Basic Inc. v Levinson*, 485 U.S. 224 (1988).

33 http://www.sasb.org/engage/join-an-iwg/.

34 Steve Lydenberg, Jean Rogers, David Wood, "From Transparency to Performance: Industry-Based Sustainability Reporting on Key Issues," Harvard Initiative for Responsible Investment, 2010.

35 Ibid, 21.

36 See "Climate Change Scenarios – Implications for Strategic Asset Allocation," Mercer Consulting, 2011, 1.

37 "Physical Risks from Climate Change: A Guide for Companies and Investors on Disclosure and Management of Climate Impacts," Ceres, Oxfam America, Calvert Investments, David Gardiner & Associates, May 2012, http://www.ceres.org/resources/reports/physical-risks-from-climate-change/view

38 See "World Energy Outlook," International Energy Agency (IEA), November 2011; "Coal & Carbon, Stranded Assets: Assessing the Risk," HSBC Global Research, June 2012; "Oil & Carbon Revisited: Value at Risk from 'Unburnable' Reserves," HSBC Global Research, January 2013; and "Unburnable Carbon – Are the World's Financial Markets Carrying a Carbon Bubble?" Carbon Tracker Initiative, April 2011.

39 Zoltan Nagy, Doug Cogan, Dan Sinnreich, "Optimizing Environmental, Social and Governance Factors in Portfolio Construction: An Analysis of Three ESG-Tilted Strategies," MSCI, February 2013.

40 http://ussif.org/projects/iwg/documents/EMDP2012.pdf.

41 Issued by the PRI, February 2013, http://www.unpri.org/viewer/?file=wp-content/uploads/Aligning_Expectations_2013.pdf.

42 Issued by ICGN, 2012, http://www.icgn.org/files/icgn_main/pdfs/agm_reports/2011/item_9.2_icgn_model_mandate_initiative.pdf.

43 "CalSTRS Teacher's Retirement Board Policy Manual, Attachment A: Investment Policy for Mitigating Environmental, Social, and Governance Risks (ESG)," September 2012, 20-22.

44 http://www.sbafla.com/fsb/LinkClick.aspx?fileticket=Flc9AdaMXaQ%3d&tabid=732&mid=1882.

45 TIAA-CREF's policy statement is one example, "We believe that investors should encourage a long-term perspective regarding sustainability and social responsibility, which may impact the long-term performance of both individual companies and the market as a whole. We communicate directly with companies to encourage careful consideration of sustainable practices and disclosure. TIAA-CREF may support reasonable shareholder resolutions on social and environmental topics that raise relevant economic issues for companies." ["TIAA-CREF, Policy Statement on Corporate Governance, 6th Edition," 17].

46 "Ceres Guidance: Proxy Voting for Sustainability," (http://www.ceres.org/resources/reports/proxy-voting-for-sustainability/view).

47 For a list of recent sustainability issues arising in shareholder resolutions see appendix B in "Ceres Guidance," note 46.

48 The Council for Institutional Investors (CII, www.cii.org), The Forum for Sustainable and Responsible Investment (US SIF, www.ussif.org), the Interfaith Center on Corporate Responsibility (ICCR, www.iccr.org) and the International Corporate Governance Network (ICGN, www.icgn.org) all provide guidance on current ESG issues of concern. Investors can also get guidance concerning material risk factors from reports published by Ceres and from SASB and Project Delphi.

49 Lisa Lindsley, Director of Capital Strategies for the American Federation of State, County and Municipal Employees Pension quoted in Pensions & Investments; September 12, 2012, http://www.pionline.com/article/20120912/DAILYREG/120919956.

50 CalSTRS, for example, sent letters to 128 U.S. companies that did not respond to a carbon emissions survey conducted by the Carbon Disclosure Project, an initiative supported by the fund. ["CalSTRS Green Initiative Task Force, 2012 Annual Report," 23].

51 "When we engage successfully and companies adjust their approach, most observers are never aware of that engagement." [Lauren Post, spokeswoman for BlackRock, quoted in *Chicago Tribune*, August 31, 2012, http://articles.chicagotribune.com/2012-08-31/business/sns-rt-us-proxy-voting-blackrockbre87u1a3-20120831_1_proxy-jpmorgan-shares-jpmorgan-chase]; TIAA-CREF, publicly announced that in 2011 that they engaged with more than 400 companies. These engagements encompassed greater transparency of business risk factors, strategies for mitigating exposures related to climate change, initiatives to improve energy efficiency, non-discrimination based on sexual or gender identity, and integrity of the supply chain. ["TIAA-CREF 2012 Socially Responsible Investing Report," https://www.tiaa-cref.org/public/about/press/about_us/releases/articles/pressrelease425.html.

