Climate action and profitability

CDP S&P 500 Climate Change Report 2014

On behalf of 767 investors representing US$92 trillion in assets

A report by CDP North America

In memory of
Edward Robert Roehrig
1958–2014
Vice President
Global Real Estate and Sustainability
IntercontinentalExchange/NYSE

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Meg Whitman

Chairman, President, and CEO, HP

At HP, our people and technology help solve society's toughest challenges. Climate change is one of the most serious issues the world is confronting today. The toll it takes on the planet and humans—through changes in temperature, rising sea levels, extreme weather, and other phenomena—can no longer be ignored.

That's why it is so important for companies, governments, and non-governmental organizations (NGOs) to address the root causes of climate change. This will require new ways of doing business, including developing long-term strategies to drive the low-carbon economy and collaborating on best practices for reducing greenhouse gas (GHG) emissions across industries. It also demands greater accountability, which is why CDP's work to drive transparency around climate change issues and deliver compelling environmental data analysis is so critical.

We believe the information technology (IT) industry is uniquely positioned to help lower carbon emissions across every sector. One way is by inventing more sustainable technologies to replace outdated, inefficient processes and behaviors. In fact, technology has already helped reengineer entire industries with new solutions that use much less energy and have a substantially smaller carbon footprint.

But we need to do even more to reduce the environmental impact of technology itself, while addressing the growing demands of businesses and consumers. For example, today mankind produces more data in two days than in all of human history up to 2003. Supporting that growth in data requires more data centers, which requires more energy. How much energy? Today, the public cloud alone uses more energy than the entire country of Japan. It may soon require more energy than we can even produce. This is simply not sustainable.

We need to think differently about the technology that powers our life and work—creating solutions that go beyond incremental efficiency improvements. At HP, we're looking ahead and thinking about how we can revolutionize the energy economics of the data center. Innovations like HP Moonshot servers, which consume up to 89 percent less energy, use 80 percent less space, and cost 77 percent less than a traditional server environment, and the HP Apollo 8000 System, a liquid-cooled supercomputer, can help organizations eliminate up to 3,800 tons of carbon dioxide waste from data centers per year. We must create solutions that are orders of magnitude faster, that use the optimal amount of energy for the task, and that are built at a fraction of the size—just as HP is doing with its latest innovation, The Machine, which will redefine how we think about computing in this big data era.

But technology is only part of the equation. For companies to make a sustainable impact and achieve long-term business value, they must work to lower carbon emissions across their entire value chain. This means being transparent in tracking and reporting GHG emissions, an approach that allows companies to measure progress, make necessary course corrections, and promote broader accountability.

At HP, we have systematically analyzed our carbon footprint and taken action to reduce our GHG emissions across operations, supply chain, and products. For example, we were the first major IT company to publish and verify our complete carbon footprint. In 2013, we became the first IT company to publish a supply chain GHG emissions reduction goal—a 20 percent decrease in first-tier manufacturing and product transportation-related GHG emissions intensity by 2020, compared with 2010. We have now set a new goal to reduce the emissions intensity of our product portfolio by 40 percent by 2020 from a 2010 baseline. This initiative will help us and our customers reduce our carbon impacts.

By integrating sustainability across the entire value chain, companies can capture return on capital today and build leadership and business value for their future. These investments help companies create a competitive advantage, build stability, and provide assurances to stakeholders that they are well positioned for the challenges of the 21st century.

As we celebrate our 75th anniversary, our focus on sustainability is as strong as ever and is a critical part of HP's growth strategy. We're pleased to be partnering with CDP, governments, NGOs, our customers, and others in the IT industry to build a healthier world for everyone.

By integrating sustainability across the entire value chain, companies can capture return on capital today and build leadership and business value for their future.

> One irrefutable fact is filtering through to companies and investors: the bottom line is at risk from environmental crisis.

Paul Simpson

Chief Executive Officer, CDP

The global economy has bounced back from crisis and a cautious optimism is beginning to pervade the markets. As we embrace recovery we must remember that greenhouse gas emissions continue to rise and we face steep financial risk if we do not mitigate them.

The unprecedented environmental challenges that we confront today—reducing greenhouse gas emissions, safeguarding water resources and preventing the destruction of forests—are also economic problems. One irrefutable fact is filtering through to companies and investors: the bottom line is at risk from environmental crisis.

The impact of climate events on economies around the world has increasingly been splashed across headlines in the last year, with the worst winter in 30 years suffered by the USA costing billions of dollars. Australia has experienced its hottest two years on record, and the UK has had its wettest winter for hundreds of years costing the insurance industry over a billion pounds. Over three-quarters of companies reporting to CDP this year have disclosed a physical risk from climate change. Investing in climate change–related resilience planning has become crucial for all corporations.

Investor engagement on these issues is increasing. In the US a record number of shareholder resolutions in the 2014 proxy season led 20 international corporations to commit to reduce greenhouse gas emissions or sustainably source palm oil.

As mainstream investors begin to recognize the real value at risk, we are seeing more action from some of the 767 investors who request disclosure through CDP. The Norwegian pension fund, Norges Bank, with assets worth $260 billion, expects companies to show strategies for climate change risk mitigation and water management, and have divested from both timber and palm oil companies that did not meet their standards.

There is growing momentum on the policy front with President Obama's announcement of new federal rules to limit greenhouse gases in the US. In the EU, some 6,000 companies will be required to disclose on specific environmental, social and governance criteria as part of their mainstream reporting to investors. In China over 20,000 companies will be required to report their greenhouse gas emissions to the government.

There is a palpable sea change in approach by companies driven by a growing recognition that there is a cost associated with the carbon they emit. Measurement, transparency and accountability drives positive change in the world of business and investment. Our experience working with over 4,500 companies shows the multitude of benefits for companies that report their environmental impacts, unveiling risks and previously unseen opportunities.

We are standing at a juncture in history. With the prospect of a global climate deal coming from the United Nations process, governments, cities, the private sector and civil society have a great opportunity to take bold actions and build momentum in the run up to the Paris 2015 meeting. The decisions we make today can lead us to a profitable and secure future. A future that we can all be proud of.

1 www.un.org/climatechange/towards-a-climate-agreement/

Executive summary

For each of the past nine years, the world's largest investors have tasked CDP with administering their request for climate change disclosure to S&P 500 companies. This authority granted by capital markets participants representing trillions of dollars in assets makes CDP unique among environmental non-governmental organizations. Investors rely on CDP to communicate to corporations on their behalf, to identify the critical elements of climate change governance, risk management and emissions accounting, and to provide comprehensive data to integrate into their investment research and decision-making.

In this report, we answer the number one question US investors ask CDP about climate change data—"is there evidence of a link to financial performance?"—with a resounding yes.

Our analysis shows that, on climate change management, S&P 500 industry leaders:[2]

- **generate superior profitability:** ROE[3] 18% higher than low scoring peers and 67% higher than non-responders;
- **with more stability:** 50% lower volatility of earnings over the past decade than low scoring peers;
- **grow dividends to shareholders:** 21% stronger than low scoring peers; and
- **exhibit value attributes** attractive to equity investors.

By featuring the investment implications of climate change management for the first time in our ninth annual S&P 500 report, we hope to shine a light on the link between strong climate change management and measures of financial performance and, at the very least, to put to rest the common misconception that taking action on climate change exacts a cost to profitability. Our data shows the opposite.

This report presents the progress achieved by 70%[4] of S&P 500 companies in integrating climate change risk management into strategic planning, taking action towards emissions reductions and demonstrating a long-term view of how to best manage the assets of shareholders.

Investors seek out companies with superior management quality that efficiently allocate capital and maximize operating profitability. Quality is often measured in terms of financial outcomes, including return on equity, earnings stability and dividend growth. Our analysis suggests that climate change leadership is another strong reflection of superior management quality; thus, we observe correlations with these financial measures. However, we are careful to caveat that correlation does not imply causation. Rather, we believe that S&P 500 companies are compelled to act on climate change in defense of their superior profitability and market valuation consistent with their fiduciary obligation to shareholders.

2 In this report, we refer to industry leaders as S&P 500 companies with 2014 CDP disclosure scores and/or CDP performance bands that rank in the first quartile versus peers by GICS Industry Group, where:
Q1 = first quartile (top 25% of responding companies by industry group);
Q2 = second quartile;
Q3 = third quartile;
Q4 = fourth quartile (bottom 25% of responding companies by industry group); and
Non-responders include: declined to participate; no response; provided information but did not answer questionnaire to CDP in 2014.

3 Return on Equity (ROE) = net income less preferred dividends, divided by average total common equity (three-year average, 2011-2013).

4 Analysis in this report is based on the 337 company responses received by the deadline of June 28, 2014. The response rate of 70% (348 companies) is based on time of printing.

S&P 500 INDUSTRY LEADERS:

Generate superior profitability

67%
higher ROE
than non-responders

(18%)
higher ROE
than low-scoring peers

Enjoy more stability

50%
lower volatility
of earnings over the past decade
than low-scoring peers

Exhibit value attributes attractive to equity investors

Grow dividends to shareholders

21%
stronger than
low-scoring
peers

CSX is committed to investing in the safe, reliable, environmentally friendly rail network of the future to continue to drive profitable growth and shareholder value creation. One such opportunity, intermodal transportation, capitalizes on the environmental efficiency of freight rail, which is four times more fuel-efficient than trucks, and significantly reduces emissions and highway congestion. Investing in intermodal means investing in future growth and shareholder returns, as more people demand more things that must be moved in the most responsible way possible. Those shipments now represent 40 percent of CSX's portfolio by volume, with an estimated 9 million additional loads in the Eastern US that have the potential to shift from truck to rail.

To capitalize on that growth opportunity, CSX spearheaded the National Gateway project—an $850 million public-private partnership with state and federal partners to better connect ports with consumption centers by expanding the intermodal capacity of key corridors on the CSX network. CSX's broad coverage of Eastern markets and unique strategy, combining a hub-and-spoke model with the traditional intermodal corridor strategy, effectively reaches nearly two-thirds of American consumers.

CSX's commitment to sustainable growth includes aggressive maeasurement and transparency for shareholders and employees alike. CDP is an important avenue for communicating about CSX's sustainability strategy, progress against important goals, and leadership in the area of environmentally responsible growth. CDP helps CSX continue to be how tomorrow moves.

Fredrik Eliasson
Executive Vice President and
Chief Financial Officer,
CSX Corporation

Trends in CDP S&P 500 data

Trends in CDP data

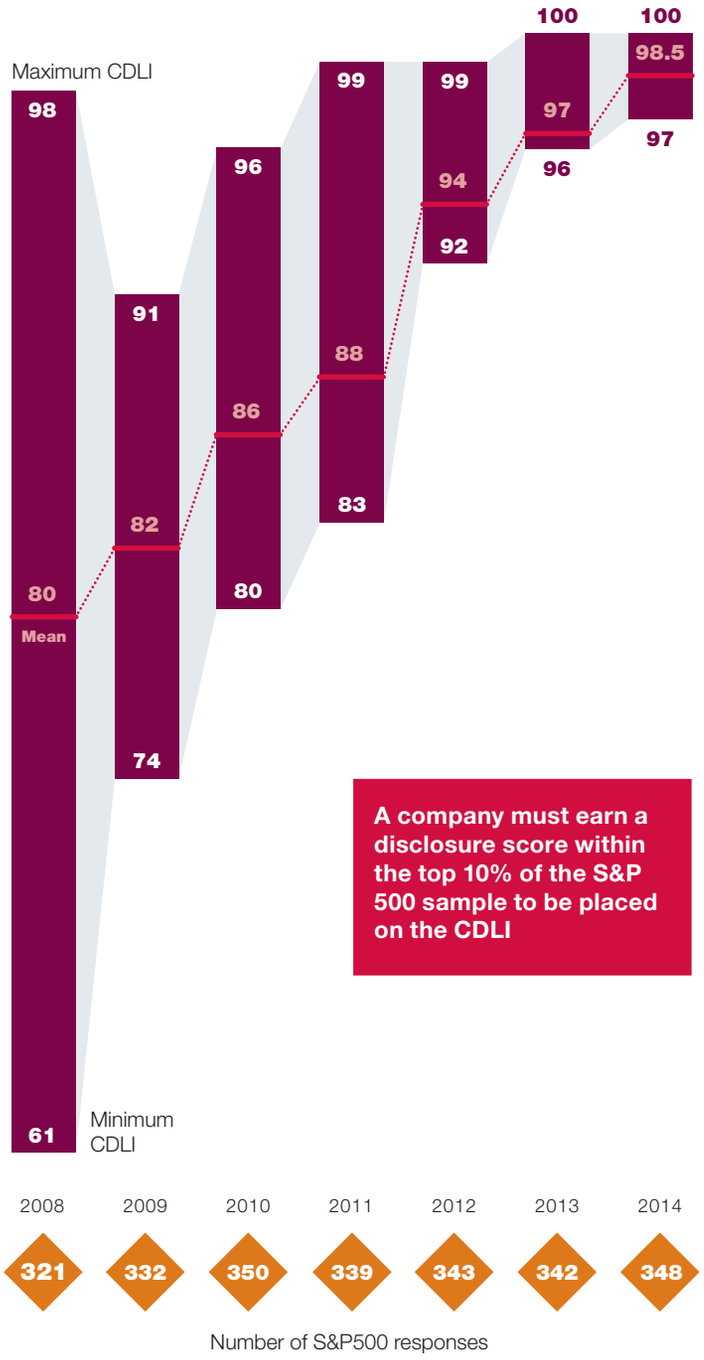
Since 2003, CDP has requested annual climate change disclosures from the world's largest companies on behalf of its investor signatories. The CDP climate change questionnaire focuses on governance, risks & opportunities, and greenhouse gas (GHG) emissions accounting.[5] CDP began scoring company responses to its questionnaire in 2007 to provide a gauge of the transparency of climate change information disseminated to the market. Participating companies receive a CDP disclosure score (from 0 to 100) and performance band (from A to E). The disclosure score reflects the transparency of information provided on emissions measurement; climate-related initiatives; risks & opportunities to the business; and external verification and assurance based solely on the information disclosed in the CDP response.[6] Companies who score in the top 10% are included in an annual index known as the Climate Disclosure Leadership Index (CDLI).

The bar for admission to the CDLI continues to rise: CDP disclosure scores for the CDLI have narrowed considerably over the past 7 years from a minimum score of 61 in 2008 to 97 in 2014.

Since 2011, CDP has also assigned a performance band from A to E to companies scoring above 50 on disclosure scores. CDP performance bands assess the level of action, as reported by the company, on climate change mitigation, adaptation and transparency. Its intent is to highlight positive climate action as demonstrated by a company's CDP response.

Figure 1. The bar for admission to the Climate Disclosure Leadership Index (CDLI) continues to rise

Maximum and minimum CDLI scores, 2008–2014



5 For details of the 2014 CDP Climate Change information request, please visit: https://www.cdp.net/CDP%20Questionaire%20Documents/CDP-climate-change-information-request-2014.pdf

6 For details of the 2014 CDP Climate Change scoring methodology, please visit: https://www.cdp.net/Documents/Guidance/2014/CDP-2014-Climate-Change-Scoring-Methodology.pdf

"Our company's core value of integrity drives our commitment to being an industry leader in sustainability. It's important to us because we know it's important to our shareholders, our customers, our employees and the communities where we operate.

It's also good for business. One tangible example of our commitment includes the Principal Green Property Fund I, a closed-end fund managed by our real estate division. We launched our first Green Fund in 2008, which invested specifically in US properties for purposes of achieving LEED or ENERGY STAR certification. We intend to continue to develop new investment strategies and products that encourage sustainability and achieve such standards.

Participating in the CDP process has strengthened our company's sustainability program overall. It's also allowed us to provide current and potential investors and others with detailed information about our sustainability goals and results."

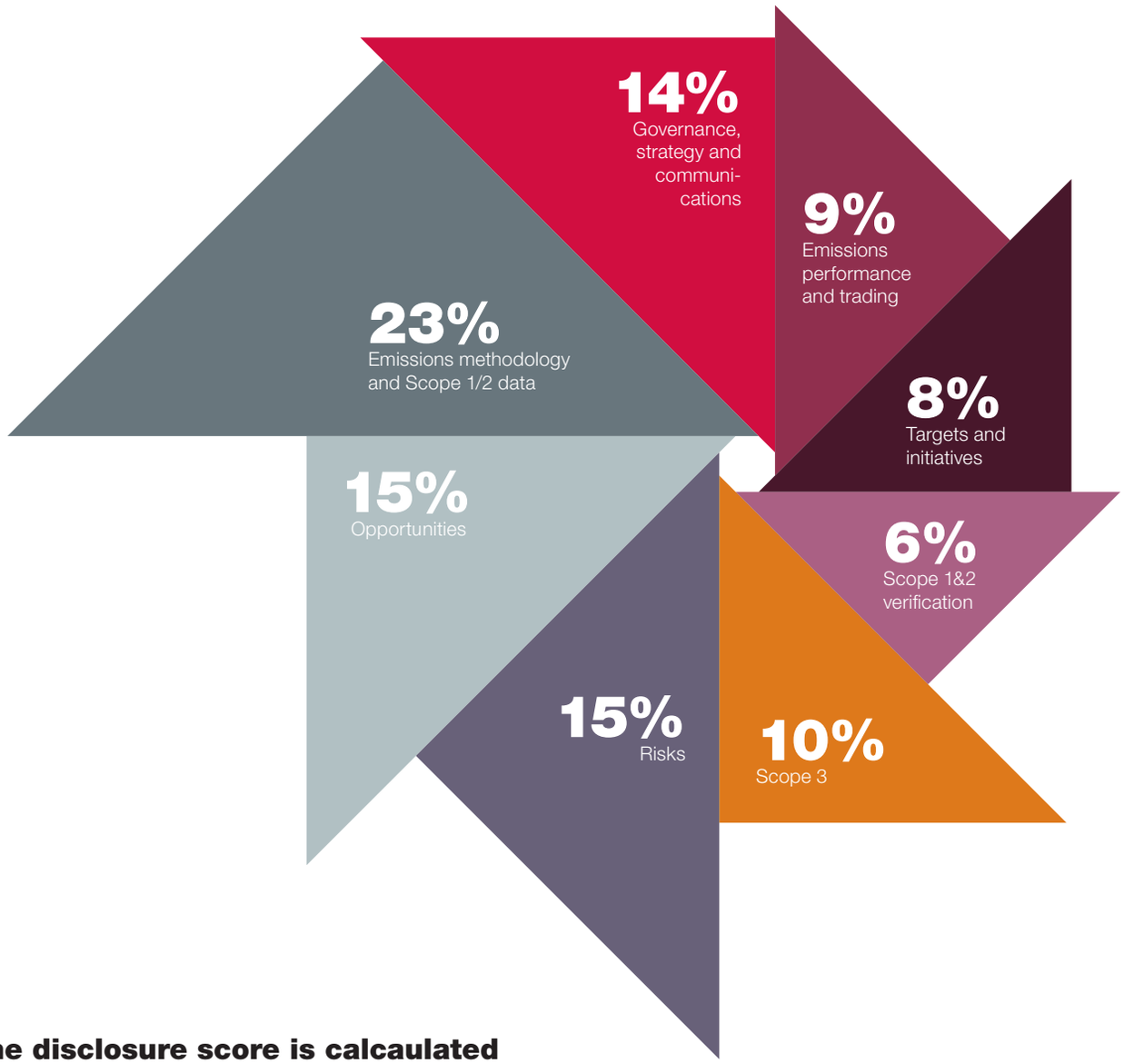
Larry Zimpleman, Chairman, President and CEO
The Principal Financial Group

The Principal is undergoing a $400 million, multi-year renovation of its 2+ million square foot campus in Des Moines, Iowa. The environmentally friendly renovations involve plans to reduce both indoor and outdoor water use, recycle more than 90 percent of all construction debris and conserve energy. One highlight of our energy conservation strategies involves using LED lighting throughout the entire campus, including in the skywalks between buildings (as shown above).

Anatomy of CDP disclosure scores and performance bands

Relative weight of elements in determining the disclosure score

The disclosure score assesses the completeness and quality of a company's response. Its purpose is to provide a summary of the extent to which companies have answered CDP's questions in a structured format. A high disclosure score signals that a company provided comprehensive information about the measurement and management of its carbon footprint, its climate change strategy and risk management processes and outcomes.



How the disclosure score is calcaulated

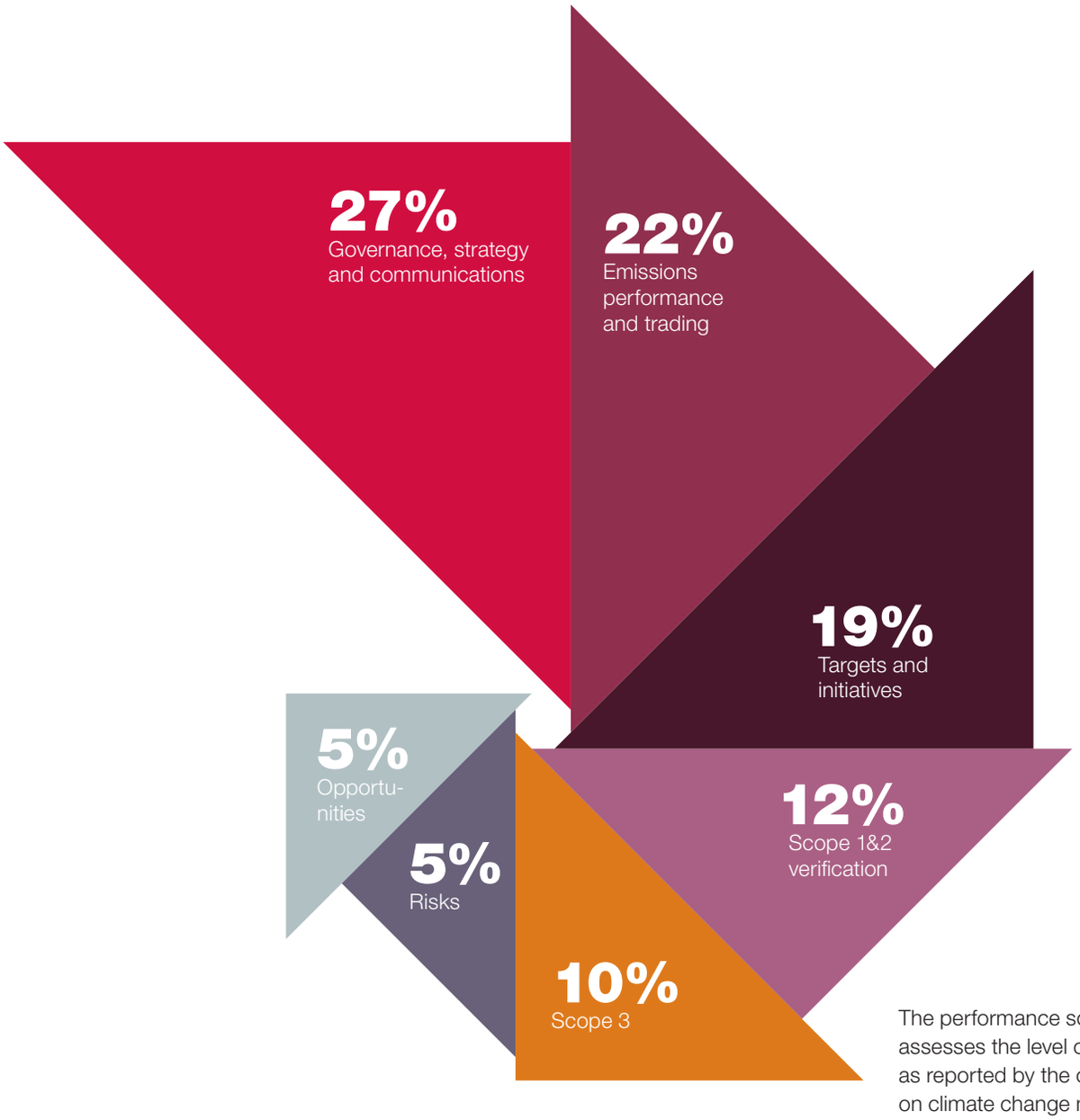
$$\frac{\text{Disclosure points earned}}{\text{Disclosure points available}} \times 100 = \text{Disclosure score \%}$$

0 to 100

>50% disclosure = scored for performance

<50% disclosure = not scored for performance

Relative weight of elements in determining the performance bands



The performance score assesses the level of action, as reported by the company, on climate change mitigation, adaptation and transparency. Its intent is to highlight positive climate action as demonstrated by a company's CDP response. A high performance score signals that a company is measuring, verifying and managing its carbon footprint, through actions such as setting and meeting carbon reduction targets and implementing programs to reduce emissions in both its direct operations and supply chain.

