Sector insights: what is driving climate change action in the world's largest companies?

Global 500 Climate Change Report 2013

12 September 2013

Report writer and global advisor

The evolution of CDP

With great pleasure, CDP announced an exciting change this year.

Over ten years ago CDP pioneered the only global disclosure system for companies to report their environmental impacts and strategies to investors. In that time, and with your support, CDP has accelerated climate change and natural resource issues to the boardroom and has moved beyond the corporate world to engage with cities and governments.

The CDP platform has evolved significantly, supporting multinational purchasers to build more sustainable supply chains. It enables cities around the world to exchange information, take best practice action and build climate resilience. We assess the climate performance of companies and drive improvements through shareholder engagement.

Our offering to the global marketplace has expanded to cover a wider spectrum of the earth's natural capital, specifically water and forests, alongside carbon, energy and climate.

For these reasons, we have outgrown our former name of the Carbon Disclosure Project and rebranded to CDP. Many of you already know and refer to us in this way. Our rebrand denotes our progress as we continue to catalyze action and respond to business, finance, investment and environmental needs globally.

We now have a bolder, more dynamic look and logo that reflects the scale of the work we must undertake in the coming years to move the markets ahead of where they would otherwise be on these issues and realize truly sustainable economies.

- **Over 5,000 companies from all over the world have been asked to report on climate change through CDP this year;**
- **81% of the world's 500 largest public companies listed on the Global 500 engage with CDP to enable effective measurement of their carbon footprint and climate change action;**
- **CDP is a not-for-profit organization. If you would like to support our vital work through donations or sponsorship opportunities, please email paul.robins@cdp.net or telephone +44 (0) 7703 184 312.**

CDP™

DRIVING SUSTAINABLE ECONOMIES

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To read 2013 company responses in full please go to www.cdp.net/en-US/Results/Pages/responses.aspx

CEO Foreword

As countries around the world seek economic growth, strong employment and safe environments, corporations have a unique responsibility to deliver that growth in a way that uses natural resources wisely. The opportunity is enormous and it is the only growth worth having.

This year we passed a significant landmark of 400ppm of carbon dioxide in the atmosphere and are rapidly heading towards 450ppm, accepted by many governments as the upper limit to avoid dangerous climate change. The Intergovernmental Panel on Climate Change (IPCC) 5th assessment report (AR5) strengthens the scientific case for action.

Fears are increasing over future climate change impacts as we see more extreme weather events, Hurricane Sandy the most noted with damages totalling some $42 billion[1]. The unprecedented melting of the Arctic ice is a clear climate alarm bell, while the first 10 years of this century have been the world's hottest since records began, according to the World Meteorological Organization.

The result is a seismic shift in corporate awareness of the need to assess physical risk from climate change and to build resilience.

For investors, the risk of stranded assets has been brought to the fore by the work of Carbon Tracker. They calculate around 80% of coal, oil and gas reserves are unburnable, if governments are to meet global commitments to keep the temperature rise below 2°C. This has serious implications for institutional investors' portfolios and valuations of companies with fossil fuel reserves.

The economic case for action is strengthening. This year, we published the 3% Solution[2] with WWF showing that the US corporate sector could reduce emissions by 3% each year between 2010 and 2020 and deliver $780 billion in savings above costs as a result. 79% of US companies responding to CDP report higher ROI on emission reductions investments than on the average business investment. Meanwhile, governments are taking new action: The US Administration has launched its Climate Action Plan, with a new emphasis on reducing emissions from utilities; China is developing air pollution measures and moving toward pilot cap and trade schemes; the UK Government has mandated greenhouse gas emissions reporting for all large listed companies; the EU is looking at improving environmental and other reporting.

The pressure on corporations, investors and governments to act continues. At CDP, we have broadened our work to add forests to climate and water so our programs now extend to an estimated 79% of natural capital, by value[3]. To reflect this, we rebranded at the start of the year from the Carbon Disclosure Project to CDP and are increasing our focus on projects to accelerate action. One explores how corporations influence public policy on climate change both positively and negatively. Some corporations are still acting – both directly and through trade associations – to prevent the inevitable: nations need sensible climate regulation that protects the public interest over the long term.

As countries around the world seek economic growth, strong employment and safe environments, corporations have a unique responsibility to deliver that growth in a way that uses natural resources wisely. The opportunity is enormous and it is the only growth worth having.

P Simpson

Paul Simpson
CEO CDP

1 New York State Hurricane Sandy Damage Assessment; Governor Andrew Cuomo; November 12, 2012 http://www.governor.ny.gov/press/11262012-damageassessment
2 https://www.cdproject.net/CDPResults/3-percent-solution-report.pdf
3 Based on findings from the report Natural Capital at Risk: The Top 100 Externalities of Business, published by TEEB for Business Coalition in April 2013.

Investor Perspective

We seek to ensure the companies we invest in achieve and maintain high standards of corporate responsibility which includes the measurement and management of environmental impacts. CDP is a critical partner, for us, in fulfilling this responsibility.

CDP plays an important role in making available to investors high quality comparable data on company environmental performance, covering carbon emissions, water usage and forestry issues. Quantifying a company's use of 'natural capital' enables investors to integrate sustainability issues into investment decision making and company engagement. CDP is therefore working to improve market efficiency and enabling responsible investment.

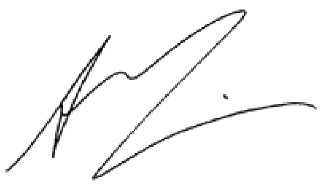
Increases in extreme weather events, water shortages, pollution, loss of biodiversity and deforestation are among the environmental issues that must be confronted. Projected increases in atmospheric CO_2 levels would lead to climate change that would inflict suffering on humanity and costs to the global economy on a fundamentally different level than that of any financial crisis we have ever experienced. These issues are now well known and broadly accepted. However, the collective response from governments to date has been disappointing in their focus on short term political desires rather than longer term mutual necessity.

The understandable temptation for policy makers and businesses is to focus on the short term pressures of the market and to postpone facing up to environmental challenges until the global economy is restored to full health. This would compound the situation. CDP challenges companies to do more on both reporting and absolute emission reductions. Despite progress in reducing emissions in overall terms by some companies a significant scope for improvement across sectors remains. For there to be a meaningful movement towards absolute emissions reductions, companies must test the concept of a trade-off between economic performance and environmental responsibility. Top performing companies demonstrate that improving environmental performance can add to the bottom line. The evidence in this report suggests linking incentives and business strategy to environmental metrics is an effective approach in achieving this goal. These are business issues that the investor community can clearly engage with companies on.

At Henderson Global Investors we manage almost £70bn on behalf of our clients who demand top class performance and responsible investment that meets their long-term requirements. We therefore seek to ensure the companies we invest in achieve and maintain high standards of corporate responsibility which includes the measurement and management of environmental impacts. CDP is a critical partner, for us, in fulfilling this responsibility.

Alongside a number of other investors, Henderson is a member of CDP's Carbon Action Initiative. This collaborative engagement exercise is designed to encourage the world's largest companies to move beyond measurement to actively work to reduce emissions over time by setting and publicly reporting emissions reduction targets. We believe that those companies that become leaders in this area and anticipate future regulatory actions, will gain significant business benefits over the long run.

I would like to thank CDP for the work it has done to date, and look forward to its continued success.



Andrew Formica
CEO Henderson Global Investors

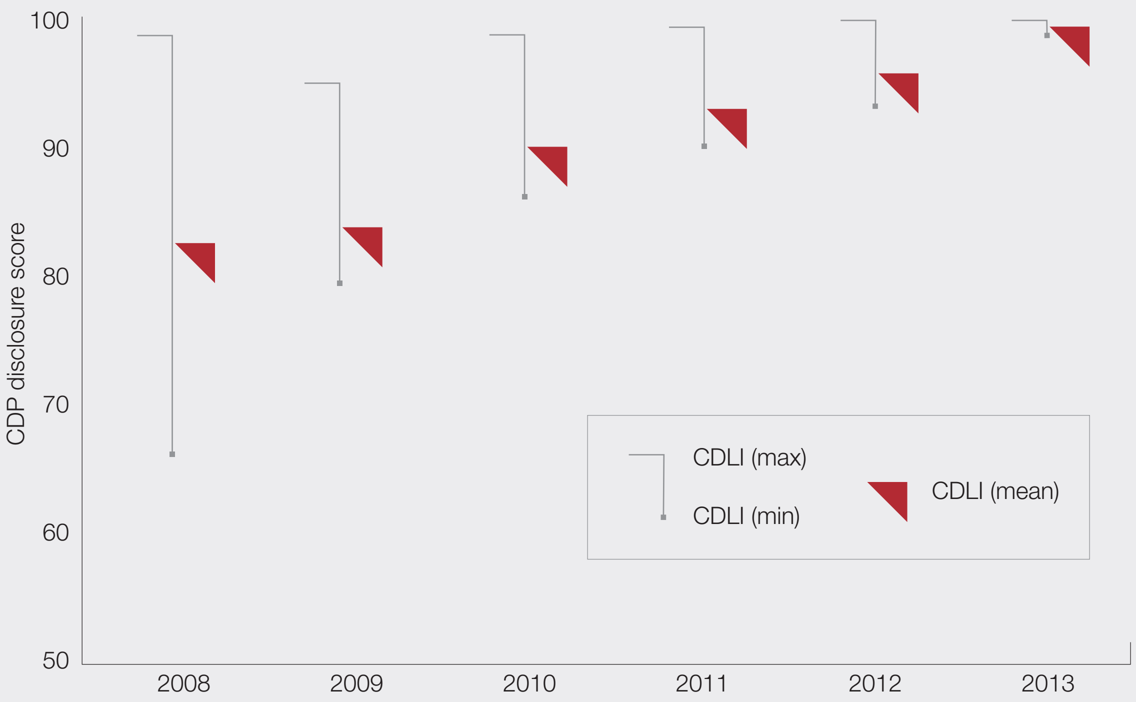
Executive Summary

Businesses increasingly face the dual risks of climate and policy shocks. How companies build and demonstrate their resilience to these climate risks has important implications for their reputation with their stakeholders and for the value of their businesses. It is for these reasons that 722 investors representing US$87 trillion of assets this year requested that the 500 largest listed companies measure and report what climate change means for their business through CDP's climate change program.

This year, 81% (403) of companies in the Global 500[1] took part. Demonstrating corporate understanding of the need for climate transparency, the quality of the information provided by companies has continually improved. To secure a position on CDP's Climate Disclosure Leadership Index (CDLI), companies must achieve a disclosure score in the top 10% of the Global 500 sample. The minimum score for entering the CDLI has risen to 97% (up from 94% in 2012 and 90% in 2011). The number of performance leaders demonstrating a strong approach to climate strategy and emissions reduction in their CDP responses has increased since last year. This highlights how seriously corporations treat their carbon reporting and that this reporting increasingly translates into action.

This report is written for companies, investors and policy makers that want to understand the climate change related risks and opportunities facing business. It assesses how ten key sectors are addressing these challenges and eliciting competitive advantage from this. It looks at how growing markets for products and services are impacting companies' responses to climate change. It also outlines trends seen in companies which are reporting barriers to actions.

Figure 1: Improving scores for Climate Disclosure Leadership Index (CDLI) over time



1 The Global 500 are the largest companies by market capitalization included in the FTSE Global Equity Index Series, as at 1 Jan 2013. The Global 500 report is based on the analysis of the 389 responses received by July 1st 2013.

This year's report presents sector-specific analysis. However, three main findings apply across the Global 500 sample:

1

Big emitters are not doing enough to reduce emissions

Total scope 1 and 2 emissions have not changed significantly in the past five years. The 50 largest emitters have increased their emissions since 2009.

2

Companies are yet to report emissions from the most relevant parts of their value chains

Current reporting of indirect scope 3 emissions does not reveal the full impact of companies' value chains.

3

Money talks: financial incentives are driving emissions reductions

Monetary rewards for employees, particularly at board-level, are powerful catalysts of climate action.

Executive Summary continued

1) Big emitters are not doing enough to reduce emissions

Total scope 1 and 2 emissions[2] from the Global 500 have fallen steadily from 4.2 billion metric tons CO_2e in 2009 to 3.6 billion metric tons CO_2e in 2013. However, scope 1 and 2 emissions from the 50 largest emitters[3], which emitted 73% of total emissions in 2013, have increased by 1.65% since 2009 (see Table 1). The five largest emitters of each sector have also seen their scope 1 and 2 emissions increase by an average of 2.3% since 2009[4] (see sector snapshots for details). This suggests that the biggest emitters, who have the largest impact on global emissions and so present the greatest opportunity for large-scale change, need to do more to reduce their emissions. Policy makers could help to accelerate the necessary change by increasing incentives.

The difference in the direction of change between the Global 500 sample and the largest emitters can to some extent be explained by a change in the number and composition of companies within the Global 500 since 2009. However, emissions of the largest emitters remain globally significant.

Energy, utilities and materials companies, for example, represent less than a quarter of the Global 500 population but are responsible for well over three quarters (87%) of scope 1 and 2 emissions. The proportion of companies from these high emitting sectors has fallen from 26% in 2009 to 23% today. Had the proportion stayed the same, emissions in 2013 would have been significantly higher. Indeed, the scope 1 and 2 emissions of each of these sectors are individually more than double the combined scope 1 and 2 emissions of all other sectors. The drop in scope 1 and 2 emissions from utility companies alone since last year is equivalent to more than the combined scope 1 and 2 emissions from healthcare, consumer staples, consumer discretionary, telecommunication services, IT and financials.

This year the majority of Global 500 companies report emissions reduction targets (84%) and resulting emissions reductions[5] (75%) in some areas of their business. However, with an increase since 2009 in scope 1 and 2 emissions for the highest emitters across the Global 500 and in each sector, there is a disparity between companies' strategies, targets and the emissions reductions which are required to limit global warming to 2C.

Table 1: Change in emissions reported by the 50 largest emitters in 2013 between 2009 and 2013

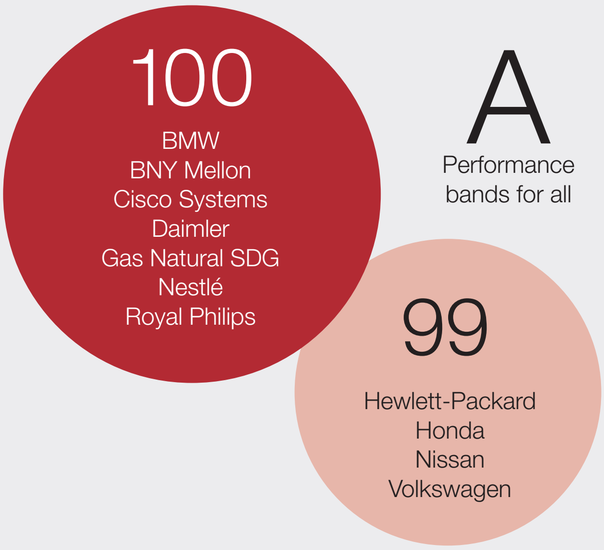
1.65% ▲

increase in (tCO_2e) emmisions since 2009

2013: 2,544,179,589 tCO_2e)

2009: 2,502,876,845 tCO_2e)

Figure 2: Highest scoring companies across both performance and disclosure



2 Total reported scope 1 and 2 emissions. It should be noted that scope 2 figures for 2013 are not directly comparable with 2012 as companies can now incorporate the specific emissions factors associated with renewable energy purchases where supported by an appropriate tracking instruments.
3 Analysis of the 50 largest emitters in 2013 for whom emissions data is available in 2009.
4 Analysis of the 5 largest emitters per sector in 2013 for whom emissions data is available in 2009 (50 companies).
5 Emissions reductions can be reported against a business-as-usual projection, which might represent a company's overall increase in absolute emissions.

2) Companies are yet to report emissions from the most relevant parts of their value chains

Most companies (97%) disclose scope 1 and 2 emissions from their operations. However, while companies are able to identify the most carbon intensive activities from their value chains, the emissions of nearly half (47%) of these activities are yet to be quantified.

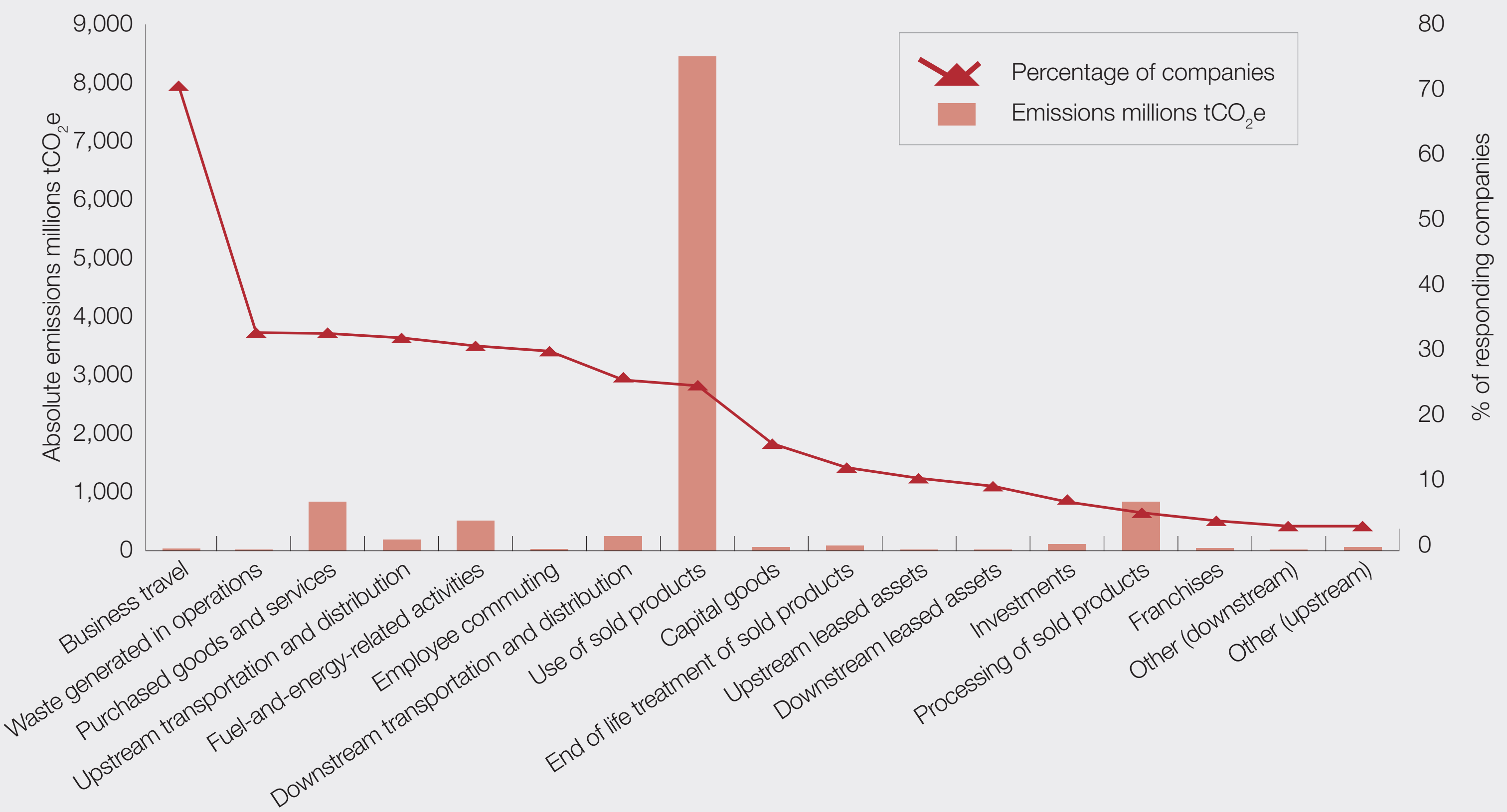
Instead of measuring carbon-intensive activities in their value chain, companies often focus on relatively insignificant opportunities for carbon reductions. Figure 3 shows the disparity in the proportion of companies reporting the different types of scope 3 activities and the actual scope 3 emissions reported for each of these activities. While 'use of sold products' is reported by 25% of companies, it accounts for 76% of reported scope 3 emissions. Meanwhile, 72% of companies report emissions from business travel, which accounts for only 0.2% of total reported scope 3 emissions.

The importance of different scope 3 categories varies between sectors. However, companies do not always report their primary sources of scope 3 emissions. For example, while 83% of financial companies report emissions associated with business travel, only 6% of them report emissions from their investment activity, where the significant majority of their scope 3 emissions originate. Similarly, only 22% of industrials report emissions from the use of sold products, which is where the majority of their scope 3 emissions come from.

Overall, this suggests that current scope 3 reporting does not reflect the full impact of companies' activities, and may mislead as to the full carbon impact of a company.

> *The biggest emitters, who have the largest impact on global emissions and so present the greatest opportunity for large-scale change, need to do more to reduce their emissions.*

Figure 3: Percentage of companies reporting scope 3 categories and disclosed emissions by category



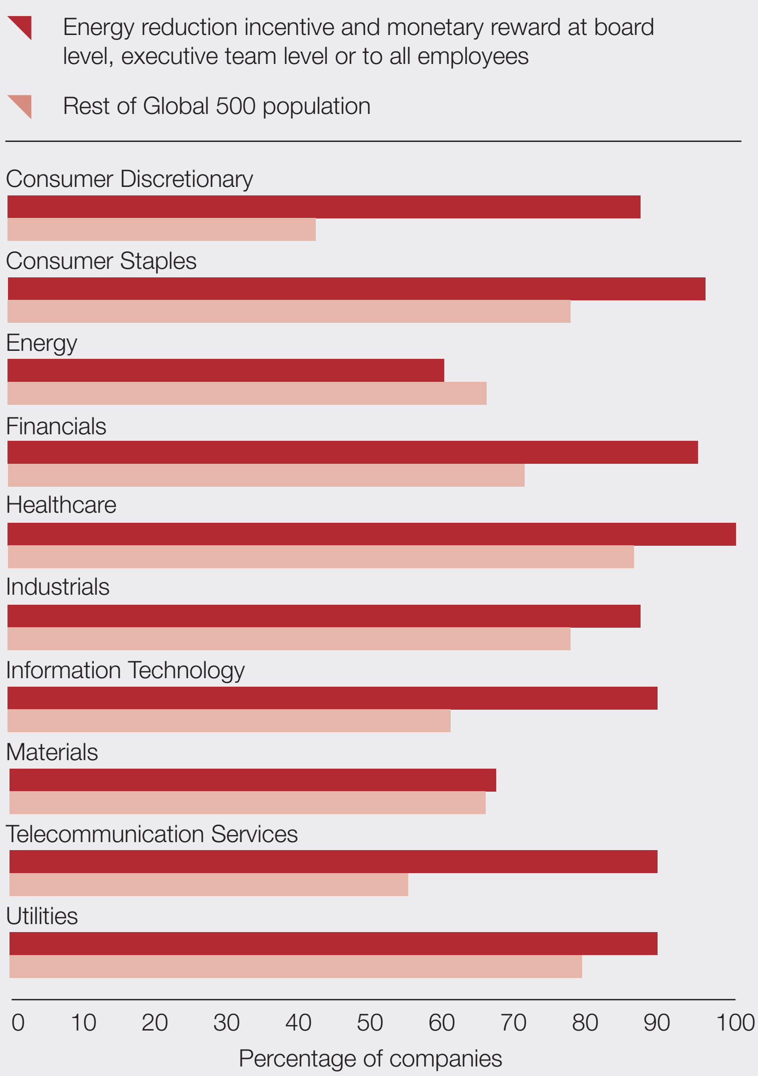
Executive Summary continued

3) Money talks: financial incentives are driving emissions reductions

Monetary rewards for employees are powerful tools to drive climate action. Figure 4 shows that companies with monetary rewards are more likely to achieve absolute emissions reductions.

With the exception of the energy sector, companies reporting monetary rewards linked to energy or emissions reductions are more likely to report decreases in emissions. 85% of companies that provide monetary incentives to the board, executive team or all employees, report emissions reductions in the past year. By comparison, only 67% of other companies report reductions in emissions.

Figure 4: Percentage of companies with monetary rewards related to energy and emissions reductions reporting decreased emissions



4) Other findings from the Global 500

Companies find it easier to quantify risks rather than opportunities
Global 500 companies identify a range of risks and opportunities (see Figures 5 & 6). However, they are more likely to quantify and monetize the impact of risks than opportunities: 54% of companies quantified at least one risk while only 41% quantified at least one opportunity. Companies tend to focus on tangible risks in areas such as carbon taxes or energy prices, whereas the benefits from climate-related opportunities are often less tangible, such as changing consumer behavior. Companies are consequently less likely to quantify the impact of these opportunities. This suggests that businesses may be missing some significant risks and opportunities because valuation methods are unavailable.

The broad categories of climate risk reported are: regulation (84%), physical impacts (83%), and other related risks such as reputation (77%). Within these, reputation, changes in seasonal rainfall, cap-and-trade schemes and carbon taxes are mentioned by 51%, 43%, 42% and 39% of companies respectively. The most common climate-related opportunities mentioned by Global 500 companies are the less tangible changing consumer behavior (53%) and reputation (51%).

Longer payback times linked to strategic advantage
When considering capital investments in emissions reduction activities, companies can face challenges in justifying investments with longer payback periods (three years or more). However, companies that are making longer term investments to reduce their emissions are more likely to report that their climate change strategy affords them a strategic advantage over their competitors. 77% of companies with at least one investment with a payback time of three years or more state that their climate strategy gives them a competitive advantage (65% in 2012). Of the companies which do not have long-term investments in emissions reductions, only 54% report a strategic advantage from their response to climate change (2012: 58%).

Rise in independently verified emissions ensures data quality
71% of responding companies verified their emissions in 2013: a 29% increase from 2012 and almost double the percentage in 2011. Investors and shareholders have always demanded accuracy in a company's financial information. Increasingly, they are demanding accuracy in non-financial information as well. This positive trend should increase the trust in the data and therefore its use.

Figure 5: Percentage of companies selecting most commonly reported 5 risks

Figure 6: Percentage of companies selecting most commonly reported 5 opportunities

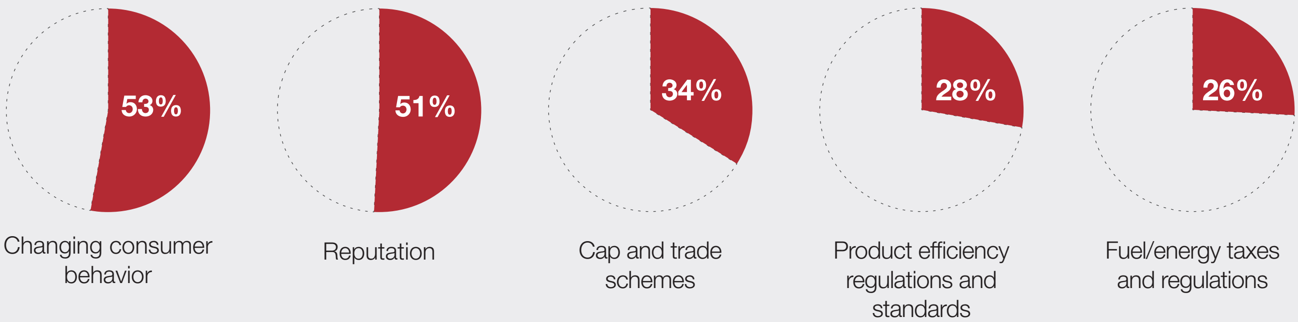


Figure 7: Methods used to drive investments in emissions reduction activities

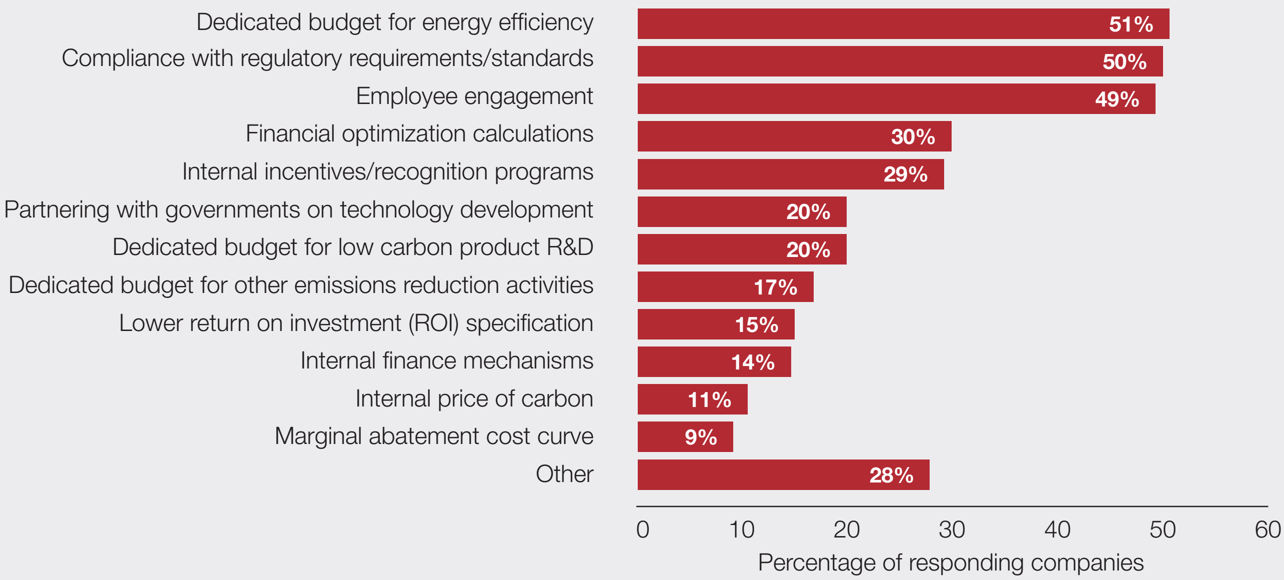
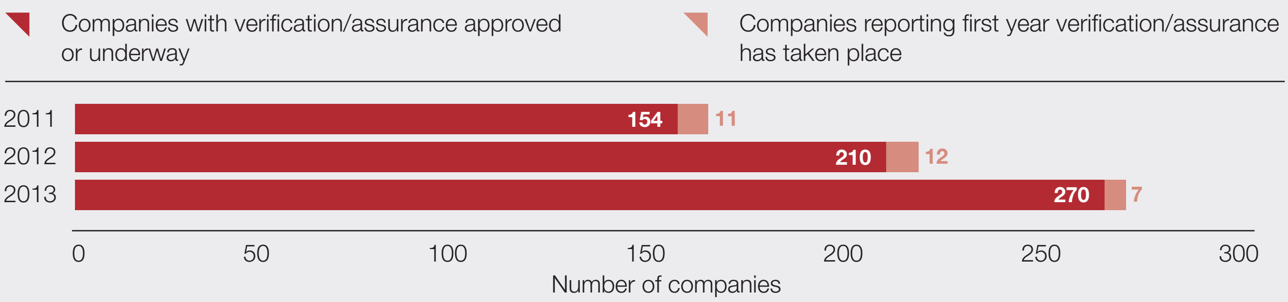


Figure 8: Number of companies with verification/assurance of emissions complete or underway



Global 500 Sector Assessment 2013[6]

Table 2: Assessment of each sector's performance against the Global 500 average

Significantly above average | Average | Significantly below average

Sector	Emissions performance	Governance	Strategy	Verification / stakeholder engagement
Consumer Discretionary	Average	Average	Average	Average
Consumer Staples	Significantly above average	Average	Average	Average
Energy	Significantly below average	Average	Significantly below average	Significantly below average
Financials	Average	Significantly below average	Average	Average
Healthcare	Average	Average	Significantly below average	Average
Industrials	Average	Average	Average	Significantly above average
Information Technology	Average	Average	Average	Average
Materials	Significantly below average	Significantly above average	Average	Average
Telecommunication Services	Average	Average	Average	Average
Utilities	Significantly above average	Significantly above average	Significantly above average	Significantly above average

Table 2 compares sectors' climate performance scores with the average score across the Global 500. Across the four categories which were analyzed, utilities significantly outperformed average Global 500 companies while energy under-performed.