52 "MFS Proxy Voting and Engagement 2012 Annual Report," 7, https://www.mfs.com/wps/FileServerServlet?articleId=templatedata/internet/file/data/backlot/proxy_voting_engagement_report&servletCommand=default

53 "F&C Investments, Responsible Investment Report 2011," 4-7; "New York City Pension Funds, ESG 2012 Shareowner Initiatives, Postseason Report," Fall 2012, 16; "The 'CalPERS Effect' on Targeted Company Share Prices," Wilshire Associates, 2009, 1; "Activism on Corporate Social Responsibility," Elroy Dimson, Oguzhan Karakas, and Xi Li, March 2012; "The FTSE4Good Effect: the Impact of Responsible Indices on Environmental Management," Craig Mackenzie, William Rees, and Tatiana Rodionova, The University of Edinburg Business School, March 2012.

54 http://www.ceres.org/files/in-briefs-and-one-pagers/proxy-power-shareholder-successes-on-climate-energy-sustainability.

55 Ioannis Ioannou and George Serafeim, "The Consequences of Mandatory Corporate Sustainability Reporting," Harvard Business School, October 26, 2012, 13, 42-44.

56 Letter to Mary Schapiro, Chairman, SEC, June 12, 2009.

57 Letter to Mary Schapiro, Chairman, SEC, March 3, 2010.

58 Michael P. McCauley, Senior Officer, Investment Programs & Governance at the Florida SBA; Ceres press release, June 2012.

59 Itay Michaeli, Christopher Reenock, Dev Kapoor, "Fuel Economy Focus: Industry Perspetives on 2020," Citi Investment Research & Analysis; April 3, 2012, http://www.ceres.org/resources/reports/fuel-economy-focus-industry-perspectives-on-2020/view.

60 Meyer Frucher, Vice Chairman at NASDAQ OMX, quoted on *CBS Money Watch*, April 8, 2013, http://markets.cbsnews.com/cbsnews/news/read/23875476/.

61 See "Towards Sustainable Investment – Taking Responsibility," CalPERS, April 2012.

62 "The Management of the Government Pension Fund in 2011," Norwegian Ministry of Finance, Report to the Storting (white paper), Meld. St. 17, 2011-2012, 95-114 and 53-55.

63 Roger W. Ferguson, Jr., President and Chief Executive Officer, "Sustainable Investing at TIAA-CREF: 2012 Socially Responsible Investing Report," 2.

64 "Responsible Investment Annual Report 2011," PGGM, 17.

65 "Green Initiative Task Force Annual Report, Period Ending June 30, 2012," CalSTRS, http://calstrs.ca.gov/Investments/green_initiatives_task_force.pdf.

66 www.ceres.org/resources/reports.

67 "A New Angle on Sovereign Credit Risk," UN Environment Programme Finance Initiative (UNEP FI) and the Global Footprint Network; 2012.

68 Ibid., 4.

69 Ibid.

70 "Sovereign Debt in Sights of ESG Ratings," *Investments & Pensions Europe*, March 1, 2012.

71 http://www.bizjournals.com/sacramento/stories/2009/04/20/daily69.html.

72 Press release, KKR, December 17, 2012, http://media.kkr.com/media/media_releasedetail.cfm?ReleaseID=727175.

73 Ibid.

74 "Environmental Defense Fund Launches New ESG Management Tool for Private Equity," December 11, 2012, http://www.edf.org/news/environmental-defense-fund-launches-new-esg-management-tool-private-equity and www.edf.org/esgtool.

75 http://business.edf.org/projects/green-returns/how-it-works/esg-management-tool-private-equity.

76 http://ilpa.org/principles-version-2-0/.

77 "Responsible investment in private equity: A guide for Limited Partners," PRI, 2011, http://www.unpri.org/viewer/?file=wp-content/uploads/PELPGuideFINAL.pdf, and "Responsible investment in private equity: Case studies," *PRI*, 2009, http://www.unpri.org/viewer/?file=wp-content/uploads/PEcasestudiesFINAL.pdf.

78 "HFR Global Hedge Fund Industry Report—First Quarter 2013," Hedge Fund Research, http://www.hedgefundresearch.com.

79 "Responsible Investment and Hedge Funds," PRI, 2012, http://www.unpri.org/viewer/?file=wp-content/uploads/2012.11RIandHF.pdf.

80 *Pensions and Investments*, December 10, 2012.

81 "Buildings and Climate Change," 1, http://www.documents.dgs.ca.gov/dgs/pio/facts/LA%20workshop/climate.pdf and Jeff Stephens, "The Growing Importance of Energy Efficiency," *USGBC Northern California Chapter Newsletter*, http://www.usgbc-ncc.org/resources/blog/11-green-building-news/119-energy-efficiency.

82 "TIAA-CREF Named ENERGY STAR® Sustained Excellence Award Winner by the EPA for Second Consecutive Year," Press release, March16, 2011, www.tiaa-cref.org/public/assetmanagement/about/news-events/news/pressrelease378.html.

83 "Buildings and Climate Change," note 81, 1.

84 www.greenprintfoundation.org/programs.

