CDP South Africa Climate Change Report 2014

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

October 2014

Lead Partner
National Business Initiative

Report writing and scoring partners
Irbaris and Incite

Contents

To read 2014 company responses in full please go to https://www.cdp.net/en-US/Results/Pages/responses.aspx

Minister's Foreword

We encourage business to set more ambitious targets and drive innovation that challenges the norm of 'business as usual'.

As we launch this year's South African CDP Climate Change report, it is both laudable and encouraging to note that South African companies are increasingly taking critical first steps towards climate change mitigation.

Almost half of the JSE100 companies surveyed for this year's CDP scored above 90/100 on disclosure. Given that disclosure is the cornerstone of all future mitigation efforts, these results are to be commended. The average disclosure score for the South African companies surveyed for the report is 87 out of 100, up from a median of 83 in 2013.

The findings of this year's report indicate that South African businesses recognise climate change as a major issue- with equally significant impact. That nine local companies have made the Global Climate Performance Leadership Index (CPLI) this year – up from eight in 2013, further demonstrates a commitment to align climate change mitigation efforts with overall business objectives. The actions undertaken by the South African companies analysed in this report also go a long way towards bolstering South Africa's role on the global stage. South Africa is taking bold steps to reduce greenhouse gas emissions – towards our commitment of a 34% and 42% deviation from a 'business as usual' emissions growth trajectory by 2020, and 2025 respectively.

Working with industry, we have done extensive work to analyse the emission reduction potential in key economic sectors, and to understand the social and economic opportunities and impacts of reducing emissions. This work will lead to the establishment of sectoral emission reduction outcomes, and carbon budgets for specific companies, where appropriate.

Because we know that climate change is a problem that government cannot solve alone. The findings of CDP South Africa 2014 show business to be a willing and leading partner in this collaboration. They also evidence that the relationship between industry and government as a regulator need not be an adversarial one: that cooperation is both preferable and beneficial.

South African companies have been engaging with climate change strategy, risk and opportunity and management for many years, and are well positioned to understand both the need for change as well as the challenges and opportunities of implementation. There is extensive progress in improving energy efficiency across all sectors, mostly led by industry. However, translating recognition of the risk posed by climate change has to be met with an overall integrated, wide-reaching risk management response. Despite the significant improvement in the number of companies achieving net emission reductions this year (51% up from 41% in 2013), this remains too low to have a significant impact. And although 76 per cent of companies have set emission reduction targets, these do not match either the scale of the challenge, or the global emission reduction targets promised by South Africa.

The UN Climate Summit in New York on 23 September 2014 demonstrated a growing alignment of world leaders towards taking action on climate change. The announcements made by heads of government, and leaders of industry, combined with pledges to resource the Green Climate Fund are positive signals that the world is responding proactively to the global challenge of climate change. It is a momentum we hope to sustain ahead of COP21 in Paris next year, when negotiations under the Durban Platform must be finalised. As we strive towards making a fair contribution to the global effort to stabilise greenhouse gas concentrations, we look forward to working with industry. The companies recognised in this year's report are to be congratulated and encouraged: their contribution has not gone unnoticed. We encourage business to set more ambitious targets and drive innovation that challenges the norm of 'business as usual.'

Mrs B E E Molewa, MP
Minister of Environmental Affairs

CDP CEO Foreword

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

The global economy has bounced back from crisis and a cautious optimism is beginning to pervade the markets. As we embrace recovery we must remember that levels of greenhouse gas emissions continue to rise and we face steep financial risk if we do not mitigate them. The unprecedented environmental challenges that we confront today – reducing greenhouse gas emissions, safeguarding water resources and preventing the destruction of forests – are also economic problems. One irrefutable fact is filtering through to companies and investors: the bottom line is at risk from environmental crisis.

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

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

As mainstream investors begin to recognise the real value at risk, we are seeing more action from some of the 767 investors who request disclosure through CDP. The Norwegian pension fund, Norges Bank, with assets worth over $800 billion, expects companies to show strategies for climate change risk mitigation and water management, and has divested from both timber and palm oil companies that did not meet their standards.

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

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

We are standing at a juncture in history. With the prospect of a global climate deal[1] coming from the United Nations process, governments, cities, the private sector and civil society have a great opportunity to take bold actions and build momentum in the run up to the Paris 2015 meeting. The decisions we make today can lead us to a profitable and secure future; a future that we can all be proud of.

