Managing the Risks and Opportunities of Climate Change:

A Practical Toolkit for Investors

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About INCR
The Investor Network on Climate Risk (INCR) is a network of institutional investors and financial institutions that promotes better understanding of the risks and opportunities posed by climate change. INCR is comprised of over 60 institutional investors and represents more than $5 trillion in assets. INCR is a project of Ceres.
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About Ceres
Ceres is a coalition of investment funds, environmental organizations, and public interest groups. Ceres’ mission is to move businesses, capital, and markets to advance lasting prosperity by valuing the health of the planet and its people. Investor members include state treasurers, state and city comptrollers, public pension funds, investment firms, religious groups, labor unions, and foundations. Ceres directs the Investor Network on Climate Risk (INCR).
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# Managing the Risks and Opportunities of Climate Change: A Practical Toolkit for Investors

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About this Toolkit

Climate change presents enormous risks and opportunities for investors. Climate risk is now embedded in investment portfolios, as companies worldwide face regulatory, legal, physical and competitive risks. But where there are risks, there are also opportunities. The next 50 years will require a massive shift to cleaner energy sources and technologies to avoid unmanageable climate disruption. Legendary venture capitalist John Doerr recently called finding solutions to climate change “the biggest economic opportunity of the 21st century.”

This toolkit is designed to help investors begin to comprehensively address climate risks and opportunities in four key areas:

- internal statements, policies, and governance
- engagement with companies, investors, and others
- investment practices
- public policy support

Internal policies and statements need to provide accurate guidance to trustees, staff, and fund managers on how to consider climate risk. Engagement with portfolio companies should be conducted to ensure disclosure and mitigation of climate risk. Investment practices need to protect investments from climate risks such as new regulations, physical impacts on companies, and reputational damage, while at the same time looking for investments across asset classes that may represent new opportunities from a low-carbon economy. And investor efforts to address climate risk must include work with policymakers to secure the regulatory certainty needed for business planning.
WHO SHOULD USE THIS TOOLKIT

This toolkit is intended for those in the investment community seeking to address climate risks and opportunities. This toolkit could be useful to:

- Pension funds
- Treasurers and comptrollers
- Foundations
- College and university endowments
- Religious institutional investors
- Investment managers
- Investment consultants
- Financial advisors
- Individual investors

Given that climate risks and opportunities are embedded in all asset classes — including equities, fixed income, real estate and alternative investments — investors and trustees of all types have sought assistance on how to consider the investment implications of climate change.

This toolkit provides an overview of the key elements that a comprehensive plan of action could contain, from a climate change statement to clean tech investments, from shareholder resolutions to public policy support. Because investors vary markedly in size, scope, mandate, and investment approach, the toolkit is organized into four topical areas, with a range of specific components, and includes examples and suggestions. Investors may select the specific components most suitable to them to weave into their existing policies and practices.

The toolkit concludes with a complete sample climate risk policy (Appendix A), information about the Investor Network on Climate Risk (INCR) (Appendix B, C, and D), and resources for investors seeking further information (Appendix E).

“Global warming presents enormous risks and opportunities for U.S. businesses and investors.”

Fred R. Buenrostro, CEO, CalPERS
**Key Elements of a Climate Plan of Action**

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INTERNAL STATEMENTS, POLICIES & GOVERNANCE:
DRAFTING A CLIMATE CHANGE STATEMENT

A climate change statement provides the rationale for addressing the financial risks and investment opportunities posed by climate change. In short, the statement should explain that climate change poses fiduciary and financial risks and opportunities that need to be addressed.

A thorough climate change statement should contain a few key elements, including references to:

- climate science;
- climate risks and opportunities; and
- the institution’s responsibility to address climate change.

SAMPLE ELEMENTS OF CLIMATE CHANGE STATEMENTS

<table>
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<th>Science</th>
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| Vermont State Treasurer: “Scientists generally agree that gases released by chemical reactions including the burning of fossil fuels contribute to a ‘greenhouse effect’ that traps the planet’s heat leading to changing climate patterns, violent weather swings, melting glaciers, rising sea levels, and receding coastlines.”

North Carolina State Treasurer: “Investors understand that [climate change] will have an impact on corporations going forward, whether through direct physical impacts to infrastructure, tighter regulations on carbon emissions or change in public perception for companies that do not take notice of global warming. It is important to investors ... for companies to evaluate and disclose both the risks and the opportunities from climate change.”

California State Teachers’ Retirement System: “CalSTRS has taken the position that sustainability issues that arise in portfolio companies, such as the risks and opportunities associated with global warming, are best handled through robust proactive engagement of these affected portfolio investments.” |
Involvement by boards of trustees is important to ensure that the assets in their care are properly managed in light of climate risk. Accordingly, fund trustees should learn about climate change and take steps to mitigate risks and seize opportunities. For instance, investors can organize briefings for their trustees on climate change.

Fund trustees are sometimes hesitant to tackle environmental, social, and corporate governance (ESG) issues out of concern about fiduciary duties. A 2005 report from the UN Environment Programme Finance Initiative (UNEP FI), conducted by the law firm Freshfields Bruckhaus Deringer, concluded that in the United States “[t]here is … no reason why investment strategies should not include investments with positive ESG characteristics. … Moreover, as with all considerations, ESG considerations must be taken into account wherever they are relevant to any aspect of the investment strategy.”

Climate change is among the most material of all ESG issues. As described by Innovest in an October 2007 report:

> Few environmental issues pose as real, significant, and widespread a financial threat to investors as climate change. ... Since there is now growing and incontrovertible evidence that superior overall environmental performance can in fact improve the risk level, profitability, and stock performance of publicly-traded companies, and given the emergence of climate change as arguably the pre-eminent environmental issue of our time, fiduciaries can now be seen to be derelict in their duties if they do not consider climate-driven risks and opportunities where they may be material.

**EXAMPLE: Trustee Trainings**

In the U.S., the Investor Network on Climate Risk (INCR) began providing trustee training forums on climate risk for pension funds in September 2004 at Harvard University. Other INCR forums have since been held in California, Illinois and New York City.

Interested investors should contact Ariane van Buren, Director of Investor Engagement, Ceres at vanburen@ceres.org.
INTERNAL STATEMENTS, POLICIES & GOVERNANCE: ADOPTING & IMPROVING POLICIES

Like a climate change statement, policies are important to provide guidance throughout the organization – for trustees, staff, investment managers and others – on how to manage climate risk. Investors should create policies on corporate engagement, climate risk disclosure, standards for investment managers’ assessment of climate risks, and other concerns addressed in this toolkit. (One particular type of policy – proxy voting guidelines – is discussed in more detail on the next page.)

In Appendix A, investors can find a sample portfolio climate risk policy. Because institutional investors vary markedly in size, scope, mandate, and investment approach, they can choose the specific components most suitable to them to weave into their existing policies.

EXAMPLE: TIAA-CREF, Policy Statement on Corporate Governance

TIAA-CREF has a Policy Statement on Corporate Governance that contains information and policies relating to:

- **Fiduciary duties:** “In keeping with our mission and fiduciary duty, TIAA-CREF continues to establish policies and engage with companies on governance, environmental, social and performance issues.”

- **Policy and practices for engaging corporations:** “Our preference is to engage privately with portfolio companies when we perceive shortcomings in their governance (including environmental and social issues) or their performance. ... While quiet diplomacy remains our core strategy, particularly for domestic companies, TIAA-CREF’s engagement program involves many different activities and initiatives...”

- **Proxy voting guidelines:** “TIAA-CREF will generally support reasonable shareholder resolutions seeking disclosure of greenhouse gas emissions and the impact of climate change on a company’s business activities.”

- **Influencing public policy and regulation:** “TIAA-CREF ... works with regulators, legislators, self-regulatory organizations, and other institutional investors to educate the business community and the investing public about governance and shareholder rights. TIAA-CREF submits written comments on regulatory proposals and testifies before various governmental bodies, administrative agencies and self-regulatory organizations...”