Sector overviews:

Consumer Discretionary
Total scope 1 and 2 emissions in consumer discretionary are not as significant as emissions in other sectors. However, the scope 3 emissions are 19 times higher than the sector's total scope 1 and 2 emissions. Emissions of the five biggest emitters have not changed significantly since 2009, although a majority of companies in the sector has reported absolute emission reduction targets as well as a decrease in emissions due to emissions reduction activities. Sector leaders have obtained outstanding results in the CPLI and CDLI, with three companies (BMW, Daimler and Royal Philips) achieving the maximum disclosure score of 100 as well as the highest performance band A. Nevertheless, the sector remains average in its overall performance relative to the Global 500 sample.

Consumer Staples
Consisting of some of the world's biggest consumer brands, companies in consumer staples are heavily influenced by changing consumer preferences. Although 58% of companies report a decrease in absolute emissions, the sector's overall scope 1 and 2 emissions have increased by 2.9% since 2012. However, the sector accounts for only 3% of total scope 1 and 2 emissions reported by the Global 500.

Energy
With one of the highest overall emissions of all sectors – the sector is responsible for 28.3% of total reported Global 500 scope 1 and 2 emissions – efforts to reduce emissions in the energy sector are essential to the global mitigation of climate change. However, 50% of energy companies have a performance band of C or lower. Since 2009, the overall emissions of the ten biggest emitters in the sector have increased by 53%. The sector also has the highest number of companies without emission reduction targets (24%), which companies justify by concerns that targets would constrain growth in their companies and in the wider economy.

6 The sector assessment is based on the following areas of the questionnaire: **emissions performance** - reporting of scopes 1, 2, and 3 emissions data and % operational spend on energy costs, energy use, absolute and/or intensity targets, emission reduction activities, change in emissions from prior year. **Governance** - level of oversight, incentives/rewards, risk management approach. **Verification/stakeholder engagement** - verification/assurance, engagement with policy makers, communication of sustainability information to public. **Strategy** - integrated strategy, identified risks and opportunities, emissions trading.

Financials
The financial sector makes up 24% of the respondents but is the lowest emitting sector in the Global 500: it represents only 0.6% of total reported scope 1 and 2 emissions. While 67% of companies report reductions in their emissions since 2012, there is a general lack of understanding of the full impact of companies' value chains. Indeed, only 6% of financials report the carbon impact of their investments, which would be their main area of scope 3 emissions.

Healthcare
Representing only 0.8% of total reported Global 500 scope 1 and 2 emissions, the healthcare sector has a limited impact on global emissions. Nevertheless, 57% of companies report a decrease in absolute emissions since 2012 (total decrease of 4.9%). Consistent drivers for emissions reductions are energy efficiency activities such as green information technology and building efficiency.

Industrials
Industrial companies will play an important role in the transition to a low carbon economy and 97% of industrial companies report that their products and services help reduce emissions. However, only 22% of companies in the sector report the emissions from the use of sold products, which suggests an incomplete understanding of their full value chains' impacts.

As companies respond to the demand for more efficient products, many companies have made substantial investments into research and development.

Companies are also engaging proactively with policymakers, where regulation plays a central role in the sector's response to climate change. Changing regulation can present significant opportunities for companies, but equally uncertainty surrounding new regulation can pose threats to business.

Information Technology
Overall emissions in the information technology sector have decreased by 21.9% since 2012. However, half of this reduction is due to divestments by Samsung. 89% of information technology companies state that their products help reduce emissions, which is important as the sector's scope 3 emissions are more than four times that of their scope 1 and 2 emissions.

Materials
The materials sector is the third biggest emitting sector, representing 26.2% of total reported scope 1 and 2 emissions. Companies are heavily exposed to regulatory risks such as carbon taxes and cap-and-trade schemes, with 74% of companies reporting regulatory issues as key risks. Mining companies, in particular, are also concerned about losing their licenses to operate and reputation is therefore seen as a significant risk (63% of companies).

Telecommunication Services
Representing 1.1% of total reported scope 1 and 2 emissions, the telecommunication services sector is focusing on avoided emissions for others rather than emissions from own operations. In fact, all companies in the sector state that their products and services help avoid emissions. 91% of companies have emissions reduction targets and the sector's overall scope 1 and 2 emissions decreased by 0.6% compared to 2012.

Utilities
With the highest emissions of all the sectors, representing a third of total reported scope 1 and 2 emissions, utility companies will play a critical role in helping customers and businesses avoid emissions. While overall emissions in the sector have decreased by 10.2% since 2012, this is to some extent due to a change in population of respondents. The sector demonstrates a comparatively mature response to climate change, with all companies having emissions reduction targets.

Utilities are acutely aware of the risks and opportunities from climate change. They therefore engage with policymakers to help inform the setting of climate targets more than any other sector and have set up working groups for special programs. Utilities are also looking at their whole value chain and are helping customers avoid emissions through a wide range of products and services that promote energy efficiency and savings.

[Repsol's] New Energy department's mandate is to position Repsol at the forefront of the market for new energy sources. Our activities in 2nd generation biofuels, micro-algae, in electrification of transportation and wind power will provide among others a strategic advantage in supplying energy in the future.

Repsol

2013 Climate Performance Leadership Index (CPLI)

CDP™ CLIMATE PERFORMANCE LEADER 2013

Sector	Company	Performance band	Disclosure score	Consecutive years in the CPLI
Consumer Discretionary	BMW	A	100	4
	Daimler	A	100	1
	Royal Philips	A	100	1
	Honda	A	99	1
	Nissan	A	99	1
	Volkswagen	A	99	1
	British Sky Broadcasting	A	95	1
	H&M Hennes & Mauritz	A	83	1
Consumer Staples	Nestlé	A	100	2
	Diageo	A	98	2
	L'Oréal	A	93	1
	Anheuser Busch InBev	A	85	1
	Unilever	A	82	2
Energy	Spectra Energy	A	98	1
	BG Group	A	89	1
Financials	BNY Mellon	A	100	1
	Bank of America	A	98	4
	Goldman Sachs	A	98	1
	HSBC	A	97	1
	Firstrand Limited	A	96	1
	Morgan Stanley	A	96	1
	Wells Fargo	A	96	2
	AXA Group	A	94	3
	TD Bank	A	94	1
	Ace	A	93	2
	BNP Paribas	A	93	1
	Barclays	A	92	1
	Swiss Re	A	92	1
	Deutsche Bank	A	91	2
	Munich Re	A	91	1
	National Australia Bank	A	91	4
	Westpac Banking	A	91	4
	Assicurazioni Generali	A	87	1
Healthcare	GlaxoSmithKline	A	98	1
Industrials	Raytheon	A	98	1
	Schneider Electric	A	97	3
	CSX	A	95	1
	Komatsu	A	95	1
	Lockheed Martin	A	91	3
Information Technology	Cisco Systems	A	100	1
	Hewlett-Packard	A	99	1
	Samsung	A	99	1
	SAP	A	98	1
	Adobe Systems	A	97	1
	EMC	A	97	1
	Microsoft	A	96	1
	Infosys	A	92	1
	Tata Consultancy Services	A	89	1
Materials	Ecolab	A	98	1
	Anglo American	A	96	2
	E.I. du Pont de Nemours	A	96	1
Telecommunication Services	Swisscom	A	97	1
	Telenor Group	A	95	1
	BT Group	A	93	1
Utilities	Gas Natural SDG	A	100	2
	Exelon	A	98	2

2013 Climate Disclosure Leadership Index (CDLI)

CDP™ CLIMATE DISCLOSURE LEADER 2013

Sector	Company	Disclosure score	Performance band	Consecutive years in the CDLI
Consumer Discretionary	BMW	100	A	3
	Daimler	100	A	2
	Royal Philips	100	A	3
	General Motors	100	A-	1
	Honda	99	A	2
	Volkswagen	99	A	1
	Home Depot	99	A-	2
	Nissan	99	A	1
	Las Vegas Sands	98	A-	1
	TJX Companies	98	B	2
	News Corporation	97	A-	4
Consumer Staples	Nestlé	100	A	4
	Colgate Palmolive	99	B	1
	Reckitt Benckiser	99	B	1
	Diageo	98	A	2
	Philip Morris International	97	B	1
Energy	Spectra Energy	98	A	2
	Repsol	98	B	2
	Chevron	97	A-	1
	Hess	97	B	5
Financials	BNY Mellon	100	A	1
	Bank of America	98	A	1
	Goldman Sachs Group	98	A	2
	Marsh & McLennan	98	B	1
	Simon Property Group	98	B	1
	HSBC	97	A	1
	HCP	97	A-	1
	Allianz	97	B	3
Healthcare	Bayer	99	A-	6
	GlaxoSmithKline	98	A	1
	Johnson & Johnson	98	A-	1
	United Health Group	98	B	1
	Sanofi	97	A-	1
Industrials	Eaton	100	A-	1
	UPS	99	A-	3
	Raytheon	98	A	1
	Deutsche Post	98	B	4
	Union Pacific	98	B	1
	Schneider Electric	97	A	1
	EADS	97	B	1
Information Technology	Cisco Systems	100	A	5
	Hewlett-Packard	99	A	1
	Samsung	99	A	5
	SAP	98	A	1
	Adobe Systems	97	A	1
	EMC	97	A	1
Materials	BASF	100	A-	6
	Air Products & Chemicals	99	B	3
	Ecolab	98	A	1
	Kumba Iron Ore	98	B	1
	Praxair	98	B	5
	Vale	98	B	1
	POSCO	97	B	2
Telecommunication Services	Swisscom	97	A	1
Utilities	Gas Natural SDG	100	A	2
	Iberdrola	99	B	2
	Exelon	98	A	2
	Endesa	98	B	1
	National Grid	98	B	1
	Centrica	97	B	6

2013 Leadership Criteria

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

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 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, for example by setting and meeting carbon reduction targets and implementing programs to reduce emissions in both its direct operations and supply chain.

The highest scoring companies for disclosure and/or performance enter the CDLI and/or CPLI. Public scores are available in CDP reports, through Bloomberg Terminals, Google Finance and Deutsche Boerse's website.

What are the CDLI and CPLI criteria?

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 Global 500 population (59 companies in 2013)

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 for greenhouse gas emissions reductions due to emission reduction actions over the past year (4% or above in 2013)
- Disclose gross global scope 1 and scope 2 figures
- Score maximum performance points for verification of scope 1 and scope 2 emissions
- Furthermore, 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.

How are the CDLI and CPLI used by investors?

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

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 10 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 2013.

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**

CDLI and CPLI financial returns against overall Global 500

Figure 9: CPLI [2010 - 2013] returns against overall Global 500

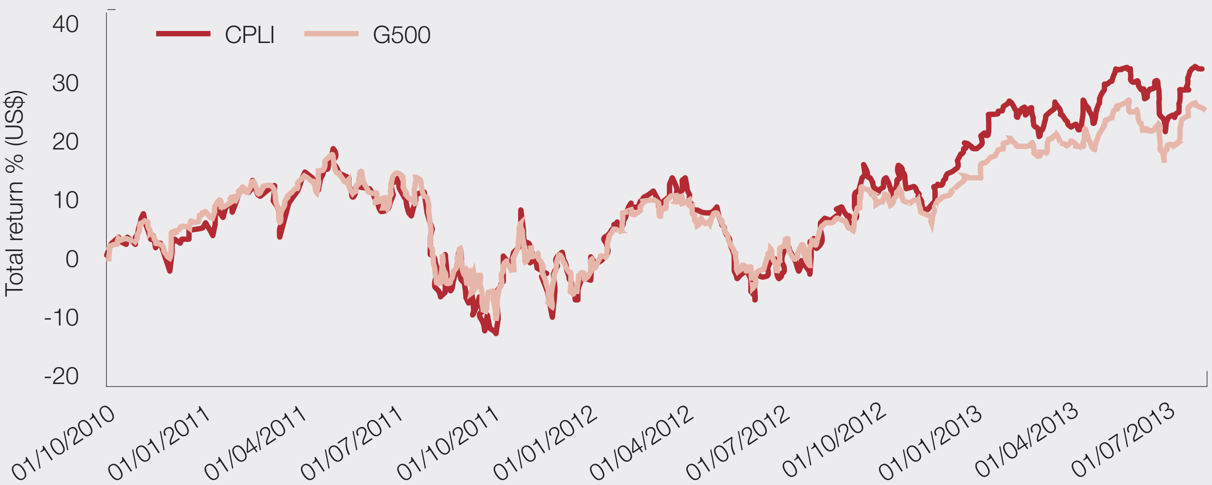
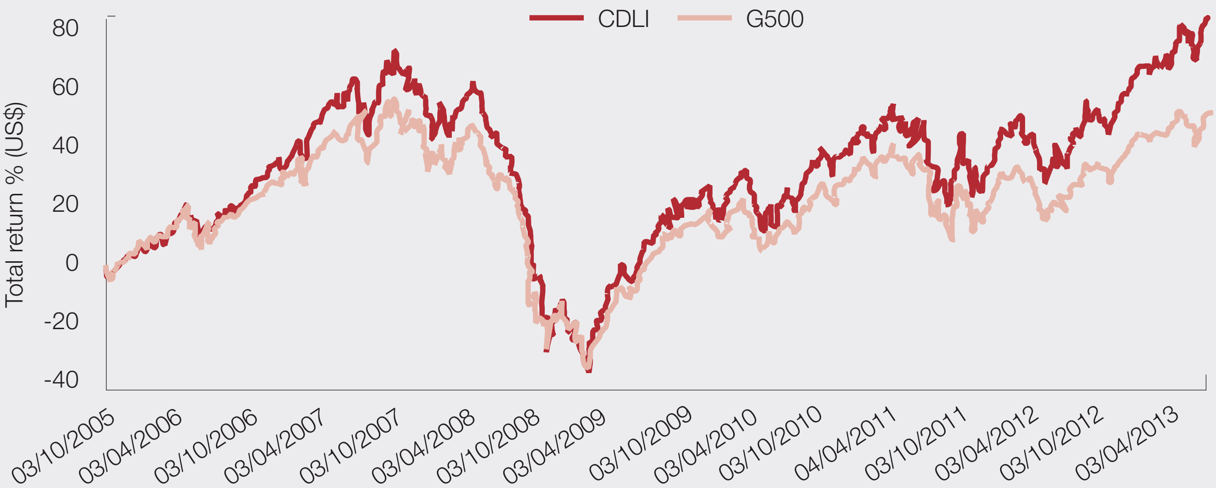


Figure 10: CDLI [2005 - 2013] returns against overall Global 500



Annual analysis of the companies that have achieved leadership positions on either the CPLI or the CDLI in the past suggests that companies that achieve leadership positions in climate change generate superior stock performance (see Figures 9 & 10). Since 2005, CDLI companies delivered total returns of 82.8%, outperforming the Global 500 (49.6%) by more than two thirds. Moreover, CPLI companies generated average total returns of 31.9% since 2010, outperforming the Global 500 (24.8%) by more than a quarter. The methodology for this analysis has been changed from previous years, however the superior financial performance of the leaders still shows through especially in the most recent years[7].

While equity market performance is influenced by a broad range of quantitative factors including country, sector and financial performance, as well as qualitative considerations such as company management, governance and risk management. Nonetheless, this analysis suggests a correlation, although not a causality, between financial performance and good climate change performance and disclosure.

7 Total Return includes interest, capital gains, dividends and distributions realized over a given period of time. Sources: Bloomberg and CDP. Note: Results presented should not and cannot be viewed as an indicator of future performance or as investment advice. Performance of CDLI and CPLI companies is calculated using drifting weights, on an equally-weighted basis relative to the FTSE Global Equity Index Series and rebalanced on the first business day in October each year. Therefore, the 2013 CDLI & CPLI companies are not included in this analysis. For this report we weighted the companies based on the share price on the first business day in October each year, compared to last years report, where we used the one share per company method. Please refer to the important notices on the contents page of this report regarding the use of CDP data in other publications.

Performance and disclosure across geographies:

Figure 11: Percentage of companies in the CPLI by country

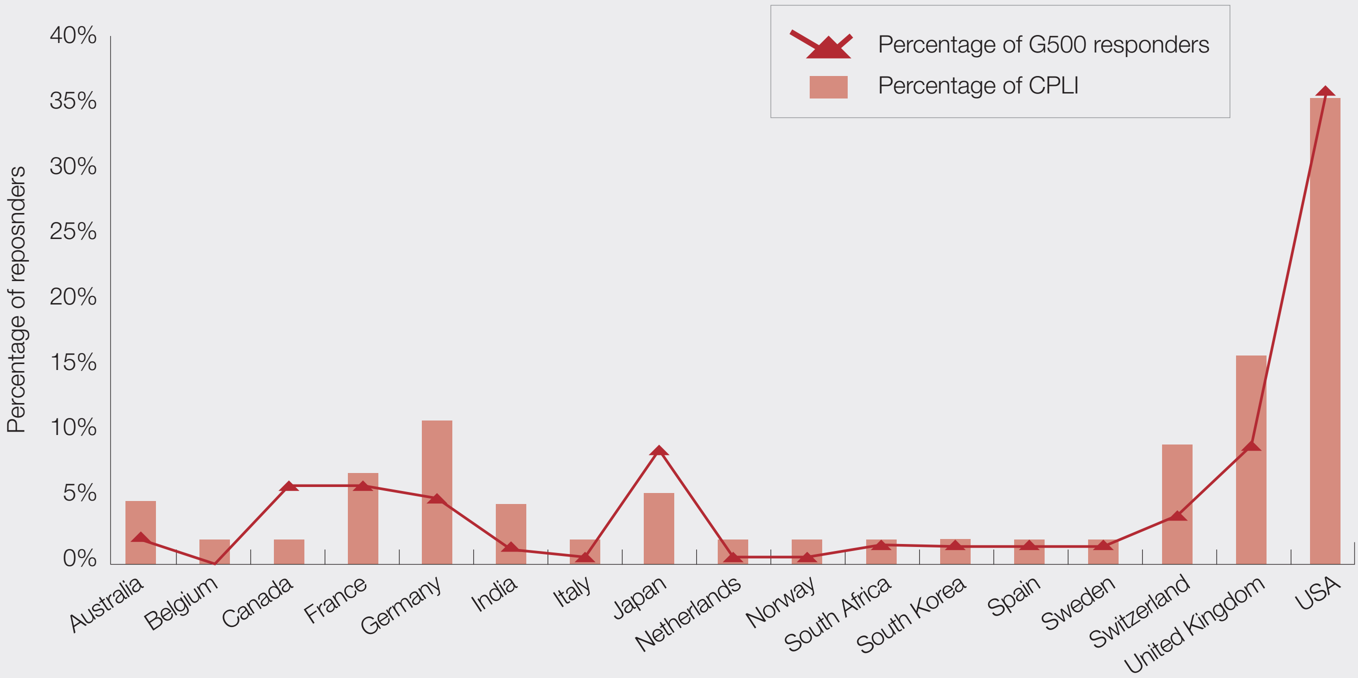
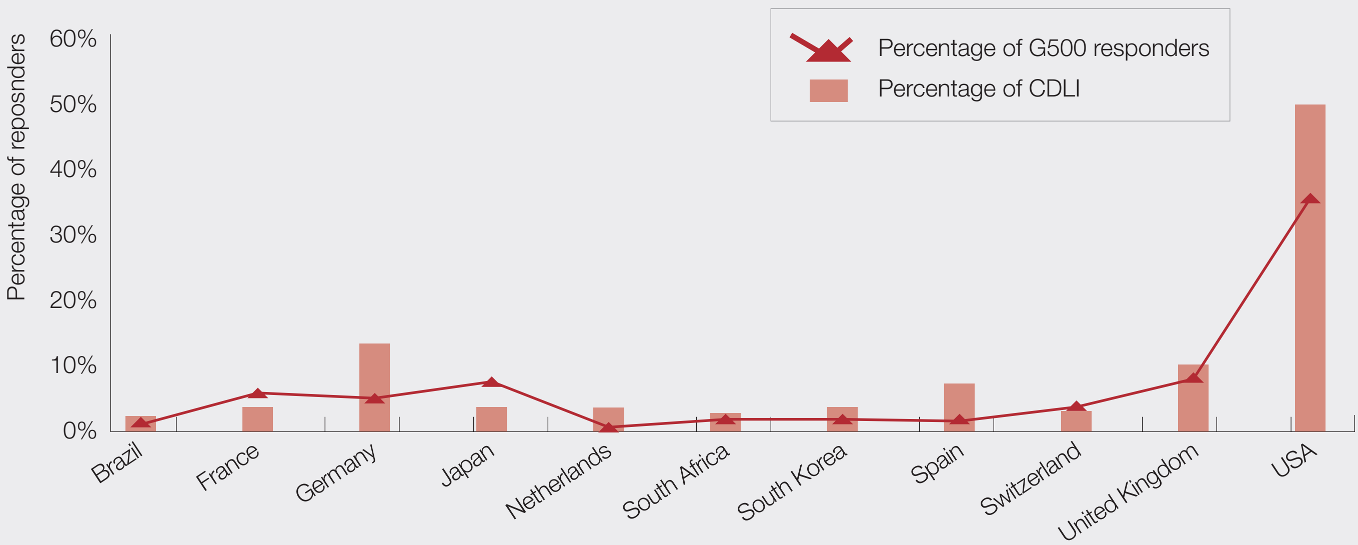


Figure 12: Percentage of companies in the CDLI by country



The UK, US and Germany are the countries with the highest representation in the CPLI (Figure 11), with the US and UK more than doubling the percentage represented in the CPLI, compared with last year. Relative to the geographic composition of the Global 500, Germany, the UK and Switzerland show over-proportionate representation in the CPLI this year.

India has a company in the performance leadership index for the first time. Meanwhile, companies from South Korea, Norway and Sweden have entered the CPLI again after at least a year out.

To provide insights into completeness of disclosure, Figure 12 shows that Spain has the highest proportion of companies in the CDLI relative to its representation in the Global 500.

PwC Commentary

Governments, investors, customers and communities make different, often contradictory, demands of business. Current business models are ill-equipped to deal with these contradictions.

In both developed and emerging economies, the demand for growth is increasingly urgent. Growth is vital to lift people out of poverty and provide jobs and stability for restless populations. Delivering this in a carbon constrained, but paradoxically energy abundant world, is a fundamental challenge. So far, there are few signs that either companies or countries have been able to decouple economic growth from carbon emissions growth.

Governments, investors, customers and communities make different, often contradictory, demands of business. One is to provide affordable, reliable, profitable and low carbon energy and transportation while minimizing impacts on local communities and the environment. Current business models are ill-equipped to deal with these contradictions or make the difficult trade-offs needed. These challenges are reflected in the responses that the world's largest companies have made to CDP, which describe different approaches to managing climate risks and tackling emissions.

Our analysis of Global 500 companies this year shows that they are increasingly transparent and sophisticated about their approach to climate change, are more likely to verify their emissions, and are looking beyond the boundary of their own operations. Companies are reporting their emissions from their supply chain and the use of their products, although some significant gaps remain. These changes will undoubtedly advance better decision-making.

In addition to carbon, companies are called to account for their broader environmental, social, economic and fiscal impacts. While companies are moving towards wider assessment of their impacts and improving data quality, there has been no systematic approach to compare different types of impact to inform decision-making. At PwC, we've been working with our clients to develop a more comprehensive approach which we call Total Impact Measurement and Management (TIMM).

TIMM gives boards better insight into the social, fiscal, environmental and economic impacts of their activities. Taking this approach can also help to support a business's license to operate. But the real benefit is that it gives management the ability to compare strategies and investment choices, using quantified data, monitor the total impact of each decision and choice they make, and communicate this to their stakeholders. Being able to measure, understand and compare the trade-offs between different options means decisions can be made with more complete knowledge of the overall impact they will have and a better understanding of which stakeholders will be effected by which decisions.

The first part of the journey down the low carbon pathway is likely to be littered with awkward compromises between growth, the environment and communities. Looking at the total impact makes sound business sense. By doing so, TIMM can help inform better decision-making needed to deliver the transformation necessary to meet the demands of a growing population in a carbon constrained world.

Jonathan Grant

Jonathan Grant
Director, PwC

Consumer Discretionary

RESPONSE RATE

77% (46 OF 60)

KEY INDUSTRIES WITHIN THE SECTOR:

- **Auto components** *(5 of 5);*
- **Automobiles** *(10 of 11);*
- **Hotels, restaurants & leisure** *(6 of 7);*
- **Household durables** *(1 of 1);*
- **Internet & catalog retail** *(1 of 3);*
- **Media** *(11 of 15);*
- **Multiline retail** *(1 of 2);*
- **Goods** *(5 of 8)*
- **Specialty retail** *(6 of 8)*
- **Textiles, apparel & luxury goods** *(5 of 8)*

Please see page 48 for a list of non-responders in consumer discretionary.

89,319,469 tons CO_2e

Total scope 1 + 2 emissions 2013

-13.6%

Decrease in scope 1 & 2 emisssions since 2012

2.5%

of total G500 emissions

83/B Average disclosure score/performance band

The consumer discretionary sector makes up 12% of overall respondents and represents 2.5% of total Global 500 emissions. 41% of companies report a drop in absolute emissions since 2012 and, although a majority of companies in the sector has reported absolute emissions reduction targets as well as a decrease in emissions due to emission reduction activities, emissions of the five biggest emitters in 2013 have not changed significantly since 2009.

> *Sales from our energy efficient Green Products totaled to €11.25 billion in 2012, representing 45.4% of total sales. We estimate that the demand for energy efficient products will increase allowing Royal Philips to increase the share of Green Products to 50% by 2015.*
>
> **Royal Philips**

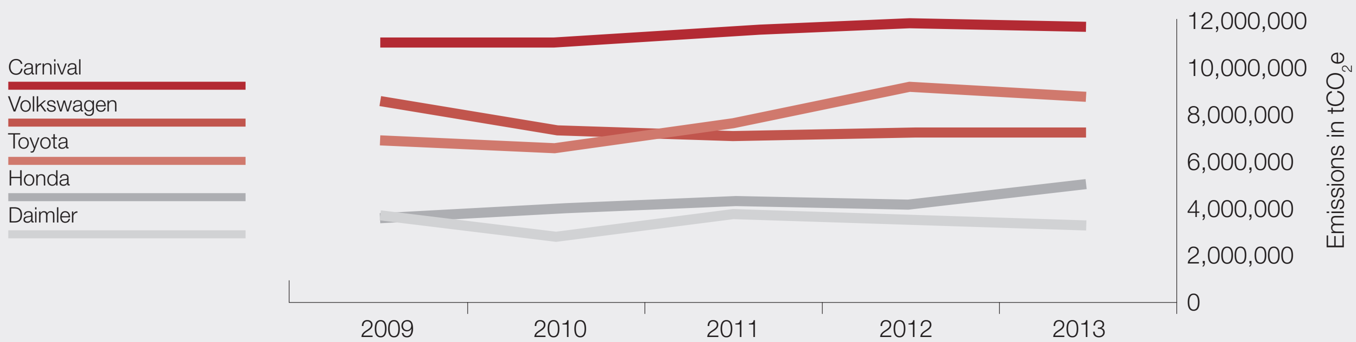
The three highest scoring companies in consumer discretionary by disclosure and performance are all part of the automobile industry: BMW, Daimler and GM.

Reported opportunities are related to consumer behavior (61%) and reputation (39%). Regulation of product efficiency (such as for vehicles) is also important (noted by 39% of companies). A majority of the companies in consumer discretionary (78%) mentions at least one of these issues as a business opportunity.

Leading companies typically have well established sustainability programs and assess their products' footprints throughout the lifecycle. Companies often facilitate reductions for customers in addition to focusing on their own carbon footprint. For example, British Sky Broadcasting has introduced new products such as set top boxes which automatically go into standby – these can save approximately 205,000 metric tons CO_2e each year. However, put in context, this is only equivalent to 12 hours of emissions by ExxonMobil.

Consumer discretionary companies are particularly affected by risks surrounding consumer behavior (46%), fuel and energy taxes (41%) as well as rainfall extremes and droughts (41%).

Figure CD1. Historic scope 1 + 2 emissions performance of current largest emitters in consumer discretionary



Currently, few companies assess the full impact of their value chains: only 28% of companies in consumer discretionary have accounted for emissions from the use of their products, which is likely to be one of the most carbon-intensive aspects of the sector's value chain. This suggests that, although 78% of companies in consumer discretionary do engage with suppliers on climate-related activities, the current reporting of the indirect value chain emissions in consumer discretionary does not reflect the companies' overall carbon impact.