Paul Simpson
CEO CDP

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

NBI CEO Foreword

> We need to accelerate our business efforts, set more ambitious targets, work with government to ensure an appropriate enabling environment, and work with each other to drive innovation and reduce our emissions.

A recent report released by the Global Commission on the Economy and Climate, of which South Africa's Trevor Manuel is a commissioner, concludes that 'countries at all levels of income now have the opportunity to build lasting economic growth at the same time as reducing the immense risks of climate change'[2]. The report goes on to say that the necessary capital and innovation potential exists already, an observation that is reinforced by the results disclosed in this year's CDP South Africa Climate Change report. The report describes how South African companies are actively working towards emissions reductions and illustrates how many companies leverage significant investment to meet their emission reduction targets.

The change we need is possible and the journey South African companies are taking towards that change is demonstrated in this and the previous seven CDP Climate Change reports. As reflected in the Climate Disclosure Leadership Index (CDLI), South African companies, many of them NBI members, continue to lead globally on transparency. The fact that the average disclosure score is now 87 out of 100, higher than the score needed to get onto the CDLI when we started in 2007, is simply remarkable.

The identification of climate change risk is on the rise and 95% of responding companies list associated risks as highly likely (rated as likely to virtually certain) to materialise within three years. This, combined with the growing international gap between what is required by science and the emission reductions we are achieving, as well as the increasing regulatory response from governments globally, demands a change in behaviour. It is for this reason that the NBI has shifted the focus of recent CDP Climate Change reports to performance and not just disclosure.

Companies responding to this year's CDP report are demonstrating encouraging improvements in climate change performance and nine South African companies have been recognised in the Global Climate Performance Leadership Index (CPLI). The sample companies (the top 100 companies on the JSE by market capitalisation) have shown improved performance scores compared with 2013, with more than half of the companies (58%) scoring a grade B or higher (51% in 2013) and 83% achieving a C or higher (72% in 2013). It is clear that South African companies are grappling with the issue of climate change and making incremental improvements.

Unfortunately we are simply not making enough progress, and the progress is too slow. Only half of the responding companies have made net emissions reductions and only 31 companies have set absolute emission reduction targets. The NBI acknowledges the challenges of growing our businesses to have a positive impact on inequality, poverty and job creation, while simultaneously reducing our emissions. It seems that the 50% of companies who are achieving absolute reductions are setting the example for the rest of us. We need to accelerate our business efforts, set more ambitious targets, work with government to ensure an appropriate enabling environment, and work with each other to drive innovation and reduce our emissions.

The NBI wishes to commend the companies who participate in the CDP and is confident that these companies are better positioned to deal with physical and regulatory climate change risk than their peers. We hope to continually learn from these companies as they lead the way in reducing emissions and averting irreversible and dangerous climate change.

Joanne Yawitch
CEO National Business Initiative

2 See http://newclimateeconomy.report/

Key messages from 2014

1 South African companies have continued to improve their disclosure and standards are now generally high. This is an important indicator of progress, as disclosure is a critical first step in driving performance.

2 Companies demonstrate the attention they are giving climate change by increasingly recognising climate change as a significant and near-term issue. While most companies see the issue as a risk, some companies see important opportunities.

3 There have been improvements in climate change performance, with nine companies making the Global Climate Performance Leadership Index.

4 Despite the improvements in performance, there is a gap between the recognition of risk (or opportunity) and the management actions that companies are taking. In some key areas, South African companies are lagging behind the Global 500 performance.

5 While more companies are voluntarily establishing reduction targets, the scale and ambition of most companies' emission reduction targets does not yet match the scale of the challenge or the contribution promised by South Africa.

6 Although there has been a small reduction in total reported emissions, this reduction appears to reflect methodological and sampling issues rather than a significant change in underlying performance.

7 While the proposed carbon tax is reported as a significant risk by many companies, there are substantial differences in the perceived magnitude of the impact and the required management response.

8 Too few companies seem to appreciate the climate change risks or emissions levels in their value chain, even though some companies are providing more accurate reporting.

Key messages continued

KEY MESSAGE 1: South African companies have continued to improve their disclosure and standards are now generally high. This is an important indicator of progress, as disclosure is a critical first step in driving performance.