How the performance score is calcaulated

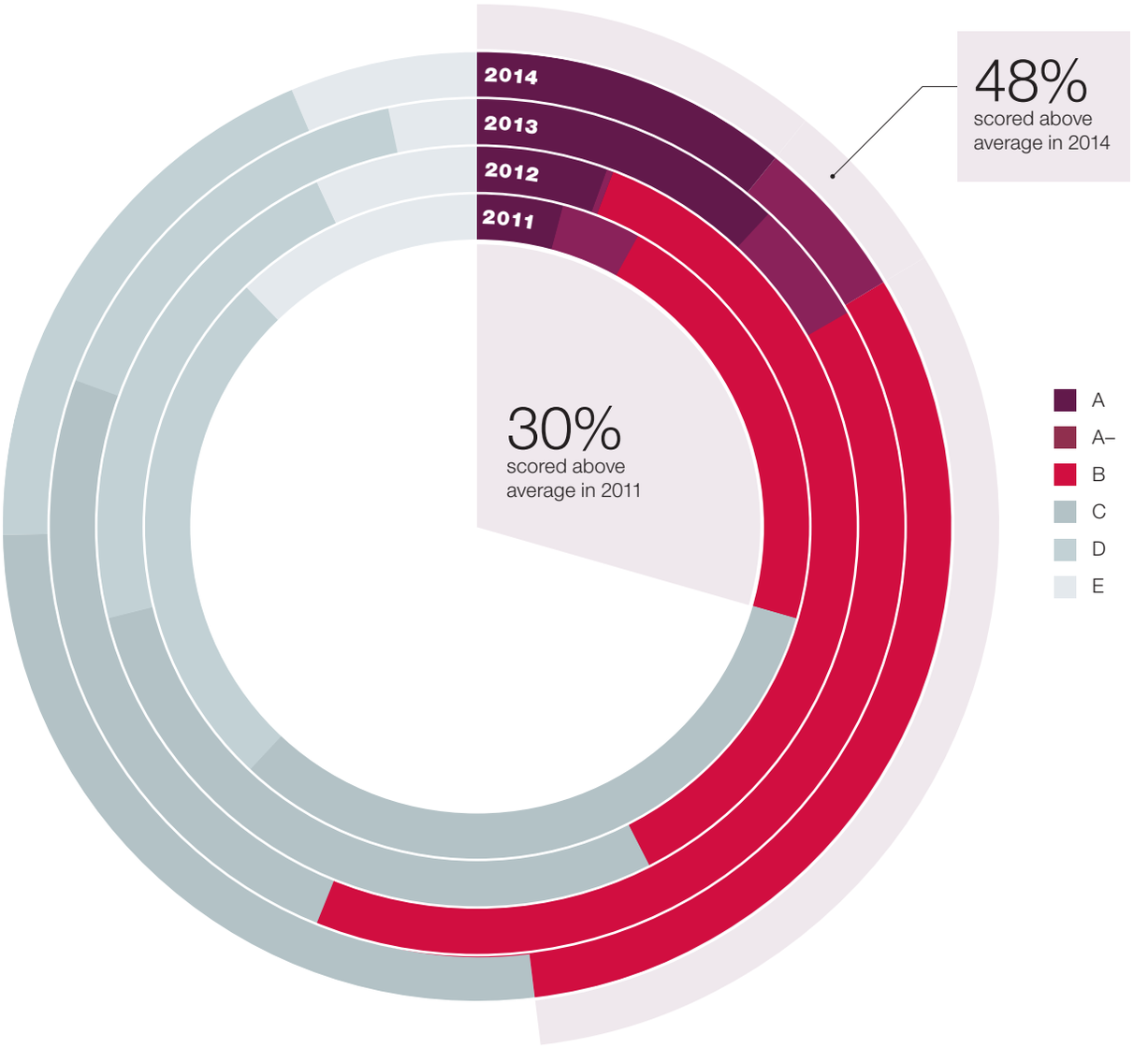
$$\frac{\text{Performance points earned}}{\text{Performance points available}} \times 100 = \text{Performance score \%} = \text{Performance band}$$

A to E

CDP performance bands for the S&P 500 have improved dramatically over the past three years.

Whereas in 2011, just 30% of S&P 500 companies achieved high performance bands of A, A– or B, that percentage increased to nearly half, at 48%, in 2014. Moreover, the improvement in performance occurred during the same period that CDP markedly increased the minimum point percentage thresholds for achieving each CDP performance band: for an A or A–, from 71 to 86, for a B from 51 to 61, for a C from 31 to 41, and for D from 16 to 21. Companies achieving a performance band of A are included in CDP's annual Climate Performance Leadership Index (CPLI).[7]

Figure 2. CDP performance bands for the S&P 500 have improved dramatically over the past three years
CDP performance bands, 2011–2014

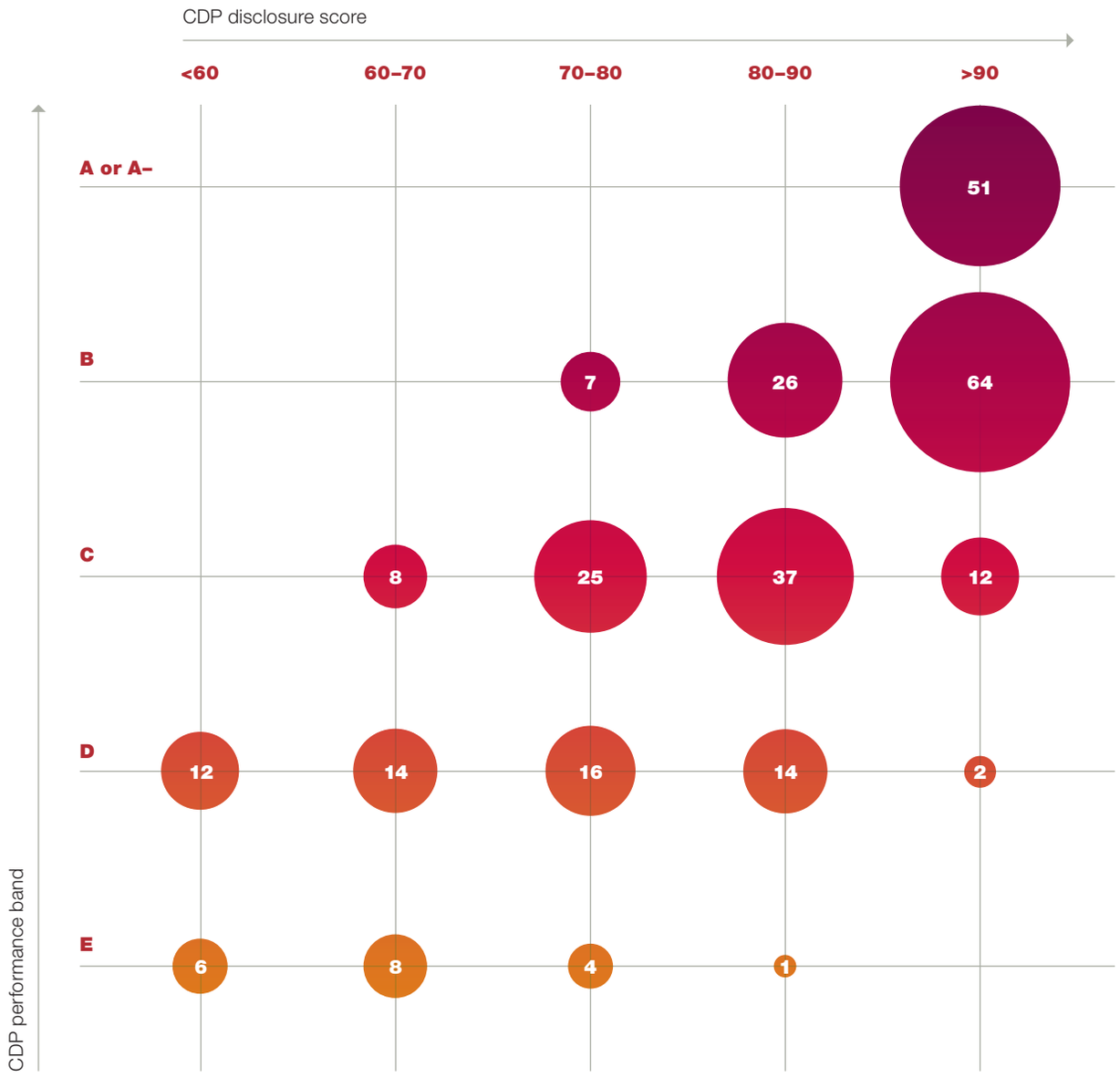


7 Companies that achieve a performance score high enough to warrant inclusion in the CPLI, but do not meet all of the CPLI requirements are classified as performance band A– and are not included in the CPLI. See page XX for CPLI criteria.

Disclosure lays the foundation for performance

It is not surprising to see a strong overlap between CDP disclosure scores and performance bands based on responses to the CDP Climate Change questionnaire for the 2014 CDP S&P 500. Although not a prerequisite to achieving emissions reductions, in CDP's experience of engaging with thousands of companies over the past 15 years, companies typically utilize the CDP climate change questionnaire as a strategic framework to identify areas across company operations, supply chains and products and services where it may make sense to take action to reduce emissions. Performance bands measure action towards mitigation of emissions such as setting targets, investing in emissions reduction activities and reducing the emissions intensity of operations. The strong relationship between CDP disclosure scores and performance bands illustrates the importance of measurement and transparency as a foundation for meaningful action on climate change.[8]

Figure 3. Strong correlation between disclosure score and performance bands
Number of companies by disclosure score and performance band, 2014



8 Companies that achieve a performance score high enough to warrant inclusion in the CPLI, but do not meet all of the CPLI requirements are classified as performance band A– and are not included in the CPLI. See page XX for CPLI criteria.

At IFF, our sustainability strategy is aligned with our overall long-term business strategy. We make better business decisions by evaluating the financial, environmental and social implications of the triple bottom line. This means we are taking into consideration what matters most to our shareholders, customers, employees and the millions of consumers whose lives we touch daily. As more investors place effective sustainability strategy in their investing decision criteria, IFF believes that aligning with CDP responds to those investment needs. CDP provides a valuable framework to benchmark our efforts and supports the communication of our carbon management initiatives.

As sustainability is becoming increasingly more embedded in our business practices and personal behaviors, we are committed to achieving or exceeding our 2020 goals of reducing water, waste and GHG emissions by 25% and energy use by 20%, as well as increasing our use of renewable energy. Our eco-efficiency initiatives allow us to use less energy and water and reduce waste and carbon emissions, while improving our processes and enabling the production of high quality, innovative products that people love.

Kevin C. Berryman
Executive Vice President
and Chief Financial Officer
International Flavors & Fragrances Inc.

The financial implications of CDP data

The financial implications of CDP data

In this report, we offer investors our analysis of the financial implications of CDP data based on the relationship between corporate climate change management, disclosure and performance alongside measures of corporate profitability and equity valuation.[9] We summarize trends in CDP data and illustrate examples of the financial links to climate change leadership. Our analysis of the 2014 CDP S&P 500 2014 data is consistent with our findings globally in 2013[10]—industry leadership on climate change is linked to financial measures of corporate profitability.

CDP's role as secretariat to 767 investors

At its core, CDP serves as a vehicle between capital, represented by 767 investors with $92 trillion in assets, and corporations, who issue equity and debt securities to investors to fund their operations. These operations, whether in oil production, electricity generation, financial services, technology or manufacturing, rely on natural capital, such as energy and water, and impact our environment, including greenhouse gas emissions to the atmosphere. This has only become more important in 2014 and investors are becoming more aware than ever of the necessity of high-quality information on how companies are mitigating the risks from climate change—risks which in many cases were exacerbated by extraordinary weather events across multiple geographies, including extreme drought in California and devastating typhoons in the Philippines.

Sustainable growth of a lower-carbon economy

Investors access CDP data through a variety of means, including through more than 7.5 million downloads from Bloomberg terminals annually. CDP provides the capital markets with this critical environmental data infrastructure to enable informed investment analysis. The challenges presented by climate change and natural resource scarcity are beyond what any single government can confront alone. CDP therefore leverages the power of the markets to allocate capital to power the sustainable growth of a lower-carbon economy.

The definition of a lower-carbon economy is straightforward—to maximize gross domestic product (GDP) and job growth while minimizing carbon emissions and detrimental impacts to the atmosphere. But how can sustainable growth be defined as it relates to large capitalization companies in the S&P 500? Investment professionals rely on a financial definition[11] to estimate the rate of corporate growth:

Sustainable growth = return on equity × reinvestment,

where return on equity (ROE) is the key determinant of long-term value creation, given it encapsulates company profit margins, asset turnover, and debt to equity ratios. The question we address in the pages that follow is whether companies can take action towards achieving a lower carbon economy while also generating sustainable growth.

> At a minimum, CDP data suggests that there is no penalty to corporate profitability for establishing climate change reporting, governance and management systems and taking action on climate change.

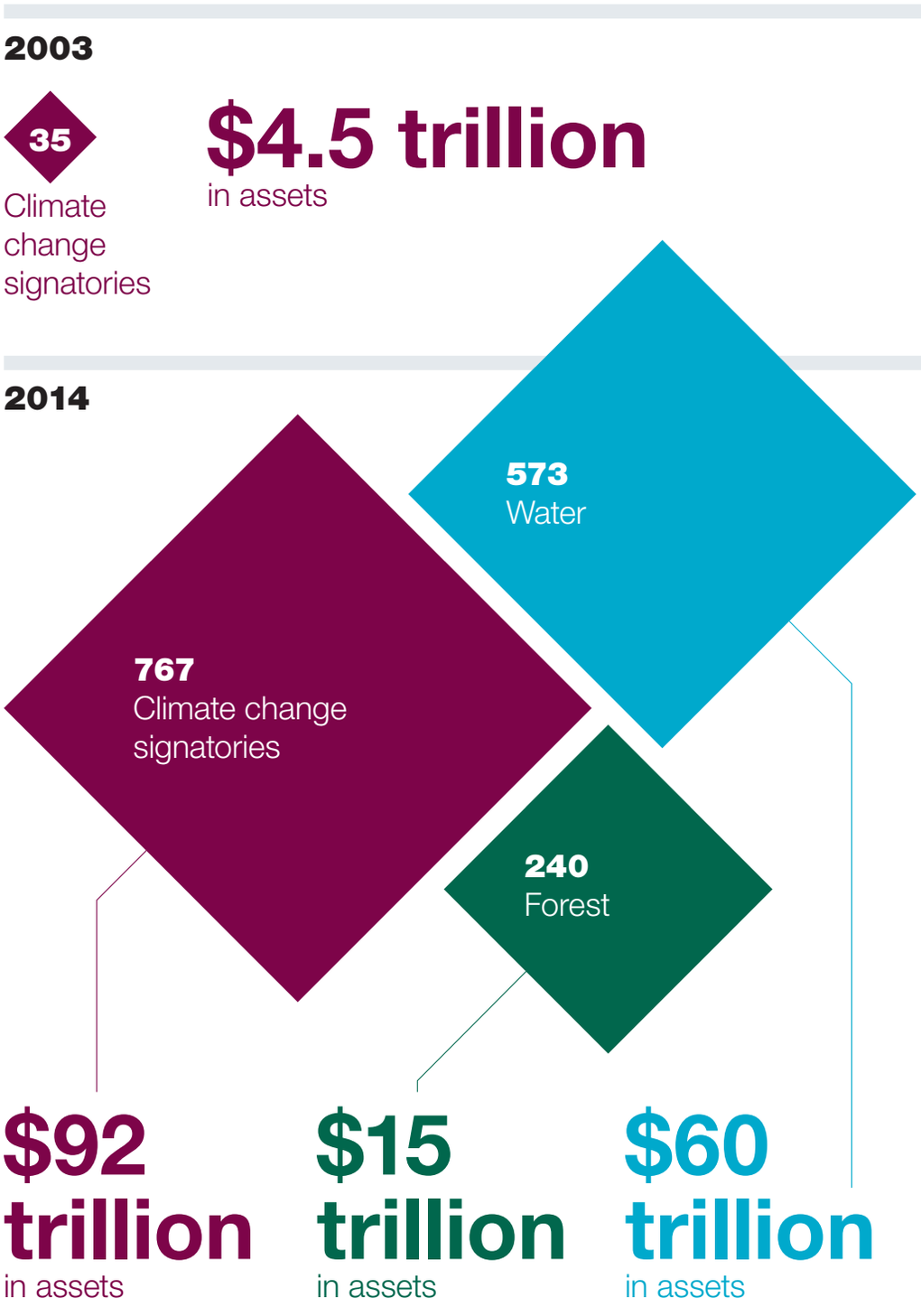
We compare 2014 CDP S&P 500 disclosure and performance[12] versus industry peers across a number of financial measures of management quality, including return on equity, earnings stability, and dividend growth. Our analysis focuses on peer-relative CDP disclosure and performance scores to assess industry leadership on climate change.[13] We percentile rank each score on a peer-relative basis and sort it into quartiles by GICS[14] Level II Industry Group (where first quartile (Q1) = highest CDP score, fourth quartile (Q4) = lowest CDP score, and NR = no response).

Superior-quality management

We find that US corporate leaders on climate change management, as measured by S&P 500 peer-relative CDP disclosure and performance, have generated superior return on equity, more resilient earnings, and stronger dividend growth than their peers. At a minimum, CDP data suggests that there is no penalty to corporate profitability for establishing climate change reporting, governance and management systems and taking action on climate change.

We do not suggest a causal relationship between present day leadership on a long-term issue such as climate change and short-term financial performance based on the data available. However, we do believe it is rational to posit that extraordinarily profitable companies are likely engaging on climate change in defense of their industry-leading ROE. By integrating climate change risk management into strategic planning, responding to CDP and taking action towards emissions reductions, companies are simply demonstrating a long-term view of how to best manage the assets of shareholders. Our analysis serves only to hold a mirror up to companies, and that has revealed a third variable is present—superior-quality management reflected through higher CDP scores and higher financial performance.

Figure 4. CDP investor signatories and assets 2003–2014



9 All data is sourced from CDP and Bloomberg, unless otherwise noted.

10 Kahn, B. and Fox, M. "Linking Climate Engagement to Financial Performance: An Investor's Perspective." (September 23, 2013). http://www.sicm.com/docs/CDP_SICM_VF_page.pdf

11 Higgins, Robert (1977): How much growth can a firm afford?, Financial Management 6 (3) p. 7–16.

12 For details of the 2014 CDP Climate Change scoring methodology, please visit: https://www.cdp.net/Documents/Guidance/2014/CDP-2014-Climate-Change-Scoring-Methodology.pdf

13 In this report, we refer to industry leaders as S&P 500 companies with 2014 CDP disclosure scores and/or CDP performance bands that rank in the first quartile versus peers by GICS Industry Group, where:
Q1 = first quartile (top 25% of responding companies by industry group);
Q2 = second quartile;
Q3 = third quartile;
Q4 = fourth quartile (bottom 25% of responding companies by industry group); and
Non-responders include: declined to participate; no response; provided information but did not answer questionnaire to CDP in 2014.

14 Global Industry Classification Standard updated as of February 28, 2014: https://us.spindices.com/search/?ContentType=GICSMaps

Corporate profitability: Why we focus on ROE

One of the most universally applicable measures of management quality and corporate profitability is return on equity ("ROE"), the ratio of net income to shareholder's equity.[15] When management earns a high ROE, the company increases the equity investment of shareholders. In the simplest terms, ROE measures how many cents of profit management can produce for every $1 of shareholder's equity. Over the long-term, the markets reward high-quality management that maximizes returns on shareholders equity with gains in stock price.

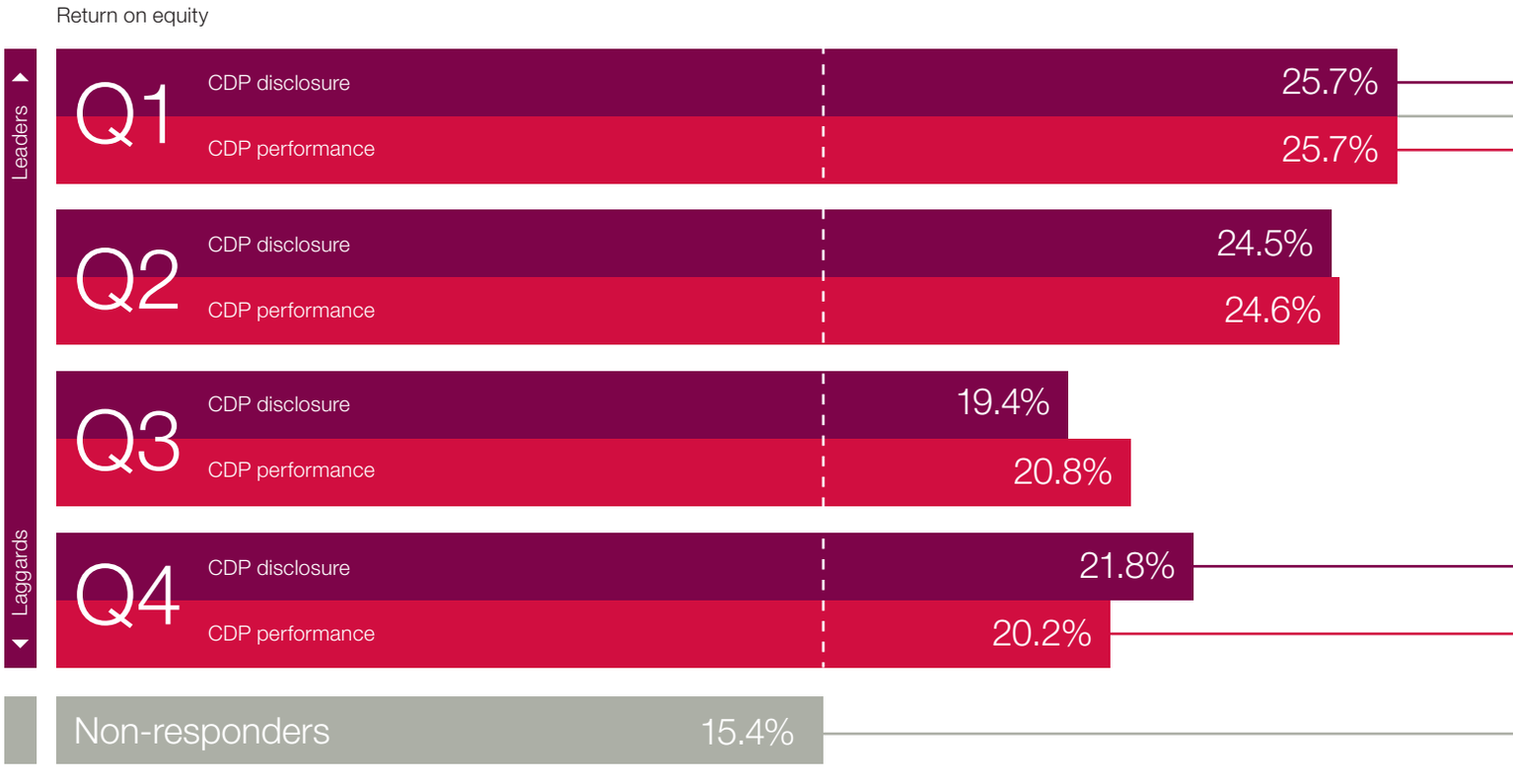
S&P 500 industry leaders on 2014 CDP disclosure and performance generate significantly higher return on equity than peers

Given the emphasis investors place on maximizing corporate profits, it is notable that CDP industry leaders generate higher ROE (Fig. 2). Q1 industry leaders on 2014 CDP disclosure stand out versus peers with average ROE of 25.7%—which is 18.4% higher than Q4 industry laggards at 21.8% ROE.