- **Corporate governance on environmental and social issues:** “TIAA-CREF believes that companies and boards should exercise diligence in their consideration of environmental and social issues, analyze the strategic and economic questions they raise and disclose their environmental and social policies and practices.”
**INTERNAL STATEMENTS, POLICIES & GOVERNANCE: REVIEWING & ADOPTING PROXY VOTING GUIDELINES**

Proxy voting guidelines provide direction for voting proxies in accordance with the institution’s policies. The guidelines should cover the most significant proxy issues that arise regularly. Inclusion of climate change and related issues in the proxy voting guidelines informs investment managers that climate risk is an important corporate governance consideration and provides direction on how they should cast proxy votes on climate-related resolutions. Investors that already have proxy voting guidelines on climate change may want to review them to ensure they provide accurate guidance on each year’s climate-related shareholder resolutions.

**EXAMPLE: VERMONT RETIREMENT SYSTEMS AND VERMONT STATE TREASURER’S OFFICE, PROXY VOTING POLICY STATEMENT & GUIDELINES**

**Environmental Reporting**
Reports and enhanced disclosure addressing potential environmental liabilities and sustainable development are important to companies because they offer a formal structure for decision-making that helps management teams anticipate and address important risks and global trends that can have serious consequences for business and society. Shareholders may request general sustainability reports on a specific location (i.e., drilling in the Arctic) or operation (i.e., nuclear facility), often requesting that the company detail the environmental, social, legal, and other risks and/or potential liabilities of the specific project in question....

Vermont managers should generally vote FOR shareholder proposals seeking greater disclosure on the company’s environmental practices, and/or environmental risks and liabilities.

**Global Warming / Greenhouse Gas Emissions**
Scientists generally agree that gases released by chemical reactions including the burning of fossil fuels contribute to a “greenhouse effect” that traps the planet’s heat leading to changing climate patterns, violent weather swings, melting glaciers, rising sea levels, and receding coastlines.

Vermont managers should generally vote FOR shareholder proposals calling for the reduction of greenhouse gas emissions under a reasonable timeline.

**Invest in Clean / Renewable Energy**

Filers of proposals on renewable energy ask companies to increase their investment in renewable energy sources and to work to develop products that rely more on renewable energy sources. Increased use of renewable energy will reduce the negative environmental impact of energy companies. In addition, as supplies of oil and coal exist in the earth in limited quantities, renewable energy sources represent a competitive, and some would even argue essential, long-term business strategy.

Vermont managers should generally support shareholder proposals seeking increased investment in renewable energy sources, taking into account whether the terms of the resolution are realistic or overly restrictive for management to pursue.
ENGAGEMENT WITH COMPANIES, INVESTORS, & OTHERS:
PARTICIPATING IN INVESTOR FORUMS AND NETWORKS

Participating in investor forums and networks that address issues such as climate risk:

- allows investors to begin to take action, even if they have limited staff resources, by enabling them to harness the knowledge, experience and collective achievements of the network;
- provides an opportunity to gain new information and insights concerning climate risks and opportunities; and
- provides a forum for sharing best practices to address climate risks and opportunities.

The leading U.S. network is the Investor Network on Climate Risk (INCR), which has over 60 members that collectively manage more than $5 trillion in assets (as of April 2008). Through INCR working groups, investors can share information and expertise on topics such as deploying capital in clean energy, enhancing corporate governance on climate risk through shareowner resolutions and dialogues, and engaging with the SEC, Congress, and other policy makers. For more information on current INCR working groups, please contact Chris Fox, Director of Investor Programs, Ceres at fox@ceres.org.

Other organizations that can help investors address climate change risks and opportunities are included in the list of resources in Appendix E.

EXAMPLE: GROWING MEMBERSHIP OF INCR

In April 2007, Florida Chief Financial Officer Alex Sink announced that as the state treasurer, she was joining the Investor Network on Climate Risk.

“As the State Treasurer managing more than $20 billion in Floridians’ tax dollars, my first priority is safeguarding the people’s money,” said CFO Sink, who oversees the Department of Financial Services. “Joining the Investor Network on Climate Risk will keep our state prepared for the potential risks that climate change can pose to our investments.”

Florida joined a dozen other states that are already INCR members through their state treasuries or pension funds, including: California, Connecticut, Illinois, Iowa, Kentucky, Maine, Maryland, New Jersey, New York, North Carolina, Oregon, Pennsylvania and Vermont.

At the Investor Summit on Climate Risk at the UN in February 2008, Deutsche Asset Management, which manages over $800 billion in assets, announced that it too was joining INCR. Launched at the first Summit in November 2003, INCR now includes more than 60 investment institutions collectively managing more than $5 trillion.
Engagement with Companies, Investors, & Others: Proxy Voting & Outreach

Voting proxies is an important duty of fiduciaries. Investors should verify that their proxies are being cast in favor of reasonable shareholder resolutions calling for enhanced disclosure or action on climate risks and opportunities. As part of this process, investors should educate themselves about the various climate-related resolutions that have been filed with companies, which they can do by participating in INCR working groups or the other investor forums and networks.

In addition, investors can participate in outreach efforts to proxy advisory firms such as RiskMetrics, Glass Lewis and Proxy Governance Inc., encouraging them to advise their clients to support these resolutions.

Example: INCR Outreach to Proxy Advisory Firms

Every spring, INCR coordinates meetings for investors with the major U.S. proxy advisory firms to discuss the climate-related resolutions filed with companies. During the 2007 proxy season, concerned investors filed a record 43 resolutions asking companies for enhanced climate risk disclosure or action. Of those resolutions, 15 were withdrawn following dialogues in which the companies agreed to the shareholders’ requests. Resolutions that went to a vote received record-high support, with the average vote being 21.64%. Proxy advisors ISS (now RiskMetrics) and Proxy Governance Inc each supported 10 climate resolutions, helping to achieve votes of 39.5% at Allegheny Energy, 37.4% at Kroger, 31.1% at ExxonMobil, and 29.1% at GM.

So far in 2008, investors have filed a record 55 climate-related resolutions and have negotiated a record 24 withdrawals. Investors interested in proxy voting and in outreach to proxy advisors should contact Rob Berridge, Manager, Investor Programs, Ceres at berridge@ceres.org.
ENGAGEMENT WITH COMPANIES, INVESTORS, & OTHERS: ENGAGING IN DIALOGUES WITH COMPANIES

Engaging with companies is important for improving the long-term financial performance of portfolios. Dialogues with boards and executives can be effective for raising awareness of climate risk issues, explaining shareholder concerns and encouraging them to improve their disclosure and actions. Investors can organize such dialogues themselves or join in dialogues set up by others.

Sometimes, depending on a company’s history and its willingness to engage, investors need to file shareholder resolutions (discussed on the next page) to encourage a company to enter into dialogue. These dialogues can lead to withdrawal of the resolutions if the companies agree to take the requested actions.

EXAMPLE: INSTITUTIONAL INVESTORS DIALOGUE WITH FORD MOTOR COMPANY

After a multi-year dialogue led by investors such as the Tri-State Coalition for Responsible Investment (an alliance of Roman Catholic institutional investors) and the Connecticut Treasurer’s Office, the Ford Motor Co. agreed in April 2008 to set a greenhouse gas (GHG) emissions reduction target of 30 percent for its fleet by 2020 (relative to 2006). Ford is the first U.S. automotive company to publicly announce a GHG emissions reduction target for its products.

The dialogue with Ford about GHG reduction goals included multiple letters and shareholder resolutions from groups of investors and numerous meetings between Ford investors, senior managers and board members. The dialogue was coordinated by Ceres, the Investor Network on Climate Risk and the Interfaith Center on Corporate Responsibility (ICCR).

Investors interested in initiating or joining in dialogues with companies on climate risk issues should contact Rob Berridge, Manager, Investor Programs, Ceres at berridge@ceres.org.
**ENGAGEMENT WITH COMPANIES, INVESTORS, & OTHERS: FILING SHAREHOLDER RESOLUTIONS**

When initial efforts at dialogue are rejected or are unsuccessful, investors can file shareholder resolutions with companies that address a range of issues concerning climate governance, disclosure, and action.