Figure CD2. Metric tons CO_2e emitted per unit of revenue (US$) of the 10 largest companies by revenue in consumer discretionary (scope 1 & 2 emissions)[8]

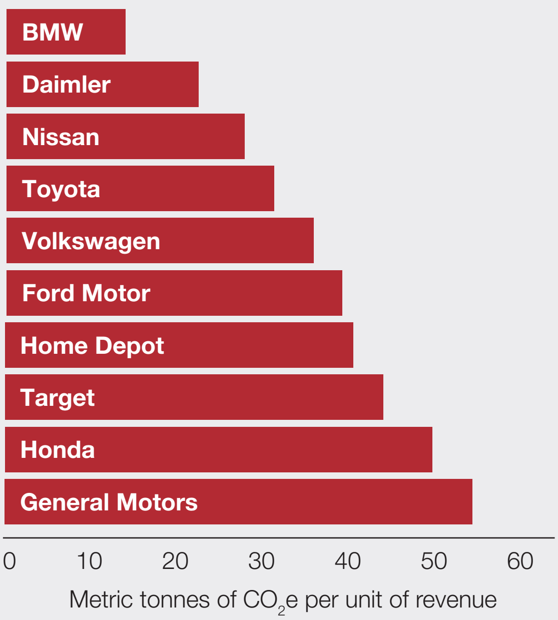


Figure CD3. Total reported combined scope 1 and 2 emissions compared to total reported scope 3 emissions by sector: scope 3 emissions in consumer discretionary are 19 times higher than the sector's combined scope 1 and 2 emissions

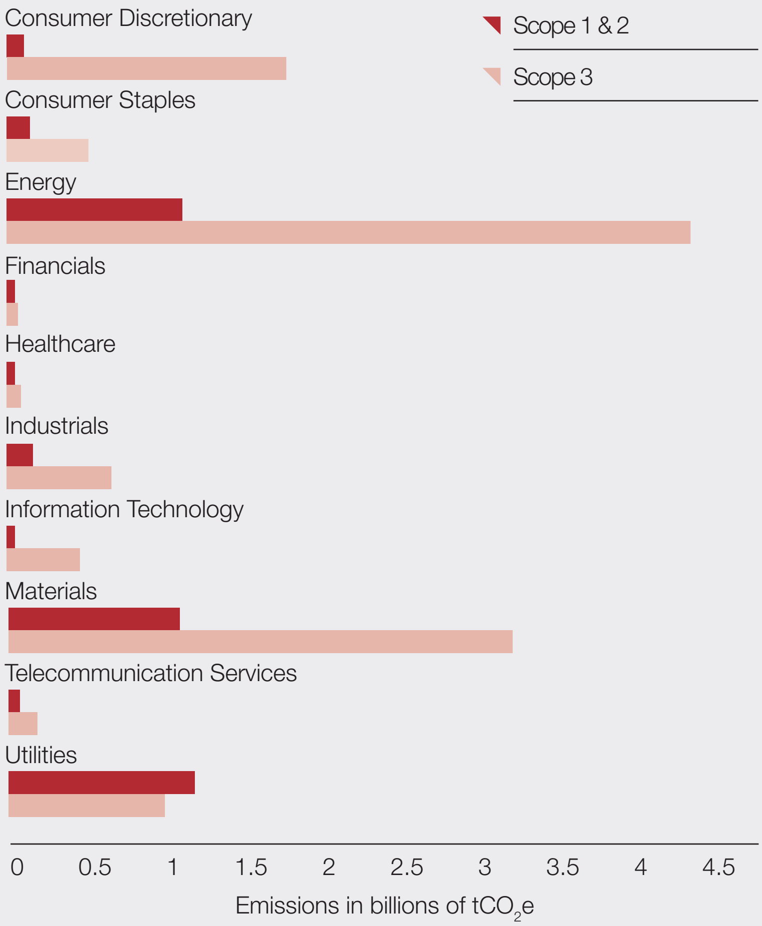


Figure CD4. Most commonly reported risks by companies in consumer discretionary

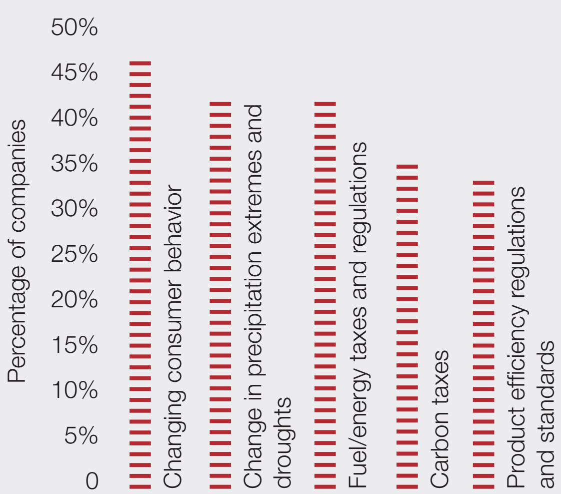
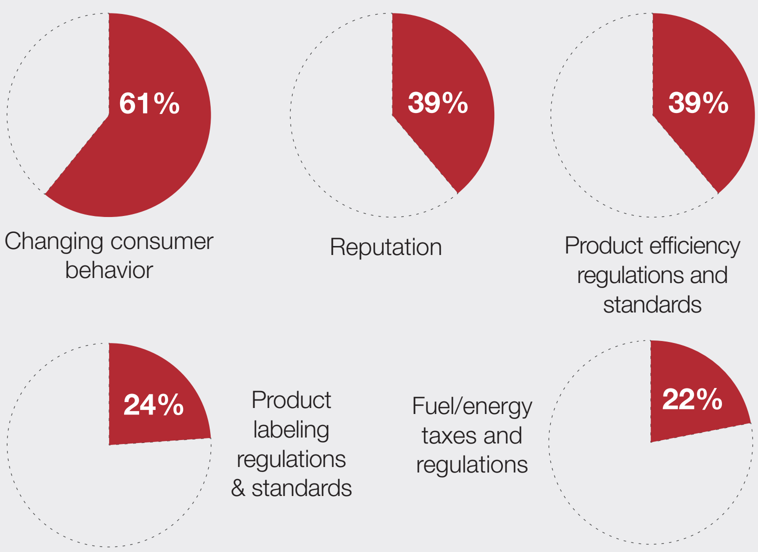


Figure CD5. Most commonly reported opportunities by companies in consumer discretionary



8 Global 500 US$ revenue data sourced from Bloomberg for financial year 2012. This applies to all ten sector revenue intensity charts in this report.

Consumer Staples

RESPONSE RATE

88% **(43 OF 49)**

KEY INDUSTRIES WITHIN THE SECTOR:

Beverages *(9 of 9);*
Food & staples retailing *(11 of 12);*
Food products *(10 of 13);*
Household products *(1 of 2);*
Personal products *(5 of 5);*
Tobacco *(7 of 8);*

Please see page 48 for a list of non-responders in consumer staples.

108,027,874 tons CO_2e
Total scope 1 + 2 emissions 2013

3%
of total G500 emissions

+2.9%
Increase in scope 1 & 2 emisssions since 2012

81/B Average disclosure score/performance band

The sector comprises many of the world's most well known consumer brands. As such, they are heavily influenced by changing consumer preferences. In fact, 53% of companies in the sector consider change in consumer behavior in response to climate change a key risk. The inability to address climate change issues is seen as a reputational risk by 51% of companies. At the same time, 47% of companies mention fuel and energy prices and 53% change in extreme weather. This illustrates the impact of regulation and physical risks on consumer staples companies.

While 58% of companies report a decrease in absolute scope 1 and 2 emissions, the sector's total emissions have increased by 2.9%. The analysis shows that there has been little change in absolute emissions in the sector since 2009.

A number of climate change-related risks and opportunities in consumer staples are related to companies' supply chain's exposure to physical impacts of climate change as well as changes in regulation surrounding fuel and energy.

In particular, companies report the changing regulation surrounding biofuels as a reason for increased costs. For instance, PepsiCo notes that requirement to increase the volume of ethanol to 13.8 billion gallons in the U.S. gasoline supply in 2013 will increase the price of corn and sugar which make up a significant portion of the company's primary raw materials. Similarly, Unilever reports that the support for biofuels is leading to increased costs of key agricultural raw materials such as oils and fats in global commodity markets. The impact on the key raw materials in the sector suggests that the trade-off between biofuels production and global food supply is yet to be resolved, despite increasing focus on second generation biofuels.

Companies are also affected by exposure of their supply chains to physical impacts of climate change, with 58% of companies reporting extreme weather related risks influencing the cost and availability of raw materials. For example, Colgate Palmolive states that recent droughts in the U.S. and Russia have caused the cost of agricultural commodities such as corn, wheat and cotton to fluctuate. Similarly, Diageo reports disruptions due to lack of water in Ghana and Kenya as well as flooding in Ireland and Australia as having a significant impact on its costs.

Consumer behavior, the risk mentioned most frequently, is also cited frequently as an opportunity (58%). The risk reported by companies is that consumers may view products as less climate-friendly than others or view a whole industry as a poor carbon performer, which would drive them away from products. At the same time, many companies consider themselves well positioned and see commercial opportunities in anticipating changes in consumer behavior and the ability to enhance their reputation.

Figure CS1. Historic scope 1 + 2 emissions performance of current largest emitters in consumer staples

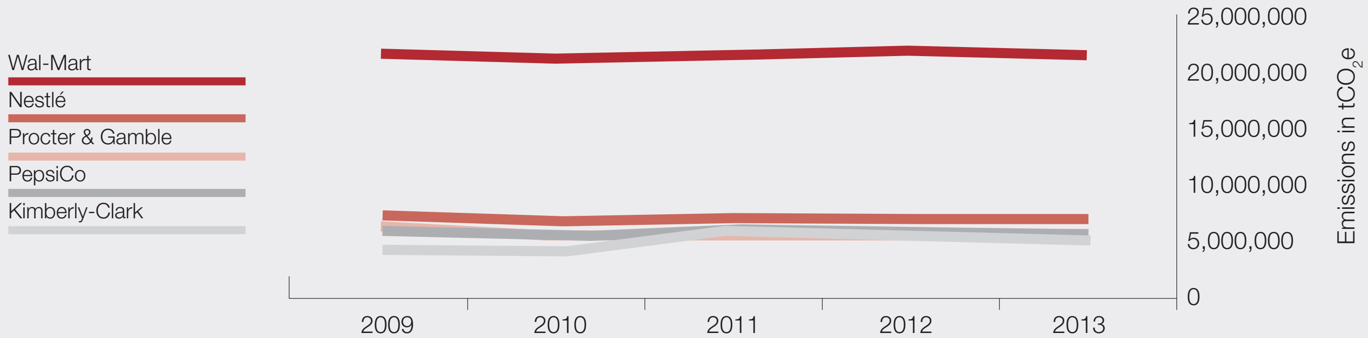
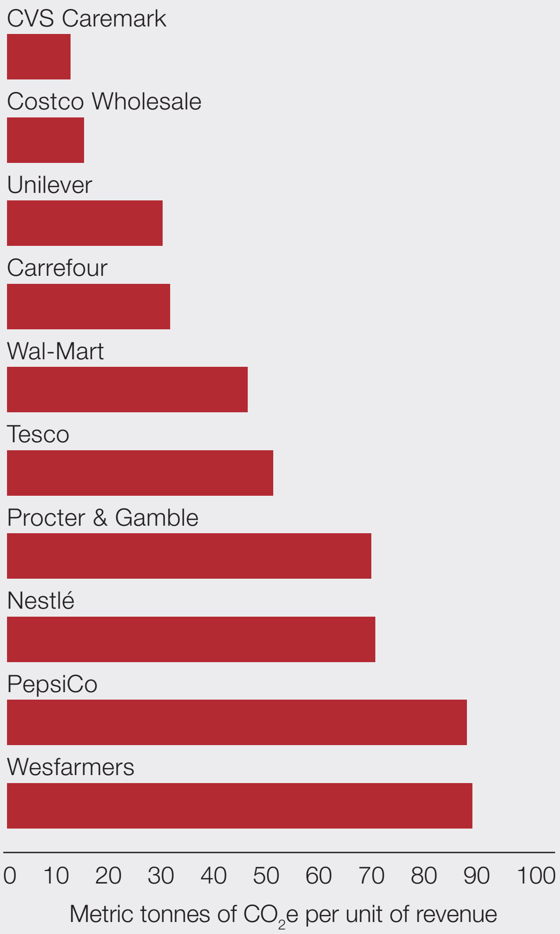


Figure CS2. Metric tons CO_2e per unit of revenue (US$) for 10 largest companies by revenue in consumer staples (scope 1 & 2 emissions)



Emissions from transportation and logistics are the most commonly reported scope 3 categories – with 49% and 42% reporting upstream and downstream transport emissions respectively. Consumer staples companies also note the impact of rising fuel prices on operational costs, with 51% of companies mentioning fuel and energy regulations as a key risk.

> *Another target we have is to help our customers reduce their own carbon footprints by 50% by 2020. Our customers' carbon footprint is around 100 times greater than our direct carbon footprint. There is therefore a real opportunity to tackle climate change by helping our customers to make small changes that together can make a big difference.*
>
> **Tesco**

Figure CS3. Most commonly reported risks by companies in consumer staples

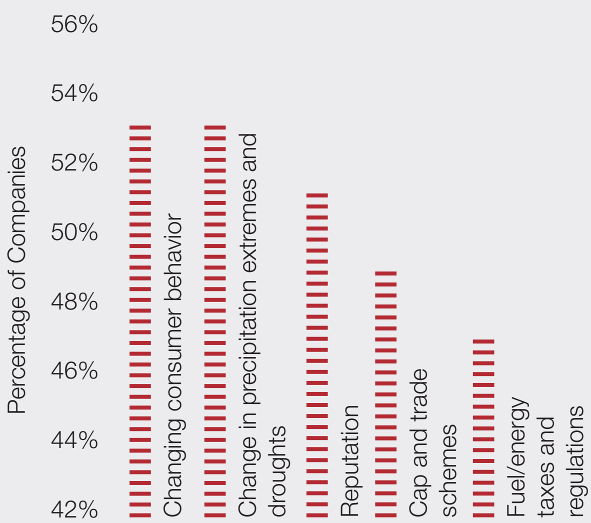
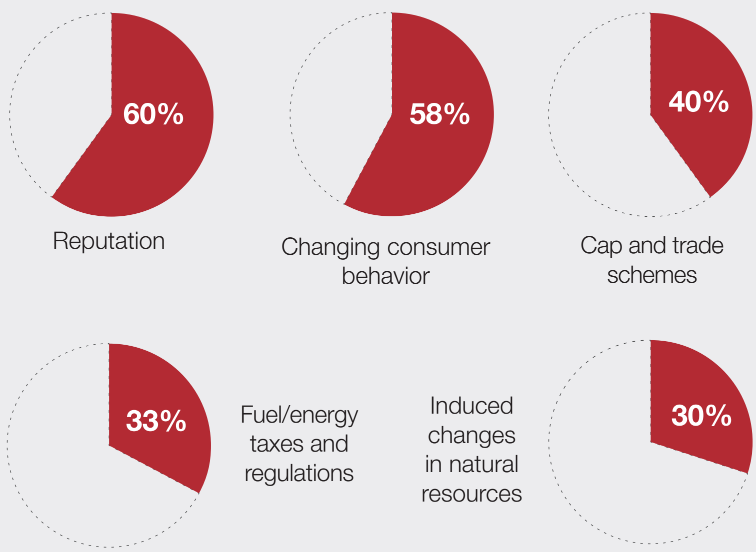


Figure CS4. Most commonly reported opportunities by companies in consumer staples



Energy

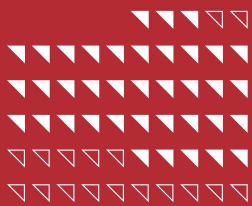
RESPONSE RATE

69%

(38 OF 55)

KEY INDUSTRIES WITHIN THE SECTOR:

Energy equipment & services *(3 of 5);*
Oil, gas & consumable fuels *(35 of 50);*



Please see page 48 for a list of non-responders in energy.

1,011,426,516 tons CO_2e
Total scope 1 + 2 emissions 2013

-2.1%
Decrease in scope 1 & 2 emisssions since 2012

28.3%
of total G500 emissions

78/B Average disclosure score/performance band

Efforts to reduce emissions in the energy sector are essential to the mitigation of climate change as the sector is one of the highest emitting sectors. However, 50% of energy companies have a performance band of C or lower. Since 2009, the total scope 1 and 2 emissions of the ten biggest emitters in the sector have increased by 53%. At the same time, the sector has the highest proportion of companies without emission targets (24%).

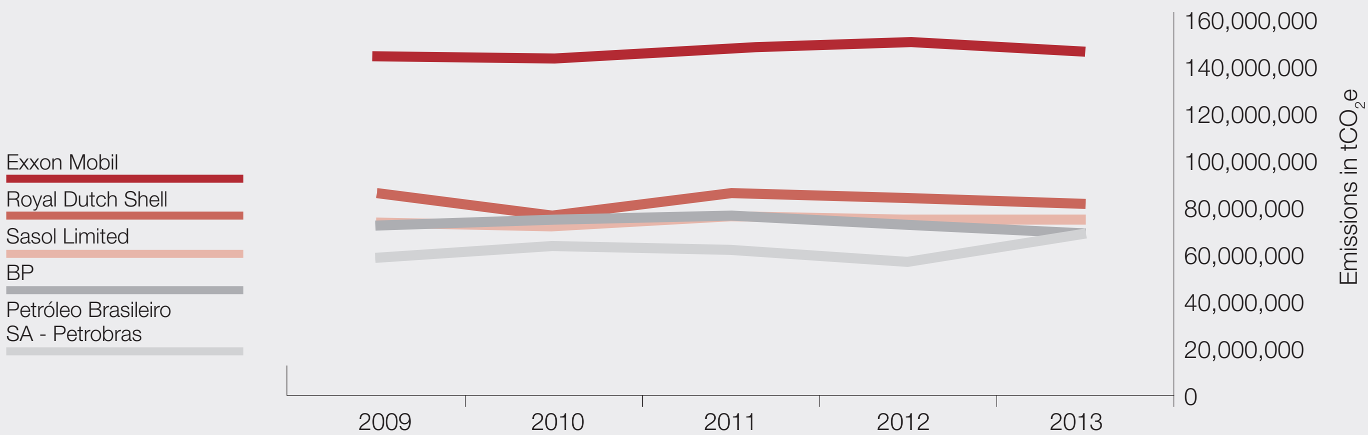
In addition to the significant impact on the total Global 500 scope 1 and 2 emissions, the energy sector's reported scope 3 emissions are four times higher than its scope 1 and 2 emissions. 98% of these emissions are emitted through the use of sold products.

Energy companies state that regulation is a major risk: 66% of companies report cap and trade schemes and 61% of companies report carbon taxes as risks. BG Group, for example, states that the *[initial] rejection of the backloading proposal for EU ETS has led to more uncertainty in pricing.* Other issues mentioned include the regulation of the sulfur content in the fuel used in shipping, Australian Clean Energy Futures Act, AB32 in California as well as the carbon leakage in the EU ETS.

At the same time, energy companies see opportunities in changing regulation, but also in changing consumer behavior: 50% of companies mention changing consumer behavior, 45% international agreements and 45% cap and trade schemes as a key opportunity. Spectra Energy states that US transmission may experience an increased demand for natural gas transmission and storage operations resulting from cap and trade schemes. Chevron states that the EU, U.S. and Australia have already adopted regulation for developing Carbon Capture and Storage projects. It has begun work to make Gorgon in Australia the world's biggest carbon storage facility and thereby reduce emissions from one of the world's largest natural gas projects.

Companies such as Occidental Petroleum Corporation, Noble Energy or BP give similar explanations for the lack of company-wide absolute emissions reduction targets: business is constantly evolving and expanding and emission reduction targets will constrain growth. Instead, the focus is on energy efficiency projects throughout their business activities. Companies prefer

Figure EN1. Historic scope 1 + 2 emissions performance of current largest emitters in the energy sector



to use efficiency targets at an operational or project level, stating that overall emissions targets are not practical or useful in driving emissions reductions at the corporate level.

Therefore, reducing emissions from an energy company's own operations may require more significant and drastic changes to business as usual. In addition, the energy sector remains the only sector in the Global 500 sample, where Board-level monetary incentives did not lead to emissions reductions due to emission reduction activities.

Figure EN3. Metric tons CO_2 per unit of revenue (US$) of the 10 largest companies by revenue in the energy sector (scope 1 & 2 emissions)

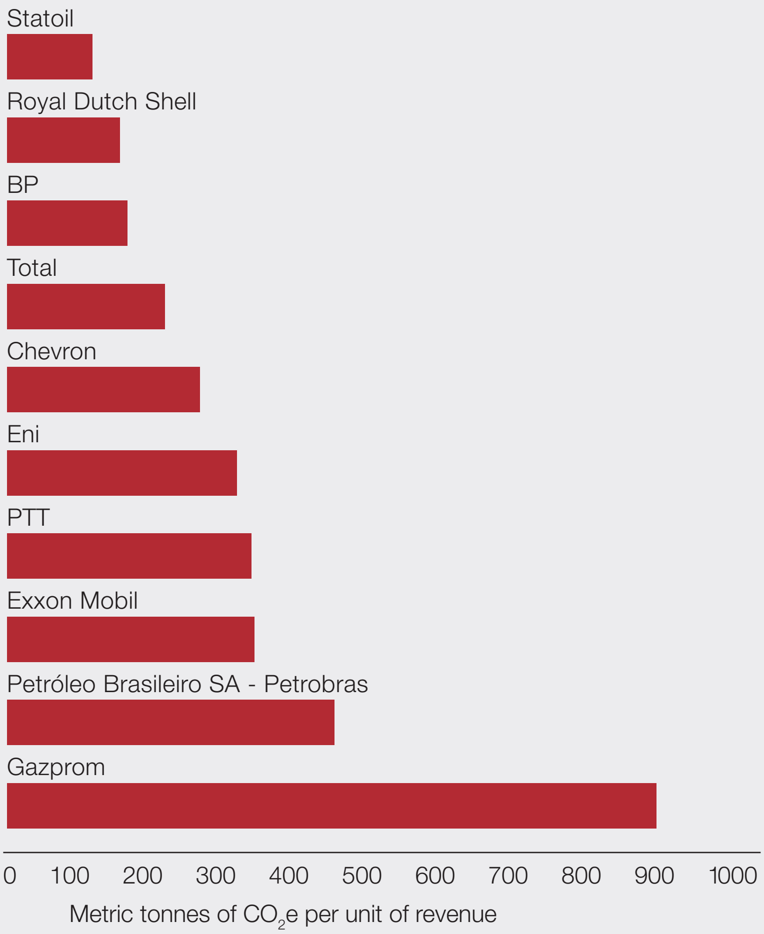


Figure EN2. Scope 3 emissions in the energy sector are four times higher than the combined scope 1 and 2 emissions. 98% of reported scope 3 emissions are from the use of sold products.

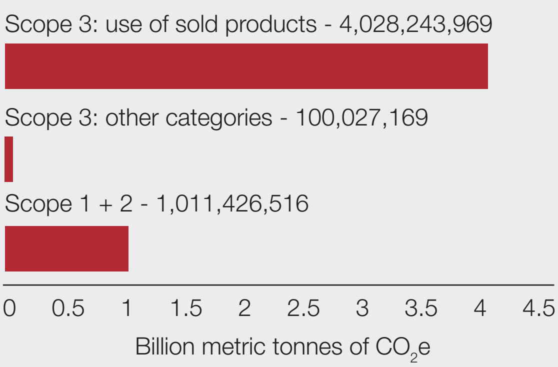
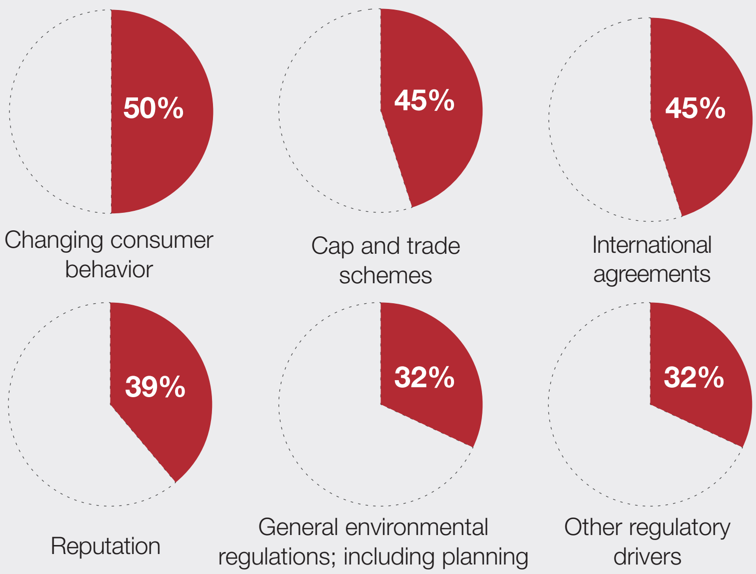


Figure EN4. Most commonly reported risks by energy companies

Figure EN5. Most commonly reported opportunities by energy companies



Financials

RESPONSE RATE

75%

(94 OF 125)

KEY INDUSTRIES WITHIN THE SECTOR:

Capital markets *(9 of 9);* **Commercial banks** *(46 of 61);* **Consumer finance** *(4 of 5);* **Diversified financial services** *(8 of 8);* **Insurance** *(20 of 26);* **Real Estate Investment Trusts (REITs)** *(5 of 8);* **Real estate management & development** *(2 of 7);* **Thrifts & mortgage finance** *(0 of 1);*

Please see page 48 for a list of non-responders in financials.

1,825,823 tons CO_2e

Total scope 1 + 2 emissions 2013

+4.2%

Increase in scope 1 & 2 emisssions since 2012

0.6%

of total G500 emissions

79/B Average disclosure score/performance band

The financial sector makes up 24% of the respondents and is the lowest emitting sector in the Global 500: it represents only 0.6% of total reported scope 1 and 2 emissions. While 67% of companies have reduced their scope 1 and 2 emissions since 2012, only 6% of financials report the carbon impact of their investments. This is a significant gap in the measurement of the sector's overall carbon impact.

Within the sector, there is a strong drive to understand the risks and opportunities from climate change. 56% of companies work in partnerships with trade associations and 33% fund research organizations to obtain information to feed into risk reports. Allianz SE, for example, states: "*the WWF-Allianz study Tipping Points is one good example of how Allianz is investing in a better understanding of the potential risks of climate change by analysing concrete insurance portfolios in specific locations.*"

The most reported risk and opportunity in the financial sector is reputation, with 54% of companies reporting it as a key risk and similarly 55% as a key opportunity. For example, Deutsche Bank reports that demonstrating responsible investment practices and helping finance the transition to a low carbon economy is a way for [the company] to help restore trust with society. Weather extremes are reported by 40% of financials which can have an effect on the companies' own business as well as their clients'. Flooding of assets (commercial or offices) can influence the types of investments being made, for example the cost of insurance. Recent storm events, such as Superstorm Sandy, had significant implications for insurance companies and are something that is increasingly being factored into pricing strategies.

For many companies, climate change is primarily seen as an opportunity in terms of sales, e.g. increased demand for insurance of physical assets and for financing to upgrade assets. However, the materiality of the impacts of these changes is often considered minimal. 20% of the companies who respond that they have not identified any risks/opportunities with climate change state that they are not directly impacted by the effects of climate change due to the nature of their business.

Scope 3 emissions should be significant for financial companies relative to their scope 1 and 2 emissions. Business travel, employee commuting and waste generation are the three most commonly disclosed relevant scope 3 categories in financials. Most scope 3 emissions would be expected to come from investments, however, only 6% of responding companies report emissions in this category. This suggests that financials are yet to account fully for the impact of their value chains, but will require a standardized widely-accepted approach for calculating emissions from investments.