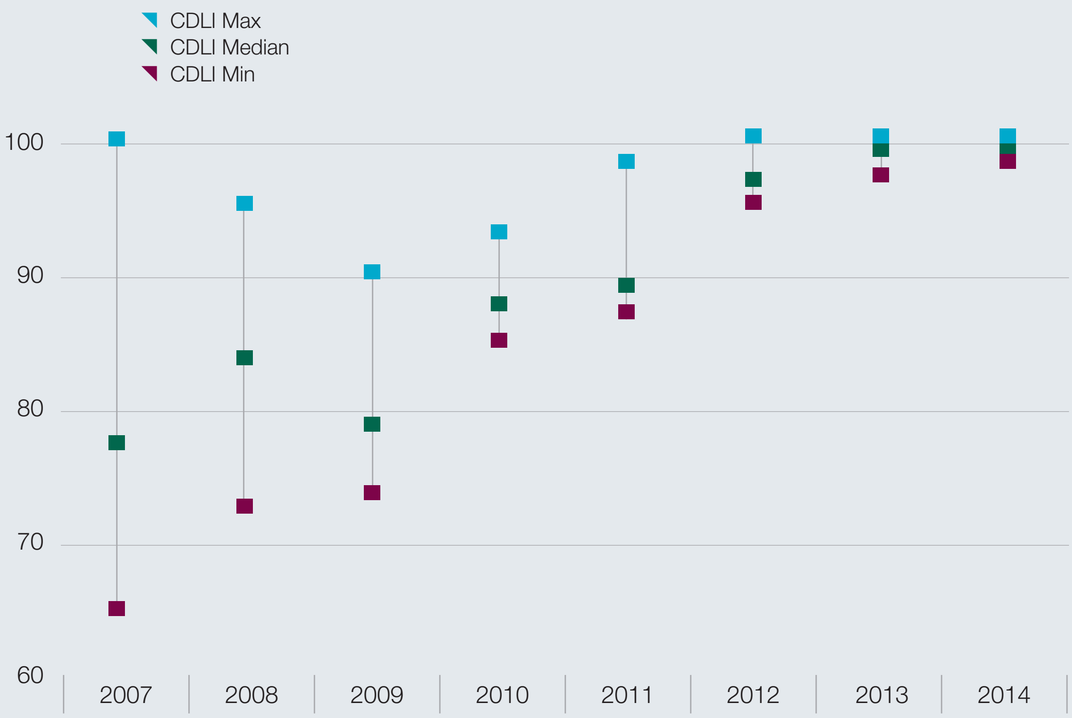
> The threshold score required to be in the CDLI has increased; this is impressive and shows the commitment of South African companies to increasing transparency.

Companies' disclosure has continued to improve compared to previous years. Over the last few years, companies have risen to the challenge of more transparent reporting and standards are now high. The overall threshold score required to be in the Climate Disclosure Leadership Index (CDLI) is now much higher than it was a few years ago.

JSE100 companies are generally doing well at disclosure: almost half of the companies responding scored above 90/100 (up from a median of 83 in 2013). The average disclosure score is 87/100 (up from a mean of 83 in 2013). The range of scores has significantly decreased: only 8% of companies scored between 50 and 70, and 82% of companies scored above 80.

The threshold score required to be in the CDLI, the top 10% of companies, has also increased: it is now 98, up from 97 in 2013 and 95 in 2012 (Figure 1). This is impressive and shows the commitment of South African companies to increasing transparency, hopefully providing a good base for improving performance.

Figure 1: CDLI scores over time (2007-2014)