Filing successful shareholder resolutions involves two steps:

- drafting specific resolution language (both the Whereas clauses and the Resolved clause) that not only addresses shareholder concerns but also is likely to be upheld by the SEC
- gaining support of the proxy advisory firms and achieving high shareholder support at annual shareholder meetings

**EXAMPLE: OVERVIEW OF THE 2008 PROXY SEASON**

As of April 2008, investors have filed a record 55 climate-related resolutions and have negotiated a record 24 withdrawals. Some of the climate-related resolutions filed this year include requests for companies to:

- produce a report on how the company is responding to rising regulatory, competitive, and public pressure to significantly reduce carbon dioxide emissions from the company’s operations and products.
- produce a report on actions the company is taking to work with policymakers to design new incentives that will provide financial returns for the company to reduce greenhouse gas emissions by improving the efficiency with which its customers use energy.
- produce a report describing how the company is assessing the impact of climate change on the company, the company’s plans to disclose this assessment to shareholders, and the rationale for not disclosing such information through existing reporting mechanisms.
- adopt quantitative goals, based on available technologies, for reducing total greenhouse gas emissions from the company’s products and operations.

Investors interested in filing, co-filing, or learning more about climate-related shareholder resolutions should contact Rob Berridge, Manager, Investor Programs, Ceres at berridge@ceres.org.
Engagement with Companies, Investors, & Others:
Engaging Analysts, Banks, Ratings Agencies & Others

Climate risks and opportunities are present for every sector of the economy, and debt and equity analysts, banks, ratings agencies, mutual funds, and others in the finance sector must start incorporating climate risk and opportunity into their routine financial analysis and company and portfolio valuation.

In January 2008, Ceres issued the first-ever report analyzing the climate change governance practices of 40 of the world’s largest banks. The report found that a growing number of European, U.S., and Japanese banks are responding to the risks and opportunities presented by climate change, primarily by setting internal greenhouse gas reduction targets, boosting climate-related equity research, and increasing lending and financing for clean energy projects. But many others are still not addressing climate change, and only a handful of the 40 banks have begun integrating climate risks into their core business of lending by pricing carbon into their finance decisions or setting targets to reduce greenhouse gas emissions in their lending portfolios.

Investors can engage with these and other finance sector actors by drafting or signing on to letters and by initiating or participating in calls and meetings on climate risk and opportunity. In addition, investors can engage directly with the banks, mutual funds, etc. with whom they regularly interact to promote increased understanding of (and actions in response to) climate risk.

Example: Nathan Cummings Foundation Engages Mutual Fund

In 2006, the Nathan Cummings Foundation asked Barclays Global Investors, which managed a mutual fund of which the Foundation owned a sizable portion, to vote its proxies in favor of climate-related resolutions or separate out the Foundation’s shares and vote them according to the Foundation’s instructions. When Barclay’s declined, the Foundation moved its investment to a separate account at a different manager.

Investors interested in engaging with others in the finance sector on issues of climate risk and opportunity should contact Rob Berridge, Manager, Investor Programs, Ceres at berridge@ceres.org.
**Investment Practices:**
**Assessing Managers’ Climate Risk Expertise**

It is important that investment managers are aware of the material financial threats presented by climate change. Accordingly, it is important that investors assess the ability of investment consultants, advisors, and managers to address climate risks and opportunities across asset classes. Key asset classes include not only public equity, but also fixed income, real estate and alternative investments. Requests for Proposals (RFPs) should include questions about climate risk assessment, and this assessment can be part of regular manager reviews. In addition to RFPs, investors can develop one or more screens on climate risk.

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<tr>
<td>Connecticut State Treasurer: <em>“RFP SECTION II, PART (E) — Specialty Capacity: Identify any specialty capacity in the areas of climate risk and/or Environment Social Governance (ESG) investing, principally the ability to evaluate a fund manager’s ability to assess risks associated with E.S.G. factors.”</em></td>
<td>Pennsylvania State Treasurer: <em>“The Treasury Department will develop ... one or more written screens, or sets of considerations and factors, that it will ask all of its investment managers to utilize. These considerations and factors will identify areas of possible risk or exposure that publicly traded companies might face from such developments as direct carbon regulatory schemes, indirect regulatory approaches (such as taxes on fuel, or on fuel consumption), imbalances in global energy demand and supply, climate change and attendant consequences, and other similar concerns. The Treasury Department will require the Department’s investment managers to evaluate their current portfolios and to review investments in light of these screens, and to make such adjustments to current holdings and future investments as they deem appropriate.”</em></td>
<td>Florida State Treasurer: <em>“[Florida] is directing the state’s Treasury investment managers to detail their abilities to assess climate risk.... Investment managers will be required to report on climate risk as a part of their semi-annual reviews.... As a guide, [Florida] is providing Treasury investment managers with the ‘Global Framework for Climate Risk Disclosure,’ created by several leading investors and worldwide organizations in October 2006.”</em></td>
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**INVESTMENT PRACTICES:**

**INVESTING IN CLEAN TECH**

While climate change poses significant financial risk, investors should not overlook substantial opportunities in addressing climate change. For instance, investments in clean, climate-friendly technologies – such as energy efficiency and renewable energy – represent significant opportunities and can enhance shareholder value.

Clean tech investment opportunities exist across a full range of company sizes and investment vehicles. As a result, investors can seek diversified opportunities across asset classes to achieve competitive returns. In February 2008, leading investors announced in the INCR Action Plan (shown in Appendix B) a commitment to: “Seek investment opportunities in all appropriate asset classes to support clean technology efforts. Our goal is to deploy $10 billion collectively in additional investment over the next two years.” For more information about investing in clean tech and participating in the INCR clean tech working group, please contact Chris Fox, Director of Investor Programs, Ceres at fox@ceres.org.

**EXAMPLES: CLEAN TECH INVESTMENTS BY CALPERS AND NY STATE COMMON RETIREMENT FUND**

**CalPERS**

“CalPERS is building a ... diversified portfolio of clean technology-focused investments by investing across stages, strategies, geographies, and structures. We define environmental or clean technologies as solutions that are more efficient and less polluting than existing or legacy products, services, or technologies. Areas of particular interest include, but are not limited to, alternative and renewable energy (clean energy), water technologies (clean water), advanced materials or nanotechnology (clean material), air purification technologies (clean air), and transitional infrastructure opportunities. It is expected that investment returns in this sector will be commensurate with the risk-adjusted returns of the general private equity market...Since early 2007, we have committed $600 million to the Program’s investment partners.”

**NY State Common Retirement Fund**

In the spring of 2008, New York State Comptroller Thomas P. DiNapoli announced the Green Strategic Investment Program, which will increase commitments to environmentally focused investment strategies by $500 million over the next three years across the New York State Common Retirement Fund’s entire portfolio. Currently, the New York State Common Retirement Fund has $40 million invested in private equity funds focused on renewable energy and clean technologies. The Fund also has more than $440 million in commitments to funds where clean tech is a component of the Fund’s overall strategy. This includes more than $16 million already invested in New York-based clean tech companies through the Fund’s Instate Co-Investment Program.”
**INVESTMENT PRACTICES:**
**IMPROVING THE ENERGY PERFORMANCE OF REAL ESTATE PORTFOLIOS**

Investors can also improve the energy performance of their real estate portfolios and investments – studies demonstrate that enormous opportunities exist to improve building energy efficiency while enhancing the value of real estate assets.

Investors can take a range of actions in this regard, including:

- engaging their real estate managers on the importance of boosting the energy efficiency of core holdings
- asking for disclosure and targets on energy efficiency for properties within their direct and indirect holdings
- incorporating green building standards (such as LEED and Energy Star) as a factor in making investment decisions

**EXAMPLE: CalPERS’ Real Estate Environmental Strategies**

“The real estate environmental strategy’s focus is to generate attractive investment returns while adopting environmental and green building technologies in areas such as energy efficiency, water conservation, waste stream management and indoor air quality, within the overall real estate portfolio.