Figure FI1. Historic scope 1 + 2 emissions performance of current largest emitters in financial companies

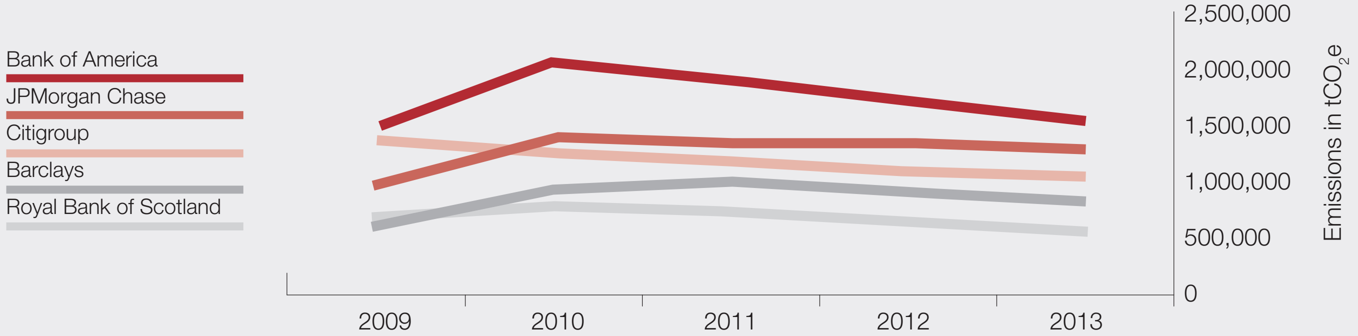


Figure FI2. Only 6% of companies in financials are reporting emissions from investments: this is where the majority of their scope 3 emissions should be

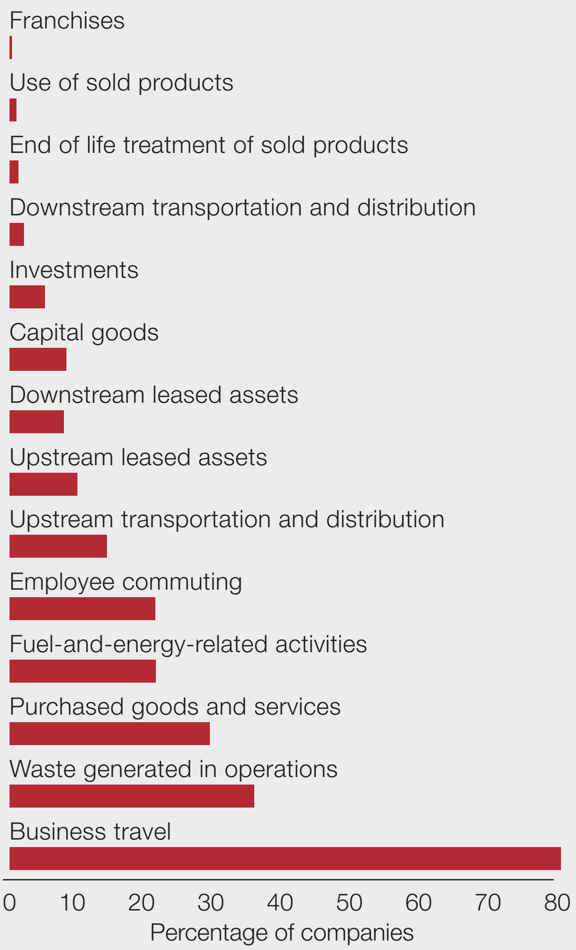


Figure FI3. Metric tons CO_2 per unit of revenue (US$) of the 10 largest companies by revenue in financials (scope 1 & 2 emissions)

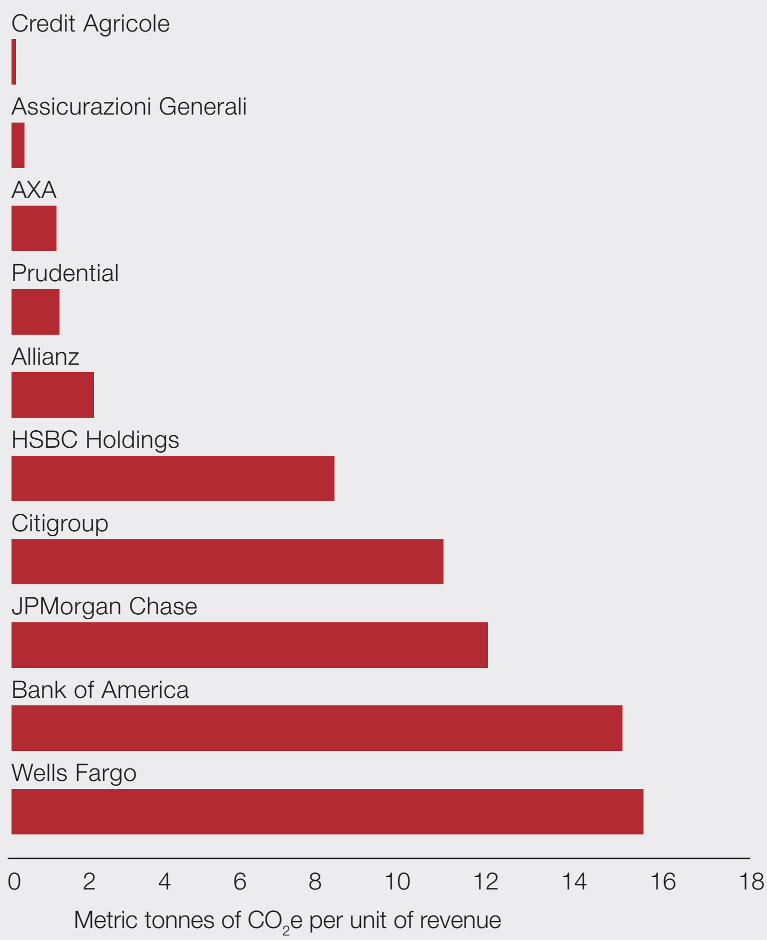


Figure FI4. Most commonly reported risks by financial companies

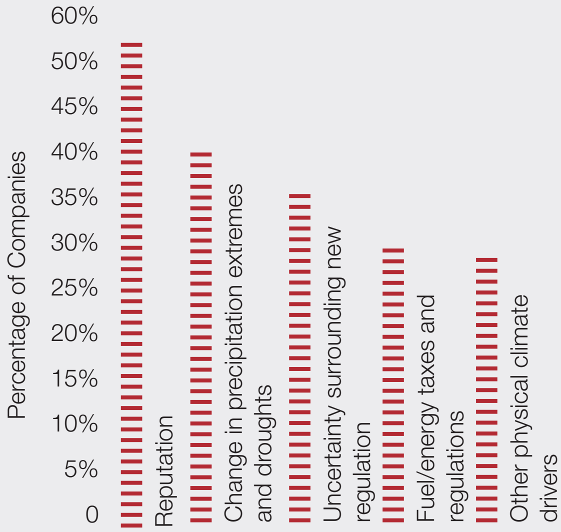
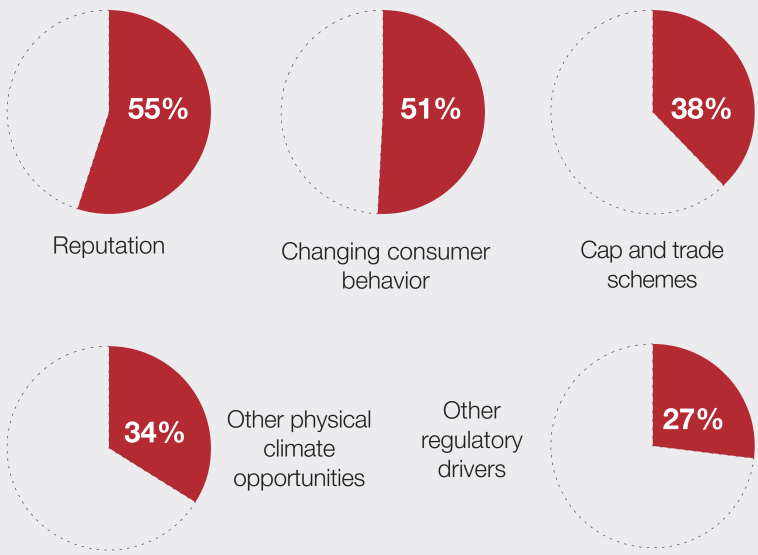


Figure FI5. Most commonly reported opportunities by financial companies



Healthcare

RESPONSE RATE

83%

(30 OF 36)

KEY INDUSTRIES WITHIN THE SECTOR:

Biotechnology *(4 of 6);*
Healthcare equipment & supplies *(5 of 6);*
Healthcare providers & services *(3 of 5);*
Life sciences tools & services *(1 of 1);*
Pharmaceuticals *(17 of 18);*

Please see page 48 for a list of non-responders in healthcare.

28,584,823 tons CO_2e
Total scope 1 + 2 emissions 2013

-4.9%
Decrease in scope 1 & 2 emisssions since 2012

0.8%
of total G500 emissions

82/B Average disclosure score/performance band

> *In 2012 Bayer's total energy consumption was reduced by approx. 2% compared to 2011 despite an increase in manufactured sales volume. Therefore; a decoupling of the production from the energy demand could be realized. One important aspect for this decoupling was the implementation of numerous energy efficiency measures during the reporting year.*
>
> **Bayer**

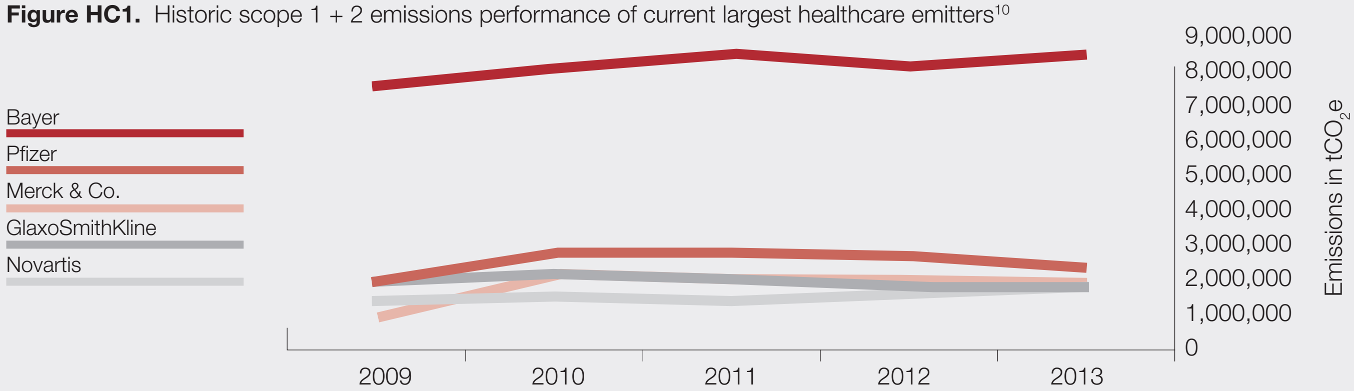
The healthcare sector makes up 8% of respondents and is the second lowest emitting sector representing only 0.8% of total reported scope 1 and 2 emissions.

The risks reported typically appear more tangible and quantifiable than the climate-related business opportunities. Roughly half of the companies mention cap and trade schemes (57%) and weather extremes (50%) as key risks, whereas the most often reported opportunities are reputation and changing consumer behavior. Meanwhile, some of the highest scoring healthcare companies (e.g. Sanofi) state that they have not identified any climate change risks that have the potential to change their business substantially over the next years.

However, physical changes may still have an impact on the healthcare sector. For example, changes in mean average temperature may lead to changes in the location of diseases which can drive business growth in emerging economies. Bayer, for example, states that the increase in temperature as a result of global climate change could promote the reproduction and spread of mosquitoes. This could result in another 40 to 60 million people being exposed to the risk of vector borne diseases like malaria and therefore the demand of products could rise in affected regions.

While climate change is having a limited impact on healthcare companies' business strategies, they are still investing in emissions reductions. 57% of them report a decrease in emissions compared to 2012. A consistent driver for this decrease is energy reduction activities, e.g. green IT and building efficiency. Increases in emissions are typically the result of acquisitions and change in output.

Figure HC1. Historic scope 1 + 2 emissions performance of current largest healthcare emitters[10]



Manufacturing healthcare companies are starting to invest more in energy efficient production techniques to reduce their own emissions. Companies' products can significantly help users reduce their emissions. For example, by developing a new type of inhaler, GlaxoSmithKline has reduced consumers' emissions by 2 million metric tons CO_2e/year which is equivalent to approximately 10% of the total emissions from the financials sector or four days of emissions from Arcelor Mittal in 2012.

Figure HC2. Healthcare has the second highest percentage of companies reporting absolute targets

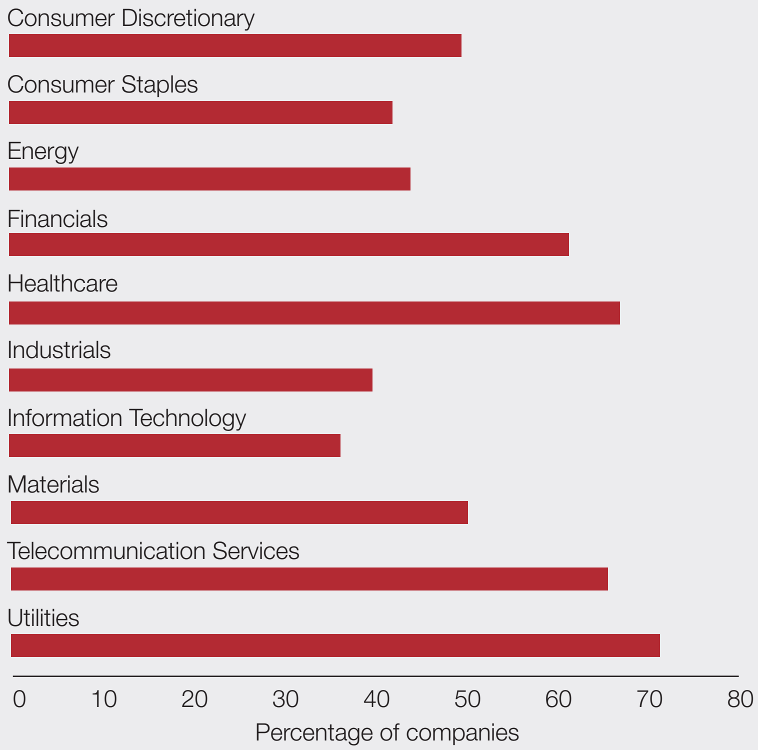


Figure HC3. Metric tons CO_2e per unit of revenue (US$) of the 10 largest companies by revenue in healthcare (scope 1 & 2 emissions)

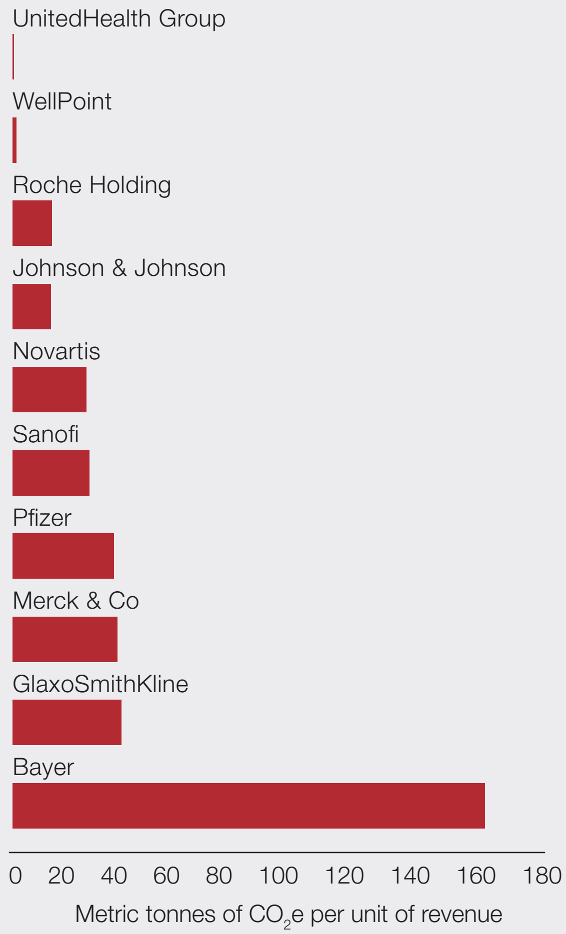


Figure HC4. Most commonly reported risks by healthcare companies

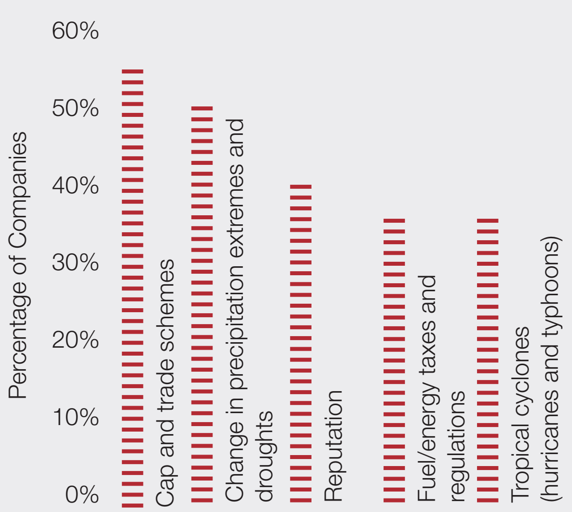
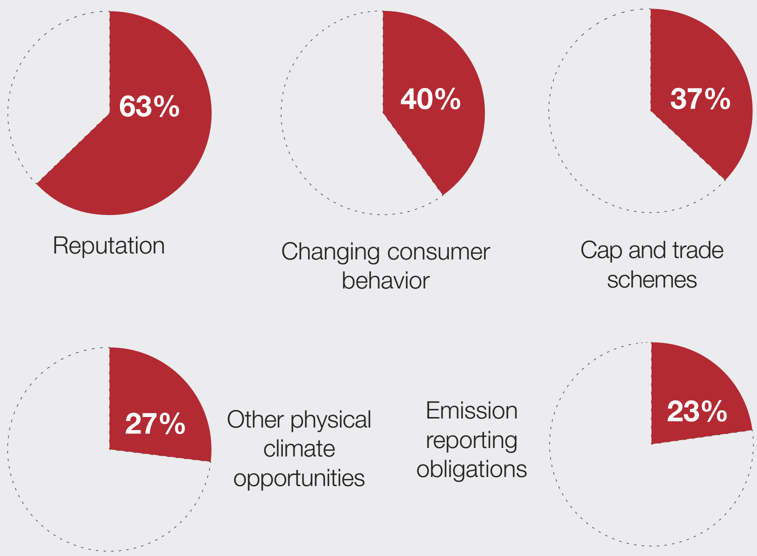


Figure HC5. Most commonly reported opportunities by healthcare companies



10 Some companies may not have disclosed data publicly over the 5 year period.

Industrials

RESPONSE RATE

77% **(37 OF 48)**

KEY INDUSTRIES WITHIN THE SECTOR:

Aerospace & defense *(8 of 10);*
Air freight & logistics *(3 of 3);*
Building products *(1 of 1);*
Construction and engineering *(2 of 2);*
Electrical Equipment *(1 of 2);*
Industrial conglomerates *(6 of 9);*
Machinery *(9 of 12);*
Road & rail *(5 of 7);*
Trading companies & distributors *(2 of 2)*

Please see page 48 for a list of non-responders in consumer discretionary.

131,042,539 tons CO_2e
Total scope 1 + 2 emissions 2013

-3.4%
Decrease in scope 1 & 2 emisssions since 2012

3.7%
of total G500 emissions

83/B Average disclosure score/performance band

The industrials sector is the fourth highest emitting sector. Companies are making large investments in research and development (R&D) as well as energy-efficiency projects, suggesting climate change is central in these companies' strategies. Industrials are both reducing their own carbon footprint as well as enabling emissions reductions throughout their value chain.

Industrial companies will play an important role in the transition to a low carbon economy: 97% of companies report that their products and services enable emissions reduction to third parties. For example, Hitachi has set a target to achieve an annual reduction of 100 million metric tons CO_2e through products and services by 2025, roughly equivalent to the annual emissions of a single large cement company. In many cases, more efficient and environmentally sound products are linked to more stringent regulation. 86% of industrials report regulation as an opportunity which could lead to increase in demand.

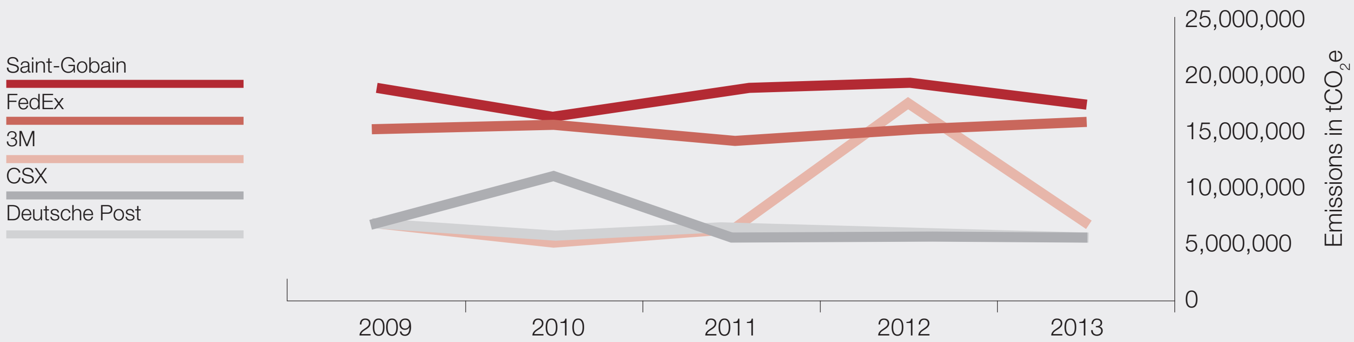
To respond to the demand for more efficient products, many companies have made substantial investments into R&D. Schneider Electric, for example, spent 4.4% of its revenue on R&D in 2012 (over €1 billion) while Rolls-Royce report £919 million of investments on R&D. Two thirds of Rolls-Royce's expenditure focused on improving the environmental performance of products and in particular on reducing emissions.

Although changing regulation is a key opportunity for the industrial sector, uncertainty surrounding new regulation simultaneously poses a threat to companies (32% of companies). 38% of them consider regulation a key risk. Carbon taxes, cap and trade schemes as well as fuel and energy regulation are the main risks reported by the companies. Industrials are likely to be impacted by cap and trade schemes and other carbon regulation due to high fuel and energy consumption rates.

At the same time, 19% of companies do not consider the potential impacts of climate-related regulation to be significant. For example, Las Vegas Sands Corporation has conducted an assessment of potential impacts of cap and trade schemes in the next 3-5 years, and concluded that the enforcement of cap and trade schemes remains uncertain and the potential impact is minor.

Due to the central role of regulation in the sectors' response to climate change and the influence the sector could have on climate change mitigation, companies are proactively engaging with policy makers, with all companies in the sector supporting climate policy and none of the companies stating that their position on climate change is inconsistent with the trade associations

Figure IN1. Historic scope 1 + 2 emissions performance of current largest industrial emitters



they engage with. Whether it is upcoming climate policy driving the deployment of green technologies (Siemens), increases in fuel prices shifting customers to rail transportation (CSX) or the compliance with new product standards (Schneider Electric), regulatory changes are a key driver for new business opportunities in industrials.

Figure IN2. Percentage of companies reporting a decrease from 2012 in total scope 1 and 2 emissions

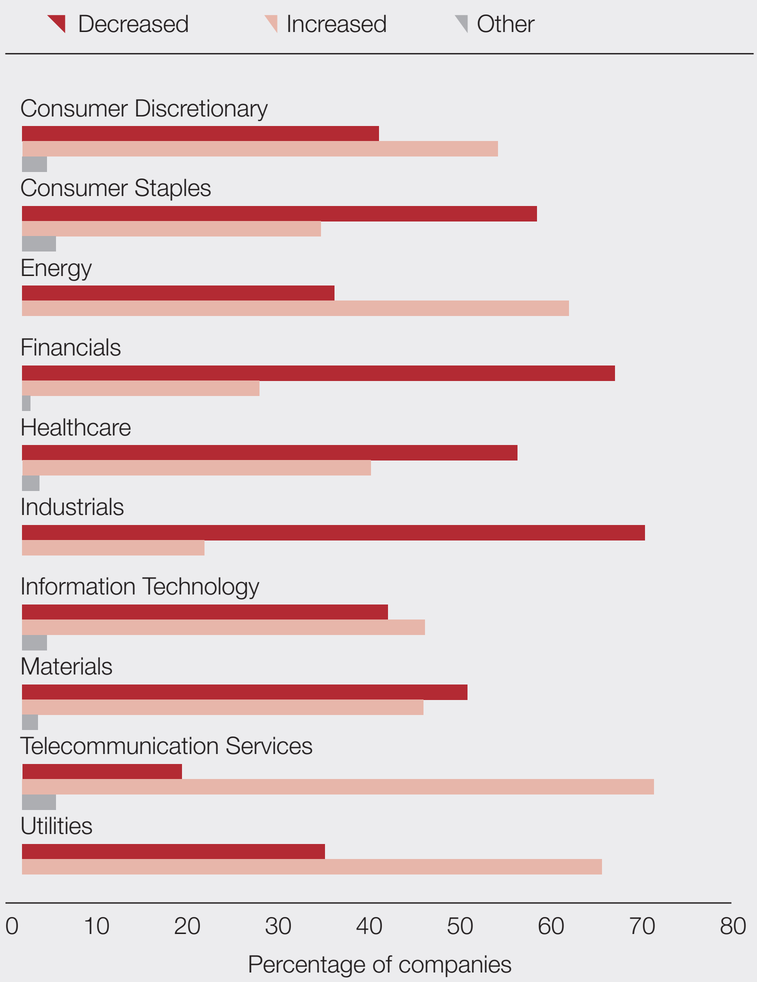


Figure IN3. Metric tons CO_2e per unit of revenue (US$) of the 10 largest companies by revenue in industrials (scope 1 & 2 emissions)

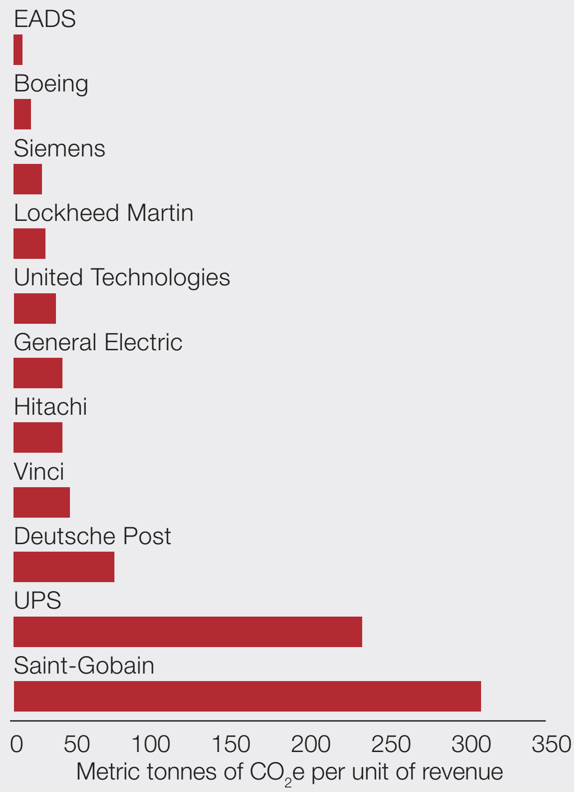


Figure IN4. Most commonly reported risks by industrial companies

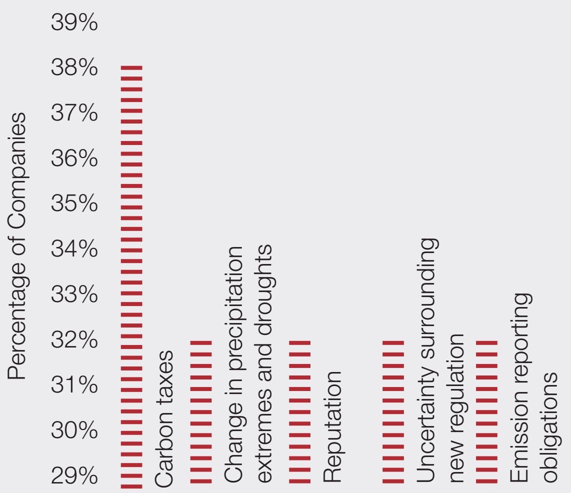
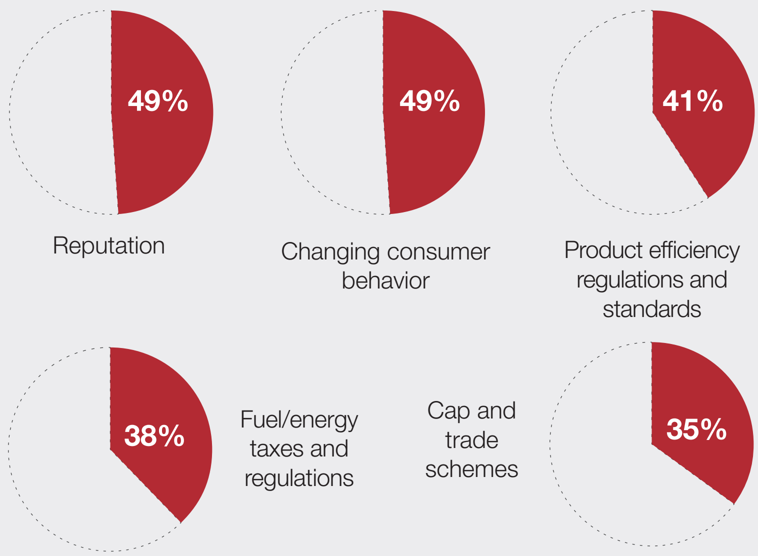


Figure IN5. Most commonly reported opportunities by industrial companies



Information Technology

RESPONSE RATE

85%

(28 OF 33)

KEY INDUSTRIES WITHIN THE SECTOR:

Communications equipment *(3 of 3);*
Computers & peripherals *(4 of 5);*
Electronic equipment, instruments & components *(3 of 4);*
Internet software & services *(3 of 5);*
IT services *(6 of 6);*
Semiconductors & semiconductor equipment *(3 of 4);*
Software *(6 of 6)*

Please see page 48 for a list of non-responders in Information Technology.

32,256,224 tons CO_2e
Total scope 1 + 2 emissions 2013

-21.9%
Decrease in scope 1 & 2 emisssions since 2012

0.9%
of total G500 emissions

80/B Average disclosure score/performance band

Information technology (IT) companies report that they offer products that assist third parties in avoiding emissions (89% of respondents, compared with the Global 500 average of 74%). Solutions include cloud services, outsourcing, systems implementations and software solutions.

IT companies reduced their scope 1 and 2 emissions significantly in 2012 (by 21.9%). However, almost half of this decrease was solely due to Samsung's divestment of its LCD business division which contributed to a 4 million tCO_2e decrease in its emissions.

Customers' expectations of environmentally-friendly products and corporate responsibility are driving good practice. IT companies believe that there are significant reputational benefits from taking strong climate change actions (39% highlight reputational opportunities and 50% highlight reputational risks).

The IT sector is striving to help consumers make choices which are less resource or carbon intensive. For instance, SAP's product footprint (including upstream and downstream emissions) is 28 times the size of its scope 1 and 2 emissions. The majority of the IT sector's effect on mitigating climate change will be through the delivery of less carbon intensive products. However, only 36% of companies report emissions data for use of sold products and processing of sold products. A number of IT companies report a drive to decouple growth from emissions and success in developing ranges of efficiency projects, from energy-saving improvements in their data centers and office to more fuel-efficient corporate cars.

Risks from climate change are relatively limited compared to other sectors. Regulatory risks are not expected to have a major impact on the sector as the sector's scope 1 and 2 emissions are comparatively small. However, 71% of IT companies report that physical risks could be significant – through disruption of supply chains and manufacturing processes. Leaders are responding by measuring the impact of their supply chain on the environment and assessing the resilience of their supply chains to physical risks.

The main opportunities reported are primarily around product development (43% of respondents report opportunities that could lead to new products and services). These are both due to consumer demand (environmentally conscious customers, reputation) and the development of new products in order to improve business continuity in case of physical natural disasters.