And performance matters—the gap in profitability widens when we analyze CDP performance figures where Q1 industry leaders generate average ROE of 25.7%—which is 27.2% higher than Q4 industry laggards at 20.2%. Also significant is that Q1 industry leaders on both CDP disclosure and performance generate 67% higher ROE than the lower level of profitability generated by non-responding companies at 15.4%.

The data suggests that US corporate climate change management, as measured by CDP disclosure and performance versus industry peers, reflects higher-quality management, as measured by return on equity.

Figure 5. Q1 industry leaders outperform industry laggards and non-responding companies by a significant margin. Higher CDP score is associated with higher ROE.



15 Vick, T. "Picking Stocks the Buffett Way," AAII Journal, April 2001 http://www.aaii.com/journal/article/picking-stocks-the-buffett-way-understanding-return-on-equity

> The primary test of managerial economic performance is the achievement of a high earnings rate on equity capital employed.
>
> —Warren Buffet
> 1979 Berkshire Hathaway annual report

Q1 industry disclosure leaders' ROE is **18.4%** higher than the ROE of Q4 industry laggards.

Q1 industry performance leaders' ROE is **27.2%** higher than the ROE of Q4 industry laggards.

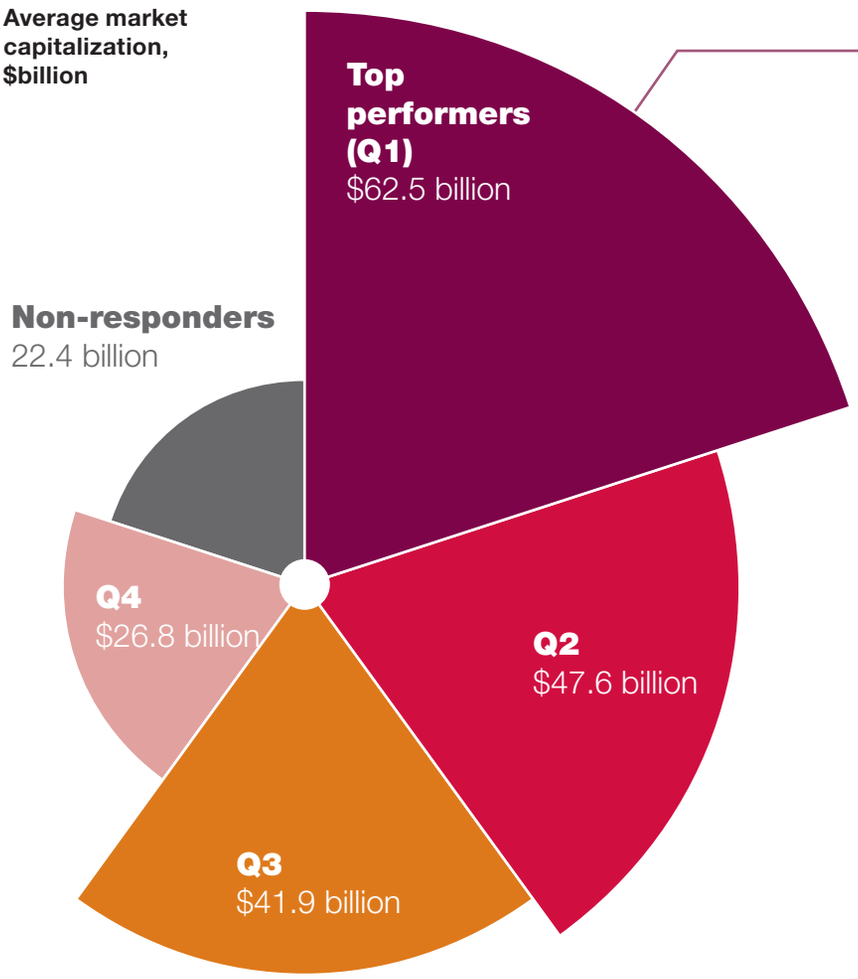
Q1 industry leaders generate **67%** higher ROE than non-responding companies.

Size matters: The largest take the lead

In 2006, CDP sent its climate change questionnaire to the S&P 500 for the first time, targeting the largest companies in corporate America. At the time, the consensus feedback from investor signatories indicated that large-cap companies were the most appropriate CDP sample given the significant resources at their disposal to address climate change in their operations. Eight years later, the largest of the large-caps are leading their industries. Companies that rank in the top quartile versus industry group peers (e.g., Q1 in Figure 6) are more than 66% more valuable at $62.5 billion average market capitalization versus the S&P 500 average of $37.6 bn. Note that both non-responders to CDP ($22.4 billion) and Q4 laggards by industry group ($26.8 billion) are considerably smaller in relative terms. Examples of the largest companies by market capitalization (>$100 billion) with Q1 CDP disclosure scores in 2014 include Apple, Microsoft, Johnson & Johnson, Walmart and Wells Fargo (per Figure 5).

Companies that rank in the top quartile versus industry group peers are more than 66% more valuable versus the S&P 500 average.

Figure 6. Q1 industry leaders on CDP disclosure are larger by market capitalization



Mega-caps over $100 billion that score Q1 versus industry group on CDP disclosure, and their market capitalization

Apple Inc.	$612 billion
Microsoft Corporation	$370 billion
Johnson & Johnson	$290 billion
Wells Fargo and Company	$267 billion
Wal-Mart Stores, Inc.	$245 billion
Chevron Corporation	$244 billion
JPMorgan Chase & Co.	$223 billion
Pfizer Inc.	$186 billion
Bank of America	$168 billion
Philip Morris International	$133 billion
Cisco Systems, Inc.	$127 billion
The Home Depot, Inc.	$125 billion

Over the long term, Apple is making a conscious decision to be more transparent and expansive in its sustainability efforts, including those directly related to climate change, as we believe it's a significant problem that may affect our operations, suppliers, partners and customers, and we are taking action to address it.

—Apple Inc.

Our goal to eliminate 20 million metric tons of GHG emissions from our global supply chain by the end of 2015 is purposely aggressive. Seizing the opportunity to leverage our size and scale to positively impact the world requires innovation. In our supply chain and in the products we sell, to date, we've eliminated more than 7.575 mmt of GHG emissions.

—Wal-Mart Stores, Inc.

Our environmental commitment will support our business growth, promote a greener global economy and address climate change while helping our clients meet their own sustainability objectives. This will contribute to our top-line growth and position us to capitalize on the longer term opportunities that exist. All this should serve to give us a strategic advantage in our industry and deliver long term value for our shareholders.

—Bank of America

Consideration of GHG issues are integrated into Chevron's strategy, business planning and risk management tools and processes. We consider carbon costs when forecasting long-range supply, demand and energy prices, and we thoroughly assess a range of potential future policy and economic growth outcomes. These analyses affect our investment decisions and capital project approvals worldwide.

—Chevron Corporation

Results of our progress towards our Healthy Future 2015 goals have not only positively impacted the environment but also have resulted in competitive advantage by reducing our operating costs. For example, as a result of investing in various projects in 2012 that increase energy efficiency and solar photovoltaic capacity, we achieved estimated cost avoidance of approximately $3 million in 2013 alone.

—Johnson & Johnson

Climate change and sustainability are key components of The Home Depot's business strategy. We have aligned our strategy of controlled profitable growth with net impact reduction creating the model of a dual "value-driven" company, both in shareholder value and in resource conscience values.

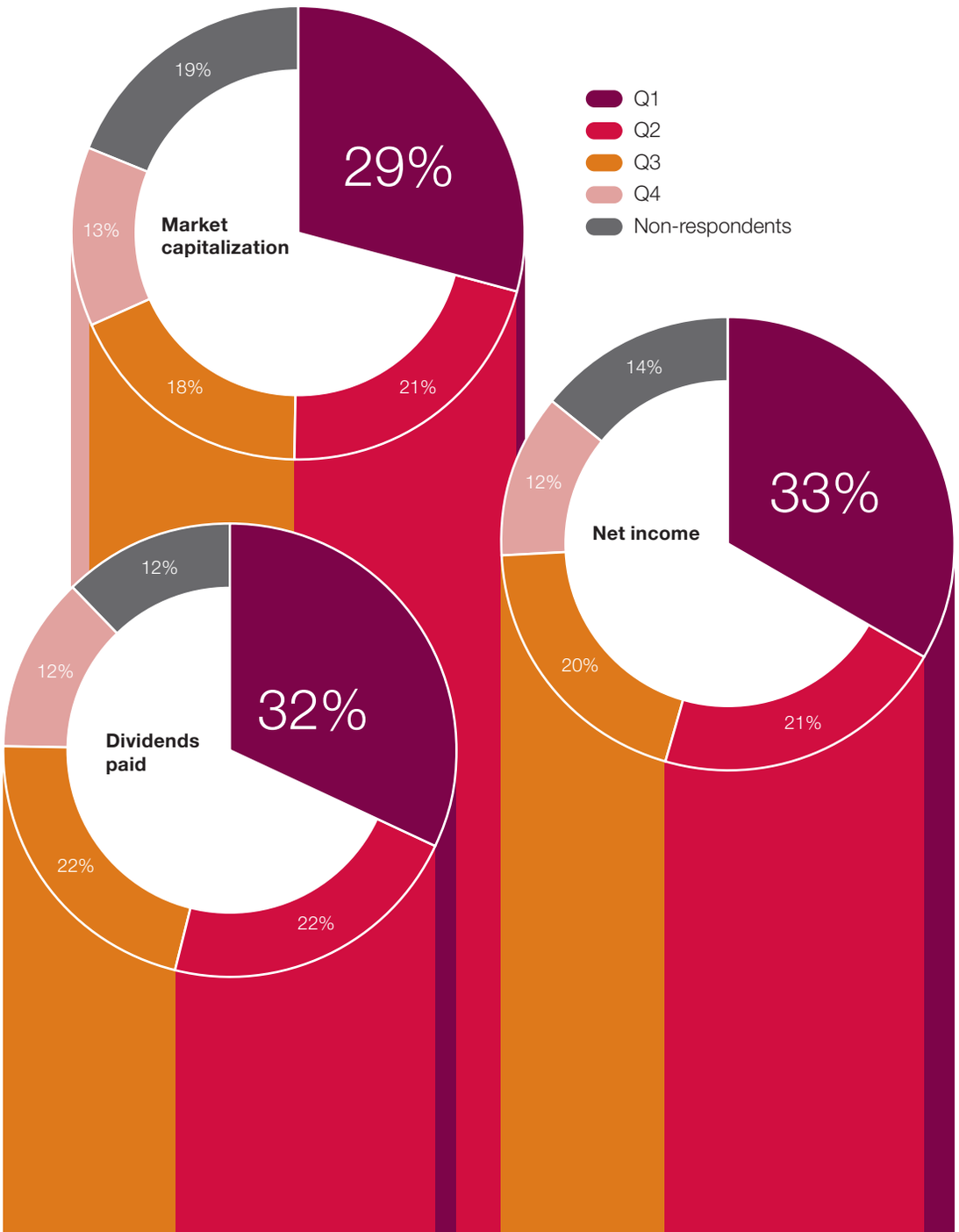
—The Home Depot

Further, companies that rank in the top quartile versus industry group peers (e.g., Q1 in figure 7 below) not only account for 29% of market capitalization of the S&P 500, but also hit above their weight in proportion of net income at 33% and dividends at 32%. The financial weight of CDP leaders is not easily dismissed—these are astounding figures for just 87 companies (17.4% by number) of the S&P 500.

When we disaggregate the data by sector, we note that the correlation between CDP disclosure scores and ROE is highest in traditionally defensive sectors[16] that are characterized by predictable cash flow generation and low market betas[17] below 0.8 (where 1 = beta of the market). The correlation coefficient between 2014 CDP disclosure scores and ROE exceeds 20% in consumer staples and health care.

The lower the sector beta, the higher relationship between CDP disclosure scores and ROE. A notable exception is the utilities sector, which has the lowest dispersion of returns given the highly regulated nature of ROE in the US, which is capped by state. Utilities are a notable outlier given the sector accounts for the largest proportion (29%) of global emissions reported to CDP.[18]

Figure 7. Q1 industry leaders account for a significant portion of market cap, earnings and dividends



16 A defensive sector refers to a section of the economy characterized by stable earnings, reliable dividends and low correlation to economic activity.

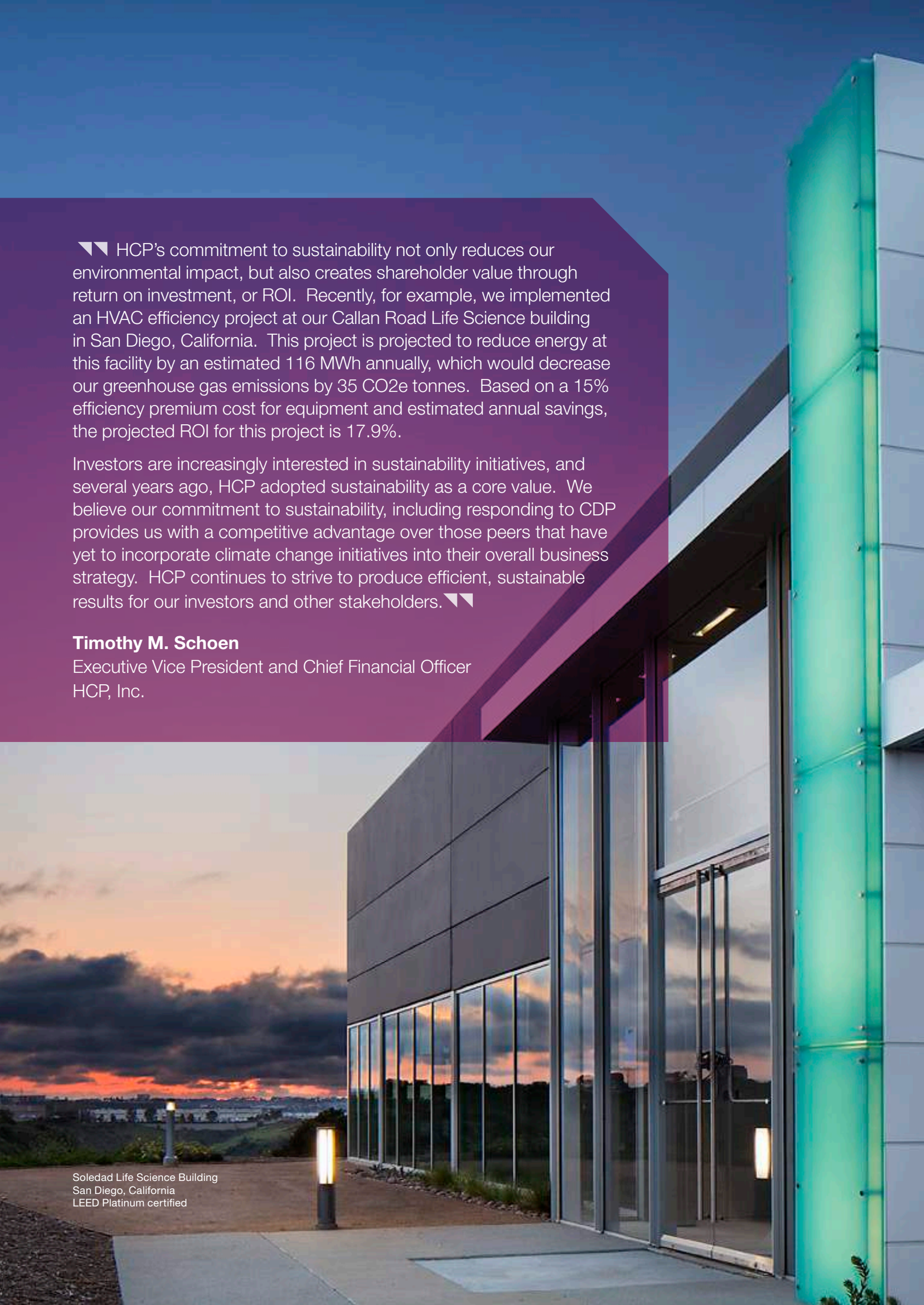
17 Beta (b) is a measure of a stock or portfolio that describes the correlated volatility of an asset in relation to the volatility of the benchmark that the asset is being compared to where 1 = beta of the market.

18 CDP Carbon Action: "Lower emissions, higher ROI: the rewards of low carbon investment." (2013). Page 6. https://www.cdp.net/CDPResults/Carbon-action-report-2013.pdf

HCP's commitment to sustainability not only reduces our environmental impact, but also creates shareholder value through return on investment, or ROI. Recently, for example, we implemented an HVAC efficiency project at our Callan Road Life Science building in San Diego, California. This project is projected to reduce energy at this facility by an estimated 116 MWh annually, which would decrease our greenhouse gas emissions by 35 CO2e tonnes. Based on a 15% efficiency premium cost for equipment and estimated annual savings, the projected ROI for this project is 17.9%.

Investors are increasingly interested in sustainability initiatives, and several years ago, HCP adopted sustainability as a core value. We believe our commitment to sustainability, including responding to CDP provides us with a competitive advantage over those peers that have yet to incorporate climate change initiatives into their overall business strategy. HCP continues to strive to produce efficient, sustainable results for our investors and other stakeholders.

Timothy M. Schoen
Executive Vice President and Chief Financial Officer
HCP, Inc.



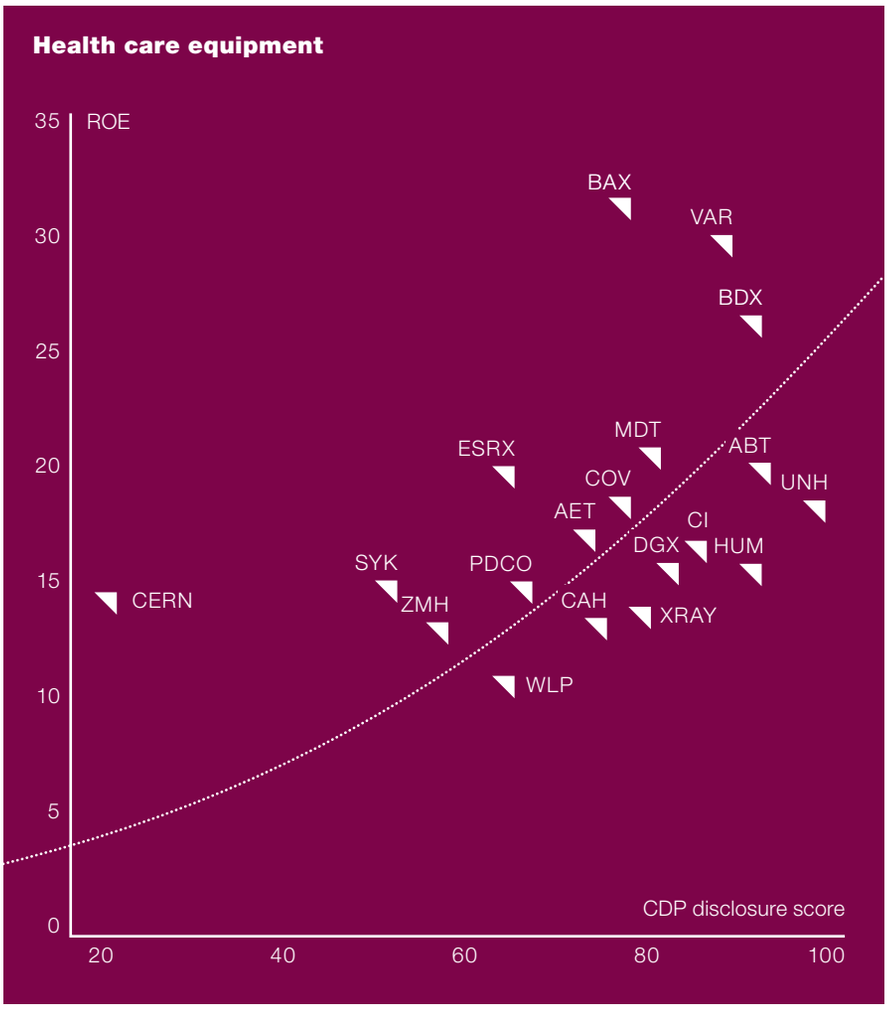
Soledad Life Science Building
San Diego, California
LEED Platinum certified

Examples by industry group

In addition to the broad relationship between CDP disclosure, performance and ROE across the S&P 500, there are also discernible correlations at the company level in many industry groups. Four industry groups stand out—Health Care Equipment, Real Estate, Transportation and Consumer Durables & Apparel. For example, ROE is correlated to disclosure in Health Care Equipment and Real Estate, where services firm CBRE Group scores in the first quartile on both disclosure and performance and has average industry-leading ROE of 22%.

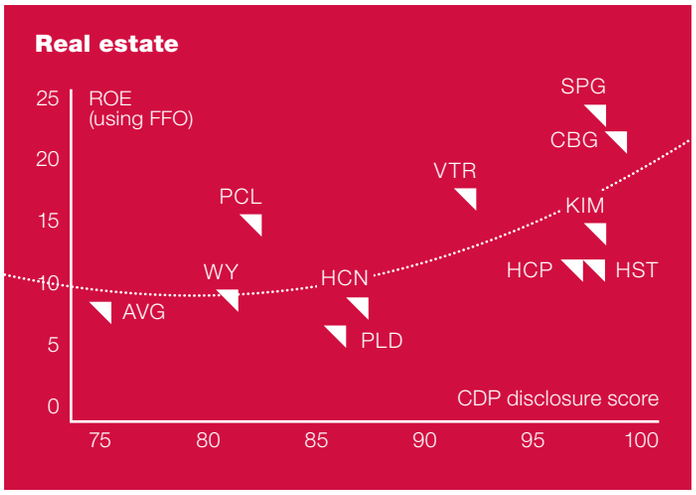
The link between ROE and CDP performance is most apparent in Transportation and Consumer Durables & Apparel, where VF Corp scores highest on CDP performance (Fig. 8).

Figure 8. CDP scores vs. ROE in select industry groups



We are currently developing a modified capital investment strategy to include a relaxed ROI criteria for projects with energy savings or increased renewable energy. This framework will also likely incorporate the total cost of ownership for capital equipment. To date, this opportunity has been managed by implementing projects with significant energy/water/waste savings, which has contributed to approximately $25 million in costs savings since 2008. In 2013, we implemented several projects that will have approximately $5.6 million in annual savings.