CalPERS Board has set an energy reduction goal of 20 percent in its core real estate portfolio over the next five years. The pension fund owns approximately $5 billion of core real estate that includes investments in office, retail, industrial, and apartment properties.

The real estate environmental strategy also supports green building initiatives and continues to explore investments that fit within the Leadership in Energy & Environmental Design (LEED) / Energy Star requirements. …

In response to CalPERS surveys, real estate partners reported such energy savings methods as adjusting or reprogramming of temperature control systems, installing sensor-operated flushers and faucets, and sorting scrap metal and other materials for recycling.

Going forward, some core and non-core partners reported plans to purchase environmentally efficient products, use internal monitoring tools to look for patterns of waste, expand their environmental program to include international investments, and to hire consultants to educate property managers about environmental impacts of tenants’ actions.”
Investment Practices: Considering Climate Risks & Opportunities Across Asset Classes

Investors should consider the climate risks and opportunities in markets and asset classes in which they invest, including:

- **Fixed income** – Florida CFO Alex Sink sent a climate risk questionnaire in October 2007 to fixed-income managers that invest portions of the state treasury. California Treasurer Bill Lockyer proposed in August 2007 a new $5 billion California Green Bond program to finance renewable energy and energy efficiency technologies in state buildings.

- **Emerging market equities** – In October 2007, PGGM, the €86 billion Dutch pension fund, appointed three prominent experts in the fields of climate change, human rights, and the arms industry as advisers to the emerging markets equities strategy. Deutsche Asset Management created a Climate Change Fund in September 2007 that may invest up to 30% of assets in emerging market equities.

- **Infrastructure** – Climate change is expected to significantly impact a range of infrastructure investments, including water, transportation, and other projects needed to support the growth of cities and the transition to a low-carbon economy. A March 2008 National Research Council report highlighted the expected climate impacts on transportation, particularly in coastal areas. There is also new low-carbon energy infrastructure needed; the New York State Common Retirement Fund made a $30 million initial commitment to the Carlyle/Riverstone Renewable Energy Infrastructure Fund I in 2006.

- **Private equity** – There are a range of private equity investors in clean technology. Connecticut, for example, has invested $25 million in a Credit Suisse clean tech private equity fund of funds. Citigroup committed in May 2007 to over $2 billion of private equity over the next ten years in renewable and alternative energy, clean technologies, energy efficiency, carbon credit markets, waste and water management and sustainable forestry.

- **Hedge funds** – As in private equity, several hedge fund providers are entering the field as well. In February 2008, London-based hedge fund Cumulus Funds launched a climate change fund, targeting returns of between 15% and 20%. The long/short equity fund will focus on the financial ramifications of the regulatory and physical impacts of climate change on companies. In 2007, Man Group plc (the world’s largest provider of hedge fund products) launched the RMF Environmental Opportunities Fund focusing on four sectors: carbon trading, water infrastructure, clean technology and renewable energy.

- **Commodities** – Climate change could impact a range of commodities, including basics such as oil, gas, coal and agricultural products. The establishment of carbon markets also creates new commodities, such as CO2 emissions allowances. For instance, in March 2007, JPMorgan released a research brief on “Carbon Dioxide: A Commodity Market Perspective.”

- **Timber** – F&C Asset Management has invested in FourWinds Capital Management’s Phaunos Timber Fund, launched in December 2006 to look at timber and related investments, including investments that can add value via carbon credits. Similarly, PKA, the Danish collective pension scheme for public employees, boosted its forestry investments in 2007 as part of the fund’s aim to limit climate change by investing in reduced carbon dioxide strategies.
SUPPORT FOR PUBLIC POLICY ACTION:
ENGAGING THE SEC

Investors require information in order to analyze a company’s business risks and opportunities resulting from climate change, as well as the company’s efforts to address those risks and opportunities. Crucial in this regard is engagement of the Securities and Exchange Commission (SEC), which controls the rights of shareholders to place advisory shareholder resolutions on the corporate ballot, has the authority to omit shareholder resolutions from the ballot for a variety of reasons, and has the power to make climate risk disclosure mandatory. Investors can:

- Ask the SEC to require companies to disclose material climate risks as part of their regular securities filings;
- Call on the SEC to protect shareholders’ right to vote on resolutions related to climate change and to enforce existing rules requiring disclosure of material risks; and
- Call on the SEC to develop expertise on climate change risks, as well as other environmental and social issues that pose material financial risks to corporations and investors.

There are a range of actions investors can take to further these goals. For instance, they can meet with SEC staff or write the SEC in support of the September 2007 Investor Petition to the SEC for “Interpretive Guidance on Climate Risk Disclosure”. They can also ask Members of Congress to support these efforts by writing to the SEC or by drafting legislation.

EXAMPLE: Petition for Interpretive Guidance on Climate Risk Disclosure, filed 9/18/2007

On September 18, 2007, a coalition of 22 groups, including state pension plans and institutional investors who together control $1.5 trillion in assets, petitioned the SEC to promulgate a rule to force companies to disclose a greater range of climate-related risks, stating:

“Recent scientific, legal, and regulatory developments make it unavoidably clear that the risks and opportunities many corporations face in connection with climate change fall squarely within the category of material information that is required to be analyzed and disclosed in many corporate filings. Yet corporate disclosures of the risks and opportunities created by climate change lag behind these developments, and investors are left with little or in some cases no useful information about corporate exposure to these risks. Investors are responding to this information gap with increasing demand for more and better disclosure on climate risk that will allow them to make informed investment decisions.

“This petition respectfully requests that the Commission issue an interpretive release clarifying that material climate-related information must be included in corporate disclosures under existing law.”

Investors interested in engaging the SEC should contact Jim Coburn, Program Manager, Ceres at coburn@ceres.org.
Support for Public Policy Action: Encouraging Companies & Investors to Support Policy Action

Regulations to address climate change are coming from all levels of government and will affect all sectors of the economy. It is therefore important for investors – and the companies in which they invest – to support appropriate state, regional, national, and international policies on climate change, such as legislation to enact mandatory policies to reduce greenhouse gas emissions economy-wide. As fiduciaries and investment leaders, investors should recognize the need for policies that establish regulatory certainty, minimize climate risks, and provide strong incentives for investment in clean technology and other climate change solutions.

Investors can encourage companies and their peers to support government action on state, regional, national, and international climate policy through a variety of mechanisms, including letters, company dialogues, and shareholder resolutions.

Example: NYC Comptroller’s Office: Shareholder Resolutions filed with Allegheny Energy and Dominion Resources

The NYC Comptroller’s Office filed shareholder resolutions in fall 2007 – with electric power companies Allegheny Energy and Dominion Resources – with the following resolved clause:

"RESOLVED: Shareholders request a report [reviewed by a board committee of independent directors] on actions the company is taking to work with policymakers to design new incentives that will provide financial returns for the company to reduce greenhouse gas emissions by improving the efficiency with which its customers use energy. The report should be provided by September 1, 2008 at a reasonable cost and omit proprietary information."

Both resolutions were withdrawn after dialogues with the companies in which they agreed to provide such a report.
Support for Public Policy Action: Articulating a Public Policy Stance

One of the ways that investors can push for climate policy action – and can encourage companies and other investors to do the same – is by visibly and clearly articulating a public policy stance. A public policy position complements the climate change statement described earlier: the climate change statement explains the science, risks, opportunities, and investor responsibility to act, while the policy stance explains the investor’s view of the actions that government should take to address climate risks and opportunities.

This stance can be accomplished as part of a group, such as the policy statement released by Ceres and the Investor Network on Climate Risk in March 2007 entitled “Investors and Business for US Climate Action”. But it can also be valuable to articulate an individual position, as the process of formulating a public policy stance can help investors understand and come to grips with the implications of policy choices on their investment portfolios.