Figure IT1. Historic scope 1 + 2 emissions performance of current largest information technology emitters

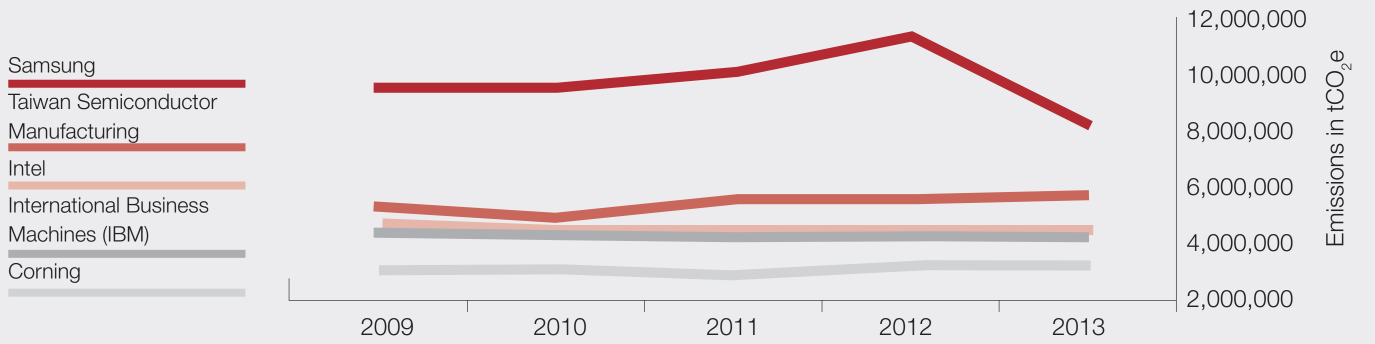
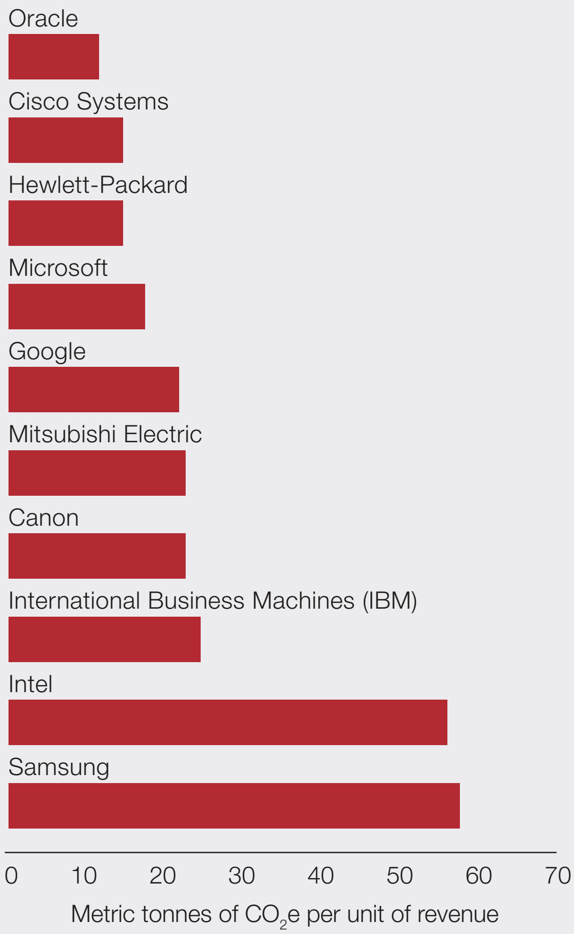


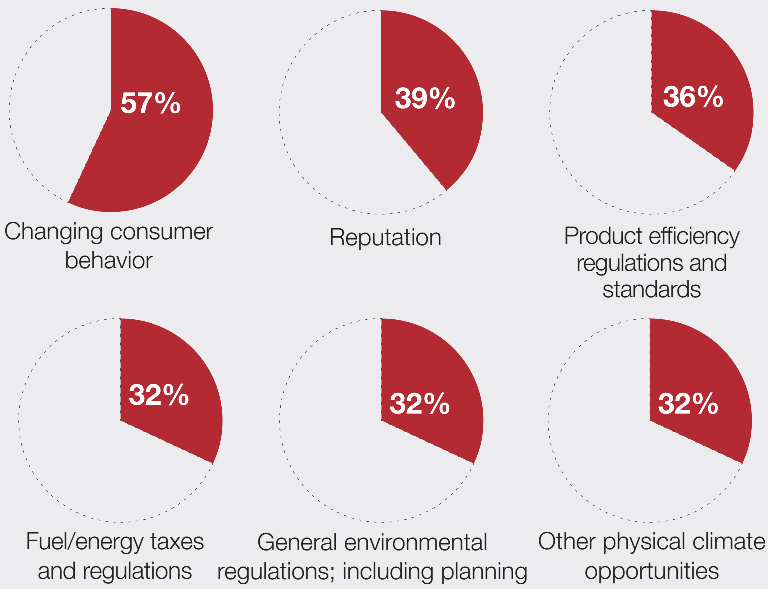
Figure IT2. Metric tons CO_2e per unit of revenue (US$) of the 10 largest companies by revenue in information technology (scope 1 & 2 emissions).



> *SAP anticipates that increasing regulation at the global level, including potential UNFCCC successor agreements to the Kyoto Protocol, will significantly increase the need for business process and reporting automation. [...] SAP anticipates that during the negotiation phase leading up to 2015, we are likely to see an increase in sector based initiatives to agree voluntary CO_2 reduction commitments as industry makes a proactive attempt to shape the smartest regulation possible.*
>
> **SAP**

Figure IT3. Most commonly reported risks by information technology companies

Figure IT4. Most commonly reported opportunities by information technology companies



Materials

RESPONSE RATE

90%

(35 OF 39)

KEY INDUSTRIES WITHIN THE SECTOR:

Chemicals *(15 of 16);*

Construction materials *(2 of 3);*

Metals & mining *(18 of 20);*

Please see page 48 for a list of non-responders in materials.

935,470,845 tons CO_2e

Total scope 1 + 2 emissions 2013

+13.1%

Increase in scope 1 & 2 emisssions since 2012

26.2%

of total G500 emissions

84/B Average disclosure score/performance band

The materials sector is the third highest emitting sector. 74% of companies report being highly exposed to regulatory risks, such as carbon taxes, given their high emissions and the global nature of the majority of their businesses.

Anglo American, for example, estimates that the carbon cost of its Metallurgical Coal business in Australia could range between US$7 million in 2012 and US$69 million by 2016. BASF states that roughly 50% of its global emissions are covered by the EU ETS, which it sees as its main regulatory risk. In addition, the current uncertainty around international, legally-binding, regulation can be a barrier to entry for companies with global operations and companies report a careful monitoring of changes in legislation. Mining companies, in particular, are also concerned about losing their license to operate and reputation is therefore seen as a significant risk (63% of companies).

Reducing their overall emissions can therefore significantly reduce liabilities to carbon taxes. As such, a majority (89%) of companies offer monetary incentives for energy efficiency and emission reductions. BHP Billiton's annual remuneration review takes into account performance against carbon targets. At Kumba Iron Ore, 25% of the CEO's performance targets are weighted towards key performance indicators including energy and water saving targets.

Among leading companies, there is therefore a trend towards renewable power generation in order to reduce the fuel costs. 92% of companies disclosed an emissions reduction target, although there is a tendency towards shorter term targets (more than half do not have targets with timeframes beyond 2012). This might reflect the uncertainty around long term regulation.

Companies also have high research and development budgets for green and low carbon products. For example, Arcelor Mittal notes that its commitment to a collaborative French research program on low impact steelmaking is US$16.7 million out of a total US$41.2 million budget. Government support also helps the development of new technologies. BASF reports German Government sponsored projects for innovating in the field of e-mobility. However, on the whole, emissions decreases by companies are relatively insignificant and some increases in this sector are substantial (e.g. a 450% increase for First Quantum Minerals Limited). This is because companies' operations are frequently carbon intensive and they are finding it difficult to decouple financial growth from emissions growth.

36% of companies engage with trade associations and 22% of companies fund research organizations, although companies' motivations for doing so vary. A majority of companies emphasize positive engagement on climate change but often lobby in order to protect their business interests, for example by minimizing

Figure MA1. Historic scope 1 + 2 emissions performance of current largest materials emitters

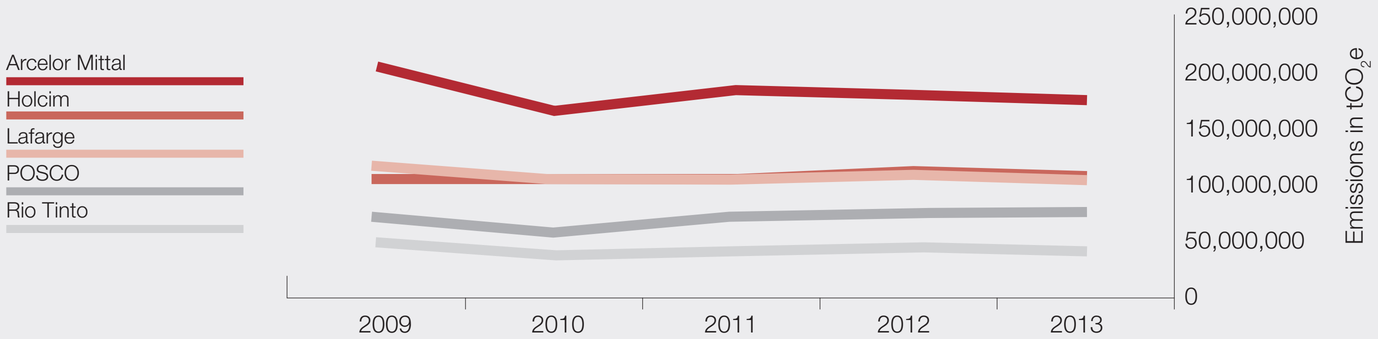
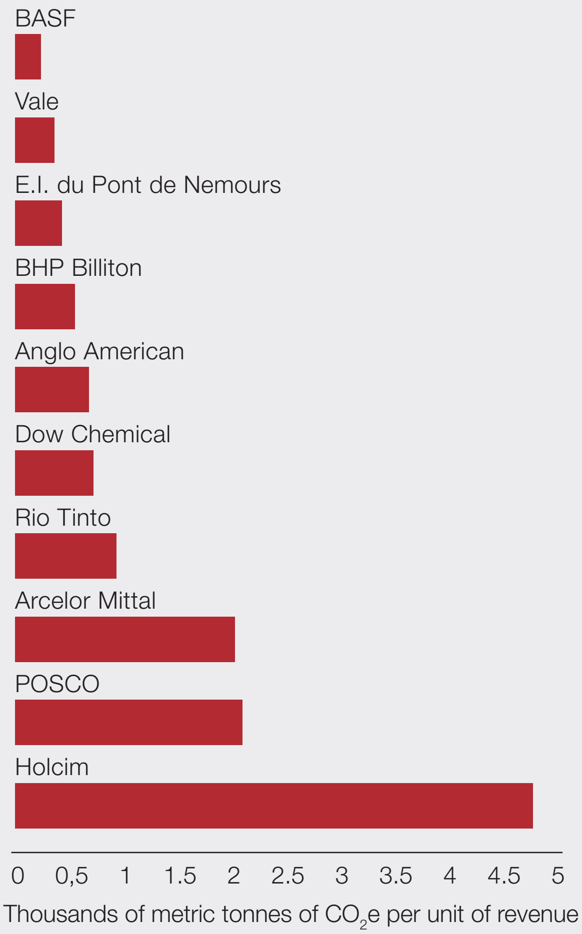


Figure MA2. Metric tons CO_2e per unit of revenue (US$) of the 10 largest companies by revenue in materials (scope 1 & 2 emissions)



> *Anglo American Platinum has a number of projects in differing stages of development that could be taken forward as CDM projects. These include electric drilling, solar water heating, various compressor efficiency and pumping projects and the installation of a thermal co-generation heat recovery process on a high-pressure cooling system.*
>
> **Anglo American**

reporting or protecting competitiveness. Overall, the materials sector is still supportive of climate policy, with 71% of companies supporting climate legislation. While motivations might vary, a level international playing field for an emissions-intensive sector might be the common denominator that will drive change in materials companies.

Figure MA3. Most commonly reported risks by material companies

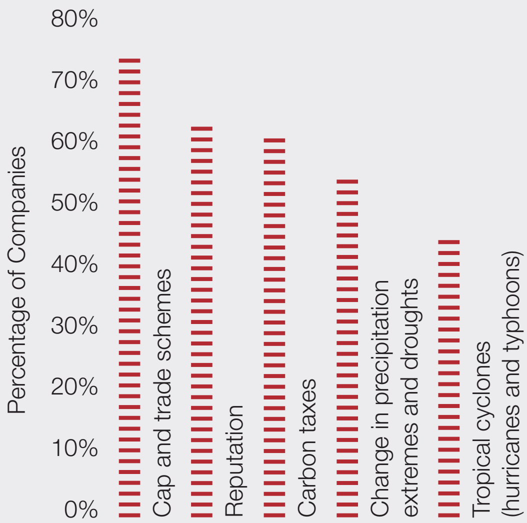
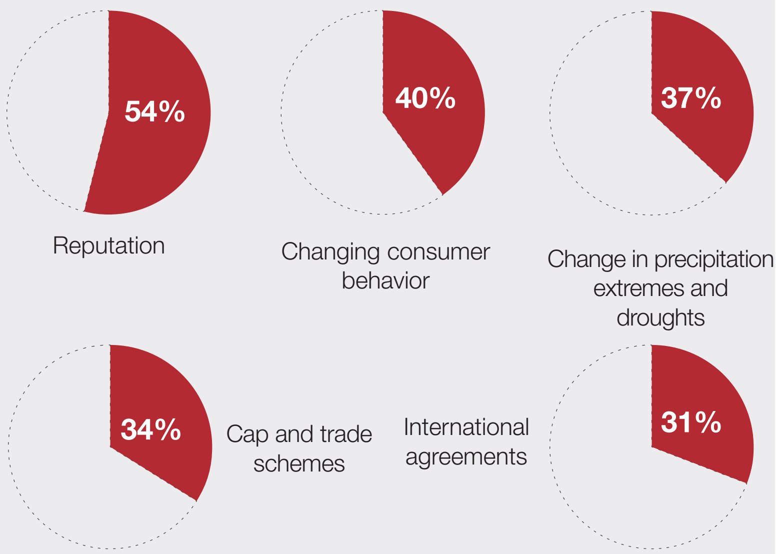


Figure MA4. Most commonly reported opportunities by material companies



Telecommunication Services

RESPONSE RATE

66% **(21 OF 32)**

KEY INDUSTRIES WITHIN THE SECTOR:

Diversified telecommunication services *(16 of 20);*

Wireless telecommunication services *(5 of 12);*

Please see page 48 for a list of non-responders in telecommunication services.

38,880,590 tons CO_2e

Total scope 1 + 2 emissions 2013

-0.6%

Decrease in scope 1 & 2 emisssions since 2012

1.1%

of total G500 emissions

81/B Average disclosure score/performance band

> *Opportunities exist for our customers to reduce their carbon emissions through the use of our products and services. Telstra is quantifying the impacts and benefits of ICT to manage and reduce carbon emissions for both its own operations and for its customers.*
>
> **Telstra Corporation**

By helping others avoid emissions, most telecommunication service companies see themselves as *"part of the solution to climate change"* (TeliaSonera). Every telecommunications company stated that their products help to avoid emissions, giving examples of green solutions such as cloud computing, video conferencing, smart building management and smart electrical grids.

Virtually all telecommunication services companies refer to the GeSI SMARTer2020 report which suggests that increased use of ICT could reduce global emissions by 16.5% by 2020. This would be equivalent to US$1.9 trillion in energy and fuel savings. Companies are innovating to meet this potential:

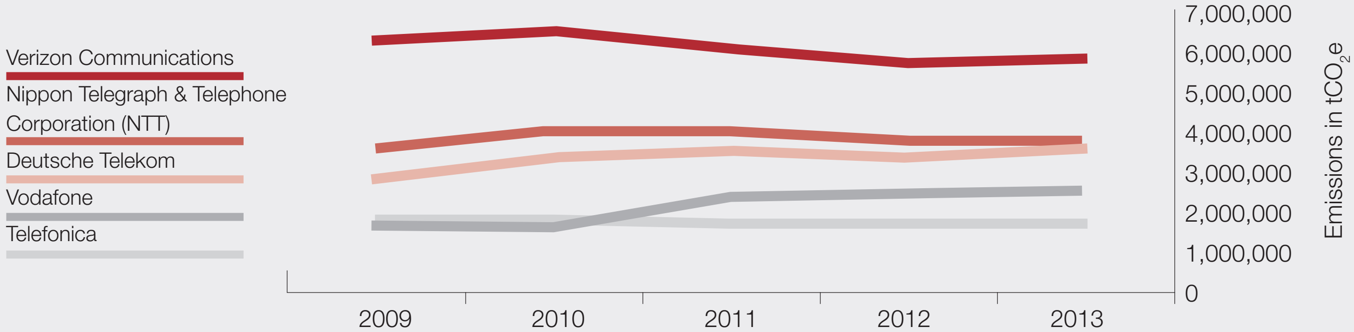
BT Group has a Director of Carbon & Energy, whose personal annual pay and bonus is linked to energy and carbon reduction targets.

While the majority (91%) of companies have emissions reduction targets, 70% of companies also reported an increase in emissions. Telecommunication services companies justify this by explaining that this increase in their own emissions will be compensated by the overall decreases resulting from the use of their products, and suggesting that overall global emissions are lower than they would be in a business as usual scenario.

Telecommunication services companies report a wide range of risks and opportunities: reputation is the most frequently reported risk in the sector (76% of companies). However, regulatory issues such as carbon taxes, fuel and energy pricing as well as emissions reporting obligations are also frequently reported. Deutsche Telekom states that, since the emissions of ICT companies are comparable to the emissions from aviation, an involvement of the sector in the EU ETS might be a possibility in the future.

Carbon taxes are both a risk and an opportunity: a risk due to their own emissions but an opportunity due to a growth in other companies' use of telecommunication companies' products in order to reduce their own emissions.

Figure TC1. Historic scope 1 + 2 emissions performance of current largest telecommunications services emitters



Similarly, extreme weather events also present telecommunication companies with both risks and opportunities too: natural disasters might provide an additional requirement for governments to be prepared to help populations communicate during extreme weather events. On the other hand, France Telecom notes that physical risks to infrastructure could increase operational costs by 9% by 2020.

Figure TC2. 100% of telecommunication services companies report that their products or services avoid others' emissions

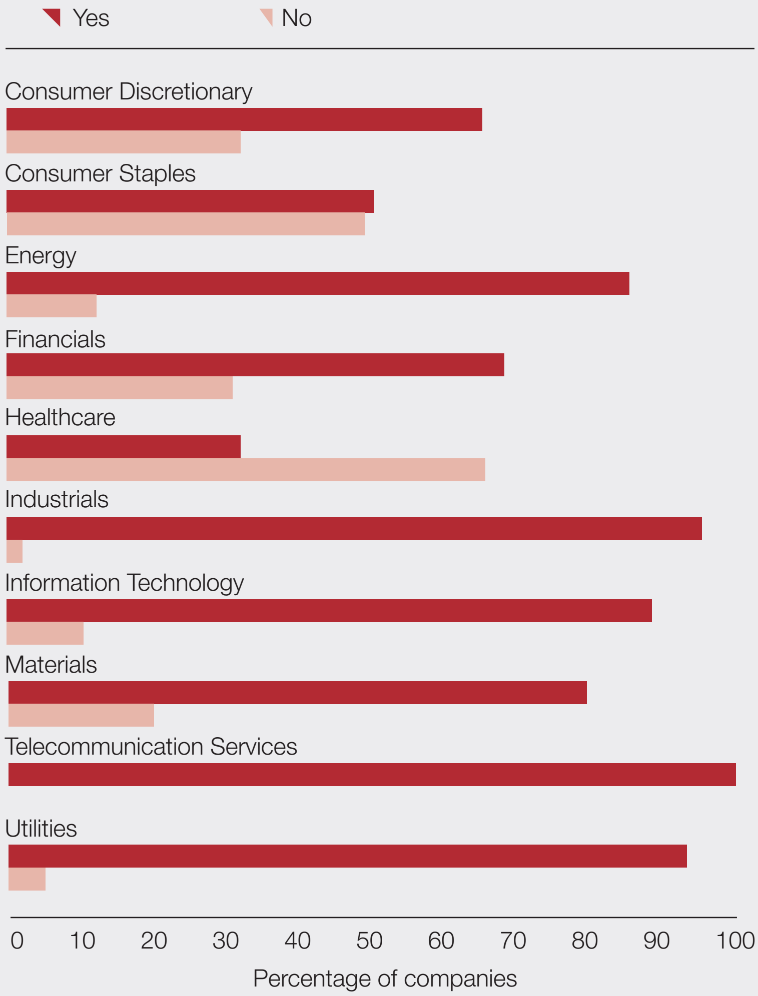


Figure TC3. Metric tons CO_2e per unit of revenue (US$) of the 10 largest companies by revenue in telecommunication services (scope 1 & 2 emissions)

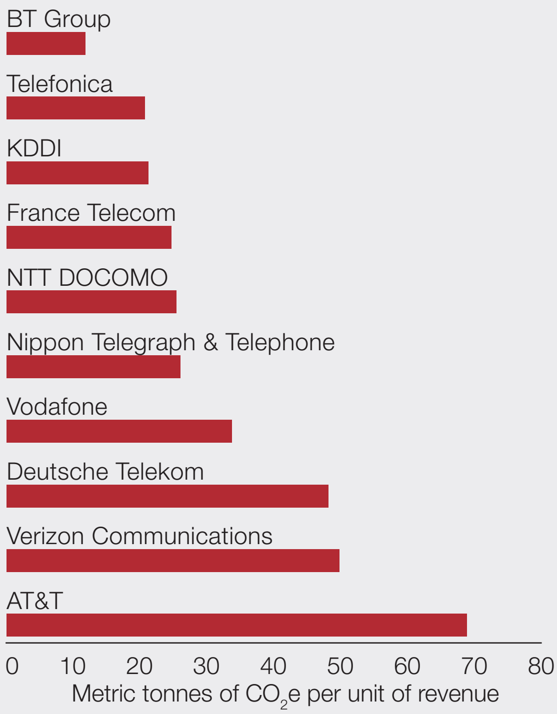


Figure TC4. Most commonly reported risks by telecommunication services companies

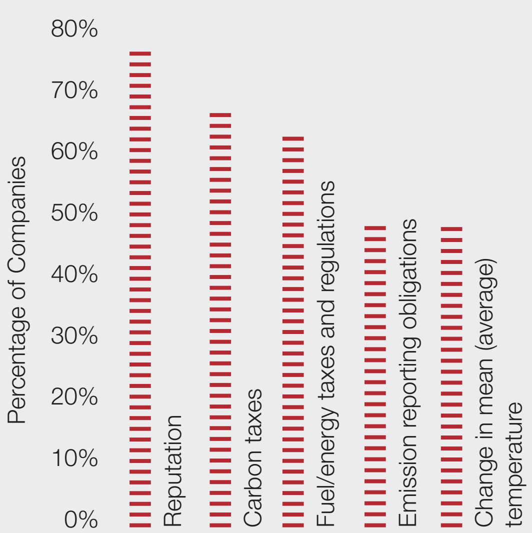
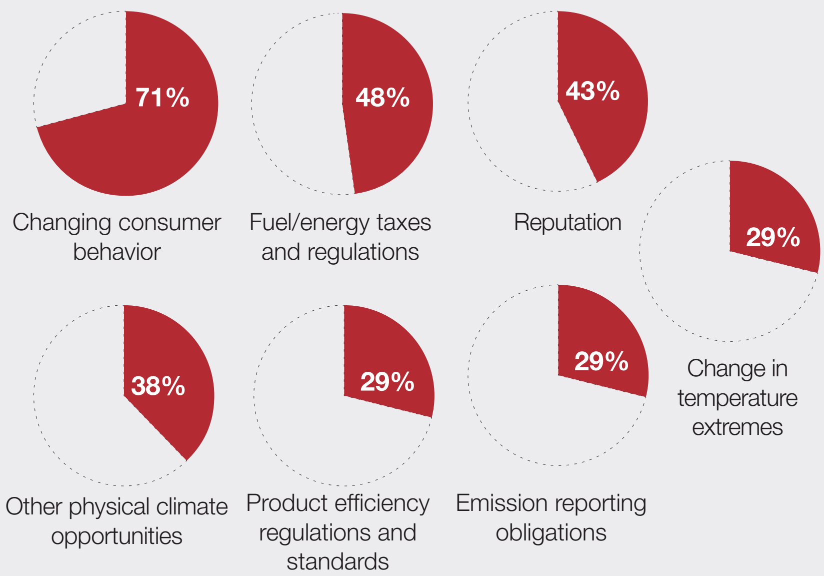


Figure TC5. Most commonly reported opportunities by telecommunication services companies



Utilities

RESPONSE RATE

74% **(17 OF 23)**

KEY INDUSTRIES WITHIN THE SECTOR:

Electric utilities *(13 of 16);*
Gas utilities *(1 of 2);*
Independent power producers & energy traders *(0 of 1);*
Multi-utilities *(3 of 4);*

Please see page 48 for a list of non-responders in utilities.

1,179,373,276 tons CO_2e
Total scope 1 + 2 emissions 2013

-10.2%
Decrease in scope 1 & 2 emisssions since 2012

33%
of total G500 emissions

91/B Average disclosure score/performance band

Despite being the highest emitting sector utilities are investing in low carbon generation and providing products or services that promote energy efficiency and savings among their customers. Given their size, small improvements in energy efficiency by utilities can have a large impact on overall emissions.

Total scope 1 and 2 emissions have decreased by 1.3 million metric tons CO_2e in absolute terms, mostly due to changes in the Global 500 population. However, two thirds of utility companies have increased their emissions since last year. For example, Enel's emissions have increased by 4.1% due to a higher consumption of fossil fuels. Companies note that energy efficiency programs (CERT & CESP) and employee engagement programs are critical to limiting emissions growth. Some also reported a change of their energy mix towards more renewable energy and the allocation of large budgets to low carbon product development.

The sector demonstrates a comparatively sophisticated response to climate change, with all companies having emissions reduction targets and (41%) of companies having long term targets beyond 2020. Most (76%) of these are intensity targets, which reflects the industry's difficulty in decoupling emissions from growth. To address this, companies not only focus on energy consumption to reduce emissions and increase energy efficiency but also, for example, water efficiency (e.g. for cooling).

Utility companies are acutely aware of the risks and opportunities from climate change. Risks to the sector include uncertainty surrounding regulation (76% of companies) as well as cap and trade schemes (71% of companies). Centrica, for example, states that the company is exposed to significant regulatory risk because, in highly regulated markets, external policy decisions or changes to regulatory regimes or industry procedures could fundamentally affect its commercial operations. RWE states that international agreements, such as an extension of the Kyoto Protocol, would help to keep a level playing field for all market participants. Furthermore, seasonal changes in precipitation and temperature, which could affect seasonal demand, are also highlighted as a significant risk.

The main opportunities reported by utilities involve reputation, changing customer behavior and regulatory opportunities surrounding international agreements. For example, E.ON states that its strategic focus on cleaner energy will strengthen its brand image and credibility among its key stakeholders. Furthermore, it estimates that 60% of its top shareholders have advanced requirements in terms of environmental, social and governance issues.

Figure UT1. Historic scope 1 + 2 emissions performance of current largest information technology emitters

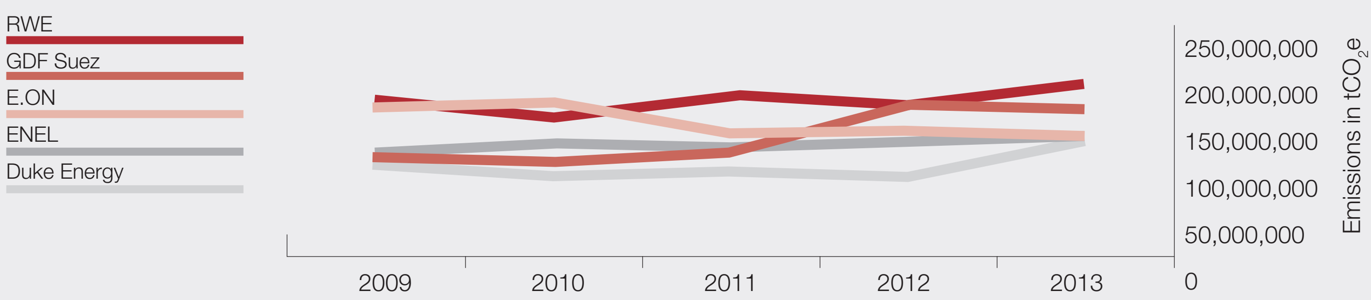
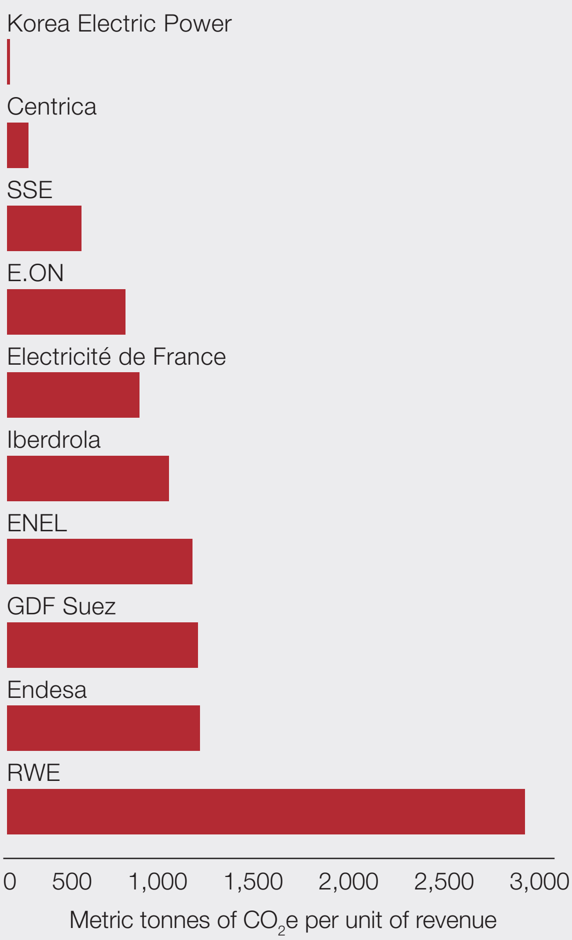


Figure UT2. Metric tons CO_2e per unit of revenue (US$) of the 10 largest companies by revenue in utilities (scope 1 & 2 emissions)



> *RWE as other electric utilities are expected to deliver their contribution to reduce CO_2 emissions. The way we contribute to the common goal to reduce CO_2 emissions influences our reputation significantly.*
>
> **RWE**

Utilities engage with policymakers more than any other sector. They have set up working groups for special programs (e.g. Green Deal & Energy Company Obligation in the UK, 'Roadmap to 2050' in the EU or support of international treaties) which aim to inform the setting of climate targets. 76% of companies fund research organizations, 94% engage with trade associations and all report direct engagement with governments. 88% of companies state that their approach to climate change is consistent with the position of trade associations.

Finally, utility companies are looking at their whole value chain and are helping customers avoid emissions through a wide range of products and services that promote energy efficiency and savings. These include supplying steam to industrial customers at cogeneration facilities, generating renewable electricity or delivering Renewable Energy Certificates.