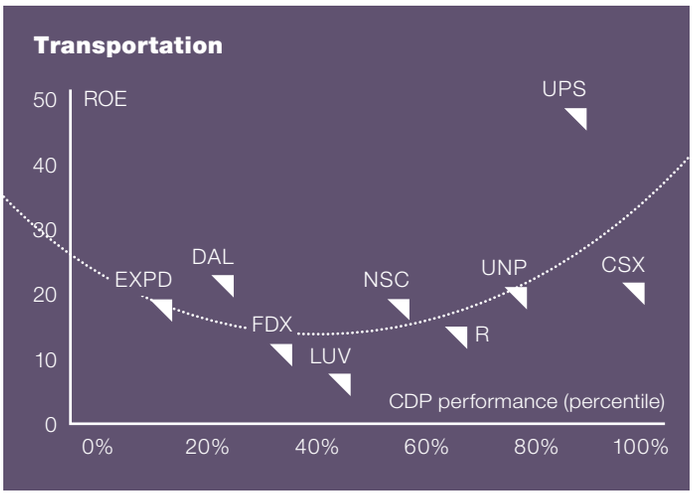
—Becton, Dickinson and Co.

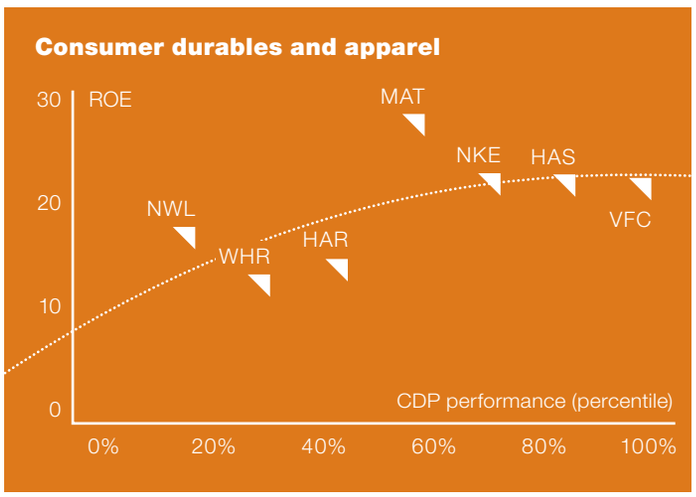


CBRE's Sustainability Programs Group assists CBRE clients in navigating the LEED rating system by embedding long-term, sustainable best practices at both the individual building and portfolio level. Through this program, nearly 60,648 metric tonnes of CO_2 emissions were avoided annually from 2009 to 2012.

—CBRE Group, Inc.

The direct and indirect consumption of fossil fuels and the emission of greenhouse gases are strongly correlated to global economic activity. When the economy grows, UPS's environmental impact increases due to greater demand for business and environmental efficiencies UPS provides to others. UPS continually seeks to reduce the strength of this correlation, so that energy costs (and associated impacts on UPS profits and the global environment) do not rise in line with UPS shipping volume. **—UPS**





We think long-term about our investments in energy efficiency and have recently forecasted our energy use through 2020. By doing this, we understand the implications of our energy use on costs and emissions of greenhouse gases and can act appropriately invest our capital and set goals to reduce these impacts (2.2a).

– VF Corporation

We have a customer-driven sustainability strategy. Customers expect us to help mitigate, if not eliminate, issues like congestion, pollution and traffic accidents, among others. If we expect our industry to continue to thrive, we must provide solutions. This extends to how we build our products and how we engage with the world around us. When it comes to sustainability, we pursue outcomes that create value for both GM and our customers. This has led to expanded use of renewable energy, a 'zero waste' mindset and other initiatives that have sharply reduced our energy intensity, resource consumption and greenhouse gas emissions worldwide.

Our CDP ranking shows that we're measuring and pulling insight from our energy and carbon data to capitalize on opportunities for greater efficiency. It reinforces our stewardship and sustainability goals. Responding to CDP helps us communicate to the financial community that we're prepared for changing market demands and emissions regulation. Effectively managing our carbon within our vehicles and facilities and sharing it publically is good for our customers, shareholders, the planet and our bottom line.

Mary T. Barra
Chief Executive Officer
General Motors Company

Figure 9. Companies with supranormal returns (>80%), and their CDP scores

		Disclosure score	Performance band	3-year ROE
CDP leaders who scored in Quartile 1 or 2				
Philip Morris International	Food, beverage & tobacco	96 (Q1)	A (Q1)	460%
Mead Johnson Nutrition Company	Food, beverage & tobacco	92 (Q2)	B (Q2)	418%
Lockheed Martin	Capital goods	98 (Q1)	A (Q1)	255%
Colgate Palmolive Company	Household & personal products	94 (Q1)	B (Q2)	101%
Pitney Bowes Inc.	Commercial & professional services	89 (Q2)	B (Q1)	96%
Boeing Company	Capital goods	97 (Q1)	B (Q1)	85%
Non-leaders				
Moody's Corporation	Diversified financials	24 (Q4)	n/a (Q4)	223%
Alliance Data Systems	Software & services	responded late		169%
Western Union Co	Software & services	20 (Q4)	n/a (Q4)	116%
Wynn Resorts, Liimited	Consumer services	declined to participate		112%
Linear Technology Corp.	Semiconductors & semiconductor equipment	65 (Q3)	D (Q3)	108%
Altria Group, Inc.	Food, beverage & tobacco	85 (Q3)	B (Q3)	107%

Companies only receive a performance band if they earn more than 50% of disclosure points. For the purpose of analysis, companies without a performance band are included in Q4.

Note that at the industry group level, the S&P 500 sample size may be too small to draw specific conclusions, but the results could be explained by characteristics that differ from the broader sector. This suggests that further sector-by-sector analyses would benefit from larger sample sizes, such as expanding the CDP questionnaire in the United States to the S&P 1500 or Russell 1000.

Supranormal returns, where company ROE is more than two standard deviations from the mean, are observed in a small number of companies in the S&P 500. Twelve companies generated three-year average ROE exceeding 80% from 2011 to 2013—quadruple the S&P 500 median of 20%. Half of these (six of 12) scored above average (Q1 or Q2) on both CDP disclosure and performance (Fig. 9). Further, only one company, Wynn Resorts Limited, declined to participate.

It stands to reason that companies with this type of financial performance have the resources to lead on climate engagement. For example, Mead Johnson Nutrition company has implemented a Green Vision strategy and has committed to reducing GHG emissions by 35%, reducing energy use by 35%, reducing water usage by 45% and reducing waste to landfill to 60%. Lockheed Martin assessed more than 40 environmental, social and governance (ESG) issues and evaluated the impacts on their value chain, prioritizing reducing greenhouse gas emissions and energy use. Larger companies with outstanding financial performance have recognized the need to act and engage on climate change and have integrated these risks into their business strategies.

More stable earnings and stronger dividend growth

One of the hallmarks of high-quality companies is earnings resilience over economic cycles. Consistent with our observation of higher ROE generated, we also observe a higher degree of earnings stability over the past decade by companies with industry-leading CDP disclosure scores. Between 2004 and 2013, Q1 industry leaders on CDP disclosure measured a 50% lower coefficient of variation,[18] a statistical measure of annual earnings volatility, where lower is better (more stable) and higher is more volatile. Figure 10 illustrates the increased earnings stability of each quartile of CDP disclosure scores by industry group where Q1 industry leaders on climate change management have generated more resilient earnings than Q4 industry peers.

We also observe that Q1 industry leaders on CDP disclosure scores delivered stronger dividend growth[19] averaging 19.8% to investors from 2010 to 2013 (Fig. 11). This compares favorably to lower scoring Q4 peers at 13.8%. The ability of companies to grow dividends to shareholders can be viewed as another strong reflection of management quality. Taken in tandem, the increased earnings stability and stronger dividend growth of Q1 industry leaders on CDP disclosure supports the link between ROE and profitability.

Figure 10. Earning stability by industry quartile of 2014 CDP disclosure scores (inverse of coefficient of variation), 2004–2013

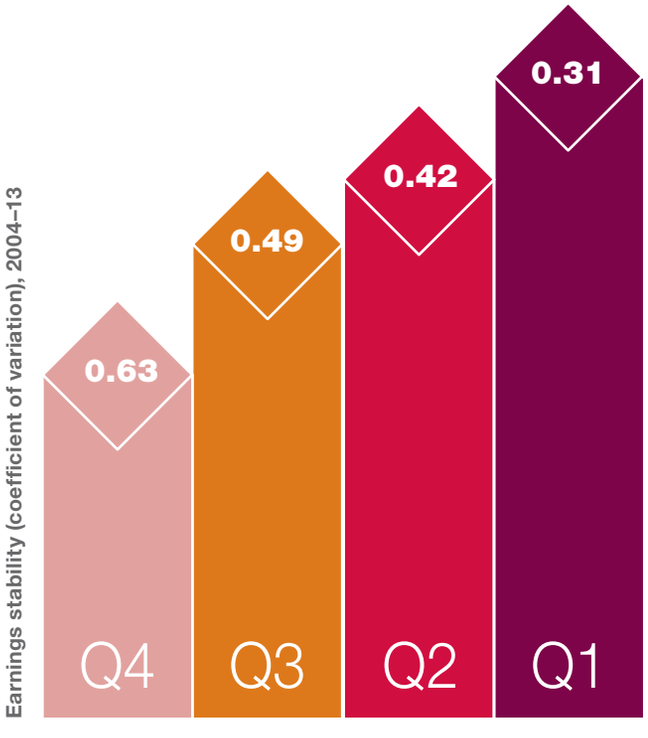
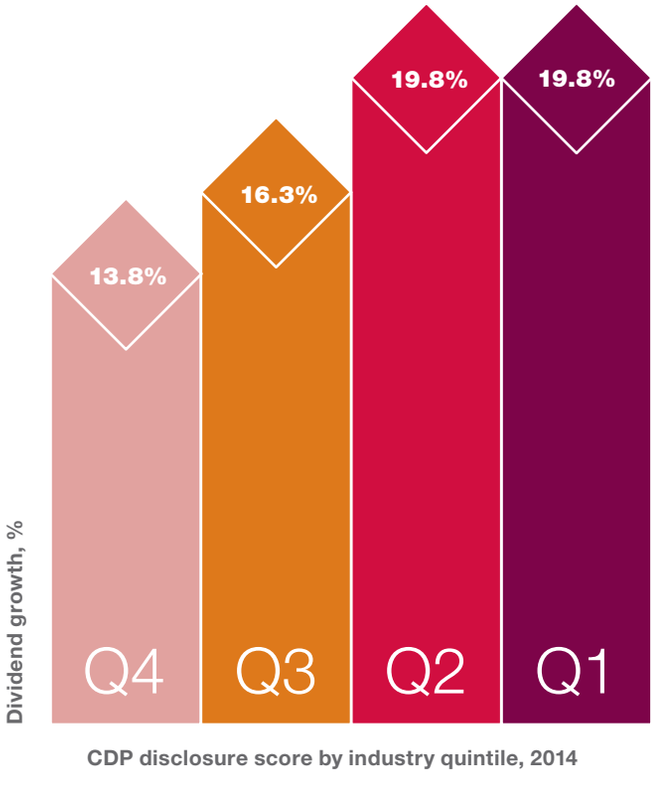


Figure 11. Dividend per share growth by industry quartile of 2014 CDP disclosure scores (3-year CAGR, 2010–2013)

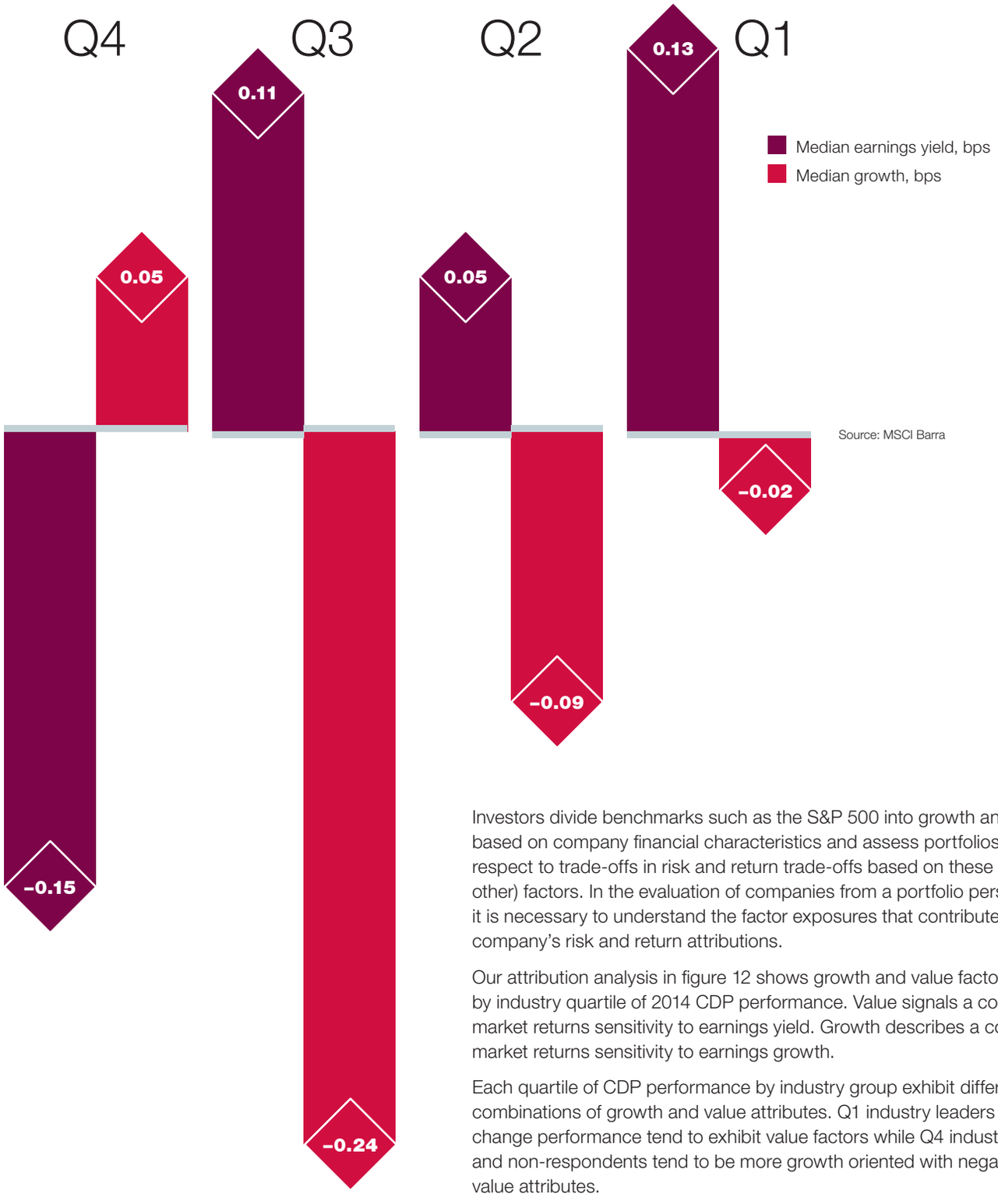


18 Earnings stability refers to the coefficient of variation of annual operating income calculated as the ratio of the standard deviation relative to the mean (ten-year stdev and mean, 2004-2013), where lower is better (more stable) and higher is more volatile. We excluded Financials and Automobiles in this calculation due to the extreme volatility and negative earnings during the 2008 financial crisis and subsequent recovery.

19 Dividend growth calculated as the compound annual growth rate in dividend per share (three-year CAGR, 2010-2013).

CDP performance leaders exhibit attractive value attributes

Figure 12. Factor exposures (basis points) by industry quartile of CDP performance scores, as of December 31, 2013



Investors divide benchmarks such as the S&P 500 into growth and value based on company financial characteristics and assess portfolios with respect to trade-offs in risk and return trade-offs based on these (and other) factors. In the evaluation of companies from a portfolio perspective, it is necessary to understand the factor exposures that contribute to each company's risk and return attributions.

Our attribution analysis in figure 12 shows growth and value factor exposures by industry quartile of 2014 CDP performance. Value signals a company's market returns sensitivity to earnings yield. Growth describes a company's market returns sensitivity to earnings growth.

Each quartile of CDP performance by industry group exhibit different combinations of growth and value attributes. Q1 industry leaders on climate change performance tend to exhibit value factors while Q4 industry laggards and non-respondents tend to be more growth oriented with negative value attributes.

The value orientation of industry leaders on climate change performance is consistent with our observations of higher return on equity, more stable earnings, and stronger dividend growth. This confirms our earlier view that the leading companies are shifting their business strategy towards a low-carbon economy.

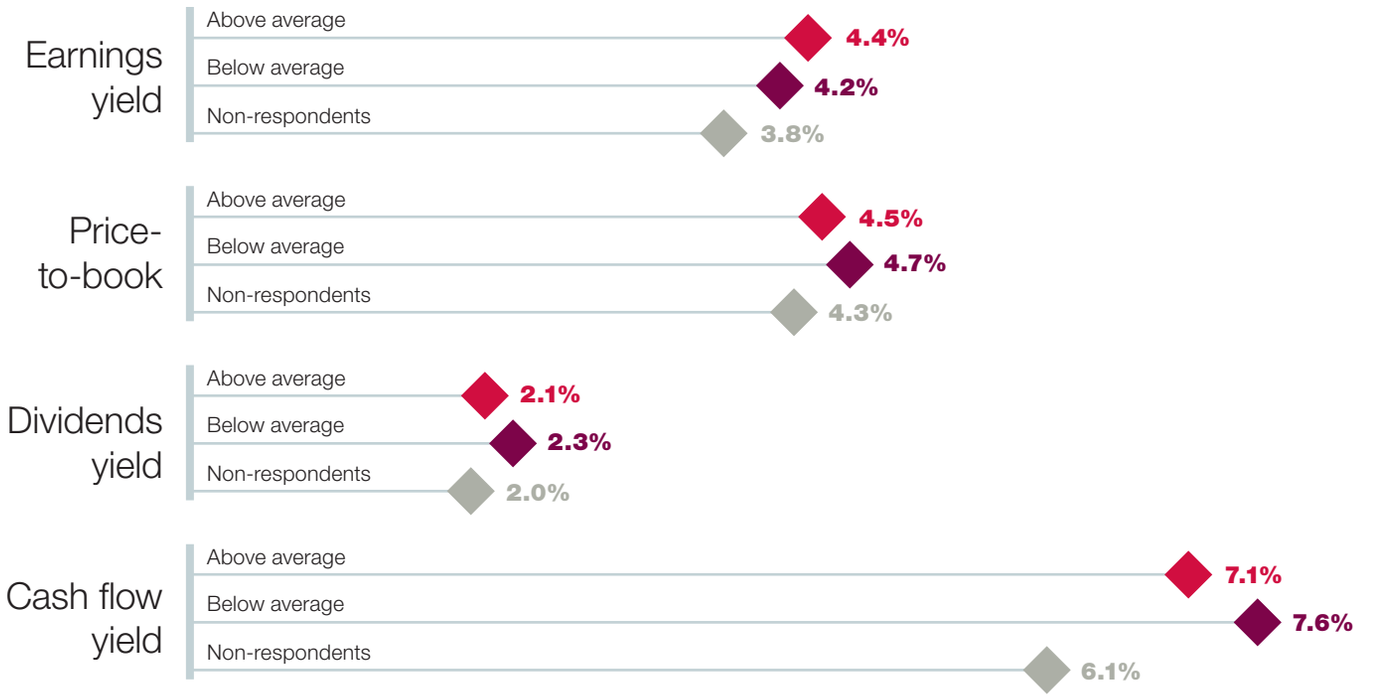
Valuation: Is climate leadership priced in?

> The focus on energy efficiency and GHG emissions reductions reduces Praxair's risk from higher energy costs, and is a significant contributor to our operational and financial results and Praxair's industry leading operating margin and return on capital.
>
> **—Praxair, Inc.**

The market opportunity for investors who incorporate corporate climate change leadership into their evaluation of companies may be significant over time. Our analysis supports the widely held view that climate change leadership does not appear to be appropriately priced by the equity markets.[20] We observe no discernible market premium ascribed to companies that lead on 2014 CDP disclosure and/or performance scores. We analyzed traditional valuation measures including earnings yield (E/P), price-to-book (P/B), dividend yield and cash flow yield (CF/P) for the S&P 500. No clear pattern emerges from the data by quartile or simply sorting companies into those above and below average by industry group.

Those scoring above average on CDP performance trade at a 4% discount on earnings yield at 4.4% versus companies below average at 4.2%. The difference in P/B ratios (4.5× versus 4.7×), dividend yields (2.1% versus 2.3%) and cash flow yields (7.1% versus 7.6%) are not statistically significant. While there is no clear pattern in the data to suggest that the equity markets "value" CDP disclosure and performance, we believe this presents an opportunity for investors who integrate climate change performance in their analysis of US companies as the market has yet to price climate change leadership.

Figure 13. Valuation by earnings yield, price-to-book, dividend yield and cash flow yield, trailing 12 months



20 Prices in this report as of 1 August 2014.

Conclusion: Why link between CDP and ROE matters

As representatives from all nations gather in New York for the September 2014 United Nations Climate Summit, we believe it is critical to emphasize that America's largest and most profitable listed companies are taking leadership on climate change in defense of their profitability.

CDP data for the 2014 S&P 500 suggests a link between strong management of climate change and profitability. S&P 500 industry leaders on CDP disclosure have generated 67% higher return on equity with 50% more earnings stability and 21% stronger dividend growth than lower-scoring peers. That the markets have yet to price climate change leadership presents an opportunity for long-term investors who integrate CDP data in their evaluation of companies today.

Given the failure of government regulators to enact binding climate change legislation in the US to date, S&P 500 companies operate in a regulatory vacuum. The fact that 70% choose to voluntarily disclose their carbon emissions, climate change governance and actions to reduce emissions is noteworthy. But it is not enough. If we are to avert the effects of dangerous climate change, a step-change in the size and scope of emissions reductions is needed as we approach the scientific consensus point of no return at 450 parts per million.

It is our hope that evidence linking leadership on CDP disclosure and performance to financial measures of profitability attractive to investors will help equip out nation's corporate leaders with a financial argument to confront cynics and motivate companies to take meaningful action on climate change.

"We believe that our climate change efforts and transparency improve our bankability and are attractive for investors and customers. At the same time, we benefit from growing expertise on climate change issues and the widening of our product portfolio, as well as from an improved risk management approach. Unum's commitment to social and environmental responsibility and good reputation as a proactive and responsible player has positioned us advantageously among our competitors."

—Unum Group

"Successful execution of a credible sustainability and climate change strategy can both improve a company's operating performance (e.g., by reducing costs) and increase stakeholder trust in the company's governance and brand. We believe that we have an opportunity to enhance the company's reputation and brand among key constituencies (such as investors, customers, employees, civil society, and host communities) and thus to create greater long-term value for our owners."

—Comerica Incorporated

Kevin Parker

CEO, Sustainable Insight Capital Management

Climate change data is of vital importance to the mainstream investor. The CDP S&P 500 Climate Change Report 2014 is a reflection of transparent and proactive management of climate change risks by corporate managers. The report results continue to confirm a shift on the part of enlightened corporate managers—disclosing climate change management strategies and demonstrating industry leading performance on climate matters is associated with leading financial performance including superior return on equity, more resilient cash flow generation and stronger dividend growth than peers. Investors should take note that the debate has squarely moved from the moral to the material and should reward climate leaders with higher valuation multiples.

However, markets may be inefficient and currently may not be accurately pricing securities to reflect the growing pressures businesses are experiencing. Hence the inconclusive results of the valuation premiums revealed in the analysis, where leaders have no real valuation premium over laggards—despite the superior financial accounting performance.

This year's report is a strong step forward in demonstrating climate leadership by incorporating both CDP disclosure and performance scoring measurements. This enables investors to continue to refine their views on corporate actions around climate change. Actions such as energy efficiency investments, usage of renewable power and supply chain management are all examples of how companies are investing, reducing greenhouse gas emissions and realizing strong returns on their investments. It is not surprising that these actions are also associated with strong financial performance.