Example: Ceres & INCR, Capital to the Capitol: Investors and Business for US Climate Action

On March 19, 2007, a coalition of 65 investors and businesses called on U.S. lawmakers to enact strong federal legislation to curb the pollution causing global climate change. In endorsing the statement, investors and companies sent a strong message that climate policy uncertainty and the lack of federal regulations may be undermine their long-term competitiveness because it is preventing them from investing in clean energy and climate-friendly technologies and practices. Among other things, the coalition called for:

- A mandatory national policy to contain and reduce national greenhouse gas emissions economy-wide, making the sizable, sensible, long-term cuts (60-90% below 1990 levels by 2050) that scientists and climate models suggest are urgently needed to avoid the worst and most costly impacts from climate change. Wherever possible, the policy should utilize mandatory market-based mechanisms, such as cap-and-trade systems, to create an economy-wide carbon price, allow for flexibility, and encourage innovation – though other regulations and policy tools may be most effective in some areas. The policy should not disadvantage businesses that have acted early to reduce their emissions.

- The realignment of incentives and other national policies to achieve climate objectives, including a range of energy and transportation policy measures to encourage research, development, and deployment of new and existing technologies at the necessary scale, as only governments can create the infrastructure needed to underpin the new clean energy system.
**Support for Public Policy Action:**

**Engaging Congress**

The absence of federal climate regulation creates uncertainty for companies and investors trying to plan for the long-term, so it benefits investors to advocate for policy certainty. In addition, regulations to address climate change will impact all sectors of the economy, so it is important for investors to weigh in on what those regulations should look like. Furthermore, Congress can play a strong role in pushing the SEC to require climate risk disclosure.

Investors can engage Congress in a range of ways, including by signing on to public statements (such as the March 2007 “Investors and Business for US Climate Action” statement or the February 2008 INCR Action Plan). Investors can also write to and arrange meetings with members of Congress and testify at Congressional hearings. Additionally, investors can stay updated on important climate and energy policy issues by participating in a forum like the INCR Policy Working Group.

**Example: Senate Hearing on Climate Risk Disclosure, October 2007**

On October 31, 2007, a subcommittee of the Senate Committee on Banking, Housing and Urban Affairs held a hearing on *Climate Disclosure: Measuring Financial Risks and Opportunities*. Russell Read, chief investment officer of the California Public Employees’ Retirement System (CalPERS), and Mindy Lubber, president of Ceres and director of the Investor Network on Climate Risk, testified at the hearing, arguing that the SEC already has the authority to require climate risk disclosure.

In December 2007, following the hearing, Senator Chris Dodd (D-CT), Chairman of the Committee, and Senator Jack Reed (D-RI), Chairman of the Subcommittee on Securities, Insurance and Investment, wrote to SEC Chairman Chris Cox urging the SEC to issue guidance on climate disclosure requirements.

Investors interested in engaging Congress or participating in the INCR Policy Working Group should contact Chris Fox, Director of Investor Programs, Ceres at fox@ceres.org.
SUPPORT FOR PUBLIC POLICY ACTION: CALLING FOR POLICIES TO MAXIMIZE ENERGY EFFICIENCY

Energy efficiency – reducing the energy used to produce and use goods and services – is the cheapest, cleanest, and most readily available form of energy supply and the most cost-effective, short-term means of reducing greenhouse gas emissions. Energy efficiency improvements can also minimize energy costs for companies and can provide attractive economic returns.

For instance, a new McKinsey Global Institute report, announced at the 2008 Investor Summit on Climate Risk, concludes that major investments over the next decade in energy productivity — the level of output achieved from the energy consumed — could earn double-digit rates of return for investors while cutting global energy demand growth by at least half and achieving up to half of the reductions of greenhouse gas emissions that experts say is required to prevent the world’s mean temperature from increasing by more than 2 degrees centigrade.25

Investors should call for policies at all levels of government to maximize energy efficiency.

EXAMPLE: 2008 INCR Action Plan

On February 14, 2008, at the Investor Summit on Climate Risk at the United Nations headquarters, nearly 50 leading U.S. and European institutional investors managing over $1.75 trillion in assets released a climate change action plan that will boost investments in clean energy technologies and require tougher scrutiny of carbon-intensive investments that may pose long-term financial risks. Additionally, European investors managing $6.5 trillion in assets supported the action plan “in principle”.

Among the items in the plan was a commitment by investors to:

- Call for policies at the local, state, and national levels that promote a doubling of the historic rate of energy efficiency improvements in developed countries (to 2.5% per year) and significant energy efficiency improvements in rapidly industrializing and other major energy-using countries

The full action plan can be found in Appendix B.

Investors interested in advocating for energy efficiency policies and/or participating in the INCR Policy Working Group should contact Chris Fox, Director of Investor Programs, Ceres at fox@ceres.org.
ENDNOTES


APPENDIX A: SAMPLE PORTFOLIO CLIMATE RISK POLICY

Introduction

Scientists generally agree that gases released by chemical reactions including the burning of fossil fuels contribute to a ‘greenhouse effect’ that traps the planet’s heat leading to changing climate patterns, violent weather swings, melting glaciers, rising sea levels, and receding coastlines.

Climate change is rapidly becoming one of the core challenges of the 21st century for corporate directors and institutional investors. Investors understand that climate change will have an impact on corporations going forward, whether through direct physical impacts to infrastructure, tighter regulations on carbon emissions, or changes in public perception for companies that do not take notice of global warming. Where there are risks, there are also opportunities, and the business and investment opportunities posed by climate change are significant. Long-term investors have a responsibility to mitigate the risks and seize the opportunities presented by climate change.

As a long-term investor, we recognize that sound governance practices and responsible corporate behavior on climate change can contribute significantly to the long-term performance of our investments. Accordingly, in keeping with our fiduciary duty, it is our policy that climate risk considerations should be taken into account wherever they are relevant to any aspect of our investment strategy. Ultimately, it is the responsibility of our trustees to ensure that procedures are followed to manage climate risk; therefore, we ensure that every trustee is equipped with a basic understanding of their fiduciary duties with respect to climate change.

Our Climate Risk Management Policies

Engaging with Companies

To help ensure sustainable long-term returns, we request that our portfolio companies provide accurate and timely disclosure of material risks and opportunities associated with climate change. Companies should apply the Global Framework for Climate Risk Disclosure when providing such disclosure.

When such disclosure is lacking, or when there are other shortcomings in corporate governance or performance related to climate risks and opportunities, we will generally first engage privately with portfolio companies. If this private dialogue with board members or senior executives does not produce a mutually productive outcome, we may use public forms of engagement, including:
■ filing or co-filing shareholder resolutions;
■ withholding votes from or voting against one or more directors;
■ engaging in public dialogue and commentary;
■ conducting a proxy solicitation;
■ engaging in collective action with other investors; and
■ seeking regulatory or legislative action.

**Proxy voting guidelines**

Disclosure addressing climate risks and opportunities is important because shareholders need to know whether the companies they own are adequately preparing for a carbon-constrained future. Disclosure also can help companies make strategic decisions related to climate – what gets measured gets managed. Accordingly, shareholders may request a report on climate risks and opportunities tied to a company’s operations and products, or they may request a report on how the company is responding to rising regulatory, competitive, and public pressure to significantly reduce carbon dioxide and other emissions.

■ **Our investment managers should generally vote FOR reasonable shareholder proposals seeking greater disclosure of greenhouse gas emissions and the impact of climate change on a company’s business activities.**

Shareholders may also request action that goes beyond disclosure, such as asking the company to establish greenhouse gas reduction targets and timelines. With respect to clean technology, they may ask companies to increase their investment in renewable energy sources and to work to develop products that rely more on renewable energy sources.