Figure UT3. Most commonly reported risks by information technology companies

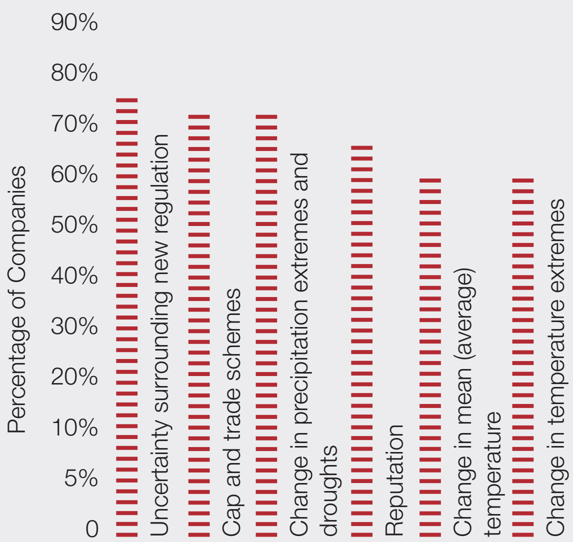
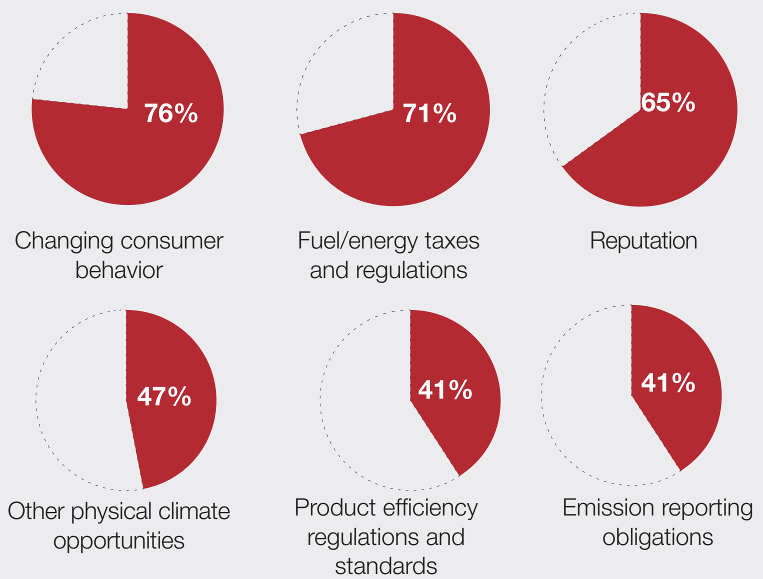
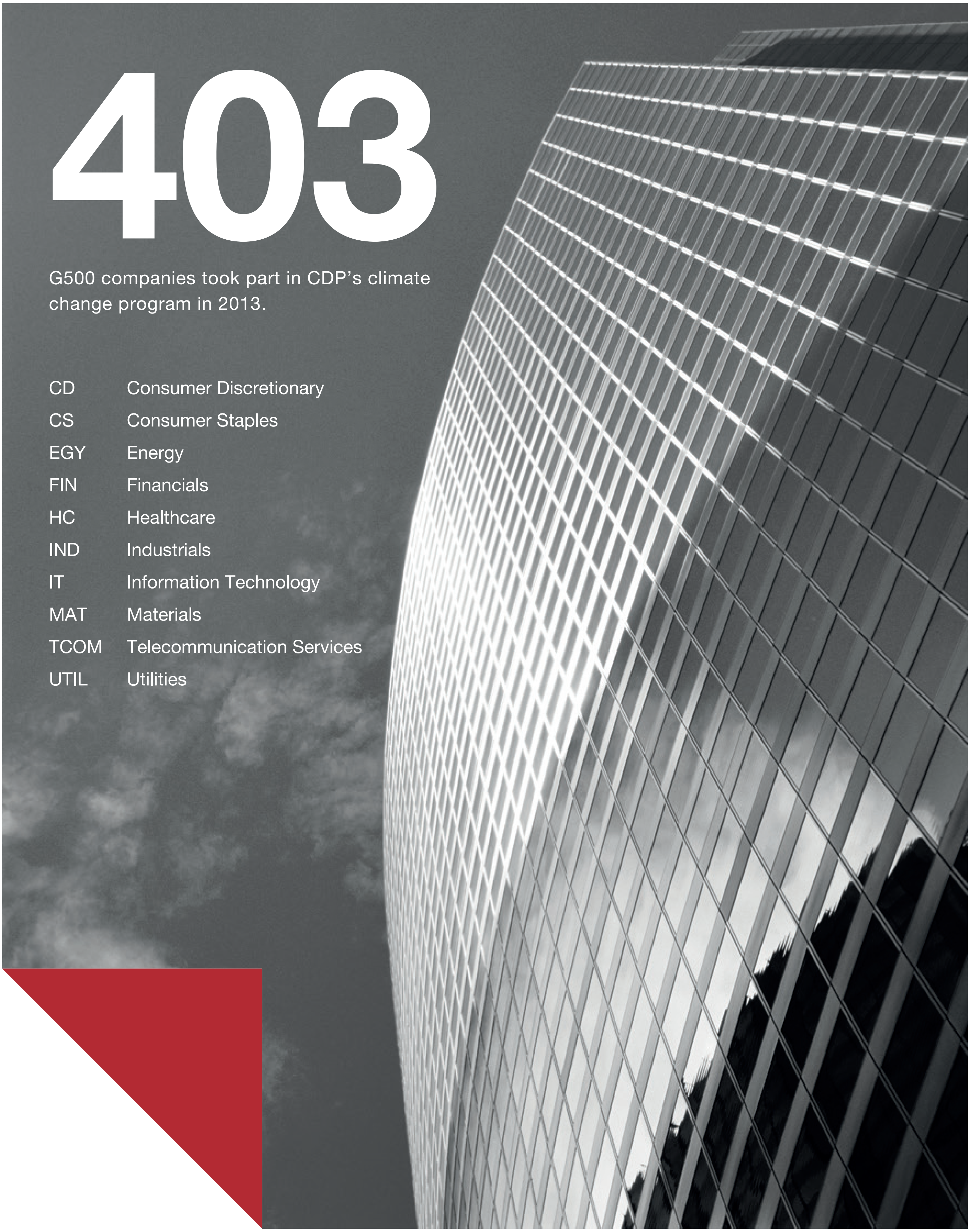


Figure UT4. Most commonly reported opportunities by information technology companies



Key Disclosure Statistics



403

G500 companies took part in CDP's climate change program in 2013.

CD	Consumer Discretionary
CS	Consumer Staples
EGY	Energy
FIN	Financials
HC	Healthcare
IND	Industrials
IT	Information Technology
MAT	Materials
TCOM	Telecommunication Services
UTIL	Utilities

Key disclosure statistics

Figure KS1 is based on the sample of 403 companies. This includes companies that reference a holding company's response. Analysis in the remainder of this report is based on 389 responses received by 1st July 2013 and does not include companies that reference a holding company's response.

The number of companies disclosing scope 1 or 2 emissions includes those that have disclosed their emissions as zero.

Scope 2 figures for 2013 are not directly comparable with 2012 as companies can now incorporate the specific emissions factors associated with renewable energy purchases where supported by appropriate tracking instruments.

Climate Change Reporting Framework

The Climate Disclosure Standards Board (CDSB), a special project of CDP, is an international organization committed to the integration of climate change-related information into mainstream corporate reporting.

CDSB's internationally accepted Climate Change Reporting Framework is designed for use by companies in making disclosures in, or linked to, their mainstream financial reports about the risks and opportunities that climate change presents to their strategy, financial performance and condition.

Designed in-line with the objectives of financial reporting and rules on non-financial reporting, the Climate Change Reporting Framework offers a leading example of how to apply the principles of integrated reporting with respect to reporting on climate change. Learn more about CDSB's work and download the Framework from their website **www.cdsb.net**.

Figure KS1: Year-on-year number of companies responding to CDP publicly and privately

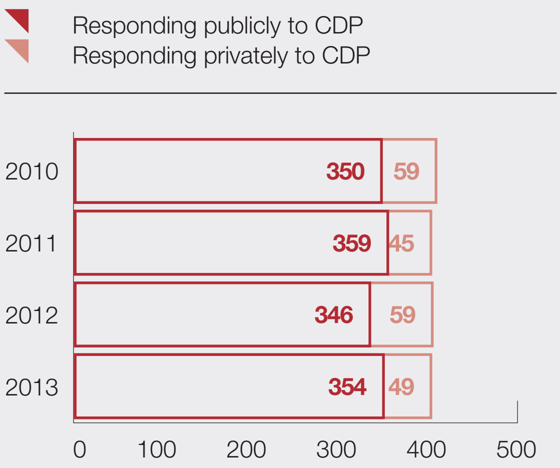


Figure KS2: Percentage response rate by sector

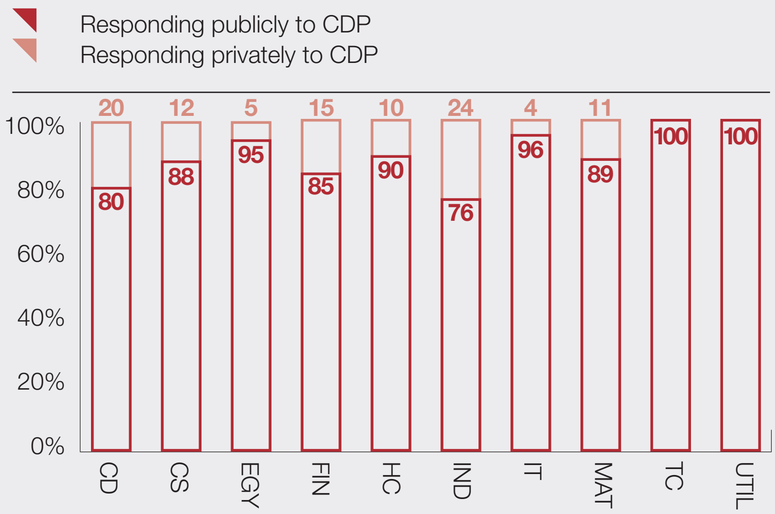
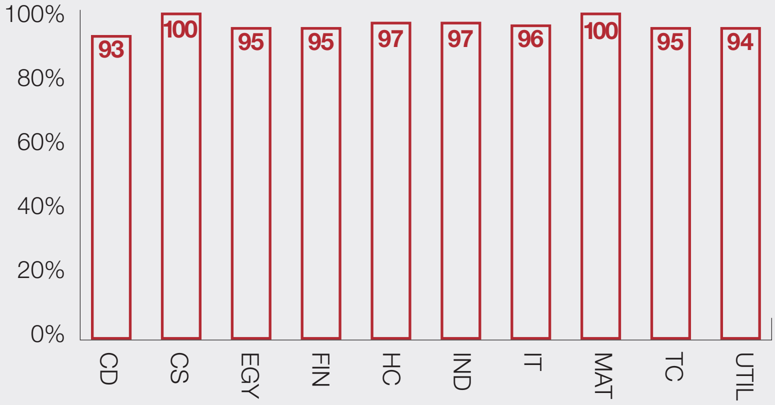


Figure KS3: Year on year number of companies disclosing scope 1 or scope 2 GHG emissions

Figure KS4: Percentage of responding companies in each sector disclosing scope 1 or scope 2 GHG emissions



Key Emissions Statistics

Total scope 1 and 2 emissions have dropped by 72 million metric tons CO_2e since 2012, although this is partly due to a change in reporting sample and a drop in the number of respondents from the heaviest emitting sectors (energy, materials, utilities).

Due to a change in the approach for scope 2 accounting, scope 2 figures for 2013 are not comparable with 2012 as companies can now incorporate the specific emissions factors associated with renewable energy purchases where supported by appropriate tracking instruments.

Only companies reporting scope 3 emissions using the Greenhouse Gas Protocol Corporate Value Chain (scope 3) Accounting and Reporting Standard named categories have been included below. In addition, only those categories for which emissions figures that are greater than zero and identified as relevant have been included.

CDP has been working to encourage greater levels of third party verification/assurance of data in response to demands for higher levels of data quality. The term "reported and approved" refers to the fact that the number of companies with verification is based on the scoring of the verification statements attached to their response. Where companies report verification/assurance of more than one scope, they are counted only once in the statistic provided below.

Figure KS5: Total scope 1 emissions reported by responding G500 companies

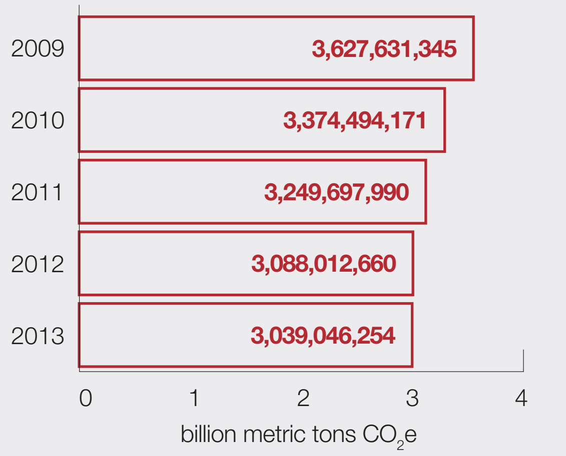


Figure KS6: Total scope 2 emissions reported by responding G500 companies

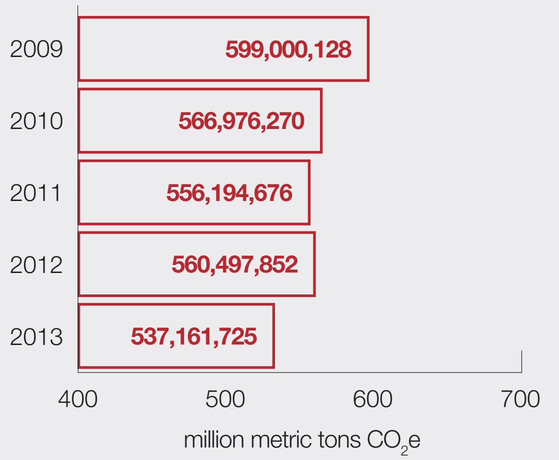


Figure KS7: Total scope 1 emissions reported by responding G500 companies (billion metric tons CO_2e)

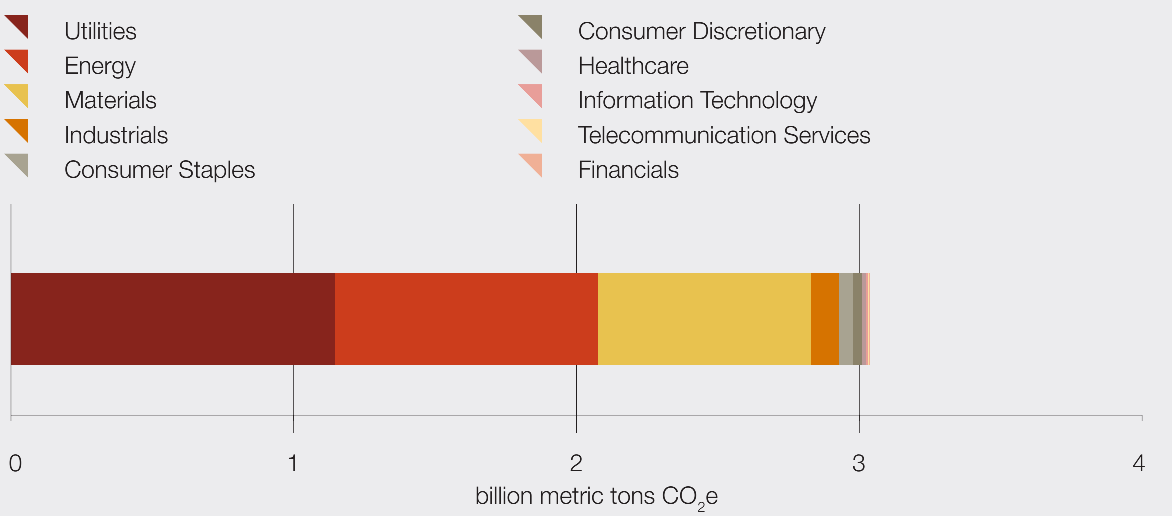


Figure KS8: Total scope 2 emissions reported by responding G500 companies (million metric tons CO_2e)

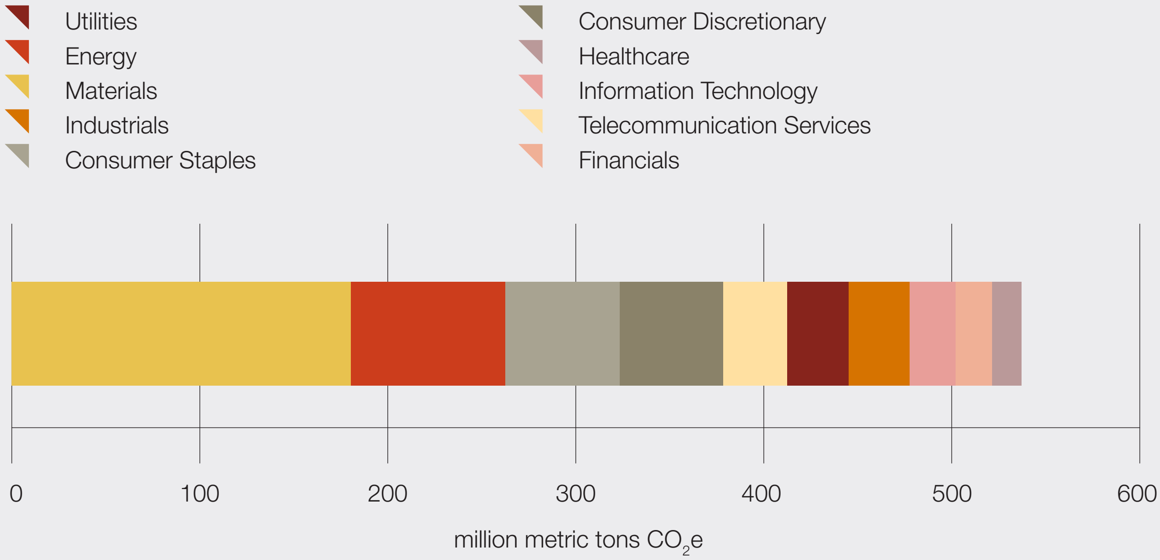


Figure KS9: Number of companies reporting 'relevant and calculated' scope 3 categories [12]

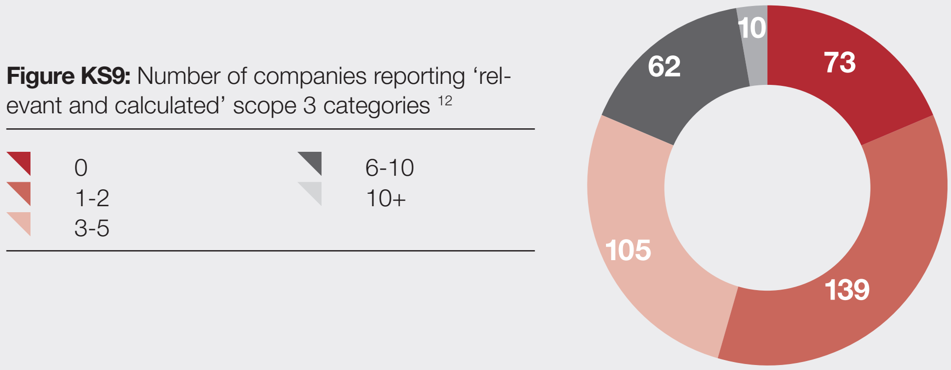
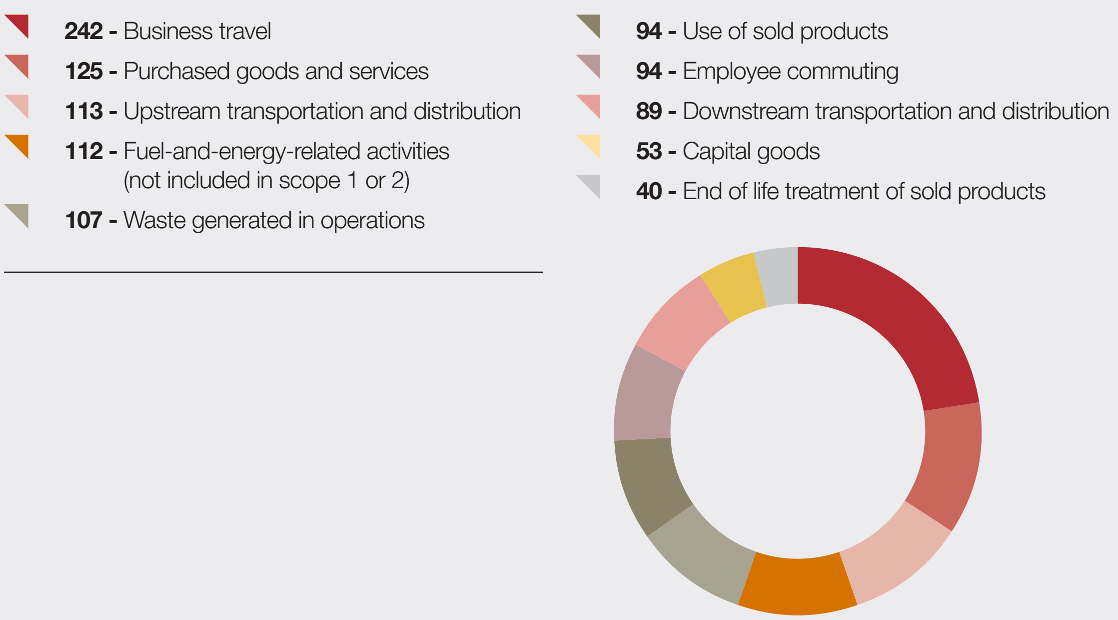


Figure KS10: 10 most commonly reported scope 3 categories (with emissions data)



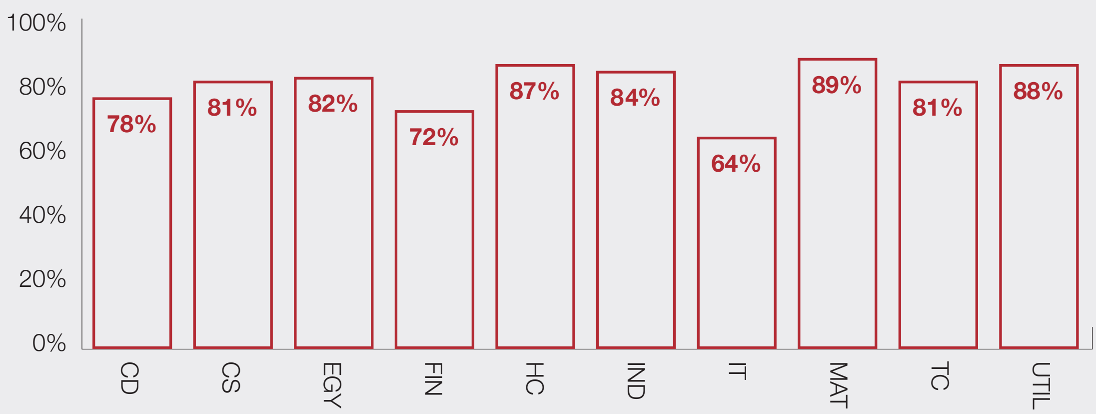
12 Analysis covers scope 3 emissions categories that have been calculated and are considered relevant by the responding companies, indicated by the "relevant, calculated" option in question 14.1 of the questionnaire.

Key Emissions Statistics *continued*

Figure KS11: Verification/assurance of emissions complete or underway and full points awarded

Companies with verification/assurance approved, verification/assurance underway
Companies reporting first year verification has taken place

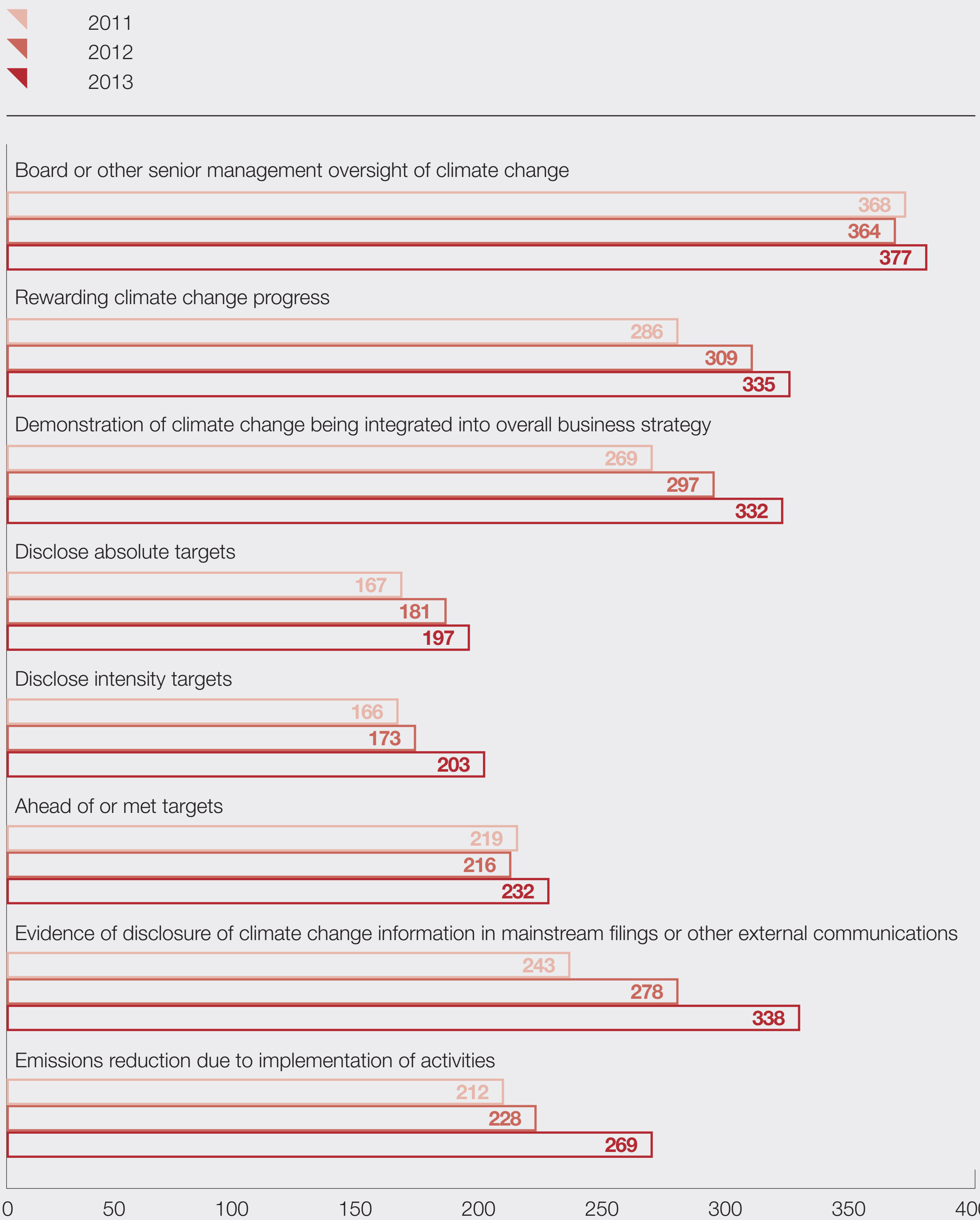
Figure KS12: Percentage of companies with verification/assurance per sector



CD	Consumer Discretionary	IND	Industrials
CS	Consumer Staples	IT	Information Technology
EGY	Energy	MAT	Materials
FIN	Financials	TCOM	Telecommunication Services
HC	Healthcare	UTIL	Utilities

Key Best Practice Statistics

Figure KS13: Key performance statistics



Companies disclosing absolute or intensity targets have been included in this section only where they have been fully described, providing base year, target year, percentage reduction and for intensity targets, target metric.

Companies may report multiple emissions reductions due to implementation of activities, targets and reward incentives. In all of these cases, companies are counted only once in the statistics presented above, with the exception of the statistics on absolute and intensity targets where companies that have both types of target will be counted once in each type.