Our continued commitment to fostering the re-pricing of climate risk is bolstered by the efforts of the CDP. The data collected by CDP provides investors critical inputs into their investment process, including alpha signals as well as risk factors. We urge companies to continue to improve their CDP disclosure and performance on climate change and investors will continue to evaluate these businesses with this information in mind.

Sustainable Insight
CAPITAL MANAGEMENT

"Investors should take note that the debate has squarely moved from the moral to the material and should reward climate leaders with higher valuation multiples."

CDLI and CPLI

Disclosure leaders
Climate Disclosure Leadership Index

CDP™ CLIMATE DISCLOSURE LEADER 2014

Company	Score	Both indices	Years on S&P 500 CDLI
Consumer discretionary			
Best Buy Co., Inc.	98		◥◥◥
General Motors Company	100	○	New
TJX Companies, Inc.	98		◥◥◥◥
Twenty-First Century Fox	99		◥◥◥◥◥◥
Wyndham Worldwide Corporation	97	○	◥◥
Consumer staples			
Constellation Brands, Inc.	97		New
Estée Lauder Companies Inc.	98		◥◥
Wal-Mart Stores, Inc.	98	○	◥◥◥◥◥
Energy			
Hess Corporation	100		◥◥◥◥◥◥
Spectra Energy Corp	100	○	◥◥◥◥◥◥◥
Financials			
Allstate Corporation	97		◥◥◥◥◥
Bank of America	100	○	◥◥◥◥◥
BNY Mellon	100	○	◥◥◥
CBRE Group, Inc.	99		◥◥
Goldman Sachs Group Inc.	98	○	◥◥◥◥
HCP, Inc.	97		◥◥
Host Hotels & Resorts, Inc.	98	○	New
JP Morgan Chase & Co.	97		◥◥
Kimco Realty	98		New
Legg Mason, Inc.	99		◥◥◥
Marsh & McLennan Companies, Inc.	98		◥◥◥
Morgan Stanley	99		◥◥◥◥◥
Northern Trust	97		New
Principal Financial Group, Inc.	99	○	New
Simon Property Group	98	○	◥◥◥◥◥◥
Unum Group	99		◥◥
Wells Fargo & Company	97	○	◥◥◥◥◥
Health care			
Bristol-Myers Squibb	98		◥◥◥◥
Johnson & Johnson	99		◥◥◥◥◥
UnitedHealth Group Inc.	99		◥◥

Company	Score	Both indices	Years on S&P 500 CDLI
Industrials			
Boeing Company	97		◥◥◥◥◥
CSX Corporation	98	○	◥◥◥◥
Eaton Corporation	97		◥◥◥◥◥◥
Lockheed Martin Corporation	98	○	◥◥◥
Norfolk Southern Corp.	98		New
Northrop Grumman Corp	98	○	◥◥
Raytheon Company	97		◥◥
Stanley Black & Decker, Inc.	100	○	New
Union Pacific Corporation	99		◥◥
UPS	100		◥◥◥◥◥◥
Waste Management, Inc.	97		New
Information technology			
Adobe Systems, Inc.	99	○	◥◥◥
Akamai Technologies Inc	97	○	◥◥
Apple Inc.	99	○	◥◥
Autodesk, Inc.	100	○	◥◥◥◥
Cisco Systems, Inc.	100	○	◥◥◥◥◥◥◥
EMC Corporation	100		◥◥◥◥◥◥
Hewlett-Packard	100	○	◥◥◥◥◥◥
Juniper Networks	99	○	◥◥
Microsoft Corporation	99	○	◥◥◥
Motorola Solutions	98		New
NetApp Inc.	97		New
Symantec Corporation	97		◥◥
Materials			
Air Products & Chemicals, Inc.	99		◥◥◥◥◥◥
International Flavors and Fragrances Inc.	97		New
Praxair, Inc.	100		◥◥◥◥◥◥◥
Sealed Air Corp.	97		New
Sigma-Aldrich Corporation	99		◥◥◥
The Mosaic Company	99	○	◥◥
Utilities			
Entergy Corporation	99	○	◥◥◥◥◥◥
Exelon Corporation	100		◥◥◥◥◥
Pepco Holdings, Inc.	100	○	◥◥◥◥◥
Sempra Energy	98		◥◥◥◥

Performance leaders
Climate Performance Leadership Index

CDP CLIMATE PERFORMANCE LEADER 2014

Company	Both indices	Years on CPLI*
Consumer discretionary		
DIRECTV		New
General Motors Company	○	New
Johnson Controls		◥◥
Wyndham Worldwide Corporation	○	New
Consumer staples		
CVS Health Corp		New
Philip Morris International		◥◥
Wal-Mart Stores, Inc.	○	New
Energy		
Spectra Energy Corp	○	◥◥◥
Financials		
Bank of America	○	◥◥◥◥◥
BNY Mellon	○	◥◥
Comerica Incorporated		◥◥
Goldman Sachs Group Inc.	○	◥◥
Host Hotels & Resorts, Inc.	○	◥◥
Principal Financial Group, Inc.	○	◥◥
Simon Property Group	○	New
The Hartford Financial Services Group, Inc.		◥◥
Wells Fargo & Company	○	◥◥◥

Company	Both indices	Years on CPLI*
Industrials		
CSX Corporation	○	◥◥◥◥
Lockheed Martin Corporation	○	◥◥◥◥
Northrop Grumman Corp.	○	◥◥◥
Stanley Black & Decker, Inc.	○	◥◥
Information technology		
Accenture		New
Adobe Systems, Inc.	○	◥◥
Akamai Technologies Inc	○	New
Apple Inc.	○	New
Autodesk, Inc.	○	◥◥◥
Cisco Systems, Inc.	○	◥◥◥◥
Google Inc.		New
Hewlett-Packard	○	◥◥
Juniper Networks, Inc.	○	New
Microsoft Corporation	○	◥◥
Materials		
The Mosaic Company	○	◥◥
Utilities		
Entergy Corporation	○	◥◥
Pepco Holdings, Inc.	○	◥◥◥

* From 2010 to 2014. In 2010, CDP had a different methodology for scoring performance. However, performance leaders for that year are included in this total.

2014 leadership criteria

Each year, company responses are analyzed and scored against two parallel scoring schemes: performance and disclosure.

The performance score assesses the level of action, as reported by the company, on climate change mitigation, adaptation and transparency. Its intent is to highlight positive climate action as demonstrated by a company's CDP response. A high performance score signals that a company is measuring, verifying and managing its carbon footprint, through actions such as setting and meeting carbon reduction targets and implementing programs to reduce emissions in both its direct operations and supply chain.

The disclosure score assesses the completeness and quality of a company's response. Its purpose is to provide a summary of the extent to which companies have answered CDP's questions in a structured format. A high disclosure score signals that a company provided comprehensive information about the measurement and management of its carbon footprint, its climate change strategy and risk management processes and outcomes.

The Climate Performance Leadership Index (CPLI) and the Climate Disclosure Leadership Index (CDLI) capture the highest-scoring companies on performance and disclosure, respectively. Public scores are available on the CDP website and in CDP reports, through Bloomberg terminals, Google Finance and Deutsche Boerse's website.

What are the CPLI and CDLI criteria?

To enter the CPLI (Performance Band A), a company must:

- Make its response public and submit via CDP's Online Response System
- Attain a performance score greater than 85
- Score maximum performance points on question 12.1a (absolute emissions performance) for GHG reductions due to emission reduction actions over the past year (4% or above in 2014)
- Disclose gross global Scope 1 and Scope 2 figures
- Score maximum performance points for verification of Scope 1 and Scope 2 emissions
- CDP reserves the right to exclude any company from the CPLI if there is anything in its response or other publicly available information that calls into question its suitability for inclusion.

Note: Companies that achieve a performance score high enough to warrant inclusion in the CPLI, but do not meet all of the other CPLI requirements are classed as Performance Band A– but are not included in the CPLI.

To enter the CDLI, a company must:

- Make its response public and submit via CDP's Online Response System
- Achieve a score within the top 10% of the total regional sample population*

* Note: while it is usually 10%, in some regions the CDLI cut-off may be based on another criteria, please see local reports for confirmation.

How are the CPLI and CDLI used by investors?

Good performance and disclosure scores are used by investors as a proxy of strong corporate climate change management or climate change performance.

Investors identify and then engage with companies to encourage them to improve their score. The 'Aiming for A' initiative which was initiated by CCLA Investment Management is driven by a coalition of UK asset owners and mutual fund managers. They are asking major UK-listed utilities and extractives companies to aim for inclusion in the CPLI. This may involve filing supportive shareholder resolutions for Annual General Meetings occurring after September 2014.

Investors are also using CDP scores for creation of financial products. For example, Nedbank in South Africa developed the Nedbank Green Index. Disclosure scores are used for selecting stocks and performance scores for assigning weight.

For further information on the CDLI and the CPLI and how scores are determined, please visit www.cdp.net/guidance.

Pathways to leadership

Pathways to climate change leadership

1

GOVERNANCE

Strong governance sets the foundation for climate leadership. Board-level direct responsibility, combined with the integration of climate change into companies' business strategies, indicates that leading companies are aware of climate issues and the strategic importance they represent at every level of decision making. Leaders that provide employees with monetary incentives for managing climate-related issues drive this point home by directly linking climate objectives to business objectives.

2

RISK MANAGEMENT PROCEDURES

Strong risk management is a product of strong governance. Implementing robust risk management procedures helps leaders identify, evaluate and monitor potential climate change risks and opportunities. Leaders consider risks and opportunities over a longer time horizon (3 years or greater), have more frequent monitoring (annually or more frequently), and close the loop by reporting the results back up to the board.

35% more likely to engage with suppliers

3

OPPORTUNITIES

Through robust risk and opportunity management, leading companies can discover climate change opportunities that have the potential to generate a substantive positive shift in business operations, revenue and expenditure. Leaders are able to identify opportunities that can be realized in the short term (3 years or less) and can have a substantial impact for the company, with a virtually certain or very high likelihood of having that impact realized.

4

TARGETS AND EMISSIONS REDUCTION ACTIVITIES

Emissions reduction targets generate corporate incentives for climate action at every level of operations. Leaders are setting absolute reduction targets, investing significant amounts in activities to achieve those targets and realizing tangible monetary savings and meaningful emissions reductions.

29% more likely to engage with the value chain

5

VERIFICATION

Verification ensures high-quality emissions accounting. The verification process involves reviewing data collection and calculation procedures, allowing leaders to add value to their reporting and increase stakeholder confidence through the verification of all three scopes of emissions: direct, indirect and value chain.

145% more likely to verify Scope 3 emissions

100% more likely to verify Scope 2 emissions

6

ENGAGEMENT

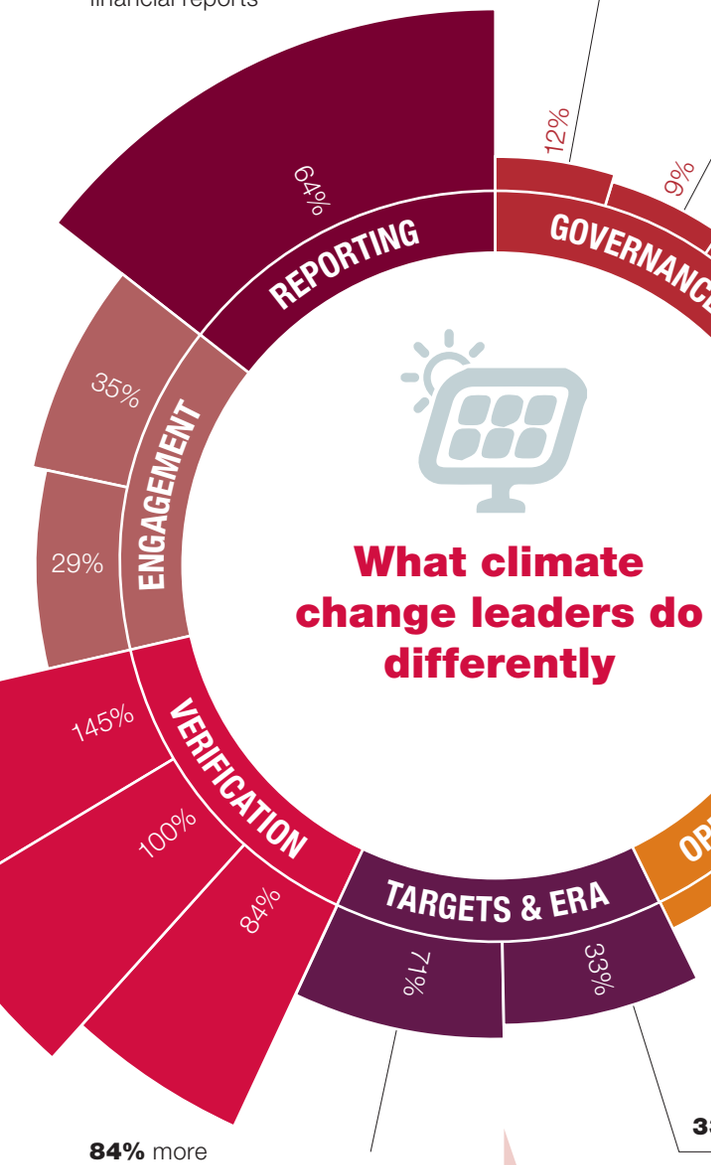
Value-chain engagement encourages corporations to think beyond corporate boundaries. By evaluating impacts outside of direct operations, leading companies engage with actors at every level of the value chain including suppliers, customers and other partners.

7

REPORTING

Disclosing climate change management information in public communications demonstrates a clear commitment to transparency. Leaders take this commitment one step further by integrating climate and GHG performance information into mainstream financial reporting for investors to consider as part of their management and value proposition.

LEADERS ARE…



64% more likely to have published their climate change response information in mainstream financial reports

12% more likely to have board responsibility for climate change

9% more likely to provide monetary incentives for management of climate change issues

12% more likely to integrate climate change into business strategy

54% more likely to report climate change risks and opportunities to the board

15% more likely to monitor climate risks and opportunities annually and semiannually

51% more likely to consider risks long-term into the future

25% more likely to realize opportunities soon

16% more likely to realize important opportunities (those of high and medium-high magnitude)

10% more likely to realize opportunities that are very likely or virtually certain to happen

33% more likely to have an emissions reduction target

84% more likely to verify Scope 1 emissions

71% more likely to have an absolute emissions reduction target

…THAN THE S&P 500 AVERAGE

To solve some of the world's most challenging problems, scientists, engineers and analysts continue to push the boundaries of performance – yet at the same time, scaling today's systems to ExaFLOPS would consume roughly the output of Hoover Dam and take up the space of 30 football fields.[1] Simply put, this is unsustainable, so HP has reinvented high-performance computing (HPC) to change the performance space and power equation.

The HP Apollo Family delivers breakthroughs in rack-scale performance, power and cooling in less space to find answers faster, in a more sustainable way than ever before. HP is building long-term value by providing our customers with systems that enable new heights of performance, while drastically lowering costs of ownership and minimizing the overall carbon footprint.

So while HP customers are changing the world with their research and work, they can reduce their impact on the planet by reducing energy use. Our customers can even take it one step further, as HP has done with the National Renewable Energy Lab (NREL), where we recycle the energy to heat the facilities, and even melt the ice on the walkways.

Mark Potter
CTO, HP Enterprise Group

1 According to the DOE Office of Science 2010 report, The Opportunities and Challenges of Exascale Computing

Glossary and appendix

Glossary

Beta (b)—A measure of a stock or portfolio that describes the correlated volatility of an asset in relation to the volatility of the benchmark that the asset is being compared to where 1=the market beta.

Capital expenditure—Funds used by a company to purchase, maintain or upgrade physical assets such as real property (land), plant (buildings) or equipment.

Cash flow from operations—The funds generated by a company's normal business activities (e.g., excludes sales of assets or investments and financing efforts), reflecting actual cash inflows and outflows related to revenue generation.

Cash flow yield—Cash flow from operations per share / stock price (or market value per share). The inverse of the P/CF ratio allows comparison of companies that have negative cash flow which would normally make the P/CF ratio insignificant.

CO_2e—Carbon dioxide equivalent.

Coefficient of variation—Measures the dispersion of data points around the mean and is used to standardize sets of data to make them comparable despite differences in their absolute values—the higher the coefficient of variation, the more variation there is in the data. The coefficient of variation is calculated by dividing the standard deviation of the data set by the mean.

Correlation—A relationship between variables which implies they are associated in some manner—this does not equate to cause and effect. Positive correlation means that when one variable increases the other one tends to increase. Negative (inverse) correlation means that when one variable increases the other tends to fall.

Correlation coefficient (r)—Measure of the strength and direction of a linear relationship. The value of r is always between negative one and positive one ($-1 < r < +1$).

Defensive industry—An industry whose revenue generation is less exposed to business cycles and is therefore seen as more stable, or defensive, by investors, including health care, utilities, telecoms, and consumer staples.

Dividend growth—Dividends are payments made by a company to its shareholders, generally on a quarterly basis, but they can be paid annually or randomly as well. Dividend growth is the year-over-year change in the total annual dividend paid to shareholders.

Dividend yield—Annual dividend per share / stock price (or market value per share). If dividends are paid quarterly, the annual dividend amount is based on the most recent quarterly dividend annualized.

Earnings stability—Volatility of cash flow refers to the coefficient of variation of annual income from operations calculated as the ratio of the standard deviation relative to the mean (ten-year stdev and mean, 2004–2013).

Earnings yield—EPS (i.e. earnings per share) / stock price (or market value per share). The inverse of the P/E ratio allows comparison of companies that have negative earnings which would normally make the P/E ratio insignificant.

GICS Level II Industry Group—The Global Industry Classification Standard (GICS) is a standardized industry classification system used by the financial community. It has four levels of detail: 10 sectors, 24 industry groups, 68 industries, and 154 sub-industries.

Market capitalization—Total market value of a company's equity.

Price-to-book value (P/B)—Stock price (or market value per share) / book value of equity per share.

Price-to-cash flow (P/CF)—Stock price (or market value per share)/cash flow per share.

Return on equity (ROE)—(Net income – preferred dividends)/ average total common equity.

Scope 1 emissions—All greenhouse gas (GHG) emissions that are directly from sources that are owned or controlled by the reporting entity.

Scope 2 emissions—All indirect greenhouse gas (GHG) emissions from the consumption of purchased electricity, heat or steam. Indirect GHG emissions are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity.

Scope 3 emissions—Other indirect emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. T&D losses) not covered in Scope 2, outsourced activities, waste disposal, etc.

Sustainability reporting—Reporting of environmental, social and governance (ESG) factors and metrics, the risks and opportunities they create for a business, the company's strategic plan for managing the risks and capitalizing on the opportunities, and its successes and failures in the execution of that strategy.

Sustainable investing—Integration of environmental, social and governance (ESG) factors into standard investment analysis.

Third-party verification and assurance—Audit and verification by a competent and independent organization that uses a standardized set of terms and methods.

Valuation premium—Refers to the excess value that investors assign to a company relative to its peer group, reflected in higher multiples (e.g., P/E, P/B, EV/EBITDA, etc.).

Appendix I
Scores, emissions, and company detail by sector

	Company	Ticker	2014 score	2013 score	Scope 1 emissions	Scope 2 emissions	Target(s) reported	Verification/ assurance
	Consumer discretionary							
◥	Best Buy Co., Inc.	BBY	98 A–	98 A	216,634	496,043	abs	❶❷❸
	Carnival Corporation	CCL	75 C	83 C	10,551,667	65,769	int	❶❷
	CBS Corp.	CBS	41	24	—	—		
	D.R. Horton, Inc.	DHI	AQL	NR	Answered questionnaire late			
	Darden Restaurants, Inc.	DRI	89 B	74 C	376,313	722,810	int	❶❷❸
	Delphi Automotive Plc	DLPH	77 C	78 C	72,603	579,592	int	
◥	DIRECTV	DTV	93 A	91 B	101,236	94,584	abs	❶❷❸
	Expedia, Inc.	EXPE	62 E	63 E	Response not public			
	Family Dollar Stores, Inc.	FDO	87 D	75 D	Response not public			
	Ford Motor Company	F	81 D	72 C	1,482,020	3,340,267	int	
	Gap Inc.	GPS	79 B	77 B	24,449	396,992	abs	
◥ ◥	General Motors Company	GM	100 A	100 A–	2,802,461	5,613,573	abs int	❶❷❸
	Goodyear Tire & Rubber Company	GT	74 C	78 B	1,226,653	1,895,713	int	
	H&R Block Inc	HRB	26	27	—	—		
	Harman International Industries Inc	HAR	78 C	72 D	2,830	43,517	int	
	Hasbro, Inc.	HAS	73 B	81 B	7,347	16,904	abs	❶❷❸
	International Game Technology	IGT	AQL	NR	Answered questionnaire late			
	Interpublic Group of Companies, Inc.	IPG	28	21	Response not public			
◥	Johnson Controls	JCI	94 A	94 A–	862,617	1,443,211	abs int	❶❷❸
	Kohl's Corporation	KSS	76 C	81 B	35,580	832,431	abs	
	L Brands, Inc.	LB	79 D	80 B	25,642	293,683		❶❷❸
	Leggett & Platt, Inc.	LEG	20	22	Response not public			
	Lowe's Companies, Inc.	LOW	85 D	85 D	335,731	2,623,838		
	Macy's, Inc.	M	33	23	—	—		
	Marriott International, Inc.	MAR	85 C	81 B	665,155	2,800,632	int	
	Mattel, Inc.	MAT	75 C	56 D	14,824	189,652	int	
	McDonald's Corporation	MCD	85 C	71 D	216,206	1,674,777	int	
	Newell Rubbermaid Inc.	NWL	50 E	57 D	25,863	285,207	int	
	News Corp	NWS	96 B	×	30,848	224,333	abs int	❶❷❸
	NIKE Inc.	NKE	80 C	70 D	Response not public			
	Nordstrom, Inc.	JWN	84 C	88 C	Response not public			
	Omnicom Group Inc.	OMC	59 E	59 D	65,592	85,625		
	Scripps Networks Interactive Inc.	SNI	64 D	16	—	15,404		
	Staples, Inc.	SPLS	85 C	74 C	115,040	34,400	abs	
	Starbucks Corporation	SBUX	94 B	86 C	253,844	830,879	int	❶❷❸
	Starwood Hotels & Resorts Worldwide, Inc	HOT	96 B	85 B	529,023	2,419,440	int	❶❷❸
	Target Corporation	TGT	89 C	91 B	704,580	2,456,557	int	❶❷
	The Home Depot, Inc.	HD	93 A–	99 A–	321,370	2,385,384	abs int	❶❷❸
	Tiffany & Co.	TIF	94 C	91 C	2,670	43,866	abs	❶❷
	Time Warner Inc.	TWX	63 E	AQL	17,383	242,119		
◥	TJX Companies, Inc.	TJX	98 B	98 B	83,059	696,943	int	❶❷❸
◥	Twenty-First Century Fox	FOX	99 B	97 A–	48,365	158,120	abs int	❶❷❸
	VF Corporation	VFC	90 B	87 B	84,702	178,783	int	❶❷
	Viacom Inc.	VIAB	76 D	60 D	Response not public			
	Walt Disney Company	DIS	65 C	78 C	866,639	911,387	abs	
	Whirlpool Corporation	WHR	58 D	53 D	210,850	570,743		
◥ ◥	Wyndham Worldwide Corporation	WYN	97 A	84 B	103,690	326,119	int	❶❷
	Yum! Brands, Inc.	YUM	95 B	92 B	82,543	2,757,423	abs	❶❷