■ **Our investment managers should generally vote FOR shareholder proposals calling for reasonable reductions of greenhouse gas emissions under a reasonable timeline.**

■ **Our investment managers should generally support shareholder proposals seeking increased investment in renewable energy sources, taking into account whether the terms of the resolution are realistic or overly restrictive for management to pursue.**
**Policy Considerations**

The actions of investors, both individually and collectively, will not be enough to comprehensively manage climate risks and opportunities without public policy action by the federal government. Accordingly, we will work towards securing government policies that support climate risk assessment – by, for example:

- Engaging the Securities and Exchange Commission (SEC) on climate risk disclosure and other shareholder rights issues, including respectfully requesting the SEC to issue guidance to businesses and investors on what material issues related to climate change companies should disclose in their regular financial reporting; and
- Engaging Congress and other policymakers on long-term investors’ need for certainty related to climate and energy policies. To enable the business and investment communities to reduce climate risks and capture opportunities, we believe there is an urgent need for the federal government to act promptly to enact mandatory federal policies and incentives such as those laid out in the Investor Network on Climate Risk (INCR) “Investors and Business for US Climate Action” statement released on March 19, 2007.

By aligning the rules, regulations, and incentives, we can help make the clean energy transition a win-win for investors, the environment, the global economy, the American economy and businesses.

**Assessing Providers of Investment-Related Services**

We will prudently select money managers, investment managers, and consultants based in part on their expertise in assessing climate-related risks and opportunities. In making investment decisions, we will require providers of investment-related services across asset classes to display an understanding of the climate risks for each investment. Providers of investment-related services will be required to report on climate risk as part of their regular performance reviews.

**Investing in Opportunities & Solutions**

While climate risks are significant financial considerations, we will endeavor to take advantage of the substantial climate-related opportunities that exist in a range of asset classes by investing in climate “solutions”. Such investment initiatives might include:

- Pursuing reasonable efforts to improve energy efficiency within our core real estate portfolio, as well as where strong investment returns are available in our overall real estate portfolio.
- Building a diversified portfolio of clean technology-focused investments, defining clean technologies as solutions that are more efficient and less polluting than existing or legacy products, services, or technologies, with a focus on alternative and renewable energy (clean energy) and transitional infrastructure opportunities.
APPENDIX B: INVESTOR NETWORK ON CLIMATE RISK ACTION PLAN

Capitalizing the New Energy Future: Minimizing Climate Risks, Seizing Opportunities

Given the sweeping nature of climate change, climate risks are embedded in every investment portfolio. As fiduciaries entrusted with trillions of dollars of fund assets, we remain firmly convinced that climate change presents both material risks and significant opportunities for investment portfolios.

Since the last Investor Network on Climate Risk (INCR) action plan in 2005, more investors have been taking steps to engage companies and reduce climate risks in their portfolios. More businesses, responding to investor concern, have started to disclose their climate risks and account for the impacts of climate change on their financial performance and competitiveness. More investors and companies have called on political leaders to enact legislation that would provide greater regulatory certainty, provide incentives for climate solutions, and minimize the risks that climate change poses to businesses, investors, and the economy. But greater efforts are needed.

As fiduciaries and long-term investors, we see significant short and long-term risks from climate change to the value and security of our investments and capital markets more broadly. And we recognize that the impacts of climate change will continue to be multi-dimensional – affecting corporations’ abilities to secure the full range of necessary resources such as energy and water. At the same time, we also see opportunities presented by the transition to a low-carbon future.

Prudence, common sense, and fiduciary duty compel us to renew our efforts to examine and address the financial ramifications of climate change and to respond to climate challenges and opportunities. Accordingly, we hereby state our intentions to manage our investments; to engage companies, investors, and others; and to support policy action to the best of our abilities, in line with the following agenda:

Managing Our Investments

1. Require that our asset managers, consultants, and financial advisors consider climate risks and opportunities.

To ensure that our investments are managed by firms and individuals that are aware of the financial threats presented by climate change, it is important that we evaluate the ability of investment consultants, advisors, and managers to assess climate risks and opportunities. Accordingly, we will:

- Require and validate that relevant investment managers currently managing or seeking to manage our fund assets, as well as investment consultants and advisors, report on how they are assessing the risks and opportunities associated with climate change. Such a requirement can be accomplished through Requests for Proposals (RFPs), by making climate risk assessment a required part of regular manager reviews, by requiring managers to use a sustainability or climate risk screen, or by other methods.

2. Invest capital in companies developing and deploying clean technologies.

We believe investments in clean, climate-friendly technologies – such as energy efficiency and renewable energy – represent significant opportunities and will ultimately enhance and sustain the long-term viability of corporate assets and shareholder value by broadening and deepening the range of tools available to help the world avoid the worst impacts of climate change. Accordingly, we will:

- Seek investment opportunities in all appropriate asset classes to support clean technology efforts. Our goal is to deploy $10 billion collectively in additional investment over the next 2 years.
3. Improve the energy performance of real estate portfolios and investments. Studies demonstrate that enormous opportunities exist to improve building energy efficiency while enhancing the value of real estate assets. Accordingly, we will:

- Aim for a 20% reduction over a three-year period in energy used in core real estate investment portfolios, using standardized units of measurement, performance baselines, and regular reporting on measures taken and actual energy performance.
- Incorporate green building standards (such as LEED and Energy Star) as a factor in making investment decisions.

**Engaging Companies, Investors, and Others**

4. Urge comprehensive corporate responses to climate risks. As investors in publicly-held companies in the auto, electric power, coal, oil & gas, insurance, real estate, construction, financial, forestry, and many other sectors, we desire greater information and action from companies on climate risks and opportunities, recognizing the broader sustainability context. Accordingly, we will:

- Urge companies to elevate climate change as a governance priority, using the Ceres “Climate Change Governance Checklist.”
- Urge companies to provide better disclosure about the financial and material risks posed by climate change and to explain how they are factoring carbon costs into operational and capital-planning decisions. Such disclosure should follow the Global Reporting Initiative (GRI) guidelines and the Global Framework on Climate Risk Disclosure.
- Support appropriate shareholder resolutions, company engagements, and other efforts to encourage companies to reduce their carbon footprint, seize new market opportunities, and ask corporate suppliers to disclose and reduce greenhouse gas emissions and energy use.

5. Help investors evaluate and address corporate climate risks. Investors often need additional information and guidance to better evaluate and engage companies on climate risks and opportunities. Accordingly, we will:

- Urge companies to adhere to best practices in corporate governance on climate risk by producing and distributing through the Investor Network on Climate Risk (INCR) a new “Corporate Governance and Climate Change” report evaluating and scoring 100 leading global companies on their governance practices and responses to the risks and opportunities from climate change.
- Produce and distribute through INCR a report evaluating how climate change is exacerbating water scarcity and evaluating how water-intensive sectors are managing water-related risks.
- Develop and promote proxy voting guidelines that encourage support for reasonable shareholder proposals on climate risk.

6. Expand climate risk scrutiny and collaboration by investors, stock market analysts, and others in the finance sector. Investors around the world must work together to address the climate risks and opportunities that exist in every market and every asset class, and debt and equity analysts and others in the finance sector must start incorporating climate risk and opportunity into their routine financial analysis and company and portfolio valuation. Accordingly, we will:

- Encourage debt and equity analysts, ratings agencies, and investment banks to incorporate climate risks and opportunities as part of their investment and valuation analysis, including analyzing and reporting on the potential impacts of foreseeable long-term carbon costs (in the range of $20–$40 per metric ton of CO2eq.), particularly on carbon-intensive investments such as new coal-fired power plants, oil shale, tar sands, and coal-to-liquids projects.
- Encourage debt and equity analysts, ratings agencies, and investment banks to incorporate climate risks, opportunities, and carbon costs into their analysis of a new category of investment funds – infrastructure – including transportation, water, and other projects needed to support the growth of cities and the transition to a low-carbon economy.
- Engage with mutual funds, hedge funds, private equity firms, and others to promote increased understanding of, and actions in response to, climate risk.
- Support global information-sharing and collaboration by the growing number of institutional investors and organizations around the world concerned about climate risk.
Supporting Policy Action

Climate-related shareholder resolutions and new SEC guidance are each critical to improving corporate disclosure of climate risks and opportunities. Accordingly, we will:

- Continue to engage the SEC and members of Congress on requiring companies to disclose material climate risks as part of their regular securities filings. Towards this end, we will ask investors and members of Congress to support the September 2007 Investor Petition to the SEC for “Interpretive Guidance on Climate Risk Disclosure.”
- Continue to call on the SEC to recognize shareholders’ right to vote on resolutions related to climate change and to enforce existing rules requiring disclosure of material risks.
- Call on the SEC to develop expertise on climate change risks, as well as other environmental and social issues that pose material financial risks to corporations and investors.