Key Best Practice Statistics *continued*

Figure KS14: Percentage of responding companies with board or other senior management oversight by sector

Individual/sub-set of the Board or other committee appointed by the Board
Other manager/officer or senior officer

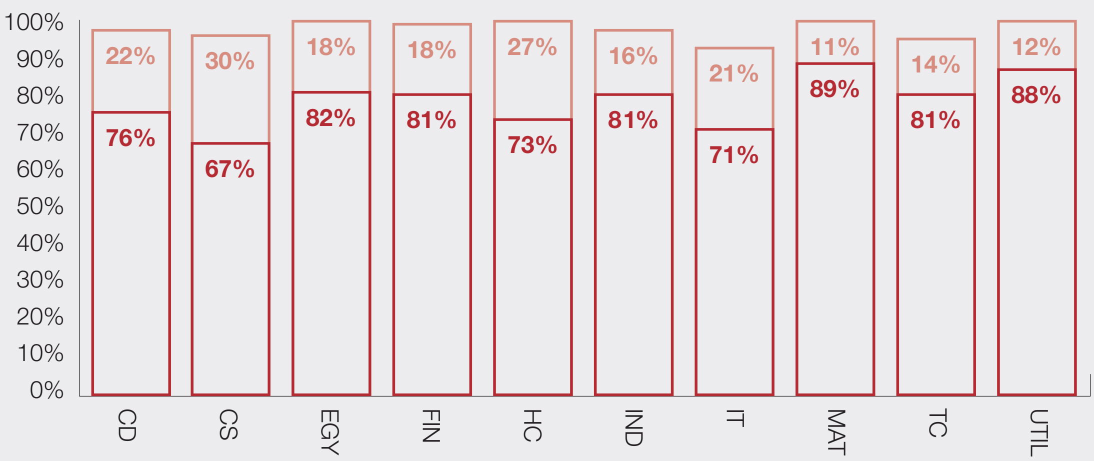


Figure KS15: Percentage of responding companies rewarding climate change progress by sector

Monetary
Non-monetary only

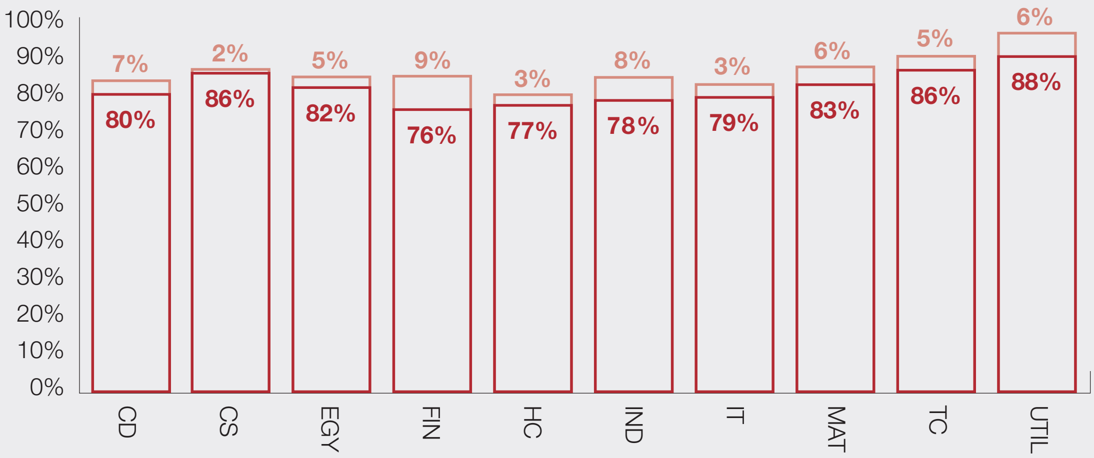


Figure KS16: Percentage of responding companies demonstrating climate change being integrated into overall business strategy

Figure KS17: Percentage of responding companies disclosing absolute targets by sector

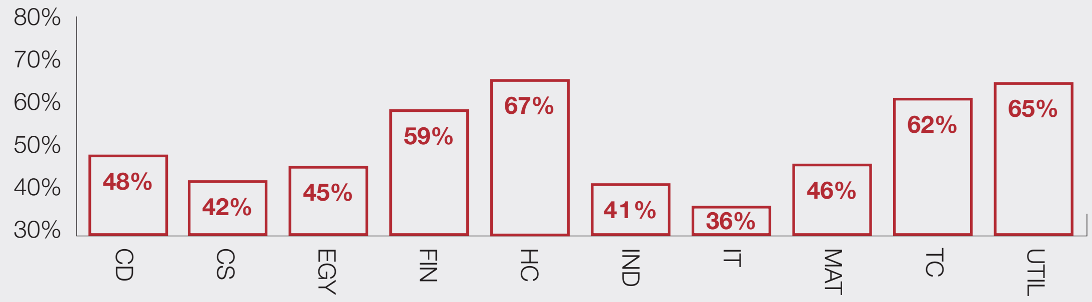


Figure KS18: Percentage of responding companies disclosing intensity targets by sector

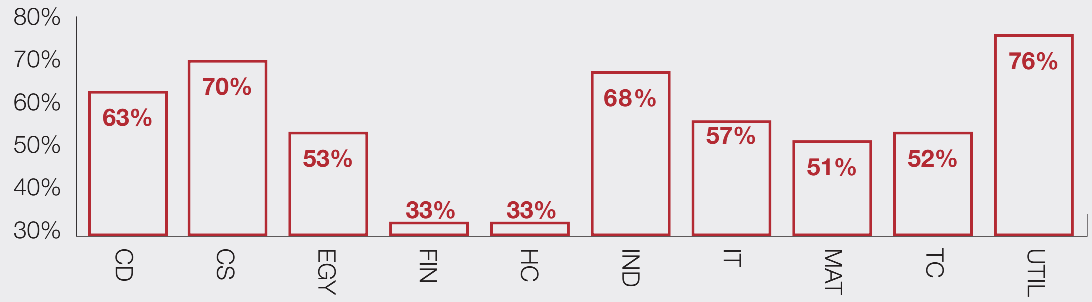


Figure KS19: Percentage of responding companies ahead of or having met targets by sector

Figure KS20: Percentage of responding companies with evidence of disclosure of climate change information in mainstream filings or other external communications by sector

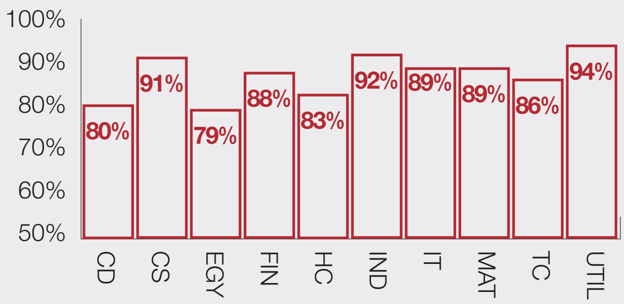
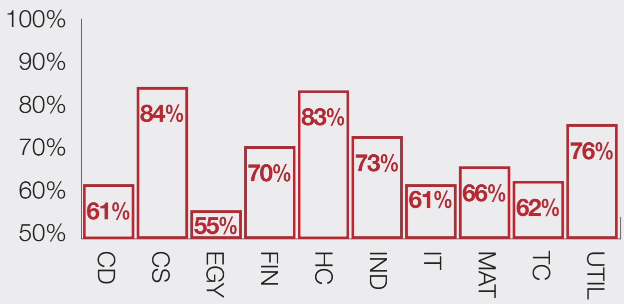


Figure KS21: Percentage of responding companies with emissions reductions due to implementation of activities by sector



Appendix I - Non-responding companies

Company name	Country	2013 Status
Consumer Discretionary		
Amazon.com	USA	NR
Belle International	Greater China	NR
Comcast	USA	IN
Fast Retailing	Japan	NR
Hermes International	France	NR
Kia Motors	South Korea	DP
Kinder Morgan.	USA	NR
Luxottica Group	Italy	DP
Prada	Italy	NR
Priceline.Com	USA	NR
S.A.C.I. Falabella	Chile	NR
Sands China	Greater China	NR
Time Warner Cable	USA	NR
Consumer Staples		
Archer Daniels Midland	USA	NR
Magnit	Russia	DP
Want Want China Holdings	Greater China	NR
Energy		
China Petroleum & Chemical	Greater China	NR
Coal India	India	NR
EOG Resources	USA	IN
Formosa Petrochemical	Greater China	NR
Lukoil	Russia	DP
Marathon Oil	USA	NR
Marathon Petroleum	USA	IN
National Oilwell Varco	USA	NR
Oil & Natural Gas	India	NR
Phillips 66	USA	NR
Reliance Industries	India	NR
Rosneft	Russia	NR
Tenaris	Luxembourg	NR
Valero Energy	USA	IN
Williams Companies	USA	NR
Financials		
AIA	Greater China	NR
Bank Central Asia	Indonesia	NR
Bank Mandiri	Indonesia	NR
Bank of China	Greater China	NR
BB&T	USA	NR
Berkshire Hathaway	USA	NR
Cheung Kong	Greater China	NR
China Construction Bank	Greater China	NR
China Life Insurance	Greater China	NR
China Overseas Land & Investment	Greater China	NR
CIMB	Malaysia	NR
DBS	Singapore	NR
Discover Financial Services	USA	IN
Equity Residential	USA	DP
General Growth Properties	USA	NR
GRUPO FINANCIERO INBURSA-O	Mexico	NR
Housing Development Finance	India	NR
ICICI Bank	India	NR
Picc Property & Casualty	Greater China	NR
Public Bank BHD	Malaysia	NR
Public Storage	USA	NR
Sampo Oyj	Finland	NR
Sberbank	Russia	NR
Siam Commercial Bank PCL	Thailand	NR
Sun Hung Kai Properties	Greater China	NR
United Overseas Bank	Singapore	NR
VTB Bank	Russia	NR
Wharf Holdings	Greater China	NR

Company name	Country	2013 Status
Healthcare		
Alexion Pharmaceuticals	USA	NR
Gilead Sciences	USA	NR
Intuitive Surgical	USA	NR
McKesson	USA	DP
Express Scripts Holding	USA	DP
Valeant Pharmaceuticals International	Canada	NR
Industrials		
Caterpillar	USA	IN
FANUC	Japan	NR
General Dynamics	USA	NR
Grupo Mexico B. de CV	Mexico	NR
Hutchison Whampoa	Greater China	NR
Jardine Matheson	Greater China	NR
Jardine Strategic	Greater China	NR
Precision Castparts	USA	NR
Information Technology		
Apple	USA	NR
ASML Holding	Netherlands	DP
Facebook	USA	NR
Tencent Holdings	Greater China	NR
Materials		
LyondellBasell Industries	Netherlands	NR
MMC Norilsk Nickel	Russia	DP
Siam Cement	Thailand	NR
Southern Copper Corporation	Peru	NR
Telecommunication Services		
Advanced Info Service	Thailand	NR
América Móvil	Mexico	NR
American Tower	USA	DP
Axiata Group Berhad	Malaysia	NR
Bharti Airtel	India	NR
China Mobile	Greater China	NR
China Telecom	Greater China	NR
Crown Castle International Corp	USA	NR
SoftBank	Japan	NR
Telekom Indonesia	Indonesia	NR
Utilities		
CEZ	Czech Republic	NR
Dominion Resources	USA	DP
Hong Kong and China Gas	Greater China	NR
National Thermal Power (NTPC)	India	NR
NextEra Energy	USA	NR
The Southern Company	USA	IN

Appendix Key :

AQ: Answered questionnaire
AQ(L): Answered questionnaire late, and therefore is not scored.
DP: Declined to participate
IN: Information provided (e.g. CSR report)
NR: No response
SA: See another - refers to another company response
Not public: the company responded privately
Scope 3 column: value indicates number of S3 categories that were reported as 'relevant and calculated'
*: the asterisk on scope 1 or scope 2 emissions figure indicates full points were awarded for verification that is complete or underway using an approved standard
Bold: companies that are in either CPLI (performance band A) or CDLI (disclosure score 97 or higher), or both.

To read 2013 company responses in full please go to www.cdp.net/en-US/Results/Pages/responses.aspx

Appendix II - Responding companies, scores and emissions data

Company name	Country	2013 Score	Scope 1	Scope 2	Scope 3
Consumer Discretionary					
Adidas	Germany	86 B	12,169	57,551	1
Astra International	Indonesia	32		Not public	
BMW	**Germany**	**100 A**	**484,612***	**862,214***	**7**
Bridgestone	Japan	93 B		Not public	
British Sky Broadcasting	**United Kingdom**	**95 A**	**20,972***	**80,458***	**11**
Carnival	United Kingdom	83 C	10,819,814*	57,585*	4
CBS	USA	24			
Christian Dior	France	59 E		Not public	
Compagnie Financière Richemont	Switzerland	79 B	18,600	45,200	1
Compass	United Kingdom	82 C	76,141	9,064	0
Continental AG	Germany	82 C	591,681*	1,860,558*	1
Daimler	**Germany**	**100 A**	**960,464***	**2,330,559***	**11**
Denso	Japan	71 C		Not public	
DIRECTV	USA	91 B	106,060*	88,145*	5
eBay	USA	75 D	14,374	225,952	1
Ford Motor	USA	72 C	1,698,799*	3,440,338	0
General Motors	**USA**	**100 A-**	**2,454,755***	**5,531,380***	**7**
H&M Hennes & Mauritz	**Sweden**	**83 A**	**15,282***	**329,630***	**2**
Home Depot	**USA**	**99 A-**	**250,224***	**2,529,646***	**1**
Honda	**Japan**	**99 A**	**1,410,000***	**3,540,000***	**12**
Hyundai	South Korea	87 B	877,211*	1,533,990*	3
Hyundai Mobis	South Korea	94 B	40,967*	291,957*	1
Inditex	Spain	80 B	24,479*	290,120*	2
Johnson Controls	USA	94 A-	866,181*	1,465,658*	8
Las Vegas Sands	**USA**	**98 A-**	**225,157***	**821,527***	**2**
Lowe's	USA	85 D	303,721	2,552,740	1
LVMH	France	67 C	48,365*	299,150*	5
McDonald's	USA	71 D		Not public	
Naspers	South Africa	59 E		Not public	
News Corporation	**USA**	**97 A-**	**62,360***	**376,022***	**6**
NIKE	USA	70 D		Not public	
Nissan	**Japan**	**99 A**	**835,766***	**2,432,889***	**12**
Royal Philips	**Netherlands**	**100 A**	**442,549***	**408,517***	**4**
PPR	France	90 B	15,078*	98,950*	3
Rogers Communications	Canada	68 C	38,870	159,819	4
Starbucks	USA	86 C	239,972*	792,644*	1
Target	USA	91 B	527,047*	2,489,866*	1
Thomson Reuters	USA	95 B		Not public	
TJX Companies	**USA**	**98 B**	**63,084***	**686,955***	**0**
Toyota	Japan	96 B	2,727,000*	4,499,000*	10
Viacom	USA	60 D		Not public	
Vivendi Universal	France	69 D	90,755*	345,818*	2
Volkswagen	**Germany**	**99 A**	**4,133,581***	**4,572,344***	**5**
Walt Disney Company	USA	78 C	867,353	899,027	1
WPP	United Kingdom	95 B	9,859*	164,206*	1
Yum! Brands	USA	92 B	156,510*	2,377,372*	1
Consumer Staples					
Altria	USA	75 C	283,926	236,169	0
Ambev - Cia. Bebidas das Americas	Brazil	66 C	757,236	235,799	0
Anheuser Busch InBev	**Belgium**	**85 A**	**2,459,221***	**1,588,297***	**0**
Associated British Foods	United Kingdom	85 B	2,295,328*	1,067,934*	0
Beiersdorf AG	Germany	51 C	22,071	51,571	0
BRF Brasil Foods	Brazil	83 B		Not public	
British American Tobacco	United Kingdom	94 B	359,184*	387,168*	4
Carrefour	France	80 B	1,630,800*	1,585,600*	1
Coca-Cola	USA	90 A-	2,607,171*	1,143,628*	5
Colgate-Palmolive	**USA**	**99 B**	**232,574***	**435,061***	**1**
Costco Wholesale	USA	45	362,802	1,197,983	0
CVS Caremark	USA	92 B	201,000*	1,495,000*	0
Danone	France	93 B	894,206*	847,529*	6
Diageo	**United Kingdom**	**98 A**	**597,619***	**83,898***	**4**
Femsa - Fomento Economico Mexicano	Mexico	73 C		Not public	
General Mills	USA	78 B	259,400*	737,000	2
H.J. Heinz	USA	27		Not public	
Heineken	Netherlands	96 B	1,263,773*	737,418*	6
Hindustan Unilever (see Unilever)	India	SA (AQ)			

Company name	Country	2013 Score	Scope 1	Scope 2	Scope 3
Imperial Tobacco	United Kingdom	83 B	144,153*	163,819*	0
ITC	India	85 B	1,150,203*	172,121*	4
Japan Tobacco	Japan	96 B		Not public	
Kellogg Company	USA	84 B	536,069*	671,729*	2
Kimberly-Clark	USA	72 C	2,461,675*	2,967,804*	2
Kraft Foods	USA	81 B	477,813*	695,225*	9
L'Oreal	**France**	**93 A**	**66,920***	**126,500***	**5**
Mondelez International	USA	91 B	1,075,761*	954,755*	9
Nestle	**Switzerland**	**100 A**	**3,706,080***	**3,391,319***	**11**
PepsiCo	USA	94 B	3,854,784*	1,928,490*	4
Pernod-Ricard	France	59 E	283,345	92,502	0
Philip Morris International	**USA**	**97 B**	**441,953***	**433,892***	**6**
Procter & Gamble	USA	47	2,799,000	3,028,000	0
Reckitt Benckiser	**United Kingdom**	**99 B**	**104,934***	**208,576**	**7**
Reynolds American	USA	70 B	107,093*	167,402*	0
SABMiller	United Kingdom	74 B	1,009,825*	997,465*	0
Seven & I Holding	Japan	82 B	169,619*	2,310,530*	2
Souza Cruz (see British American Tobacco)	Brazil	SA (AQ)			
Sysco	USA	66 C	788,200	336,857	0
Tesco	United Kingdom	96 A-	1,418,798*	3,764,068*	7
Time Warner	USA	AQ(L)			
Unilever	**United Kingdom**	**82 A**	**1,053,344***	**907,399***	**8**
Unilever NV (see Unilever)	Netherlands	SA (AQ)			
Walgreens	USA	86 C		Not public	
Wal-Mart de Mexico	Mexico	71 C	851,495	1,078,080	2
Wal-Mart Stores	USA	94 A-	5,605,099*	15,581,135*	4
Wesfarmers	Australia	77 B	2,508,924	2,790,505	4
Woolworths	Australia	96 B	383,871*	2,499,051*	3
Energy					
Anadarko Petroleum	USA	75 C	5,056,818*	535,843	1
Apache	USA	70 C	10,766,000	1,314,000	0
Baker Hughes	USA	90 B	516,000*	425,000*	1
BG Group	**United Kingdom**	**89 A**	**7,739,569***	**20,295***	**3**
BP	United Kingdom	80 C	59,830,000*	8,360,000*	1
Canadian Natural Resources	Canada	AQ(L)			
Cenovus Energy	Canada	94 B	4,657,427*	1,079,646*	0
Chevron	**USA**	**97 A-**	**58,559,220***	**3,849,319***	**1**
CNOOC (Red Chip)	Greater China	22		Not public	
ConocoPhillips	USA	83 B	24,171,000	1,638,000	3
Devon Energy	USA	86 B	7,596,657*	1,087,905	1
Ecopetrol	Colombia	48		Not public	
Enbridge	Canada	85 C	3,091,100	2,982,900	1
Eni	Italy	92 B	52,493,340*	834,197*	6
Exxon Mobil	USA	80 B	132,000,000*	14,000,000*	1
Gazprom	Russia	62 C	133,428,139	5,146,743	0
Halliburton	USA	65 D	4,211,808	839,363	1
Hess	**USA**	**97 B**	**7,409,486***	**584,695***	**3**
Husky Energy	Canada	86 C	9,171,000*	2,381,000	0
Imperial Oil	Canada	62 D	9,780,351*	1,367,700	0
Inpex	Japan	96 B	485,041*	27,981*	4
Noble Energy	USA	76 C	2,078,600	61,630	0
Novatek	Russia	40	2,336,375	73,460	1
Occidental Petroleum	USA	61 E	14,270,000	5,600,000	0
Petrobras	Brazil	82 C	65,983,676*	1,394,740*	1
PETROCHINA	Greater China	AQ(L)			
PTT	Thailand	84 B	29,332,000*	1,583,000*	3
PTT Exploration & Production	Thailand	85 C	4,431,143*	1,649*	2
Repsol	**Spain**	**98 B**	**14,062,806***	**811,243***	**3**
Royal Dutch Shell	Netherlands	90 B	72,000,000*	9,000,000*	5
Sasol	South Africa	96 B	66,895,000*	8,553,000*	8
Schlumberger	USA	83 C	2,200,000	550,000	2
Spectra Energy	**USA**	**98 A**	**8,381,680***	**608,390***	**8**
Statoil	Norway	86 B	15,362,600*	409,443	2
Suncor Energy	Canada	94 B	18,608,320 *	2,232,478 *	4
Surgutneftegas	Russia	23		Not public	
Total	France	81 C	47,000,000*	4,400,000	2
TransCanada	Canada	91 B	12,186,545*	231,494*	1
Tullow Oil	United Kingdom	72 B		Not public	
Woodside Petroleum	Australia	72 C	9,889,254*	8,455*	2

Appendix II - Responding companies, scores and emissions data - *continued*

Company name	Country	2013 Score	Scope 1	Scope 2	Scope 3
Financials					
Ace	**Switzerland**	**93 A**	**12,912***	**39,791***	**4**
Aflac	USA	85 B	3,884*	18,536*	3
AKBANK T.A.Ş.	Turkey	78 B		Not public	
Allianz	**Germany**	**97 B**	**84,161***	**166,019***	**3**
Allstate	USA	96 B	40,796*	150,401*	3
American Express	USA	87 C	23,371	142,667	1
American International Group	USA	62 D		Not public	
Assicurazioni Generali	**Italy**	**87 A**	**17,862***	**47,877***	**3**
Australia and New Zealand Banking	Australia	92 A-	16,428*	205,462*	5
Aviva	United Kingdom	79 B	23,849*	75,733*	4
AXA	**France**	**94 A**	**51,886***	**119,930***	**2**
Banco Bradesco	Brazil	76 C	4,780*	30,219*	3
Banco do Brasil	Brazil	54 D	7,444	54,348	4
Banco Santander	Spain	84 B	31,857*	342,928*	2
Banco Santander Brasil	Brazil	64 C	15,790	22,861	8
Bank of America	**USA**	**98 A**	**116,666***	**1,421,829***	**10**
Bank of Communications	Greater China	2			
Bank of Montreal	Canada	94 B	20,933*	86,853*	3
Bank of Nova Scotia	Canada	72 C	16,310*	128,052*	1
Barclays	**United Kingdom**	**92 A**	**46,757***	**786,547***	**1**
BBVA	Spain	76 D	9,267	295,771	1
BlackRock	USA	79 C		Not public	
BNP Paribas	**France**	**93 A**	**70,319***	**388,323***	**1**
BNY Mellon	**USA**	**100 A**	**9,513***	**208,926***	**8**
BOC Hong Kong	Greater China	AQ (L)			
Brookfield Asset Management	Canada	63 D	67,649	587,875	0
Canadian Imperial Bank of Commerce	Canada	61 D	21,079	54,959	1
Capital One Financial	USA	71 C	14,501	194,433	1
Charles Schwab	USA	55 E		Not public	
Chubb	USA	52 D	1,129	10,133	0
Cielo SA	Brazil	53 E	1,564*	285*	3
Citigroup	USA	95 B	35,570*	993,687*	2
Commonwealth Bank of Australia	Australia	88 B	11,160	145,989	9
Credit Agricole	France	59 D	10,241*	18,149*	1
Credit Suisse	Switzerland	88 B	23,511	151,561	4
Deutsche Bank	**Germany**	**91 A**	**94,031***	**443,165***	**5**
DnB	Norway	84 B	1,571*	13,587*	3
Firstrand Limited	**South Africa**	**96 A**	**11,572***	**257,172***	**2**
Franklin Resources	USA	86 C	8,175	29,552	1
Goldman Sachs	**USA**	**98 A**	**14,559***	**276,815***	**7**
Great West Lifeco	Canada	67 B		Not public	
Hang Seng Bank	Greater China	42	0	24,617	0
HCP	**USA**	**97 A-**	**28,940***	**216,887***	**1**
HDFC Bank	India	75 E	5,872	347,770	3
Hong Kong Exchanges & Clearing	Greater China	76 D		Not public	
HSBC	**United Kingdom**	**97 A**	**64,918***	**688,827***	**1**
Industrial and Commercial Bank of China	Greater China	5		Not public	
ING	Netherlands	96 B	27,039*	87,735*	3
Intesa Sanpaolo	Italy	92 B	58,994*	54,539*	2
Itaú Unibanco Holding	Brazil	83 C	8857*	48,890*	5
JPMorgan Chase	USA	91 B	83,343*	1,219,748*	1
Lloyds Banking	United Kingdom	90 B	49,414*	290,726*	2
Malayan Banking	Malaysia	67 C	652	88,427	1
Manulife Financial	Canada	84 C	213,835	195,565	3
Marsh & McLennan	**USA**	**98 B**	**3,429***	**97,423***	**1**
MetLife	USA	92 A-		Not public	
Mitsubishi Estate	Japan	76 C		Not public	
Mitsubishi UFJ Financial Group	Japan	76 C	18,556	238,444	1
Mitsui Fudosan Co.	Japan	67 C		Not public	
Mizuho Financial	Japan	89 B	16,177*	202,850*	10
Morgan Stanley	**USA**	**96 A**	**13,757***	**330,747***	**2**
Munich Re	**Germany**	**91 A**	**64,755***	**87,106***	**2**
National Australia Bank	**Australia**	**91 A**	**25,363***	**171,767***	**6**
Nomura Holdings	Japan	86 B	3,629*	95,377*	2
Nordea Bank	Sweden	93 B	0*	64,175*	1
Oversea-Chinese Banking	Singapore	3			
Ping An Insurance Company of China	Greater China	AQ(L)			
PNC Financial Services	USA	89 B	47,606*	398,414*	3
Power Financial Corporation	Canada	86 C		Not public	
Prudential	United Kingdom	70 D	12,500	114,636	0
Prudential Financial	USA	63 C	5,090	70,613	1
Royal Bank of Canada	Canada	77 D	32,046	127,445	1
Royal Bank of Scotland	United Kingdom	88 B	66,586*	497,763*	9
Simon Property Group	**USA**	**98 B**	**21,854***	**496,006***	**2**
Skandinaviska Enskilda Banken AB (SEB AB)	Sweden	74 B	0	9,308	3
Societe Generale	France	85 B	31,763*	205,871*	4
Standard Bank	South Africa	71 C	9,198*	363,916*	4
Standard Chartered	United Kingdom	91 B	26,560*	229,122*	0
State Bank of India	India	16			
State Street	USA	87 C	10,009*	98,756*	1
Sumitomo Mitsui Financial Group	Japan	86 B		Not public	
Svenska Handelsbanken	Sweden	81 B	41	4,889*	2
Swire Properties	Hong Kong	SA (AQ)			
Swiss Re	**Switzerland**	**92 A**	**4,850***	**8,800***	**1**
T.GARANTİ BANKASI A.Ş.	Turkey	80 C	15,568	73,994	1
Tokio Marine Holdings	Japan	83 B	17,918*	70,971*	1
Toronto-Dominion Bank	**Canada**	**94 A**	**43,289***	**64,108***	**2**
Travelers Companies	USA	63 C	35,633	48,175	0
U.S. Bancorp	USA	78 C	38,055	370,672	4
UBS	Switzerland	92 A-	21,838*	172,421*	3
Unibail-Rodamco	France	79 B	15,429*	66,533*	6
UniCredit	Italy	77 C	67,425*	308,348*	3
Ventas	USA	85 C	43,381	314,379	0
Wells Fargo	**USA**	**96 A**	**93,904***	**1,333,372***	**7**
Westfield	Australia	85 B	25,187*	458,569*	4
Westpac Banking	**Australia**	**91 A**	**12,134***	**176,648***	**3**
Zurich Insurance	Switzerland	65 C		Not public	
Healthcare					
Abbott Laboratories	USA	84 B	470,781*	537,821*	5
Allergan	USA	91 B	49,128*	52,049*	2
Amgen	USA	76 B	119,968*	286,679*	3
Astellas Pharma	Japan	88 B	85,937*	125,398*	1
AstraZeneca	United Kingdom	85 B	340,800*	286,200*	5
Baxter International	USA	82 B	345,000*	445,000*	10
Bayer	**Germany**	**99 A-**	**4,240,000***	**4,120,000***	**10**
Biogen Idec	USA	92 B	46,588*	39,307*	7
Bristol-Myers Squibb	USA	96 B	269,734*	262,565*	2
Celgene	USA	80 C	14,458*	18,420*	2
Covidien	Ireland	70 C	230,511	402,132	0
CSL	Australia	85 C	55,383	136,951	2
Eli Lilly	USA	86 B	415,040*	1,160,941*	4
Essilor International	France	28	3	55100	3
Fresenius Medical Care	Germany	72 D		Not public	
GlaxoSmithKline	**United Kingdom**	**98 A**	**1,005,447***	**804,283***	**5**
Johnson & Johnson	**USA**	**98 A-**	**329,556***	**853,700***	**2**
Medtronic	USA	61 D	31,460	170,685	2
Merck & Co.	USA	87 B	1,053,000*	927,000*	3
Novartis	Switzerland	96 B	637,838*	1,013,238*	6
Novo Nordisk	Denmark	96 B	38,587*	88,294*	5
Pfizer	USA	91 B	1,217,736*	1,155,762*	8
Roche Holding	Switzerland	96 B	394,063*	432,103*	1
Sanofi-Aventis	**France**	**97 A-**	**694,600***	**685,707***	**9**
Stryker	USA	53 E		Not public	
Takeda Pharmaceutical	Japan	79 C	238,684	168,509	3
Teva Pharmaceutical Industries	Israel	73 D		Not public	
Thermo Fisher Scientific	USA	75 D	64,863	297,992	0
UnitedHealth	**USA**	**98 B**	**8,694***	**104,200***	**2**
WellPoint	USA	57 C	7,460	114,199	3
Industrials					
3M	USA	70 D	4,540,000	2,230,000	5
ABB	Switzerland	AQ (L)			
Atlas Copco	Sweden	93 B	29,464*	75,561*	4
BAE Systems	United Kingdom	69 C	277,920	590,760	1
Boeing	USA	96 A-	576,000*	998,000*	1
Canadian National Railway	Canada	91 B	5,070,123*	173,129	1
CSX	**USA**	**95 A**	**5,268,905***	**300,170***	**2**

Company name	Country	2013 Score	Scope 1	Scope 2	Scope 3
Cummins	USA	91 B		Not public	
Danaher	USA	12		Not public	
Deere	USA	79 C	440,147*	1,053,446*	2
Deutsche Post	**Germany**	**98 B**	**4,800,000***	**570,000***	**3**
EADS	**Netherlands**	**97 B**	**581,115***	**432,092***	**0**
East Japan Railway	Japan	#		Not public	
Eaton	**USA**	**100 A-**	**105,382***	**637,346***	**8**
Emerson Electric	USA	AQ(L)			
Empresas COPEC	Chile	32		Not public	
FedEx Corporation	USA	80 B	14,602,697*	959,109	2
General Electric	USA	72 C	1,970,000	2,905,000	1
Hitachi	Japan	95 B	912,154*	3,313,114*	6
Honeywell International	USA	74 B	5,532,844*	1,756,275*	0
Illinois Tool Works	USA	79 C		Not public	
Komatsu	**Japan**	**95 A**	**123,754***	**354,601***	**9**
Larsen & Toubro	India	83 B	424,351*	248,130*	2
Lockheed Martin	**USA**	**91 A**	**249,491***	**985,006***	**2**
Mitsubishi	Japan	67 D		Not public	
Mitsui & Co	Japan	78 C		Not public	
MTR	Greater China	87 C	53,568*	1,171,764*	3
Norfolk Southern	USA	90 B	4,925,238*	252,854*	2
Raytheon	**USA**	**98 A**	**101,715***	**435,872***	**3**
Rolls-Royce	United Kingdom	85 B	213,089	337,064	3
Saint-Gobain	France	91 B	12,801,000*	4,550,000*	5
Sandvik AB	Sweden	64 C		Not public	
Schneider Electric	**France**	**97 A**	**113,238***	**345,123***	**10**
Siemens	Germany	96 A-	1,042,000*	1,385,000*	5
Sime Darby Berhad	Malaysia	65 D		Not public	
Union Pacific	**USA**	**98 B**	**11,595,509***	**407,176***	**1**
United Technologies Corporation	USA	87 B	801,694*	880,896*	1
UPS	**USA**	**99 A-**	**11,715,635***	**823,212***	**4**
Vinci	France	93 B	2,195,535*	193,548*	3
Volvo	Sweden	73 C		Not public	
Information Technology					
Accenture	Ireland	92 B	9,383	224,615	1
Adobe Systems	**USA**	**97 A**	**2,744***	**22,995***	**4**
Automatic Data Processing	USA	83 C	15,500	157,100	2
Canon	Japan	85 B	145,283	921,409	9
Cisco Systems	**USA**	**100 A**	**65,832***	**628,164***	**8**
Cognizant Technology Solutions	USA	64 C	46,934	137,460	2
Corning	USA	54 D	383,729*	1,129,330*	0
EMC	**USA**	**97 A**	**45,886***	**368,528***	**6**
Ericsson	Sweden	85 B	92,335*	263,003*	9
Google	USA	93 B	37,187*	1,149,988*	3
Hewlett-Packard	**USA**	**99 A**	**246,000***	**1,643,000***	**7**
Hon Hai Precision Industry (see Foxconn Intl Hldg - Asia ex JCK)	Greater China	SA (AQ)			
Infosys	**India**	**92 A**	**28,015***	**134,230***	**4**
Intel	USA	85 B	794,759*	2,331,048*	6
International Business Machines	USA	86 B	541,584*	2,208,459*	1
MasterCard	USA	43	3,026	37,825	0
Microsoft	**USA**	**96 A**	**48,516***	**1,207,419***	**7**
Mitsubishi Electric	Japan	60 D	322,000	791,000	3
Oracle	USA	79 C	16,481	440,773	3
Qualcomm	USA	56 D	64,782	49,216	0
salesforce.com	USA	90 C	2,350*	29,429*	2
Samsung	**South Korea**	**99 A**	**2,098,438***	**5,388,036***	**5**
SAP	**Germany**	**98 A**	**144,298***	**43,004***	**8**
Taiwan Semiconductor Manufacturing	Greater China	90 B	1,563,306*	3,042,814*	6
Tata Consultancy Services	**India**	**89 A**	**58,961***	**300,555***	**2**
Texas Instruments	USA	64 D	827,274	1,588,466	0
Visa	USA	61 D	8,151	68,313	3
Yahoo Japan	Japan	15		Not public	
Yahoo!	USA	91 B	4,002*	333,291*	2
Materials					
Air Liquide	France	88 B	11,272,000*	10,853,000*	1
Air Products & Chemicals	**USA**	**99 B**	**14,767,209***	**10,563,030***	**5**
Anglo American	**United Kingdom**	**96 A**	**8,470,754***	**9,403,534***	**11**
Antofagasta	United Kingdom	92 C	645,371*	1,539,442*	3
Arcelor Mittal	Luxembourg	88 B	158,192,000*	17,256,000*	1