Legend

◥ CDLI leader
◥ CPLI leader

AQL answered questionnaire late
DP declined to participate
IN provided information, but did not answer questionnaire
NR no response
— information not available
× company was not on S&P 500

Targets

abs absolute
int intensity

Verification/assurance

❶ Scope 1
❷ Scope 2
❸ Scope 2

Appendix I
Scores, emissions, and company detail by sector

	Company	Ticker	2014 score	2013 score	Scope 1 emissions	Scope 2 emissions	Target(s) reported	Verification/ assurance
	Consumer staples							
	Altria Group, Inc.	MO	85 B	75 C	275,499	225,277	abs	❶❷
	Archer Daniels Midland	ADM	68 C	NR	14,832,646	2,820,056	int	
	Avon Products, Inc.	AVP	83 D	86 B	63,452	85,055	abs	
	Brown-Forman Corporation	BF/B	93 A–	93 A	100,378	67,634	abs	❶❷❸
	Campbell Soup Company	CPB	79 C	79 B	406,476	362,763	abs int	
	Clorox Company	CLX	84 B	82 B	73,740	242,641	abs int	❶❷❸
	Coca-Cola Enterprises, Inc.	CCE	94 B	90 A-	112,225	82,356	abs int	❶❷❸
	Colgate Palmolive Company	CL	94 B	99 B	232,712	438,018	int	❶❷❸
	ConAgra Foods, Inc.	CAG	93 B	91 B	1,071,303	1,089,063	int	❶❷❸
◥	Constellation Brands, Inc.	STZ	97 B	85 B	139,130	52,833	int	❶❷❸
◥	CVS Health Corp	CVS	95 A	92 B	193,100	1,466,000	int	❶❷❸
	Dr Pepper Snapple Group Inc	DPS	85 B	88 B	249,446	160,649	int	❶❷❸
◥	Estée Lauder Companies Inc.	EL	98 A–	96 A	33,242	57,789	int	❶❷❸
	General Mills Inc.	GIS	80 B	78 B	291,606	771,157	int	❶
	Hormel Foods	HRL	74 C	68 D	919,287	594,055	abs int	
	Kellogg Company	K	94 B	84 B	579,557	710,498	int	❶
	Kimberly-Clark Corporation	KMB	69 C	72 C	2,266,653	2,856,488	abs	❶❷❸
	Kraft Foods	KRFT	90 B	81 B	478,276	663,394	int	❶❷❸
	Kroger	KR	60 D	53 D	2,189,672	4,147,863		
	McCormick & Company, Incorporated	MKC	84 C	83 C	23,391	63,855	int	
	Mead Johnson Nutrition Company	MJN	92 B	85 B	50,152	117,669	int	❶❷
	Molson Coors Brewing Company	TAP	96 B	97 A-	206,749	123,415	int	❶❷❸
	Mondelez International Inc	MDLZ	87 B	91 B	1,080,025	988,185	int	❶❷❸
	PepsiCo, Inc.	PEP	90 B	94 B	3,823,000	1,958,000	abs	❶❷❸
◥	Philip Morris International	PM	96 A	97 B	420,207	408,200	abs int	❶❷
	Procter & Gamble Company	PG	70 D	47	2,767,000	2,971,000	int	
	Reynolds American Inc.	RAI	64 C	70 B	109,535	167,019	abs	❶❷
	Safeway Inc.	SWY	74 B	72 C	1,583,621	1,990,754	abs	
	Sysco Corporation	SYY	80 D	66 C	782,856	336,832	int	
	The Coca-Cola Company	KO	83 B	90 A-	2,231,744	1,067,512	abs int	❶❷❸
	The Hershey Company	HSY	81 C	82 B	114,033	257,327	int	❶❷
	The J.M. Smucker Company	SJM	85 C	88 B	148,316	219,597	int	❶❷
	Walgreen Company	WAG	87 C	86 C	272,878	2,244,737	int	
◥ ◥	Wal-Mart Stores, Inc.	WMT	98 A	94 A-	6,501,715	14,933,422	abs int	❶❷❸
	Whole Foods Market, Inc.	WFM	61 D	62 C	336,988	418,458		
	Energy							
	Anadarko Petroleum Corporation	APC	79 C	75 C	14,478,082	875,805		❶
	Apache Corporation	APA	75 C	70 C	8,400,000	1,500,000		
	Baker Hughes Incorporated	BHI	89 B	90 B	436,000	374,000	int	❶❷❸
	Chevron Corporation	CVX	95 A-	97 A-	56,911,049	4,660,000	abs	❶❷❸
	ConocoPhillips	COP	89 B	83 B	25,761,226	1,625,188	abs int	❶❷❸
	CONSOL Energy Inc.	CNX	78 D	78 C	8,202,551	7,295,894		❶❷
	Devon Energy Corporation	DVN	82 B	86 B	7,644,606	991,054	int	❶
	Ensco International Incorporated	ESV	AQL	NR	Answered questionnaire late			
	EOG Resources, Inc.	EOG	34	AQL	5,786,809	-		
	Exxon Mobil Corporation	XOM	76 C	80 B	134,000,000	14,000,000		❶ ❸
	Halliburton Company	HAL	58 D	65 D	2,625,754	252,699	int	
◥	Hess Corporation	HES	100 B	97 B	6,023,190	508,448	abs int	❶❷❸
	Marathon Oil Corporation	MRO	AQL	NR	Answered questionnaire late			
	Newfield Exploration Co	NFX	92 D	84 C	671,843	34,536		
	Noble Energy, Inc.	NBL	81 C	76 C	2,912,516	31,653		
	Occidental Petroleum Corporation	OXY	62 E	61 E	12,500,000	5,200,000		
	Schlumberger Limited	SLB	84 C	83 C	1,790,000	430,000	int	
◥ ◥	Spectra Energy Corp	SE	100 A	98 A	8,571,123	640,063	abs int	❶❷❸

Appendix I
Scores, emissions, and company detail by sector

	Company	Ticker	2014 score	2013 score	Scope 1 emissions	Scope 2 emissions	Target(s) reported	Verification/ assurance
	Financials							
	Ace Ltd.	ACE	93 B	93 A	13,747	40,702	int	❶❷❸
	AFLAC Incorporated	AFL	87 B	85 B	3,133	17,791	abs int	❶❷
◥	Allstate Corporation	ALL	97 B	96 B	49,296	139,755	abs	❶❷❸
	American Express	AXP	86 C	87 C	24,187	138,913	abs	
	American International Group, Inc.	AIG	62 D	62 D	—	—		
	Ameriprise Financial, Inc.	AMP	2	0	—	—		
	Aon plc	AON	AQL	65 C	Answered questionnaire late			
	Assurant, Inc.	AIZ	AQL	43	Answered questionnaire late			
	AvalonBay Communities	AVB	75 D	DP	38,088	43,444		
◥ ◥	Bank of America	BAC	100 A	98 A	112,964	1,335,434	abs	❶❷❸
	BlackRock	BLK	87 D	79 C	Response not public			
◥ ◥	BNY Mellon	BK	100 A	100 A	9,917	206,479	abs	❶❷❸
	Capital One Financial	COF	79 C	71 C	16,829	232,703	abs	❶❷❸
◥	CBRE Group, Inc.	CBG	99 B	98 C	24,596	30,731	abs	❶❷❸
	Charles Schwab Corporation	SCHW	67 D	55 E	Response not public			
	Cincinnati Financial Corporation	CINF	77 C	71 C	17,274	18,315		
	Citigroup Inc.	C	94 B	95 B	37,602	950,239	abs	❶❷
◥	Comerica Incorporated	CMA	93 A	94 A	8,019	67,820	abs	❶❷❸
	Fifth Third Bancorp	FITB	95 C	86 D	16,714	101,350		❶❷❸
	Franklin Resources, Inc.	BEN	92 C	86 C	8,852	28,429		
	Genworth Financial, Inc.	GNW	77 E	71 D	368	12,989		
◥ ◥	Goldman Sachs Group Inc.	GS	98 A	98 A	11,323	248,886	abs	❶❷❸
◥	HCP, Inc.	HCP	97 B	97 A-	29,325	223,136	abs int	❶❷
	Health Care REIT, Inc.	HCN	87 C	88 D	5,983	145,923		❶❷❸
◥ ◥	Host Hotels & Resorts, Inc.	HST	98 A	93 A	130,778	459,278	int	❶❷❸
	Huntington Bancshares Incorporated	HBAN	85 D	69 C	11,064	76,370		❶❷
	Invesco Ltd	IVZ	60 D	65 D	19,855	3,061		
◥	JPMorgan Chase & Co.	JPM	97 B	91 B	85,950	1,092,558	abs	❶❷❸
	KeyCorp	KEY	80 B	96 A	14,583	70,125	abs	❶❷❸
◥	Kimco Realty	KIM	98 B	83 C	3,948	66,944	abs	❶❷
◥	Legg Mason, Inc.	LM	99 B	97 B	510	4,411	abs	❶❷❸
	Lincoln National Corporation	LNC	87 D	IN	3,715	15,219		
	M&T Bank Corporation	MTB	66 D	69 D	Response not public			
◥	Marsh & McLennan Companies, Inc.	MMC	98 B	98 B	6,068	103,031	abs	❶❷❸
	McGraw Hill Financial Inc.	MHFI	94 B	95 B	17,029	47,192	abs	❶❷❸
	MetLife, Inc.	MET	99 B	92 A-	Response not public			
	Moody's Corporation	MCO	24	21	—	—		
◥	Morgan Stanley	MS	99 B	96 A	30,446	308,966	int	❶❷❸
	NASDAQ OMX Group, Inc.	NDAQ	38	56 D	Response not public			
◥	Northern Trust	NTRS	97 C	94 B	3,143	51,241		❶❷❸
	Plum Creek Timber Co. Inc.	PCL	84 B	93 B	38,436	110,332	int	❶❷
	PNC Financial Services Group, Inc.	PNC	86 B	89 B	46,582	377,036	abs	❶❷❸
◥ ◥	Principal Financial Group, Inc.	PFG	99 A	95 A	5,751	55,132	abs	❶❷❸
	Prologis	PLD	86 C	83 B	2,262	5,574	abs	❶❷
	Prudential Financial, Inc.	PRU	73 C	63 C	6,053	67,254	abs int	
◥ ◥	Simon Property Group	SPG	98 A	98 B	30,756	451,318	abs	❶❷❸
	State Street Corporation	STT	95 C	87 C	9,858	110,101	int	❶❷❸
	T. Rowe Price	TROW	89 C	81 C	850	34,493		❶❷❸
	The Chubb Corporation	CB	84 D	52 D	1,473	10,499		
◥	The Hartford Financial Services Group, Inc.	HIG	92 A	94 A	23,099	51,265	abs	❶❷❸
	The Travelers Companies, Inc.	TRV	72 D	63 C	35,804	46,278	abs	
	U.S. Bancorp	USB	90 D	78 C	44,076	356,061		
◥	Unum Group	UNM	99 B	97 A	8,424	35,166	abs	❶❷❸
	Ventas Inc	VTR	92 B	85 C	80,731	316,403	abs	❶❷
◥ ◥	Wells Fargo & Company	WFC	97 A	96 A	104,062	1,272,278	abs	❶❷❸
	Weyerhaeuser Company	WY	81 C	79 B	1,400,501	1,270,871	abs	❶❷
	XL Group plc	XL	76 E	44	Response not public			

Appendix I
Scores, emissions, and company detail by sector

	Company	Ticker	2014 score	2013 score	Scope 1 emissions	Scope 2 emissions	Target(s) reported	Verification/ assurance
	Health care							
	Abbott Laboratories	ABT	93 B	84 B	471,000	520,000	abs int	❶❷
	AbbVie Inc	ABBV	83 C	76 B	320,263	3,444,304	int	❶❷
	Actavis plc.	ACT	93 B	88 C	Response not public			
	Aetna Inc.	AET	74 E	61 D	6,036	83,088		
	Agilent Technologies Inc.	A	77 D	94 B	14,400	116,800		❶❷❸
	Allergan, Inc.	AGN	90 B	91 B	49,828	55,049	abs int	❶❷
	Amgen, Inc.	AMGN	64 C	76 B	125,898	262,716	abs	
	Baxter International Inc.	BAX	78 C	82 B	347,000	468,000	int	❶❷❸
	Becton, Dickinson and Co.	BDX	92 B	69 B	74,416	248,319	int	
	Biogen Idec Inc.	BIIB	81 C	92 B	49,378	41,376	int	❶❷❸
	Boston Scientific Corporation	BSX	46	44	31,000	96,000	abs	
◥	Bristol-Myers Squibb	BMY	98 B	96 B	280,214	231,380	abs	❶❷❸
	Cardinal Health Inc.	CAH	75 E	71 D	152,645	223,178		
	Celgene Corporation	CELG	85 B	80 C	8,206	9,711		❶❷❸
	Cerner Corp	CERN	21	NR	Response not public			
	Cigna	CI	86 B	59 C	13,730	71,690	abs	
	Covidien Ltd.	COV	78 C	70 C	94,549	248,423	int	
	DENTSPLY International Inc.	XRAY	80 E	NR	3,783	87,970		
	Eli Lilly & Co.	LLY	85 B	86 B	474,244	1,129,156	int	❶❷❸
	Express Scripts Holding Company	ESRX	65 D	DP	49	10,104		
	Hospira, Inc.	HSP	58 E	50 E	86,330	460,280	int	
	Humana Inc.	HUM	92 B	83 B	17,543	130,808	abs	❶❷❸
◥	Johnson & Johnson	JNJ	99 B	98 A-	350,722	846,469	abs	❶❷❸
	Life Technologies Corp.	LIFE	SA	81 B	See parent company—Thermo Fisher Scientific Inc.			
	Medtronic, Inc.	MDT	81 D	61 D	29,182	172,728	int	
	Merck & Co., Inc.	MRK	88 B	87 B	1,051,600	808,700	abs	❶❷❸
	Patterson Companies, Inc.	PDCO	67 E	53 E	Response not public			
	PerkinElmer, Inc.	PKI	54 D	62 D	18,226	26,126	abs	
	Pfizer Inc.	PFE	92 B	91 B	959,865	705,558	abs	❶❷
	Quest Diagnostics Incorporated	DGX	83 C	59 D	83,828	175,501		
	Stryker Corporation	SYK	52 E	53 E	Response not public			
	Tenet Healthcare Corporation	THC	29	19	—	—		
	Thermo Fisher Scientific Inc.	TMO	58 D	75 D	61,496	286,315		
◥	UnitedHealth Group Inc	UNH	99 B	98 B	8,089	101,309	int	❶❷❸
	Varian Medical Systems Inc	VAR	89 C	84 C	32,449	21,312	int	
	Waters Corporation	WAT	71 D	75 C	18,164	21,445	int	
	WellPoint, Inc.	WLP	65 D	57 C	7,854	107,884	abs	
	Zimmer Holdings, Inc.	ZMH	58 E	62 E	8,622	54,166		

Legend

◥ CDLI leader
◥ CPLI leader

AQL answered questionnaire late
DP declined to participate
IN provided information, but did not answer questionnaire
NR no response
SA see another response, included under parent company
— information not available
× company was not on S&P 500

Targets

abs absolute
int intensity

Verification/assurance

❶ Scope 1
❷ Scope 2
❸ Scope 2

Appendix I
Scores, emissions, and company detail by sector

	Company	Ticker	2014 score	2013 score	Scope 1 emissions	Scope 2 emissions	Target(s) reported	Verification/ assurance
	Industrials							
	3M Company	MMM	82 C	70 D	4,550,000	2,230,000		
	ADT Corporation	ADT	6	DP	Response not public			
◥	Boeing Company	BA	97 B	96 A-	610,000	1,026,000	abs	❶❷❸
	C.H. Robinson Worldwide, Inc.	CHRW	48	30	Response not public			
◥◥	CSX Corporation	CSX	98 A	95 A	5,251,734	313,226	int	❶❷❸
	Cummins Inc.	CMI	91 B	91 B	269,130	530,453	int	❶❷❸
	Danaher Corporation	DHR	12	12	Response not public			
	Deere & Company	DE	81 C	79 C	460,808	1,073,059	int	❶❷❸
	Delta Air Lines	DAL	93 B	89 B	32,137,796	340,440	abs int	❶❷❸
	Dover Corporation	DOV	89 C	79 C	124,310	255,431	int	
	Dun & Bradstreet Corporation	DNB	86 D	NR	Response not public			
◥	Eaton Corporation	ETN	97 A-	100 A-	112,000	663,300	abs int	❶❷❸
	Emerson Electric Co.	EMR	17	10	199,710	724,189		
	Expeditors International of Washington	EXPD	78 C	72 C	6,787	42,202	int	
	Fastenal Company	FAST	28	DP	-	-		
	FedEx Corporation	FDX	90 B	80 B	13,928,770	970,652	int	❶
	Fluor Corporation	FLR	66 E	48	12,219	54,106		
	General Electric Company	GE	73 D	72 C	1,946,000	3,031,000	abs	
	Honeywell International Inc.	HON	81 C	74 B	4,346,781	1,760,651	int	❶❷
	Illinois Tool Works, Inc.	ITW	82 D	79 C	Response not public			
	Ingersoll-Rand Co. Ltd.	IR	93 B	80 B	401,920	280,840	int	❶❷
	Iron Mountain Inc.	IRM	82 C	82 B	144,570	140,198	abs	
	Jacobs Engineering Group Inc.	JEC	73 D	66 D	4,130	5,717	abs	
	L-3 Communications Holdings, Inc.	LLL	1	DP	-	-		
◥◥	Lockheed Martin Corporation	LMT	98 A	91 A	241,148	866,684	abs	❶❷❸
	Masco Corporation	MAS	76 B	68 C	124,217	205,344	int	❶❷❸
◥	Norfolk Southern Corp.	NSC	98 B	90 B	5,088,315	260,792	int	❶❷❸
◥◥	Northrop Grumman Corp	NOC	98 A	99 A	148,470	460,577	int	❶❷❸
	PACCAR Inc	PCAR	94 B	IN	Response not public			
	Pall Corporation	PLL	68 C	61 C	26,521	1,062,912	int	
	Parker-Hannifin Corporation	PH	82 B	88 B	79,420	547,481	int	
	Pitney Bowes Inc.	PBI	89 B	70 D	29,150	46,973		❶❷❸
◥	Raytheon Company	RTN	97 B	98 A	102,999	424,108	abs	❶❷❸
	Republic Services, Inc.	RSG	93 C	NR	15,822,235	240,778		❶❷
	Robert Half International Inc.	RHI	11	4	Response not public			
	Rockwell Automation	ROK	72 D	71 C	38,880	105,120	abs int	
	Rockwell Collins, Inc.	COL	65 D	66 C	18,100	120,300	abs	
	Ryder System, Inc.	R	96 B	92 B	642,001	110,257	abs int	❶❷❸
	Snap-On Inc	SNA	60 E	53 E	Response not public			
	Southwest Airlines Co.	LUV	89 B	93 B	17,949,278	47,680	int	❶❷❸
◥◥	Stanley Black & Decker, Inc.	SWK	100 A	94 A	100,165	250,497	int	❶❷❸
	Textron Inc.	TXT	70 D	57 B	127,564	470,442	int	
	Tyco International	TYC	65 D	48	243,850	99,643	int	
◥	Union Pacific Corporation	UNP	99 B	98 B	11,580,950	373,886	int	❶❷❸
	United Technologies Corporation	UTX	72 C	87 B	955,785	1,160,197	abs	❶❷
◥	UPS	UPS	100 A-	99 A-	11,770,000	828,000	int	❶❷❸
	W.W. Grainger, Inc.	GWW	91 B	93 B	43,481	102,787	int	❶❷❸
◥	Waste Management, Inc.	WM	97 A-	89 B	19,895,052	236,977	abs int	❶
	Xylem Inc	XYL	88 C	72 D	35,553	40,397	int	

Legend

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◥ CPLI leader

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NR no response
— information not available
× company was not on S&P 500

Targets

abs absolute
int intensity

Verification/assurance

❶ Scope 1
❷ Scope 2
❸ Scope 2

Appendix I
Scores, emissions, and company detail by sector

Company	Ticker	2014 score	2013 score	Scope 1 emissions	Scope 2 emissions	Target(s) reported	Verification/ assurance
Information technology							
Accenture	ACN	94 A	92 B	32,155	232,988	int	❶❷③
Adobe Systems, Inc.	ADBE	99 A	97 A	10,571	32,486	abs	❶❷③
Akamai Technologies Inc	AKAM	97 A	84 B	502	103,122	int	❶❷③
Alliance Data Systems	ADS	AQL	NR	Answered questionnaire late			
Altera Corp.	ALTR	93 B	57 D	3,158	10,451	abs int	
Analog Devices, Inc.	ADI	88 B	88 B	Response not public			
Apple Inc.	AAPL	99 A	NR	30,393	91,505	abs	❶❷③
Applied Materials Inc.	AMAT	72 D	AQL	46,358	146,917		
Autodesk, Inc.	ADSK	100 A	99 A	2,480	1,970	abs int	❶❷③
Automatic Data Processing, Inc.	ADP	87 C	83 C	14,200	131,600	abs	
Broadcom Corporation	BRCM	94 B	92 B	3,546	56,453	int	❶❷③
CA Technologies	CA	90 C	90 B	12,757	57,698	abs	❶❷③
Cisco Systems, Inc.	CSCO	100 A	100 A	55,811	666,393	abs	❶❷③
Cognizant Technology Solutions Corp.	CTSH	71 D	64 C	22,632	170,435	int	
Computer Sciences Corporation (CSC)	CSC	77 C	82 B	Response not public			
Corning Incorporated	GLW	50 D	54 D	347,157	1,087,184		❶❷
eBay Inc.	EBAY	87 D	75 D	28,090	222,892	int	
EMC Corporation	EMC	100 A-	97 A	46,404	401,500	abs int	❶❷③
F5 Networks, Inc.	FFIV	52 E	48	Response not public			
Fidelity National Information Services	FIS	AQL	DP	Answered questionnaire late			
First Solar Inc	FSLR	87 C	77 C	10,708	311,605	int	
Fiserv, Inc.	FISV	15	14	Response not public			
Google Inc.	GOOG	94 A	93 B	41,373	1,245,253	int	❶❷③
Hewlett-Packard	HPQ	100 A	99 A	207,900	1,587,100	abs int	❶❷③
Intel Corporation	INTC	79 B	85 B	756,280	936,448	abs int	❶❷
International Business Machines (IBM)	IBM	81 B	86 B	514,464	1,978,594	abs	❶❷
Intuit Inc.	INTU	82 D	85 B	5,464	31,122	abs	
Jabil Circuit, Inc.	JBL	74 D	82 C	37,723	848,937	int	
Juniper Networks, Inc.	JNPR	99 A	81 B	4,081	94,822	abs int	❶❷③
KLA-Tencor Corporation	KLAC	47	AQL	Response not public			
Linear Technology Corp.	LLTC	65 D	49	Response not public			
MasterCard Incorporated	MA	41	43	3,042	34,456		
Microchip Technology	MCHP	63 C	76 B	182,382	169,666	abs	
Micron Technology, Inc.	MU	34	34	812,125	1,260,619		
Microsoft Corporation	MSFT	99 A	96 A	39,665	1,277,364	abs	❶❷③
Motorola Solutions	MSI	98 B	74 B	27,426	159,543	abs	❶❷③
NetApp Inc.	NTAP	97 C	87 C	6,170	128,757		❶❷③
NVIDIA Corporation	NVDA	92 C	87 B	2,743	48,659	int	❶❷
Oracle Corporation	ORCL	95 C	79 C	14,764	426,026	int	
QUALCOMM Inc.	QCOM	64 D	56 D	65,935	121,098		
Red Hat Inc	RHT	AQL	NR	Answered questionnaire late			
salesforce.com	CRM	84 C	90 C	6,095	48,447		❶❷③
SanDisk Corporation	SNDK	79 B	82 B	4,130	128,409	int	❶❷
Seagate Technology LLC	STX	89 C	74 D	310,159	982,858	abs	❶❷③
Symantec Corporation	SYMC	97 C	98 B	8,511	152,932		❶❷③
TE Connectivity	TEL	68 D	64 C	209,246	479,201	int	
Teradata Corp.	TDC	45	45	642	21,854	int	
Texas Instruments Incorporated	TXN	59 D	64 D	938,159	1,388,729	int	
Total System Services (TSYS)	TSS	37	19	Response not public			
Visa	V	65 E	61 D	7,560	73,153		
Western Digital Corp	WDC	54 D	56 D	35,565	1,048,582	int	
Western Union Co	WU	20	IN	-	-		
Xerox Corporation	XRX	95 A-	77 B	123,718	144,781	abs	
Xilinx Inc	XLNX	56 D	46	Response not public			
Yahoo! Inc.	YHOO	95 B	91 B	9,123	317,446	abs int	❶❷③