8. Encourage companies and investors to support government action on climate policy. As fiduciaries and leaders in the investment community, we recognize the need for policies that establish regulatory certainty, minimize climate risks, and provide strong incentives for investment in clean technology and other climate change solutions. Accordingly, we will:

- Continue to call for a mandatory national policy to contain and reduce national greenhouse gas emissions economy-wide, making sizable, sensible, long-term cuts in accordance with the 60–90% reductions below 1990 levels by 2050 that scientists and climate models suggest are urgently needed to avoid the worst and most costly impacts from climate change.
- Continue to call for the realignment of incentives and other state and national policies to achieve climate objectives, including a range of energy and transportation policy measures to stimulate research, development, and deployment of new and existing clean technologies at the scale necessary to achieve greenhouse gas reduction goals.
- Call for strong U.S. leadership in the international negotiations for a successor to the Kyoto Protocol, including a binding target to reduce emissions significantly in the United States.

9. Support policies to maximize energy efficiency. As fiduciaries and long-term investors, we recognize that getting more use out of the energy we already produce is one of the fastest, easiest, and cheapest ways to significantly reduce emissions and to improve the bottom line of many companies in which we invest, especially with demand for energy increasing. Accordingly, we will:

- Call for policies at the local, state, and national levels that promote a doubling of the historic rate of energy efficiency improvements in developed countries (to 2.5% per year) and significant energy efficiency improvements in rapidly industrializing and other major energy-using countries.
Investors Signed on to 2008 Action Plan *(as of April 15th)*:

**Assets Under Management:** $1.75 trillion

**STATE TREASURERS, STATE/CITY COMPTROLLERS, PENSION FUNDS, LABOR**
- John Chiang, California State Controller
- Rob Feckner, Board President, California Public Employees’ Retirement System (CalPERS)
- Jack Ehnes, CEO, California State Teachers’ Retirement System (CalSTRS)
- Bill Lockyer, California State Treasurer
- Denise L. Nappier, Connecticut State Treasurer
- Alex Sink, Florida Chief Financial Officer
- General Robert Milligan, Executive Director, Florida State Board of Administration (SBA)
- Michael Goetz, Chairman of the Board, Illinois State Board of Investment
- Nancy K. Kopp, Maryland State Treasurer
- Tim Cahill, Massachusetts State Treasurer
- Orin S. Kramer, Chair, New Jersey State Investment Council
- William C. Thompson, Jr., New York City Comptroller
- Thomas P. DiNapoli, New York State Comptroller
- Richard Moore, North Carolina State Treasurer
- Randall Edwards, Oregon State Treasurer
- Robin L. Wiessmann, Pennsylvania State Treasurer
- Frank T. Caprio, Rhode Island General Treasurer
- Andrew Stern, President, Service Employees International Union
- Bruce Raynor, President, UNITE HERE
- Jeb Spaulding, Vermont State Treasurer

**FINANCIAL SERVICES FIRMS, ASSET MANAGERS, OTHER LEADERS IN INVESTING**
- Geeta Aiyer, President, Boston Common Asset Management
- Barbara J. Krumsieck, President and CEO, Calvert Group, Ltd.
- Michael Johnston, Executive Vice President, The Capital Group Companies *
- Jeff Skoll, Chairman, Capricorn Management LLC
- Allan Emanuelsson, Head of Socially Responsible Investing, DnB NOR Asset Management
- Amy L. Domini, Founder and CEO, Domini Social Investments LLC
- Don Rolfe, President and CEO, Ethical Funds
- Karina Litvack, Director, Head of Governance & Sustainable Investment, F&C Management Ltd.
- Peter Knight, President, Generation Investment Management, US
- Vinod Khosla, Founder, Khosla Ventures
- Jonathan S. Naimon, CEO, Light Green Advisors
- Mark Schwartz, Co-Founder and Chairman, MissionPoint Capital Partners
- L. John Doerr, Partner, Kleiner Perkins Caufield & Byers
- Stephen Dodson, Chief Operating Officer, Parnassus Investments
- Joe Keefe, CEO, Pax World Funds
- Rev. William Somplatsky-Jarman, Presbyterian Church (U.S.A.)
- Michael Crosby, OFMCap, Province of St. Joseph of the Capuchin Order, Milwaukee
- Joan Bavaria, President, Trillium Asset Management
- Timothy Brennan, Treasurer, Unitarian Universalist Association
- Tim Smith, Senior Vice President, Walden Asset Management
- Jack Robinson, President, Winslow Management Company

**FOUNDATIONS**
- Diane Edgerton Miller, President and CEO, Blue Moon Fund
- Denis Hayes, President and CEO, Bullitt Foundation
- Edith T. Eddy, Executive Director, Compton Foundation
- Eric Heitz, President, The Energy Foundation
- Jesse Fink, Co-Founder, Betsy and Jesse Fink Foundation
- Jenny D. Russell, Executive Director, The Merck Family Fund
- Lance E. Lindblom, President & CEO, Nathan Cummings Foundation
- Dave Beckwith, Executive Director, The Needmor Fund
- Stephen A. Foster, President and CEO, The Overbrook Foundation
- Stephen B. Heintz, President, Rockefeller Brothers Fund
- Richard Woo, CEO, The Russell Family Foundation
- Sally Osberg, President, Skoll Foundation
- Timothy E. Wirth, President, United Nations Foundation
- Wren W. Wirth, President, The Winslow Foundation

**SUPPORTERS IN PRINCIPLE:**
**ASSETS UNDER MANAGEMENT:** $6.5 TRILLION
- Rob Lake, Head of Sustainability, ABP investments
- Donald MacDonald, Trustee, British Telecommunications Pension Scheme (BTPS)
- Kevin Parker, CEO, Deutsche Asset Management & Member Group Executive Committee, Deutsche Bank
- Peter Dunscombe, Chairman, Institutional Investors Group on Climate Change (IIGCC)
- Howard Jacobs, Trustee, Universities Superannuation Scheme (USS)
APPENDIX C: INCR in Brief

The Investor Network on Climate Risk was launched at the first Institutional Investor Summit on Climate Risk at the United Nations in November 2003. INCR’s membership has since grown from 10 investors managing $600 billion in assets to more than 60 investors managing $5 trillion of assets. Members include asset managers, state and city treasurers and comptrollers, public and labor pension funds, foundations, and other institutional investors. INCR leverages the collective power of these investors to promote improved disclosure and corporate governance practices on the business risks and opportunities posed by climate change. INCR has achieved dramatic results, including:

- Mobilized a Call to Action, in March 2007 by 65 corporations and institutional investors managing $4 trillion in assets urging Congress to enact strong federal legislation to curb greenhouse gas emissions and requesting the Securities and Exchange Commission (SEC) to clarify what companies should disclose to investors on climate change in their regular financial reporting.

- Organized more than two-dozen institutional investors, managing more than $1.5 trillion of assets, to file a petition in September 2007 calling on the U.S. Securities and Exchange Commission (SEC) to require publicly-traded companies to disclose the financial risks of global warming in their securities filings.

- Spearheaded dozens of breakthrough achievements with companies, such as: Bank of America launching a $20 billion initiative to support the growth of environmentally sustainable business activity to address global climate change; Dell Inc. committing to reduce its greenhouse gas emissions by 15 percent by 2012 and press its top suppliers for annual reports on their own greenhouse emissions; and ConocoPhilips announcing it will incorporate carbon costs in capital spending plans and earmark $300 million on biofuels and other lowcarbon research.