Company name	Country	2013 Score	Scope 1	Scope 2	Scope 3
Barrick Gold	Canada	87 B	3,784,180*	2,229,368*	0
BASF	**Germany**	**100 A-**	**20,208,000***	**4,479,000***	**7**
BHP Billiton	United Kingdom	75 C	20,200,000*	20,000,000*	2
Dow Chemical	USA	90 B	27,429,000*	8,403,000*	12
E.I. du Pont de Nemours	**USA**	**96 A**	**10,817,680***	**4,416,220***	**1**
Ecolab	**USA**	**98 A**	**336,258**	**199,296**	**3**
Freeport-McMoRan Copper & Gold	USA	86 C	5,679,367*	3,985,464*	4
Fresnillo	Mexico	68 D	236,184	346,134	2
Glencore International	Switzerland	82 C		Not public	
Goldcorp	Canada	75 C	734,981*	685,344*	2
Holcim	Switzerland	82 C	102,102,123	6,600,687	6
Industrias Peñoles	Mexico	46	674,687*	1,747,388*	0
Kumba Iron Ore	**South Africa**	**98 B**	**448,274***	**516,315***	**9**
Lafarge S.A.	France	96 B	97,354,270*	8,907,096*	0
LG Chemical	South Korea	95 B	4,454,747*	1,865,116*	4
Linde	Germany	93 A-	6,100,000*	9,800,000*	7
Monsanto	USA	70 D	1,610,000	539,000	4
Newmont Mining	USA	92 B	4,016,150*	1,182,740*	2
Nippon Steel	Japan	85 D		Not public	
POSCO	**South Korea**	**97 B**	**73,526,000***	**3,471,000***	**4**
Potash Corporation of Saskatchewan	Canada	71 C	7,649,000	1,700,000	0
PPG Industries	USA	60 D	4,053,000	1,810,000	0
Praxair	**USA**	**98 B**	**5,355,000***	**11,329,000***	**3**
Rio Tinto	United Kingdom	88 B	26,900,000*	16,400,000*	6
Shin Etsu Chemical	Japan	61 C	1,525,214	2,950,932	9
Syngenta International	Switzerland	91 B	733,000*	391,000*	2
Teck	Canada	89 B	2,889,517*	293,514*	1
Uralkali	Russia	41		Not public	
Vale	**Brazil**	**98 B**	**16,403,834***	**1,469,167***	**6**
Xstrata	Switzerland	82 C		Not public	
Telecommunication Services					
AT&T	USA	96 B	948,441*	7,894,626*	1
BCE	Canada	91 B	99,151*	186,890*	1
BT	**United Kingdom**	**93 A**	**200,876***	**192,644***	**10**
CenturyLink	USA	66 D	279,523	2,079,912	2
China Unicom	Greater China	2			
Chunghwa Telecom	Greater China	65 D	23,169	785,792	1
Deutsche Telekom	Germany	90 B	356,128*	3,291,232*	1
France Telecom	France	85 B	445,424*	1,024,182*	1
KDDI	Japan	72 C	2,947	1,032,629	4
MTN	South Africa	76 D	652,790	384,725	1
Nippon Telegraph & Telephone (NTT)	Japan	95 B	260,000*	3,531,000*	8
NTT DOCOMO	Japan	75 B	87,648*	1,364,600*	3
Singapore Telecom	Singapore	76 C	6,897*	177,321*	3
Swisscom	**Switzerland**	**97 A**	**25,459***	**46,766***	**7**
Telefonica	Spain	95 B	111,124*	1,649,137*	6
Telefonica Brasil (see Telefonica)	Brazil	SA (AQ)			
Telenor	**Norway**	**95 A**	**342,073***	**787,079***	**2**
TeliaSonera	Sweden	83 B	35,331*	268,482*	3
Telstra Corporation	Australia	83 B	53,587*	1,374,617*	3
Verizon Communications	USA	84 B	512,899	5,334,874	1
Vodacom	South Africa	94 B	45,851*	401,703*	5
Vodafone	United Kingdom	85 B	404,885*	2,178,178*	2
Utilities					
American Electric Power	USA	68 D	121,927,400	0	0
Centrica	**United Kingdom**	**97 B**	**7,230,344***	**166,476***	**6**
CLP Holdings	Greater China	94 B	38,245,000*	219,000	2
Duke Energy	USA	67 C	123,430,000		0
E.ON AG	Germany	83 B	126,871,536*	4,363,825*	5
Electricite de France (EDF)	France	95 B	80,283,556*	74,004*	9
Endesa	**Spain**	**98 B**	**54,676,230***	**1,317,120***	**5**
ENEL	Italy	87 B	127,801,261*	1,140,337*	1
Exelon	**USA**	**98 A**	**26,038,890***	**5,691,542***	**4**
Gas Natural	**Spain**	**100 A**	**26,062,058***	**956,889***	**2**
GDF Suez	France	95 B	154,230,874*	3,712,790*	2
Iberdrola	**Spain**	**99 B**	**35,461,092***	**7,189,301***	**0**
Korea Electric Power Corporation	South Korea	91 B	1,174,220*	132,861*	0
National Grid	**United Kingdom**	**98 B**	**7,913,978***	**4,547,930***	**6**
Power Assets Holdings	Greater China	96 B	8,960,000*	0	8
RWE	Germany	93 B	181,690,000*	1,940,000*	2
SSE	United Kingdom	90 B	24,560,110*	1,364,652*	1

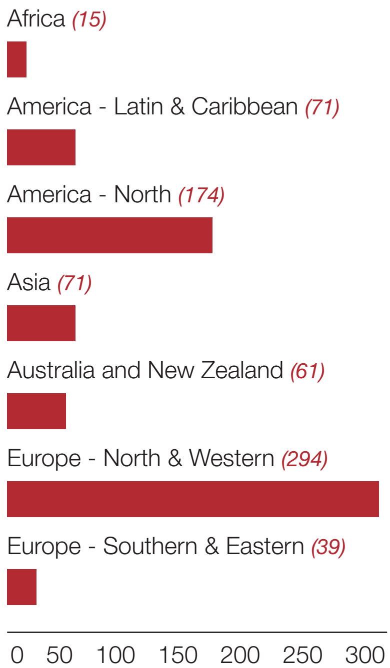
East Japan Railway responded in Japanese. Please see CDP Japan report for their score.

Appendix III: Investor members

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 the investor pages at **https://www.cdp.net/en-US/WhatWeDo/Pages/investors.aspx**

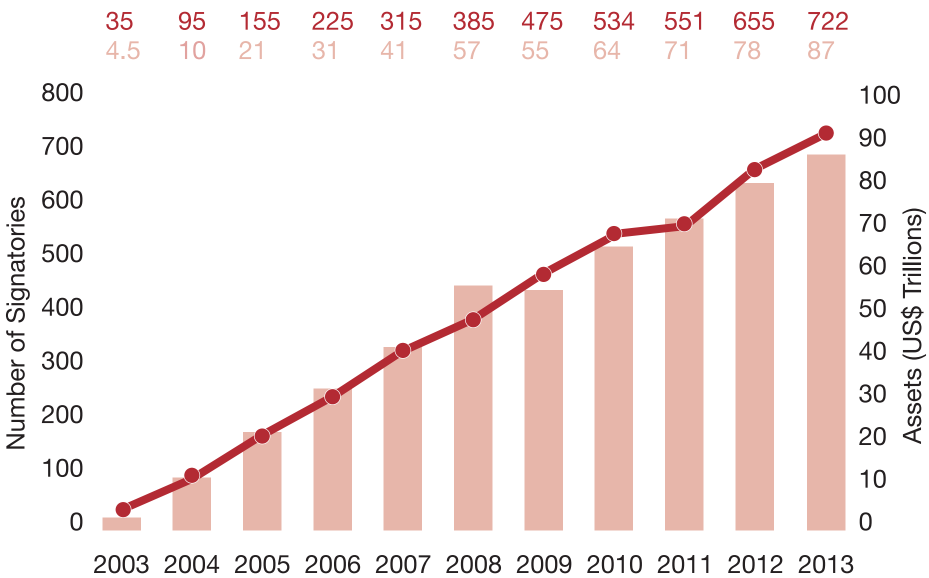
- ABRAPP - Associação Brasileira das Entidades Fechadas de Previdência Complementar
- ATP Group
- Aviva Investors
- Bank of America
- Bendigo and Adelaide Bank
- BlackRock
- Boston Common Asset Management, LLC
- California Public Employees' Retirement System (CalPERS)
- California State Teachers' Retirement System (CalSTRS)
- Calvert Group, Ltd.
- Capricorn Investment Group
- Catholic Super
- CCLA Investment Management Ltd
- Daiwa Asset Management Co. Ltd.
- Generation Investment Management
- Goldman Sachs Group Inc.
- Henderson Global Investors
- HSBC Holdings plc
- Legg Mason, Inc.
- KLP
- London Pensions Fund Authority
- Mobimo Holding AG
- Mongeral Aegon Seguros e Previdência S.A.
- Morgan Stanley
- National Australia Bank
- Neuberger Berman
- Newton Investment Management Limited
- Nordea Bank
- Norges Bank Investment Management (NBIM)
- Northwest and Ethical Investments L.P. (NEI Investments)
- PFA Pension
- Robeco
- RobecoSAM AG
- Rockefeller Asset Management
- Royal Bank of Scotland Group
- Sampension KP Livsforsikring A/S
- Schroders
- Scottish Widows Investment Partnership
- Skandinaviska Enskilda Banken AB (SEB AB)
- Sompo Japan Insurance Inc.
- Standard Chartered
- Sun Life Financial Inc
- Sustainable Insights Capital Management
- TD Asset Management
- The Wellcome Trust

2013 INVESTOR SIGNATORY BREAKDOWN - REGION



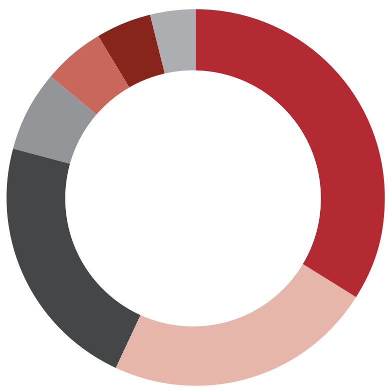
INCREASING NUMBER OF INVESTORS REQUESTING CLIMATE DATA THROUGH CDP

- Investor signatory assets
- Number of investor signatories



2013 INVESTOR SIGNATORY BREAKDOWN - TYPE

247	Mainstream Asset Managers
167	Pension funds
160	Banks
51	Insurance
39	SRI Asset Managers
34	Foundations
27	Other



Investor signatories

722 financial institutions with assets of US$87 trillion were signatories to the CDP 2013 climate change information request dated February 1st 2013

3Sisters Sustainable Management LLC
Aberdeen Asset Management
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
Advantage Asset Managers (Pty) Ltd
Aegon N.V.
AEGON-INDUSTRIAL Fund Management Co., Ltd
AFP Integra
AIG Asset Management
AK PORTFÖY YÖNETİMİ A.Ş.
AKBANK T.A.Ş.
Alberta Investment Management Corporation (AIMCo)
Alberta Teachers Retirement Fund
Alcyone Finance
AllenbridgeEpic Investment Advisers
Alliance Trust
Allianz Elementar Versicherungs-AG
Allianz Global Investors AG
Allianz Group
Altira Group
Amalgamated Bank
Amlin
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 Group
AQEX LLC
Aquila Capital
Arisaig Partners
Arkx Investment Management
ARMA PORTFÖY YÖNETİMİ A.Ş.
Armstrong Asset Management
ASM Administradora de Recursos S.A.
ASN Bank
Assicurazioni Generali
ATI Asset Management
Atlantic Asset Management
ATP Group
Auriel Capital Management
Australia and New Zealand Banking Group
Australian Ethical Investment
AustralianSuper
Avaron Asset Management AS
Aviva
Aviva Investors
AXA Group
Baillie Gifford & Co.
BaltCap
Banco Bradesco S/A
Banco Comercial Português SA
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 Economico e Social (BNDES)
Banco Popular Espanol
Banco Sabadell
Banco Santander
Banesprev – Fundo Banespa de Seguridade Social
Banesto
BANIF SA
Bank Handlowy w Warszawie SA
Bank Leumi Le Israel
Bank of America Merrill Lynch
Bank of Montreal
Bank of Nova Scotia (Scotiabank)
Bank Sarasin & Cie AG
Bank Vontobel
Bankhaus Schelhammer & Schattera Kapitalanlagegesellschaft m.b.H.
Bankia
Bankinter
BankInvest
bankmecu
Banque Degroof
Banque Libano-Francaise
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
Bedfordshire Pension Fund
Beetle Capital
Befimmo SA
Bendigo and Adelaide Bank
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 mbH
Boston Common Asset Management, LLC
Brasilprev Seguros e Previdência S/A.
Breckinridge Capital Advisors
British Airways Pensions
British Coal Staff Superannuation Scheme
British Columbia Investment Management Corporation (bcIMC)
Brown Advisory
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
California Public Employees' Retirement System (CalPERS)
California State Teachers' Retirement System (CalSTRS)
California State Treasurer
Calvert Investment Management, Inc
Canada Pension Plan Investment Board (CPPIB)
Canadian Imperial Bank of Commerce (CIBC)
Canadian Labour Congress Staff Pension Fund
CAPESESP
Capital Innovations, LLC
Capricorn Investment Group
CARE Super
Carmignac Gestion
Caser Pensiones E.G.F.P
Cathay Financial Holding
Catherine Donnelly Foundation
Catholic Super
CBF Church of England Funds
CBRE Group, Inc.
Cbus Superannuation Fund
CCLA Investment Management Ltd
Celeste Funds Management
Central Finance Board of the Methodist Church
Ceres
CERES-Fundação de Seguridade Social
Change Investment Management
Chinatrust Financial Holding Co Limited
Christian Brothers Investment Services Inc.
Christian Super
Christopher Reynolds Foundation
Church Commissioners for England
Church of England Pensions Board
CI Mutual Funds' Signature Global Advisors
City Developments Limited
ClearBridge Investments
Climate Change Capital Group Ltd
CM-CIC Asset Management
Colonial First State Global Asset Management
Comerica Incorporated
Comgest
Commerzbank AG
CommInsure
Commonwealth Bank of Australia
Commonwealth Superannuation Corporation
Compton Foundation, Inc.
Concordia Versicherungs-Gesellschaft a.G.
Connecticut Retirement Plans and Trust Funds
Conser Invest
Co-operative Asset Management
Co-operative Financial Services (CFS)
Credit Suisse
Daegu Bank
Daesung Capital Management
Daiwa Asset Management Co. Ltd.
Daiwa Securities Group Inc.
Dalton Nicol Reid
Danske Bank A/S
de Pury Pictet Turrettini & Cie S.A.
DekaBank Deutsche Girozentrale
Delta Lloyd Asset Management
Desjardins Financial Security
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
DLM INVISTA ASSET MANAGEMENT S/A
DNB ASA
Domini Social Investments LLC
Dongbu Insurance
Doughty Hanson & Co.
DWS Investments
DZ Bank
Earth Capital Partners LLP
East Sussex Pension Fund
Ecclesiastical Investment Management
Ecofi Investissements - Groupe Credit Cooperatif
Edward W. Hazen Foundation
EEA Group Ltd
Eko
Elan Capital Partners
Element Investment Managers
ELETRA - Fundação Celg de Seguros e Previdência
Environment Agency Active Pension fund
Epworth Investment Management
Equilibrium Capital Group
equinet Bank AG
Erik Penser Fondkommission
Erste Asset Management
Erste Group Bank AG
Essex Investment Management Company, LLC
ESSSuper
Ethos Foundation
Etica SGR
Eureka Funds Management
Eurizon Capital SGR S.p.A.
Evangelical Lutheran Church in Canada Pension Plan for Clergy and Lay Workers
Evangelical Lutheran Foundation of Eastern Canada
Evli Bank Plc
F&C Asset Management
FACEB – Fundação de Previdência dos Empregados da CEB
FAELCE – Fundacao Coelce de Seguridade Social

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FAPERS- Fundação Assistencial e Previdenciária da Extensão Rural do Rio Grande do Sul
FASERN - Fundação COSERN de Previdência Complementar
Fédéris Gestion d'Actifs
FIDURA Capital Consult GmbH
FIM Asset Management Ltd
FIM Services
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, LLC
First Commercial Bank
First State Investments
First State Superannuation Scheme
First Swedish National Pension Fund (AP1)
Firstrand Limited
Five Oceans Asset Management
Florida State Board of Administration (SBA)
Folketrygdfondet
Folksam
Fondaction CSN
Fondation de Luxembourg
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
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Fundação Forluminas de Seguridade Social - FORLUZ
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Fundação Itaúsa Industrial
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GEAP Fundação de Seguridade Social
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Generali Deutschland Holding AG
Generation Investment Management
Genus Capital Management
German Equity Trust AG
Gjensidige Forsikring ASA
Global Forestry Capital S.a.r.l.
GLS Gemeinschaftsbank eG
Goldman Sachs Group Inc.
GOOD GROWTH INSTITUT für globale Vermögensentwicklung mbH
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GPT Group
Greater Manchester Pension Fund
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Green Century Capital Management
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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
Gruppo Monte Paschi
Guardians of New Zealand Superannuation

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Harbour Asset Management
Harrington Investments, Inc
Hauck & Aufhäuser Asset Management GmbH
Hazel Capital LLP
HDFC Bank Ltd
Healthcare of Ontario Pension Plan (HOOPP)
Helaba Invest Kapitalanlagegesellschaft mbH
Henderson Global Investors
Hermes Fund Managers
HESTA Super
HIP Investor
Holden & Partners
HSBC Global Asset Management (Deutschland) GmbH
HSBC Holdings plc
HSBC INKA Internationale Kapitalanlagegesellschaft mbH
Humanis
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Hyundai Securities Co., Ltd.
IBK Securities
IDBI Bank Ltd
IDFC Ltd
Illinois State Board of Investment
Ilmarinen Mutual Pension Insurance Company
Impax Group plc
Independent Planning Group
Indusind Bank
Industrial Alliance Insurance and Financial Services Inc.
Industrial Bank
Industrial Bank of Korea
Industrial Development Corporation
Industry Funds Management
Inflection Point Partners
ING Group
Insight Investment Management (Global) Ltd
Instituto Infraero de Seguridade Social - INFRAPREV
Instituto Sebrae De Seguridade Social - SEBRAEPREV
Insurance Australia Group
IntReal KAG
Investec Asset Management
Investing for Good
Irish Life Investment Managers
Itaú Asset Management
Itaú Unibanco Holding S.A.
Janus Capital Group Inc.
Jarislowsky Fraser Limited
Jessie Smith Noyes Foundation
JOHNSON & JOHNSON SOCIEDADE PREVIDENCIARIA
JPMorgan Chase & Co.
Jubitz Family Foundation
Jupiter Asset Management
Kaiser Ritter Partner Privatbank AG (Schweiz)
KB Kookmin Bank
KBC Asset Management NV
KBC Group
KCPS and Company
KDB Asset Management Co., Ltd.
KDB Daewoo Securities Co. Ltd.
KEPLER-FONDS Kapitalanlagegesellschaft m. b. H.
KEVA
KeyCorp
KfW Bankengruppe
Killik & Co LLP
Kiwi Income Property Trust
Kleinwort Benson Investors
KlimaINVEST
KLP Insurance
Korea Investment Management
Korea Technology Finance Corporation
KPA Pension
La Banque Postale Asset Management
La Financiere Responsable
Lampe Asset Management GmbH
Landsorganisationen i Sverige
LaSalle Investment Management
LBBW - Landesbank Baden-Württemberg
LBBW Asset Management Investmentgesellschaft mbH
LD Lønmodtagernes Dyrtidsfond
Legal & General Investment Management
Legg Mason, Inc.
LGT Capital Management Ltd.
LIG Insurance Co., Ltd.
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
Macquarie Group
MagNet Magyar Közösségi Bank Zrt.
MainFirst Bank AG
Malakoff Médéric
MAMA Sustainable Incubation AG
Man Group plc
Mandarine Gestion
MAPFRE
Maple-Brown Abbott
Marc J. Lane Investment Management, Inc.
Maryland State Treasurer
Matrix Asset Management
Matrix Group
McLean Budden
MEAG MUNICH ERGO Asset Management 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 Investment Gmbh
MFS Investment Management
Midas International Asset Management
Miller/Howard Investments
Mirae Asset Global Investments Co. Ltd.
Mirae Asset Securities
Mirvac Group
Missionary Oblates of Mary Immaculate
Mistra, Foundation for Strategic Environmental Research
Mitsubishi UFJ Financial Group, Inc.
Mitsui Sumitomo Insurance Co.,Ltd
Mizuho Financial Group, Inc.
Mn Services
Momentum Manager of Managers (Pty) Ltd
Monega Kapitalanlagegesellschaft mbH
Mongeral Aegon Seguros e Previdência S.A.
Morgan Stanley
Mountain Cleantech AG
MTAA Superannuation Fund
Mutual Insurance Company Pension-Fennia
Nanuk Asset Management
Natcan Investment Management
Nathan Cummings Foundation, The
National Australia Bank
National Bank of Canada
National Bank Of Greece
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 SA
Natural Investments LLC
Nedbank Limited
Needmor Fund
Nelson Capital Management, LLC
Nest Sammelstiftung
Neuberger Berman
New Alternatives Fund Inc.
New Amsterdam Partners LLC
New Forests
New Mexico State Treasurer
New York City Employees Retirement System
New York City Teachers Retirement System
New York State Common Retirement Fund (NYSCRF)
Newton Investment Management Limited
NGS Super
NH-CA Asset Management
Nikko Asset Management Co., Ltd.
Nipponkoa Insurance Company, Ltd
Nissay Asset Management Corporation
NORD/LB Kapitalanlagegesellschaft AG
Nordea Bank
Norfolk Pension Fund

Norges Bank Investment Management (NBIM)
North Carolina Retirement System
Northern Ireland Local Government Officers' Superannuation Committee (NILGOSC)
Northern Star Group
Northern Trust
Northward Capital
Northwest and Ethical Investments L.P. (NEI Investments)
Nykredit
OceanRock Investments Inc.
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)
OPSEU Pension Trust (OP Trust)
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
Pensionsmyndigheten
Perpetual Investments
PETROS - Fundação Petrobras de Seguridade Social
PFA Pension
PGGM
Phillips, Hager & North Investment Management Ltd.
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 Investments
Porto Seguro S.A.
POSTALIS - Instituto de Seguridade Social dos Correios e Telégrafos
Power Finance Corporation
PREVHAB PREVIDÊNCIA COMPLEMENTAR
PREVI Caixa de Previdência dos Funcionários do Banco do Brasil
PREVIG Sociedade de Previdência Complementar
Prologis
Provinzial Rheinland Holding
Prudential Investment Management
Prudential PLC
Psagot Investment House Ltd
PSP Investments
Q Capital Partners Co. Ltd
QBE Insurance Group
Rabobank
Raiffeisen Fund Management Hungary Ltd.
Raiffeisen Kapitalanlage-Gesellschaft m.b.H.
Raiffeisen Schweiz
Rathbone Greenbank Investments
RCM (Allianz Global Investors)
Real Grandeza Fundação de Previdência e Assistência Social
REI Super
Reliance Capital Ltd
Representative Body of the Church in Wales
Resolution
Resona Bank, Limited
Reynders McVeigh Capital Management
River Twice Capital Advisors, LLC
RLAM
Robeco
RobecoSAM AG
Robert & Patricia Switzer Foundation
Rockefeller Asset Management
Rose Foundation for Communities and the Environment
Rothschild
Royal Bank of Canada
Royal Bank of Scotland Group
RPMI Railpen Investments
RREEF Investment GmbH
Russell Investments
Sampension KP Livsforsikring A/S
Samsung Fire & Marine Insurance
Samsung Life Insurance
Samsung Securities
Sanlam
Santa Fé Portfolios Ltda
Santam Ltd
Sarasin & Partners
SAS Trustee Corporation
Sauren Finanzdienstleistungen GmbH & Co. KG
Schroders
Scottish Widows Investment Partnership
SEB Asset Management AG
Second Swedish National Pension Fund (AP2)
Seligson & Co Fund Management Plc
Sentinel Funds
SERPROS - Fundo Multipatrocinado
Service Employees International Union Benefit Funds
Servite Friars
Seventh Swedish National Pension Fund (AP7)
Shiga Bank, Ltd.
Shinhan Bank
Shinhan BNP Paribas Investment Trust Management Co., Ltd
Shinkin Asset Management Co., Ltd
Siemens Kapitalanlagegesellschaft mbH
Signet Capital Management Ltd
Skandia
Skandinaviska Enskilda Banken AB (SEB AB)
Smith Pierce, LLC
SNS Asset Management
Social(k)
Sociedade de Previdencia Complementar da Dataprev - Prevdata
Socrates Fund Management
Solaris Investment Management
Sompo Japan Insurance Inc.
Sonen Capital LLC
Sopher Investment Management
Soprise! LLP
SouthPeak Investment Management
SPF Beheer bv
Spring Water Asset Management, LLC
Sprucegrove Investment Management Ltd
Standard Chartered
Standard Chartered Korea Limited
Standard Life Investments
State Bank of India
State Street Corporation
StatewideSuper
Stockland
Storebrand ASA
Strathclyde Pension Fund
Stratus Group
Sumitomo Mitsui Financial Group
Sumitomo Mitsui Trust Holdings, Inc.
Sun Life Financial Inc.
Superfund Asset Management GmbH
SUSI Partners AG
Sustainable Capital
Sustainable Development Capital LLP
Sustainable Insight Capital Management
Svenska Kyrkan, Church of Sweden
Svenska Kyrkans Pensionskassa
Swedbank
Swift Foundation
Swiss Re
Swisscanto Holding AG
Sycomore Asset Management
Syntrus Achmea Asset Management
T. Rowe Price
T.GARANTİ BANKASI A.Ş.
T.SINAİ KALKINMA BANKASI A.Ş.
Tata Capital Limited
TD Asset Management
Teachers Insurance and Annuity Association – College Retirement Equities Fund
Telluride Association
Tempis Capital Management Co., Ltd.
Terra Forvaltning AS
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 Foundation
The Clean Yield Group
The Collins Foundation
The Co-operators Group Limited
The Daly Foundation
The Environmental Investment Partnership LLP
The Hartford Financial Services Group, Inc.
The Joseph Rowntree Charitable Trust
The Korea Teachers Pension
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 Sisters of St. Ann
The Standard Bank Group
The Sustainability Group
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 & Nichido Fire Insurance Co., Ltd.
Toronto Atmospheric Fund
Trillium Asset Management, LLC
Triodos Bank
Tri-State Coalition for Responsible Investment
Tryg
Turner Investments
UBS
Unibail-Rodamco
UniCredit
Union Asset Management Holding AG
Union di Banche Italiane S.c.p.a
Union Investment Privatfonds GmbH
Unionen
Unipension
UNISON staff pension scheme
UniSuper
Unitarian Universalist Association
United Methodist Church General Board of Pension and Health Benefits
United Nations Foundation
Unity Trust Bank
Universities Superannuation Scheme (USS)
Vancity Group of Companies
VCH Vermögensverwaltung AG
Ventas Inc
Veris Wealth Partners
Veritas Investment Trust GmbH
Vermont State Treasurer
Vexiom Capital, L.P.
VicSuper
Victorian Funds Management Corporation
VIETNAM HOLDING ASSET MANAGEMENT LTD.
Vinva Investment Management
Voigt & Collegen
VOLKSBANK INVESTMENTS
Waikato Community Trust
Walden Asset Management, a division of Boston Trust & Investment Management Company
WARBURG - HENDERSON Kapitalanlagegesellschaft für Immobilien mbH
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Water Asset Management, LLC
Wells Fargo & Company
West Yorkshire Pension Fund
WestLB Mellon Asset Management (WMAM)
Westpac Banking Corporation
WHEB Asset Management
White Owl Capital AG
Woori Bank
Woori Investment & Securities
YES BANK Limited
York University Pension Fund
Youville Provident Fund Inc.
Zegora Investment Management
Zevin Asset Management
Zurich Cantonal Bank
Zurich Cantonal Bank

Appendix IV: 50 companies with largest emissions in 2013†

AUSTRALIA

Energy
Woodside Petroleum

BRAZIL

Energy
Petróleo Brasileiro SA - Petrobras
Materials
Vale

CANADA

Energy
Husky Energy
Imperial Oil
Suncor Energy
Materials
Potash Corporation of Saskatchewan

FRANCE

Energy
Total
Industrials
Saint-Gobain
Materials
Air Liquide
Utilities
Electricite de France (EDF)
GDF Suez

GERMANY

Consumer Discretionary
Volkswagen
Materials
BASF
Linde
Utilities
E.ON
RWE

ITALY

Utilities
ENEL

JAPAN

Materials
Nippon Steel & Sumitomo Metal

LUXEMBOURG

Materials
Arcelor Mittal

NETHERLANDS

Energy
Royal Dutch Shell

NORWAY

Energy
Statoil

S. AFRICA

Energy
Sasol

S. KOREA

Materials
POSCO

SPAIN

Energy
Repsol
Utilities
Gas Natural SDG

SWITZERLAND

Materials
Holcim
Xstrata

UK

Consumer Discretionary
Carnival
Energy
BP
Materials
Anglo American
BHP Billiton
Rio Tinto
Utilities
National Grid

USA

Consumer Staples
Wal-Mart
Energy
Apache
Chevron
ConocoPhillips
Devon Energy
Exxon Mobil
Occidental Petroleum
Industrials
FedEx
Materials
Air Products & Chemicals
Dow Chemical
E.I. du Pont de Nemours
Praxair
Telecommunication services
AT&T
Utilities
American Electric Power
Duke Energy
Exelon

† the 50 largest emitters in 2013 for whom data was available in 2009

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Global Partners

Global Implementation Partner

accenture
High performance. Delivered.

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