Appendix I
Scores, emissions, and company detail by sector

	Company	Ticker	2014 score	2013 score	Scope 1 emissions	Scope 2 emissions	Target(s) reported	Verification/ assurance
	Materials							
◥	Air Products & Chemicals, Inc.	APD	99 A-	99 B	14,972,268	10,853,989	int	❶❷❸
	Alcoa Inc.	AA	93 B	87 B	28,227,078	15,134,829	int	❶❷
	Avery Dennison Corporation	AVY	87 C	85 C	156,755	319,408	int	
	Ball Corporation	BLL	93 B	78 B	360,628	898,432	int	❶❷
	Bemis Company	BMS	77 C	59 C	228,280	596,604	int	
	Cliffs Natural Resources Inc	CLF	59 D	72 C	6,026,261	3,287,159		
	E.I. du Pont de Nemours and Company	DD	93 B	96 A	13,561,008	4,944,363	abs	❶❷❸
	Eastman Chemical Company	EMN	47	47	6,190,000	760,000	int	
	Ecolab Inc.	ECL	96 B	98 A	396,424	233,406	int	❶❷❸
	Freeport-McMoRan Copper & Gold Inc.	FCX	85 C	86 C	5,859,810	4,321,572		❶❷❸
◥	International Flavors & Fragrances Inc.	IFF	97 A-	89 B	108,277	128,552	int	❶❷❸
	International Paper Company	IP	79 B	74 C	10,100,000	5,660,000	abs	❶
	MeadWestvaco Corp.	MWV	96 B	98 B	2,777,007	577,642	abs int	❶❷❸
	Monsanto Company	MON	76 D	70 D	1,450,000	565,000		
	Newmont Mining Corporation	NEM	85 C	92 B	4,402,780	1,205,633	abs	❶❷
	Owens-Illinois	OI	56 D	31	4,703,000	1,673,000	int	
	PPG Industries, Inc.	PPG	53 D	60 D	1,122,000	943,000	int	
◥	Praxair, Inc.	PX	100 A-	98 B	6,152,000	11,883,000	abs int	❶❷❸
◥	Sealed Air Corp.	SEE	97 A-	59 D	221,528	468,877	abs int	❶❷❸
	Sherwin-Williams Company	SHW	78 C	72 C	263,324	273,240	int	
◥	Sigma-Aldrich Corporation	SIAL	99 A-	97 B	61,877	162,395	abs int	❶❷❸
	The Dow Chemical Company	DOW	85 B	90 B	27,730,000	7,570,000	abs int	❶❷❸
◥ ◥	The Mosaic Company	MOS	99 A	97 A	2,793,949	1,616,303	abs int	❶❷❸
	United States Steel Corporation	X	85 B	78 B	41,433,617	5,025,063	abs	❶
	Telecommunications services							
	AT&T Inc.	T	94 B	96 B	1,007,224	8,103,246	abs int	❶❷❸
	CenturyLink	CTL	71 C	66 D	274,783	2,069,135	abs int	❶❷
	Verizon Communications Inc.	VZ	94 B	84 B	438,414	5,047,406	int	❶❷❸
	Windstream Corporation	WIN	8	8	—	—		
	Utilities							
	Ameren Corporation	AEE	87 C	80 B	32,978,295	70,179	abs	❶
	American Electric Power Company, Inc.	AEP	86 C	68 D	120,807,200	107,200	abs	
	CMS Energy Corporation	CMS	92 C	93 C	17,308,533	92,724	abs int	❶
	Consolidated Edison, Inc.	ED	86 B	89 B	3,361,491	1,193,349	abs	
	DTE Energy Company	DTE	AQL	82 C	Answered questionnaire late			
	Duke Energy Corporation	DUK	72 C	67 C	124,592,000	—	abs int	❶
◥ ◥	Entergy Corporation	ETR	99 A	100 A	34,214,242	891,922	abs	❶❷❸
◥	Exelon Corporation	EXC	100 A-	98 A	18,696,695	6,269,876	abs	❶❷❸
	Integrys Energy Group, Inc.	TEG	46	32	10,895,037	—	abs	
	NiSource Inc.	NI	64 C	50 D	19,146,240	307,278		
	Northeast Utilities	NU	76 C	79 B	1,962,008	634,665	abs	❶
	NRG Energy Inc	NRG	74 C	86 B	76,721,124	1,237,050	abs int	❶
	Oneok Inc.	OKE	49	3	Response not public			
◥ ◥	Pepco Holdings, Inc.	POM	100 A	94 A	217,588	1,185,540	abs	❶❷❸
	PG&E Corporation	PCG	95 B	93 B	4,105,291	1,262,066	abs	❶❷❸
	Pinnacle West Capital Corporation	PNW	52 D	48	14,227,295	18,466	abs int	
◥	Sempra Energy	SRE	98 A-	97 B	7,552,996	267,767	abs int	❶❷❸
	The AES Corporation	AES	85 C	66 C	75,170,100	167,902	abs	❶
	Wisconsin Energy Corporation	WEC	63 E	64 D	21,924,000	506,000		❶
	Xcel Energy Inc.	XEL	94 B	91 B	52,178,081	863,130	abs	❶❷❸

Legend

◥ CDLI leader
◥ CPLI leader

AQL answered questionnaire late
DP declined to participate
IN provided information, but did not answer questionnaire
NR no response
— information not available
× company was not on S&P 500

Targets

abs absolute
int intensity

Verification/assurance

❶ Scope 1
❷ Scope 2
❸ Scope 2

Appendix II
Non-responding companies

Declined to participate

Company	Ticker
Consumer discretionary	
AutoNation, Inc.	AN
Bed Bath & Beyond Inc.	BBBY
BorgWarner	BWA
Chipotle Mexican Grill	CMG
Comcast Corporation	CMCSA
Discovery Communications, Inc.	DISCA
Gannett Co., Inc.	GCI
Graham Holdings Company	GHC
Lennar Corporation	LEN
Mohawk Industries, Inc.	MHK
O'Reilly Automotive	ORLY
Petsmart, Inc.	PETM
Polo Ralph Lauren Corporation	RL
Ross Stores Inc	ROST
Time Warner Cable Inc.	TWC
Wynn Resorts, Limited	WYNN
Consumer staples	
Beam Inc	BEAM
Costco Wholesale Corporation	COST
Lorillard Inc.	LO
Tyson Foods, Inc.	TSN
Energy	
EQT Corporation	EQT
FMC Technologies	FTI
Kinder Morgan Inc.	KMI
Marathon Petroleum	MPC
Murphy Oil Corporation	MUR
Noble Corporation	NE
Peabody Energy Corporation	BTU
QEP Resources	QEP
Rowan Companies Inc	RDC
Tesoro Corporation	TSO
Valero Energy Corporation	VLO
Financials	
American Tower Corp.	AMT
Discover Financial Services	DFS
Loews Corporation	L
Macerich Co.	MAC
Regions Financial Corporation	RF
Zions Bancorporation	ZION

Company	Ticker
Health care	
AmerisourceBergen Corp.	ABC
DaVita Inc.	DVA
Forest Laboratories, Inc.	FRX
Gilead Sciences, Inc.	GILD
McKesson Corporation	MCK
Perrigo Co.	PRGO
Regeneron Pharmaceuticals, Inc.	REGN
St. Jude Medical, Inc.	STJ
Zoetis Inc	ZTS
Industrials	
Allegion Plc	ALLE
Ametek, Inc.	AME
Caterpillar Inc.	CAT
Equifax Inc.	EFX
Flowserve Corporation	FLS
Quanta Services Inc	PWR
Information technology	
Citrix Systems	CTXS
Lam Research Corp.	LRCX
LSI Corporation	LSI
Materials	
Allegheny Technologies Incorporated	ATI
LyondellBasell Industries Cl A	DLY
Nucor Corporation	NUE
Utilities	
CenterPoint Energy, Inc.	CNP
Dominion Resources, Inc.	D
Edison International	EIX
FirstEnergy Corporation	FE
PPL Corporation	PPL
TECO Energy, Inc.	TE
The Southern Company	SO

Provided information, but did not answer questionnaire

Energy	
Denbury Resources Inc	DNR

Appendix II
Non-responding companies

No response

Company	Ticker
Consumer discretionary	
Amazon.com Inc.	AMZN
AutoZone, Inc.	AZO
Cablevision Systems Corporation	CVC
CarMax Inc.	KMX
Coach, Inc.	COH
Dollar General Corporation	DG
Dollar Tree Inc	DLTR
Fossil, Inc.	FOSL
GameStop Corp.	GME
Garmin Ltd	GRMN
Genuine Parts Company	GPC
Harley-Davidson, Inc.	HOG
Michael Kors Holdings Ltd	KORS
Netflix, Inc.	NFLX
Pulte Homes Inc	PHM
PVH Corp	PVH
The Priceline Group Inc	PCLN
Tripadvisor Inc	TRIP
Urban Outfitters, Inc.	URBN
Consumer staples	
Monster Beverage Corporation	MNST
Energy	
Cabot Oil & Gas Corporation	COG
Cameron International Corporation	CAM
Chesapeake Energy Corporation	CHK
Diamond Offshore Drilling	DO
Helmerich & Payne	HP
Nabors Industries Ltd.	NBR
National Oilwell Varco, Inc.	NOV
Phillips 66	PSX
Pioneer Natural Resources	PXD
Range Resources Corp.	RRC
Southwestern Energy	SWN
Transocean Ltd.	RIGN
Williams Companies, Inc.	WMB
Wpx Energy	WPX
Financials	
Apartment Investment and Management Co.	AIV
BB&T Corporation	BBT
Berkshire Hathaway	BRK/B
Boston Properties	BXP
CME Group Inc.	CME
E TRADE Financial Corporation	ETFC
Equity Residential	EQR
General Growth Properties	GGP
Hudson City Bancorp, Inc.	HCBK
IntercontinentalExchange Inc	ICE
Leucadia National Corp.	LUK

Company	Ticker
Financials	
People's United Financial, Inc	PBCT
Progressive Corporation	PGR
Public Storage	PSA
SLM Corporation	SLM
SunTrust Banks, Inc.	STI
Torchmark Corporation	TMK
Vornado Realty Trust	VNO
Health care	
Alexion Pharmaceuticals	ALXN
Carefusion Corp	CFN
CR Bard Inc	BCR
Edwards Lifesciences Corp	EW
Intuitive Surgical Inc.	ISRG
Laboratory Corporation of America Holdings	LH
Mylan Inc.	MYL
Vertex Pharmaceuticals Inc	VRTX
Industrials	
Cintas Corporation	CTAS
General Dynamics Corporation	GD
Joy Global Inc	JOY
Kansas City Southern	KSU
Nielsen Holdings	NLSN
Pentair, Inc.	PNR
Precision Castparts Corp.	PCP
Roper Industries Inc	ROP
Stericycle Inc.	SRCL
Information technology	
Amphenol Corporation	APH
Electronic Arts Inc.	EA
Facebook	FB
FLIR Systems	FLIR
Harris Corporation	HRS
Paychex, Inc.	PAYX
Verisign Inc.	VRSN
Materials	
Airgas	ARG
CF Industries Holdings, Inc.	CF
FMC Corp	FMC
Vulcan Materials Company	VMC
Telecommunications services	
Crown Castle International Corp	CCI
Frontier Communications Corp	FTR
Utilities	
AGL Resources	GAS
NextEra Energy, Inc.	NEE
Public Service Enterprise Group Inc.	PEG
SCANA Corporation	SCG

Appendix III
Other responding companies

CDP would like to recognize all US-based, non-S&P 500* companies that used CDP's climate change questionnaire to manage their carbon and energy impacts this year. CDP also acknowledges those organizations whose vital information was provided to investors through another company's submission. The majority of these disclosures are publicly available at www.cdp.net.

Abercrombie & Fitch Co.
Actiontec Electronics
Advanced Micro Devices, Inc
Alliant Energy Corporation
American Airlines Group Inc
American Water Works
Amtrak
AptarGroup
Ashland Inc.
Bel Fuse Inc.
Bernhardt Design a Division of Bernhardt Furniture Company
Bernhardt Residential a Division of Bernhardt Furniture Company
Bernhardt Transportation a Division of Bernhardt Furniture Company
BROADRIDGE FINANCIAL SOLUTIONS INC
Bunge
Cabot Corporation
Caesars Entertainment
Cal Development
Cargill
Chicken of the Sea Intl
Compatico
Compuware Corp.
CoreLogic, Inc.
Covanta Energy Corporation
Crane Co.
Cypress Semiconductor Corporation
Dean Foods Company
Dell Inc.
Dunkin' Brands Group
DW Morgan, LLC
Eastman Kodak Company
Ecova, Inc.
Ernst & Young LLP (USA)

Fairchild Semiconductor
Flextronics International
Future Electronics
GRANT THORNTON
Hanesbrands Inc.
Herman Miller
Hillshire Brands Company
Humanscale Corporation
Hyatt Hotels
Idacorp Inc
Informatica Corporation
Integrated Device Technology, Inc.
Interface, Inc.
International Rectifier
Itron, Inc.
jcpenney
JDS Uniphase Corp.
Keurig Green Mountain
KNOLL INC
Las Vegas Sands Corporation
Layne Christensen Company
Level 3 Communications, Inc.
Levi Strauss & Co.
Lexmark International, Inc.
ManpowerGroup
Markel Corporation
Mars
Marvell Technology Group, Ltd.
MGM Resorts International
ModusLink Corporation
Molex Incorporated
Motorola Mobility
Navistar International Corporation
Office Depot, Inc.
OFS Brands

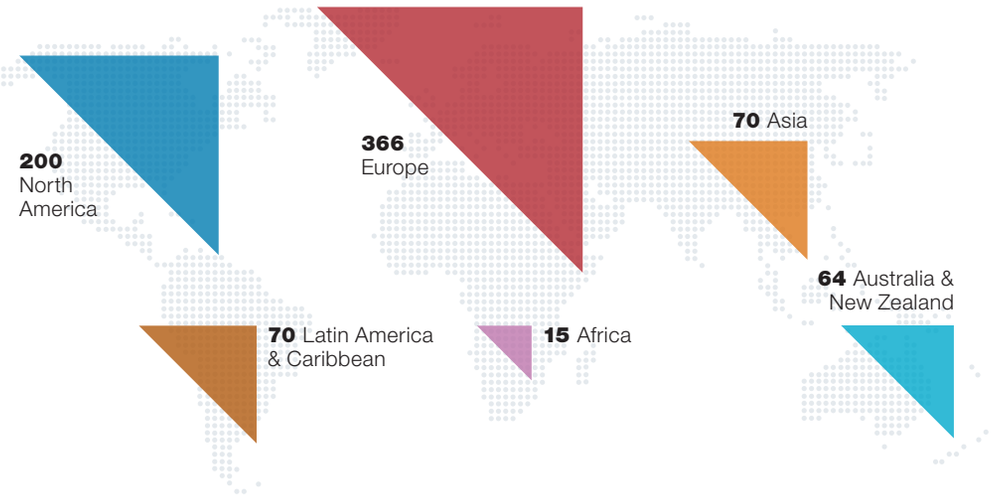
OGE Energy Corporation
Ormat Technologies Inc
Outerwall
Owens Corning
Pericom Semiconductor Corp.
PRESTIGE MAINTENANCE USA
PrimeAsia Leather Company
QLogic Corp.
Royal Caribbean Cruises Ltd
S.C. Johnson & Son, Inc.
Sanyo Denki America Inc
Silicon Laboratories
Smithfield Foods, Inc.
Sonoco Products Company
Spansion Inc.
Sprint Nextel Corporation
Steelcase
SunGard
SunPower Corporation
Syniverse
Teradyne Inc.
Terex Corporation
The Hertz Corporation
Trans-Expedite Inc.
TRW Automotive Holdings Corp
Unisys Corporation
United Industries
Valspar Corporation
Visteon
VWR International LLC
Wesco International
WhiteWave Foods
World Resources Institute (WRI)

* The S&P 500 list of companies covered in the main body of this report was taken on January 2, 2014. Non-S&P 500 companies are not eligible for ranking on the CDLI or CPLI.

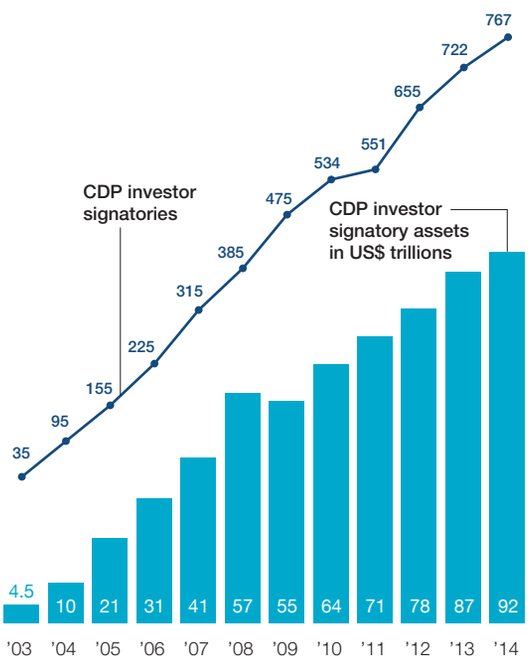
Appendix IV
Investor memebers

CDP works with investors globally to advance the investment opportunities and reduce the risks posed by climate change by asking over 5,000 of the world's largest companies to report their climate strategies, GHG emissions and energy use through CDP's standardized format. To learn more about CDP's member offering and becoming a member, please contact us or visit **www.cdp.net/en-US/WhatWeDo/.**

Where are the signatory investors located?*



CDP investor base continues to grow*



Investors by type

312 Asset managers

256 Asset owners

152 Banks

38 Insurance

27 Other

* There were 767 investor signatories on 1st February 2014 when the official CDP climate change letter was sent to companies, however some investors joined after this date and are only reflected in the 'geographical' and 'type' breakdown.

CDP investor members 2014

ABRAPP—Associação Brasileira das Entidades Fechadas de Previdência Complementar
AEGON N.V.
ATP Group
Aviva plc
Aviva Investors
Bank of America Merrill Lynch
Bendigo & Adelaide Bank Limited
BlackRock
Boston Common Asset Management, LLC
BP Investment Management Limited
California Public Employees' Retirement System
California State Teachers' Retirement System
Calvert Investment Management, Inc.
Capricorn Investment Group, LLC
Catholic Super
CCLA Investment Management Ltd
ClearBridge Investments
DEXUS Property Group
Fachesf
Fapes
Fundação Itaú Unibanco
Generation Investment Management
Goldman Sachs Group Inc.
Henderson Global Investors
HSBC Holdings plc
Infraprev
KLP
Legg Mason Global Asset Management
London Pensions Fund Authority
Mobimo Holding AG
Mongeral Aegon Seguros e Previdência S/A
Morgan Stanley
National Australia Bank Limited
Neuberger Berman
Nordea Investment Management
Norges Bank Investment Management
NEI Investments
Petros
PFA Pension
Previ
Real Grandeza
Robeco
RobecoSAM AG
Rockefeller Asset Management, Sustainability & Impact Investing Group
Royal Bank of Canada
Royal Bank of Scotland Group
Sampension KP Livsforsikring A/S
Schroders
Scottish Widows Investment Partnership
SEB AB
Serpros
Sistel
Sompo Japan Nipponkoa Holdings, Inc
Standard Chartered
TD Asset Management
The Wellcome Trust

Appendix V
Investor signatories

767

financial institutions with assets of US$92 trillion were signatories to the CDP 2014 climate change information request dated February 1, 2014.