- Brought together over 450 investor, financial and corporate leaders at the United Nations in February 2008 to address the growing financial risks and opportunities posed by climate change. Nearly 50 leading U.S. and European institutional investors managing over $1.75 trillion in assets released a 9-point climate change action plan that will boost investments in energy efficiency and clean energy technologies and require tougher scrutiny of carbon-intensive investments that may pose long-term financial risks.

- Published cutting-edge research reports to help investors better understand the implications of global warming. Among those: a January 2008 report, Corporate Governance and Climate Change: The Banking Sector, analyzing how 40 of the world’s largest banks are addressing the business challenges from climate change; an October 2007 report, From Risk to Opportunity: Insurer Responses to Climate Change; and a January 2007 report, Climate Risk Disclosure by the S&P 500.

- Established the Global Framework for Climate Risk Disclosure, a standardized set of guidelines for improving corporate disclosure on the risks and opportunities for climate change. The framework was developed in
INCR Membership Information

The Investor Network on Climate Risk was launched at the first Institutional Investor Summit on Climate Risk at the United Nations in November 2003. INCR’s membership has since grown from 10 investors managing $600 billion in assets to more than 60 investors managing over $5 trillion of assets. Members include asset managers, state and city treasurers and comptrollers, public and labor pension funds, foundations, and other institutional investors. INCR leverages the collective power of these investors to promote improved disclosure and corporate governance practices on the business risks and opportunities posed by climate change. For more information, please visit www.incr.com

INVITATION TO JOIN INCR
INCR welcomes institutional investors and financial institutions that are interested in learning about climate risk to become INCR Members. There are two categories of INCR Members:

- INCR General Members (plan sponsors, pension funds, treasurers, comptrollers, labor unions, foundations, endowments, and religious funds are eligible)
- INCR Sustaining Members (asset managers and other financial services firms are eligible).

INCR MEMBERSHIP BENEFITS

- Invitation to send representatives to INCR conferences, briefings, and meetings
- INCR member-only newsletter and other INCR publications
- INCR research services/products and access to experts on climate risk and sustainability issues
- Coordination with other investors and participation in INCR working groups
- Ceres staff support in coordinating media/press events on climate risk and sustainability issues
- Ceres staff support for investor engagement with companies and government agencies (e.g. SEC) including supporting shareowner letters, proposals and company dialogues
- Eligibility for additional fee-for-service benefits if desired (e.g. trustee/staff training programs)

INCR MEMBERS ARE EXPECTED TO SUPPORT INCR THROUGH THE FOLLOWING:

- Participating in INCR meetings and working groups as appropriate
- Annual financial support based on INCR Membership Fee Scale – please note that options for how INCR members can participate financially and cover annual fees include dues, sponsoring INCR meetings/conferences/reports, or contributing to the INCR research program

Please note that institutions that are interested in becoming INCR General Members or INCR Sustaining Members must submit a written application. Applications for membership will be reviewed and voted on by the INCR executive committee.

INCR ANNUAL MEMBERSHIP FEE SCALE

INCR General Members
(Plan sponsors, pension funds, treasurers, comptrollers, labor unions, foundations, endowments, and religious funds are eligible)

Assets under $1 billion = $500
Assets of $1 billion - $49.99 billion = $2,500
Assets of $50 billion - $99.99 billion = $5,000
Assets of $100 billion and over = $7,500

INCR Sustaining Members
(Asset managers and other financial services firms are eligible)

Assets under $1 billion = $2,000
Assets of $1 billion - $49.99 billion = $5,000
Assets of $50 billion - $99.99 billion = $7,500
Assets of $100 billion and over = $10,000

To learn more about getting involved in INCR, please contact Chris Fox (fox@ceres.org) or 617-247-0700 ext. 15.
## APPENDIX D: INCR MEMBERS (as of April 2008)

<table>
<thead>
<tr>
<th>AIG Investments</th>
<th>Green Century Funds</th>
<th>Pennsylvania State Treasurer</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Federation of State, County</td>
<td>Illinois State Board of Investment</td>
<td>Portfolio 21 Investments</td>
</tr>
<tr>
<td>and Municipal Employees</td>
<td>International Association of Machinists</td>
<td>Presbyterian Church USA</td>
</tr>
<tr>
<td>Boston Common Asset Management</td>
<td>International Brother of Teamsters, Affiliates Pension Plan</td>
<td>Province of St. Joseph of the Capuchin Order</td>
</tr>
<tr>
<td>British Columbia Investment Management Corporation</td>
<td>Kentucky State Treasurer</td>
<td>Rhode Island State Treasurer</td>
</tr>
<tr>
<td>Brown University</td>
<td>Kleiner Perkins Caufield &amp; Byers</td>
<td>Rockefeller &amp; Co.</td>
</tr>
<tr>
<td>Bullitt Foundation</td>
<td>Kolibri Group</td>
<td>Rockefeller Brothers Fund</td>
</tr>
<tr>
<td>California Public Employees' Retirement System</td>
<td>Maine State Treasurer</td>
<td>Service Employees International Union</td>
</tr>
<tr>
<td>California State Controller</td>
<td>Maryland State Retirement Agency</td>
<td>Sheet Metal Workers Pension Fund</td>
</tr>
<tr>
<td>California State Teachers' Retirement System</td>
<td>Maryland State Treasurer</td>
<td>Sisters of St. Dominic of Caldwell, NJ</td>
</tr>
<tr>
<td>California State Treasurer</td>
<td>Massachusetts State Treasurer</td>
<td>Stark Investments</td>
</tr>
<tr>
<td>Calvert Group</td>
<td>Nathan Cummings Foundation</td>
<td>State Street Global Advisors</td>
</tr>
<tr>
<td>Christian Brothers Investment Services</td>
<td>Needmor Fund</td>
<td>TIAA-CREF</td>
</tr>
<tr>
<td>Connecticut State Treasurer</td>
<td>New Jersey State Investment Council</td>
<td>Trillium Asset Management</td>
</tr>
<tr>
<td>CWA/ITU Negotiated Pension Plan</td>
<td>New Jersey State Treasurer</td>
<td>Unitarian Universalist Association</td>
</tr>
<tr>
<td>Deutsche Asset Management</td>
<td>New York City Comptroller</td>
<td>UNITE HERE</td>
</tr>
<tr>
<td>Domini Social Investments</td>
<td>New York City Employees Retirement System</td>
<td>United Methodist Church General Board of Pension &amp; Health Benefits</td>
</tr>
<tr>
<td>Doris Duke Charitable Foundation</td>
<td>New York State Comptroller</td>
<td>Vermont Community Foundation</td>
</tr>
<tr>
<td>Ethical Funds Company</td>
<td>New York State Teachers’ Retirement System</td>
<td>Vermont State Treasurer</td>
</tr>
<tr>
<td>Evangelical Lutheran Church in America</td>
<td>North Carolina State Treasurer</td>
<td>Walden Asset Management</td>
</tr>
<tr>
<td>F &amp; C Asset Management</td>
<td>Oregon State Treasurer</td>
<td>Winslow Management</td>
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<tr>
<td>Florida State Board of Investment</td>
<td>Parnassus Funds</td>
<td>XShares</td>
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<td>Florida State Treasury</td>
<td>Pax World Funds</td>
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<tr>
<td>Fred Alger Management</td>
<td></td>
<td></td>
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</tbody>
</table>
APPENDIX E: FOR MORE INFORMATION


Ceres, www.ceres.org


Interfaith Center on Corporate Responsibility, http://www.iccr.org

Investor Network on Climate Change (INCR), INCR.com


New York State Office of the State Comptroller: Green Initiative, http://www.osc.state.ny.us/green/


Managing the Risks and Opportunities of Climate Change:

A Practical Toolkit for Investors

April 2008