85 "Responsible Property Investment: What the Leaders are Doing," UNEP Finance Initiative, 2012, http://www.unepfi.org/fileadmin/documents/ceo_briefing_property_01.pdf.

86 "Responsible Investment in Farmland," TIAA-CREF Asset Management, 2012, 5.

87 "Responsible Investment in Farmland: A Compendium of Case Studies," Principles for Responsible Investment, 2, http://www.unpri.org/viewer/?file=wp-content/uploads/2012.10RIinfarmland.pdf and http://www.unpri.org/areas-of-work/implementation-support/the-principles-for-responsible-investment-in-farmland/.

88 "Responsible Investment in Farmland," 3.

89 Ibid., 9.

90 "Responsible Investment Report," 2011, APG, http://www.apgverslagverantwoordbeleggen.nl/beleggingscategorieen?lang=en#3e.

91 Nick Hoffman and James Twining, "Profiting from the Low Carbon Economy," August 2009, McKinsey and Company, http://www.mckinsey.com/insights/financial_services/profiting_from_the_low-carbon_economy, and The World Resources Institute, http://www.wri.org/climate-finance.

92 "2011 Global Investor Statement on Climate Change," http://globalinvestorcoalition.org, and World Economic Forum, http://www.weforum.org/issues/global-risks, and The International Energy Agency, http://www.iea.org/topics/climatechange.

93 http://gsm.ucdavis.edu/symposium.

94 Robert G. Eccles, Ioannis Ioannou, George Serafeim, "The Impact of a Corporate Culture of Sustainability on Corporate Behavior and Performance," Working Paper 12-035, Harvard Business School, May 9, 2012.

95 See Wilshire Study Results in CalPERS, "Investment Committee Agenda, Global Governance Program Update," Attachment 3, November 13, 2012, 6, http://www.calpers.ca.gov/eip-docs/about/board-cal-agenda/agendas/invest/201211/item09a-03.pdf.

96 "Sustainable Investing: Establishing Long-Term Value and Performance," DB Climate Change Advisors, June 2012.

97 Ibid., 3 & 5.

98 "Sustainability: Opportunity or Opportunity Cost?" *RCM Sustainability White Paper*, 2011.

99 "Alpha from Sustainability," SAM Research, Robeco Quantitative Strategies, 2011, 7, http://www.robecosam.com/images/Alpha_from_Sustainability_e.pdf.

100 Olaf Weber, Marco Mansfield, Eric Schirrmann, "The Financial Performance of SRI Funds Between 2002 and 2009," June 25, 2010, available at SSRN: http://ssrn.com/abstract=1630502 or http://dx.doi.org/10.2139/ssrn.1630502.

101 Ibid., 8.

102 Ibid., 14.

103 "Sustainable Investing," note 96, 7.

104 Ibid.

105 http://www.msci.com/resources/factsheets/index_fact_sheet/msci-kld-400-social-index.pdf.

106 https://www.msci.com/products/indices/esg/best-in-class/performance.html.

107 http://www.environment-agency.gov.uk/static/documents/Active_pension_fund_-_statement_of_investment_principles.pdf.

108 http://www.regjeringen.no/en/dep/fin/Selected-topics/the-government-pension-fund/responsible-investments/Guidelines-for-Norges-Banks-work-on-responsible-management-and-active-ownership-of-the-Government-Pension-Fund-Global-GPFG.html?id=594253.

109 "Environmental, Social and Corporate Governance Policy," ABP, http://www.abp.nl/en/about-abp/investments/esg-policy.asp.

110 Steve Lydenberg, note 24, 16.

111 "Our Investment Governance," AustralianSuper, http://www.australiansuper.com/investments-and-performance/approach-and-holdings/our-investment-governance.aspx.

112 http://www.generationim.com/strategy/philosophy.html.

113 http://trilliuminvest.com/about/.

114 "Responsible Investment Report 2011," APG, http://www.apgverslagverantwoordbeleggen.nl/?lang=en.

115 http://www.centroconsumatori.tn.it/download/154dextHTx56I.pdf.

116 http://www.portfolio21.com/why_p21_valu.php.

117 http://www.paxworld.com/advisors/approach/our-investment-process.

118 http://www.bostoncommonasset.com/investing.php.

119 "MFS Investment Management Policy on Responsible Investing and Response to the FRC UK Stewardship Code," 2013 Update, http://www.frc.org.uk/FRC-Documents/Corporate-Governance/MFS-Investment-Management.aspx.

120 http://www.needmorfund.org/InvPol.pdf.

121 Provided by NYCERS.

122 http://www.gbophb.org/sri_funds/oyb/201211.asp?.

123 Provided by AustralianSuper.

Ceres

Ceres
99 Chauncy Street
Boston, MA 02111
T: 617-247-0700
F: 617-267-5400

www.ceres.org

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**For more information, contact:**

**Peter Ellsworth**
ellsworth@ceres.org
617-247-0700 x107