3Sisters Sustainable Management LLC
Aberdeen Asset Managers
Aberdeen Immobilien KAG mbH
ABRAPP—Associação Brasileira das Entidades Fechadas de Previdência Complementar
Achmea NV
Active Earth Investment Management
Acuity Investment Management
Addenda Capital Inc.
Advanced Investment Partners
AEGON N.V.
AEGON-INDUSTRIAL Fund Management Co., Ltd
AIG Asset Management
AK Asset Management Inc.
Akbank T.A.Ş.
Alberta Investment Management Corporation (AIMCo)
Alberta Teachers Retirement Fund Board
Alcyone Finance
AllenbridgeEpic Investment Advisers Limited
Alliance Trust PLC
Allianz Elementar Versicherungs-AG
Allianz Global Investors Kapitalanlagegesellschaft mbH
Allianz Group
Altira Group
Amalgamated Bank
Amlin plc
AMP Capital Investors
AmpegaGerling Investment GmbH
Amundi AM
ANBIMA—Associação Brasileira das Entidades dos Mercados Financeiro e de Capitais
Antera Gestão de Recursos S.A.
APG
Appleseed Fund
AQEX LLC
Aquila Capital
Arisaig Partners Asia Pte Ltd
Arjuna Capital
Arkx Investment Management
Arma Portföy Yönetimi A.Ş.
Armstrong Asset Management
As You Sow
ASM Administradora de Recursos S.A.
ASN Bank
Assicurazioni Generali Spa
ATI Asset Management
Atlantic Asset Management Pty Ltd
ATP Group
Australia and New Zealand Banking Group
Australian Ethical Investment
AustralianSuper
Avaron Asset Management AS
Aviva Investors
Aviva plc
AXA Group
BAE Systems Pension Funds Investment Management Ltd
Baillie Gifford & Co.
BaltCap
Banca Monte dei Paschi di Siena Group
Banco Bradesco S/A
Banco Comercial Português S.A.
Banco de Credito del Peru BCP
Banco de Galicia y Buenos Aires S.A.
Banco do Brasil Previdência
Banco do Brasil S/A
Banco Espírito Santo, SA
Banco Nacional de Desenvolvimento Econômico e Social—BNDES
Banco Popular Español
Banco Sabadell, S.A.
Banco Santander
Banesprev—Fundo Banespa de Seguridade Social
Banesto
Banif, SA
Bank Handlowy w Warszawie S.A.
Bank Leumi Le Israel
Bank of America Merrill Lynch
Bank of Montreal
Bank Vontobel AG
Bankhaus Schelhammer & Schattera Kapitalanlagegesellschaft m.b.H.
BANKIA S.A.
Bankinter
bankmecu
Banque Degroof
Banque Libano-Française
Barclays
Basellandschaftliche Kantonalbank
BASF Sociedade de Previdência Complementar
Basler Kantonalbank
Bâtirente
Baumann and Partners S.A.
Bayern LB
BayernInvest Kapitalanlagegesellschaft mbH
BBC Pension Trust Ltd.
BBVA
BC Investment Management Corporation
Bedfordshire Pension Fund
Beetle Capital
BEFIMMO SA
Bendigo & Adelaide Bank Limited
Bentall Kennedy
Berenberg Bank
Berti Investments
BioFinance Administração de Recursos de Terceiros Ltda
BlackRock
Blom Bank SAL
Blumenthal Foundation
BNP Paribas Investment Partners
BNY Mellon
BNY Mellon Service Kapitalanlage Gesellschaft
Boardwalk Capital Management
Boston Common Asset Management, LLC
BP Investment Management Limited
Brasilprev Seguros e Previdência S/A.
Breckenridge Capital Advisors
British Airways Pension Investment Management Limited
British Coal Staff Superannuation Scheme
Brown Advisory
BSW Wealth Partners
BT Financial Group
BT Investment Management
Busan Bank
CAAT Pension Plan
Cadiz Holdings Limited
CAI Corporate Assets International AG
Caisse de dépôt et placement du Québec
Caisse des Dépôts
Caixa de Previdência dos Funcionários do Banco do Nordeste do Brasil (CAPEF)
Caixa Econômica Federal
Caixa Geral de Depósitos
CaixaBank, S.A
California Public Employees' Retirement System
California State Teachers' Retirement System
California State Treasurer
Calvert Investment Management, Inc.
Canada Pension Plan Investment Board
Canadian Imperial Bank of Commerce (CIBC)
Canadian Labour Congress Staff Pension Fund
CAPESESP
Capital Innovations, LLC
Capricorn Investment Group, LLC
CareSuper
Carmignac Gestion
CASER PENSIONES
Cathay Financial Holding
Catherine Donnelly Foundation
Catholic Super
CBF Church of England Funds
CBRE
Cbus Superannuation Fund
CCLA Investment Management Ltd
Cedrus Asset Management
Celeste Funds Management Limited
Central Finance Board of the Methodist Church
Ceres
CERES—Fundação de Seguridade Social

Appendix V
Investor signatories

Challenger
Change Investment Management
Christian Brothers Investment Services
Christian Super
Christopher Reynolds Foundation
Church Commissioners for England
Church of England Pensions Board
CI Mutual Funds' Signature Global Advisors
City Developments Limited
Clean Yield Asset Management
ClearBridge Investments
Climate Change Capital Group Ltd
CM-CIC Asset Management
Colonial First State Global Asset Management Limited
Comerica Incorporated
COMGEST
Commerzbank AG
CommInsure
Commonwealth Bank of Australia
Commonwealth Superannuation Corporation
Compton Foundation
Concordia Versicherungs-Gesellschaft a.G.
Confluence Capital Management LLC
Connecticut Retirement Plans and Trust Funds
Conser Invest
Co-operative Financial Services (CFS)
Crayna Capital, LLC.
Credit Agricole
Credit Suisse
CTBC Financial Holding Co., Ltd.
Daesung Capital Management
Daiwa Asset Management Co. Ltd.
Daiwa Securities Group Inc.
Dalton Nicol Reid
Dana Investment Advisors
Danske Bank Group
de Pury Pictet Turrettini & Cie S.A.
DekaBank Deutsche Girozentrale
Delta Lloyd Asset Management
Demeter Partners
Desjardins Group
Deutsche Asset Management Investmentgesellschaft mbH
Deutsche Bank AG
Deutsche Postbank AG
Development Bank of Japan Inc.
Development Bank of the Philippines (DBP)
Dexia Asset Management
DEXUS Property Group
DGB Financial Group
DIP
DLM INVISTA ASSET MANAGEMENT S/A
DNB ASA
Domini Social Investments LLC
Dongbu Insurance
Doughty Hanson & Co.
DWS Investment GmbH
DZ Bank
E.Sun Financial Holding Co
Earth Capital Partners LLP
East Capital AB
East Sussex Pension Fund
Ecclesiastical Investment Management Ltd.
Ecofi Investissements—Groupe Credit Cooperatif
Edward W. Hazen Foundation
EEA Group Ltd
Eika Kapitalforvaltning AS
Eko
Elan Capital Partners
Element Investment Managers
ELETRA—Fundação Celg de Seguros e Previdência
Environment Agency Active Pension fund
Environmental Investment Services Asia Limited
Epworth Investment Management
Equilibrium Capital Group
equinet Bank AG
Erik Penser Fondkommission
Erste Asset Management
Erste Group Bank
Essex Investment Management Company, LLC
ESSSuper
Ethos Foundation
Etica Sgr
Eureka Funds Management
Eurizon Capital SGR
Evangelical Lutheran Church in Canada Pension Plan for Clergy and Lay Workers
Evangelical Lutheran Foundation of Eastern Canada
Evangelisch-Luth. Kirche in Bayern
Evli Bank Plc
F&C Investments
FACEB—FUNDAÇÃO DE PREVIDÊNCIA DOS EMPREGADOS DA CEB
FAELCE—Fundacao Coelce de Seguridade Social
FAPERS- Fundação Assistencial e Previdenciária da Extensão Rural do Rio Grande do Sul
FASERN—Fundação COSERN de Previdência Complementar
Federal Finance
Fédéris Gestion d'Actifs
FIDURA Capital Consult GmbH
FIM Asset Management Ltd
FIM Services
Finance S.A.
Financiere de l'Echiquier
FIPECq—Fundação de Previdência Complementar dos Empregados e Servidores da FINEP, do IPEA, do CNPq
FIRA.—Banco de Mexico
First Affirmative Financial Network
First Bank
First State Investments
First State Super
First Swedish National Pension Fund (AP1)
Firstrand Group Limited
Five Oceans Asset Management
Folketrygdfondet
Folksam
Fondaction CSN
Fondation de Luxembourg
Fondazione Cariplo
Fondo Pensione Gruppo Intesa Sanpaolo—FAPA
Fonds de Réserve pour les Retraites—FRR
Forluz—Fundação Forluminas de Seguridade Social—FORLUZ
Forma Futura Invest AG
Fourth Swedish National Pension Fund, (AP4)
FRANKFURT-TRUST Investment-Gesellschaft mbH
Friends Fiduciary Corporation
Fubon Financial Holdings
Fukoku Capital Management Inc
FUNCEF—Fundação dos Economiários Federais
Fundação AMPLA de Seguridade Social—Brasiletros
Fundação Atlântico de Seguridade Social
Fundação Attilio Francisco Xavier Fontana
Fundação Banrisul de Seguridade Social
Fundação BRDE de Previdência Complementar—ISBRE
Fundação Chesf de Assistência e Seguridade Social—Fachesf
Fundação Corsan—dos Funcionários da Companhia Riograndense de Saneamento
Fundação de Assistência e Previdência Social do BNDES—FAPES
FUNDAÇÃO ELETROBRÁS DE SEGURIDADE SOCIAL—ELETROS
Fundação Itaipu BR—de Previdência e Assistência Social
FUNDAÇÃO ITAUBANCO
Fundação Itaúsa Industrial
Fundação Promon de Previdência Social
Fundação Rede Ferroviaria de Seguridade Social—Refer
FUNDAÇÃO SANEPAR DE PREVIDÊNCIA E ASSISTÊNCIA SOCIAL—FUSAN
Fundação Sistel de Seguridade Social (Sistel)
Fundação Vale do Rio Doce de Seguridade Social—VALIA
FUNDIÁGUA—FUNDAÇÃO DE PREVIDENCIA COMPLEMENTAR DA CAESB
Futuregrowth Asset Management
GameChange Capital LLC
Garanti Bank
GEAP Fundação de Seguridade Social
Gemway Assets
General Equity Group AG
Generali Deutschland Holding AG
Generation Investment Management
Genus Capital Management
German Equity Trust AG
Gjensidige Forsikring ASA
Global Forestry Capital SARL
Globalance Bank Ltd
GLS Gemeinschaftsbank eG
Goldman Sachs Group Inc.
GOOD GROWTH INSTITUT für globale Vermögensentwicklung mbH
Good Super

Appendix V
Investor signatories

Governance for Owners
Government Employees Pension Fund ("GEPF"), Republic of South Africa
GPT Group
Greater Manchester Pension Fund
Green Cay Asset Management
Green Century Capital Management
GROUPAMA EMEKLİLİK A.Ş.
GROUPAMA SİGORTA A.Ş.
Groupe Crédit Coopératif
Groupe Investissement Responsable Inc.
GROUPE OFI AM
Grupo Financiero Banorte SAB de CV
Grupo Santander Brasil
Gruppo Bancario Credito Valtellinese
Guardians of New Zealand Superannuation
Hang Seng Bank
Hanwha Asset Management Company
Harbour Asset Management
Harrington Investments, Inc
Harvard Management Company, Inc.
Hauck & Aufhäuser Asset Management GmbH
Hazel Capital LLP
HDFC Bank Ltd.
Healthcare of Ontario Pension Plan (HOOPP)
Heart of England Baptist Association
Helaba Invest Kapitalanlagegesellschaft mbH
Henderson Global Investors
Hermes Fund Managers—BUT Hermes EOS for Carbon Action
HESTA Super
HIP Investor
Holden & Partners
HSBC Global Asset Management (Deutschland) GmbH
HSBC Holdings plc
HSBC INKA Internationale Kapitalanlagegesellschaft mbH
HUMANIS
Hyundai Marine & Fire Insurance Co., Ltd
Hyundai Securities Co., Ltd.
IBK Securities
IDBI Bank Ltd.
Illinois State Board of Investment
Ilmarinen Mutual Pension Insurance Company
Imofundos, S.A
Impax Asset Management
IndusInd Bank Ltd.
Industrial Alliance Insurance and Financial Services Inc.
Industrial Bank (A)
Industrial Bank of Korea
Industrial Development Corporation
Industry Funds Management
Inflection Point Capital Management
Inflection Point Partners
Infrastructure Development Finance Company
ING Group N.V.
Insight Investment Management (Global) Ltd
Instituto Infraero de Seguridade Social—INFRAPREV
Instituto Sebrae De Seguridade Social—SEBRAEPREV
Insurance Australia Group
Integre Wealth Management of Raymond James
Interfaith Center on Corporate Responsibility
IntReal KAG
Investec Asset Management
Investing for Good CIC Ltd
Investor Environmental Health Network
Irish Life Investment Managers
Itau Asset Management
Itaú Unibanco Holding S A
Janus Capital Group Inc.
Jarislowsky Fraser Limited
Jessie Smith Noyes Foundation
Jesuits in Britain
JMEPS Trustees Limited
JOHNSON & JOHNSON SOCIEDADE PREVIDENCIARIA
JPMorgan Chase & Co.
Jubitz Family Foundation
Jupiter Asset Management
Kagiso Asset Management
Kaiser Ritter Partner Privatbank AG
KB Kookmin Bank
KBC Asset Management
KBC Group
KCPS Private Wealth Management
KDB Asset Management Co. Ltd
KDB Daewoo Securities
Kendall Sustainable Infrastructure, LLC
Kepler Cheuvreux
KEPLER-FONDS KAG
Keva
KeyCorp
KfW Bankengruppe
Killik & Co LLP
Kiwi Income Property Trust
Kleinwort Benson Investors
KlimaINVEST
KLP
Korea Investment Management Co., Ltd.
Korea Technology Finance Corporation (KOTEC)
KPA Pension
La Banque Postale Asset Management
La Financière Responsable
La Francaise AM
Lampe Asset Management GmbH
Landsorganisationen i Sverige
LaSalle Investment Management
LBBW—Landesbank Baden-Württemberg
LBBW Asset Management Investmentgesellschaft mbH
LD Lønmodtagernes Dyrtidsfond
Legal and General Investment Management
Legg Mason Global Asset Management
LGT Group
LGT Group Foundation
LIG Insurance
Light Green Advisors, LLC
Living Planet Fund Management Company S.A.
Lloyds Banking Group
Local Authority Pension Fund Forum
Local Government Super
Logos portföy Yönetimi A.Ş.
London Pensions Fund Authority
Lothian Pension Fund
LUCRF Super
Lutheran Council of Great Britain
Macquarie Group Limited
MagNet Magyar Közösségi Bank Zrt.
MainFirst Bank AG
Making Dreams a Reality Financial Planning
Malakoff Médéric
MAMA Sustainable Incubation AG
Man
Mandarine Gestion
MAPFRE
Maple-Brown Abbott
Marc J. Lane Investment Management, Inc.
Maryknoll Sisters
Maryland State Treasurer
Matrix Asset Management
MATRIX GROUP LTD
McLean Budden
MEAG MUNICH ERGO AssetManagement GmbH
Mediobanca
Meeschaert Gestion Privée
Meiji Yasuda Life Insurance Company
Mendesprev Sociedade Previdenciária
Merck Family Fund
Mercy Investment Services, Inc.
Mergence Investment Managers
MetallRente GmbH
Metrus—Instituto de Seguridade Social
Metzler Asset Management Gmbh
MFS Investment Management
Midas International Asset Management, Ltd.
Miller/Howard Investments, Inc.
Mirae Asset Global Investments
Mirae Asset Securities Co., Ltd.
Mirova
Mirvac Group Ltd
Missionary Oblates of Mary Immaculate
Mistra, Foundation for Strategic Environmental Research
Mitsubishi UFJ Financial Group
Mitsui Sumitomo Insurance Co.,Ltd
Mizuho Financial Group, Inc.
MN
Mobimo Holding AG
Momentum Manager of Managers (Pty) Limited
Momentum Manager of Managers (Pty) Ltd
Monega Kapitalanlagegesellschaft mbH
Mongeral Aegon Seguros e Previdência S/A
Morgan Stanley
Mountain Cleantech AG
MTAA Superannuation Fund
Munich Re

Appendix V
Investor signatories

Mutual Insurance Company Pension-Fennia
Nanuk Asset Management
Natcan Investment Management
Nathan Cummings Foundation, The
National Australia Bank Limited
National Bank of Canada
NATIONAL BANK OF GREECE S.A.
National Grid Electricity Group of the Electricity Supply Pension Scheme
National Grid UK Pension Scheme
National Pensions Reserve Fund of Ireland
National Union of Public and General Employees (NUPGE)
Nativus Sustainable Investments
NATIXIS
Natural Investments LLC
Nedbank Limited
Needmor Fund
NEI Investments
Nelson Capital Management, LLC
Nest Sammelstiftung
Neuberger Berman
New Alternatives Fund Inc.
New Amsterdam Partners LLC
New Forests
New Mexico State Treasurer
New Resource Bank
New York City Employees Retirement System
New York City Teachers Retirement System
New York State Common Retirement Fund (NYSCRF)
Newground Social Investment
Newton Investment Management Limited
NGS Super
NH-CA Asset Management Company
Nikko Asset Management Co., Ltd.
Nipponkoa Insurance Company, Ltd
Nissay Asset Management Corporation
NORD/LB Kapitalanlagegesellschaft AG
Nordea Investment Management
Norfolk Pension Fund
Norges Bank Investment Management
North Carolina Retirement System
Northern Ireland Local Government Officers' Superannuation Committee (NILGOSC)
NORTHERN STAR GROUP
Northern Trust
NorthStar Asset Management, Inc
Northward Capital Pty Ltd
Nykredit
OceanRock Investments
Oddo & Cie
oeco capital Lebensversicherung AG
ÖKOWORLD
Old Mutual plc
OMERS Administration Corporation
Ontario Pension Board
Ontario Teachers' Pension Plan
OP Fund Management Company Ltd
Oppenheim & Co. Limited
Oppenheim Fonds Trust GmbH
Opplysningsvesenets fond (The Norwegian Church Endowment)
OPTrust
Oregon State Treasurer
Orion Energy Systems
Osmosis Investment Management
Panahpur
Park Foundation
Parnassus Investments
Pax World Funds
Pensioenfonds Vervoer
Pension Denmark
Pension Fund for Danish Lawyers and Economists
Pension Protection Fund
People's Choice Credit Union
Perpetual
PETROS—The Fundação Petrobras de Seguridade Social
PFA Pension
PGGM Vermogensbeheer
Phillips, Hager & North Investment Management
PhiTrust Active Investors
Pictet Asset Management SA
Pinstripe Management GmbH
Pioneer Investments
PIRAEUS BANK
PKA
Pluris Sustainable Investments SA
PNC Financial Services Group, Inc.
Pohjola Asset Management Ltd
Polden-Puckham Charitable Foundation
Portfolio 21
Porto Seguro S.A.
POSTALIS—Instituto de Seguridade Social dos Correios e Telégrafos
Power Finance Corporation Limited
PREVHAB PREVIDÊNCIA COMPLEMENTAR
PREVI Caixa de Previdência dos Funcionários do Banco do Brasil
PREVIG Sociedade de Previdência Complementar
Prius Partners
Progressive Asset Management, Inc.
Prologis
Provinzial Rheinland Holding
Prudential Investment Management
Prudential Plc
Psagot Investment House Ltd
Public Sector Pension Investment Board
Q Capital Partners Co. Ltd
QBE Insurance Group
Quilter Cheviot Asset Management
Quotient Investors
Rabobank
Raiffeisen Fund Management Hungary Ltd.
Raiffeisen Kapitalanlage-Gesellschaft m.b.H.
Raiffeisen Schweiz Genossenschaft
Rathbones / Rathbone Greenbank Investments
RCM (Allianz Global Investors)
Real Grandeza Fundação de Previdência e Assistência Social
REI Super
Reliance Capital Limited
Representative Body of the Church in Wales
Resolution
Resona Bank, Limited
Reynders McVeigh Capital Management
River Twice Capital Advisors, LLC
Robeco
RobecoSAM AG
Robert & Patricia Switzer Foundation
Rockefeller Asset Management, Sustainability & Impact Investing Group
Rose Foundation for Communities and the Environment
Rothschild & Cie Gestion Group
Royal Bank of Canada
Royal Bank of Scotland Group
Royal London Asset Management
RPMI Railpen Investments
RREEF Investment GmbH
Russell Investments
Sampension KP Livsforsikring A/S
Samsung Asset Management Co., Ltd.
Samsung Fire & Marine Insurance Co.,Ltd.,
Samsung Securities
Samsunglife Insurance
Sanlam Life Insurance Ltd
Santa Fé Portfolios Ltda
Santam
Sarasin & Cie AG
Sarasin & Partners
SAS Trustee Corporation
Sauren Finanzdienstleistungen GmbH & Co. KG
Schroders
Scotiabank
Scottish Widows Investment Partnership
SEB
Second Swedish National Pension Fund (AP2)
Şekerbank T.A.Ş.
Seligson & Co Fund Management Plc
Sentinel Investments
SERPROS—Fundo Multipatrocinado
Service Employees International Union Pension Fund
Servite Friars
Seventh Swedish National Pension Fund (AP7)
Shinhan Bank
Shinhan BNP Paribas Investment Trust Management Co., Ltd
Shinkin Asset Management Co., Ltd
Siemens Kapitalanlagegesellschaft mbH
Signet Capital Management Ltd
Sisters of St Francis of Philadelphia
Sisters of St. Dominic
Skandia
Smith Pierce, LLC
SNS Asset Management
Social(k)
Sociedade de Previdencia Complementar da Dataprev—Prevdata
Società reale mutua di assicurazioni
Socrates Fund Management

Appendix V
Investor signatories

Solaris Investment Management Limited
Sompo Japan Nipponkoa Holdings, Inc
Sonen Capital
Sopher Investment Management
Soprise! Impact Fund
SouthPeak Investment Management
SPF Beheer bv
Spring Water Asset Management
Sprucegrove Investment Management Ltd
Standard Chartered
Standard Chartered Korea Limited
Standard Life Investments
Standish Mellon Asset Management
State Bank of India
State Board of Administration (SBA) of Florida
State Street Corporation
StatewideSuper
Stockland
Storebrand ASA
Strathclyde Pension Fund
Stratus Group
Sumitomo Mitsui Financial Group
Sumitomo Mitsui Trust Holdings, Inc.
Sun Life Financial
Superfund Asset Management GmbH
SURA Peru (AFP Integra, Seguros SURA, Fondos SURA, Hipotecaria SURA)
SUSI Partners AG
Sustainable Capital
Sustainable Development Capital
Sustainable Insight Capital Management
Svenska kyrkan
Svenska kyrkans pensionskassa
Swedbank AB
Swedish Pensions Agency
Swift Foundation
Swiss Re
Swisscanto Asset Management AG
Sycomore Asset Management
Syntrus Achmea Asset Management
T. Rowe Price
T. SINAİ KALKINMA BANKASI A.Ş.
Tata Capital Limited
TD Asset Management (TD Asset Management Inc. and TDAM USA Inc.)
Teachers Insurance and Annuity Association—College Retirement Equities Fund
Telluride Association
Telstra Super
Tempis Asset Management Co. Ltd
Terra Global Capital, LLC
TerraVerde Capital Management LLC
TfL Pension Fund
The ASB Community Trust
The Brainerd Foundation
The Bullitt Foundation
The Central Church Fund of Finland
The Children's Investment Fund Management (UK) LLP
The Collins Foundation
The Co-operative Asset Management
The Co-operators Group Ltd
The Council of Lutheran Churches
The Daly Foundation
The Environmental Investment Partnership LLP
The Hartford Financial Services Group
The Joseph Rowntree Charitable Trust
The Korea Teachers Pension (KTP)
The New School
The Oppenheimer Group
The Pension Plan For Employees of the Public Service Alliance of Canada
The Pinch Group
The Presbyterian Church in Canada
The Russell Family Foundation
The Sandy River Charitable Foundation
The Shiga Bank, Ltd.
The Sisters of St. Ann
The Sustainability Group at the Loring, Wolcott & Coolidge Office
The United Church of Canada—General Council
The University of Edinburgh Endowment Fund
The Wellcome Trust
Third Swedish National Pension Fund (AP3)
Threadneedle Asset Management
TOBAM
Tokio Marine Holdings, Inc
Toronto Atmospheric Fund
Trillium Asset Management, LLC
Triodos Investment Management
Tri-State Coalition for Responsible Investment
Trust Waikato
Trusteam Finance
Trustees of Donations to the Protestant Episcopal Church
Tryg
Turner Investments
UBS
UniCredit SpA
Union Asset Management Holding AG
Union Investment Privatfonds GmbH
Unione di Banche Italiane S.c.p.a.
Unionen
Unipension Fondsmaeglerselskab A/S
UNISONS Staff Pension Scheme
UniSuper
Unitarian Universalist Association
United Church Funds
United Nations Foundation
Unity College
Unity Trust Bank
Universities Superannuation Scheme (USS)
Van Lanschot
Vancity Group of Companies
VCH Vermögensverwaltung AG
Ventas, Inc.
Veris Wealth Partners
Veritas Investment Trust GmbH
Vermont State Treasurer
Vexiom Capital Group, Inc.
VicSuper
Victorian Funds Management Corporation
VietNam Holding Ltd.
Vinva Investment Management
VOIGT & COLL. GMBH
VOLKSBANK INVESTMENTS
Walden Asset Management
WARBURG—HENDERSON Kapitalanlagegesellschaft für Immobilien mbH
WARBURG INVEST KAPITALANLAGEGESELLSCHAFT MBH
Water Asset Management, LLC
Wells Fargo & Company
Wespath Investment Management
West Midlands Pension Fund
West Yorkshire Pension Fund
Westfield Capital Management Company, LP
WestLB Mellon Asset Management (WMAM)
Westpac Banking Corporation
WHEB Asset Management
White Owl Capital AG
Wisconsin, Iowa, & Minnesota Coalition for Responsible Investment
Woori Bank
Woori Investment & Securities Co., Ltd.
YES BANK Ltd.
York University Pension Fund
Youville Provident Fund Inc.
Zegora Investment Management
Zevin Asset Management, LLC
Zürcher Kantonalbank

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For access to a database of public responses for analysis, benchmarking and learning best practices, please contact **info.northamerica@cdp.net.**

This report is available for download from **www.cdp.net.**

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