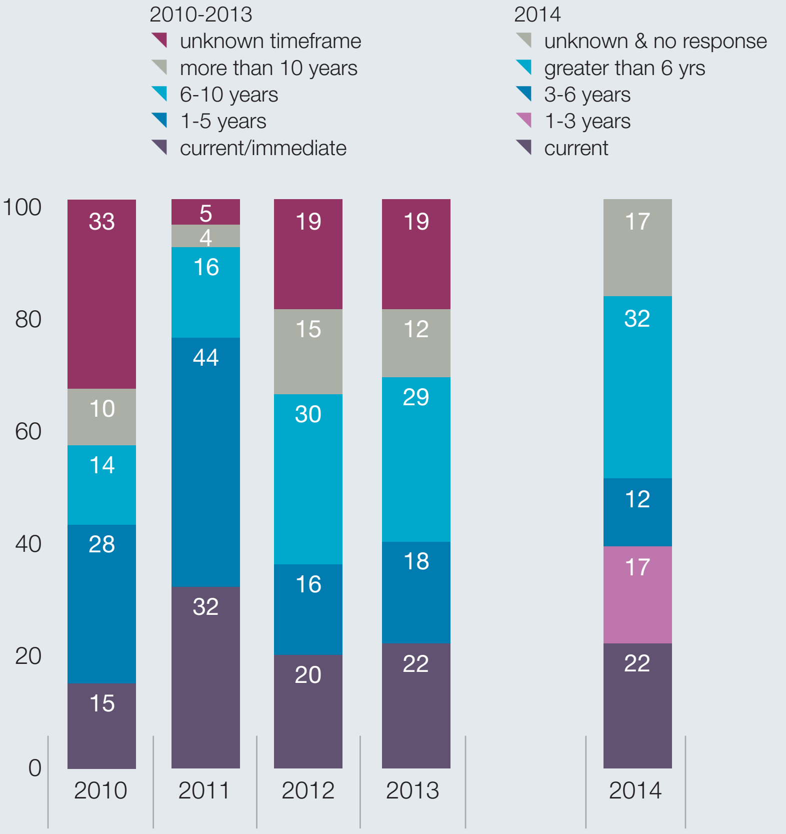
KEY MESSAGE 2: Companies demonstrate the attention they are giving climate change by increasingly recognising climate change as a significant and near-term issue. While most companies see the issue as a risk, some companies see important opportunities.

Companies are viewing climate change as increasingly pressing and significant. Many companies expect risks associated with climate change to materialise in the near-term, and see both the likelihood of such risks and their impact on the business to be high.

Virtually all the companies (95%) see some risks as highly likely (rated as likely to virtually certain) to materialise within three years[3]. This may reflect the general rise in global regulation and high profile climate change events (see Box 1) as well as significantly increased local South African legislative activity. The proportion of physical risks seen as short-term (arising within six years) has increased to just over half (Figure 2). This is well within the strategic planning horizon of companies, especially major energy and resource companies, and the life of many of their assets.

> Virtually all the companies see some climate change risks as highly likely to materialise within three years.

Figure 2: Percentage of physical risks expected to materialise in certain timeframes for 2010 - 2014[4]



3 Companies were asked to classify the likelihood of risks using the following rating scale – virtually certain, very likely, likely, more likely than not, about as likely as not, unlikely, very unlikely, exceptionally unlikely, unknown.

4 Note that the data are not directly comparable as CDP changed the timeframes for categorising risks in 2014 from current, 1-5 years, 6-10 years, more than 10 years and unknown, to current, 1-3 years, 3-6 years, more than 6 years, and unknown.

Key messages continued

Figure 3: Risk perception matrix: Risk Magnitude against Risk Likelihood[5] for (i) all reported risks; (ii) all regulatory risks; (iii) all physical risks

All reported risks

(i) Likelihood \ Magnitude	LOW	MEDIUM	HIGH
HIGH	12%	27%	20%
MEDIUM	8%	19%	10%
LOW	2%	1%	1%

All regulatory risks

(ii) Likelihood \ Magnitude	LOW	MEDIUM	HIGH
HIGH	20%	34%	26%
MEDIUM	7%	10%	2%
LOW	0%	1%	0%

All physical risks

(iii) Likelihood \ Magnitude	LOW	MEDIUM	HIGH
HIGH	8%	25%	17%
MEDIUM	9%	21%	15%
LOW	3%	1%	1%

The overwhelming majority of reported risks (76%) are perceived as having medium to high likelihood and medium to high impact (Figure 3). The majority of the different risk categories, under which the risks are disclosed in the questionnaire, are also seen as medium to high impact and medium to high likelihood. While the carbon tax is viewed as the most likely and highest impact risk, the key risks are not only regulatory (Figure 4). Companies recognise the immediacy and impact of physical risks (such as increasing drought and extreme precipitation) and reputation risks, indicating that companies are giving the identification of risks an increased degree of strategic attention.

Companies are recognising some important climate-related opportunities. The most commonly reported 'opportunities' relate to reputation (reported by 64% of companies), followed by changing consumer behaviour, and fuel/energy taxes and regulation (reported by 53% of companies each). The opportunities are reported to be arising within a short time horizon: 70% of reported opportunities are perceived as arising within six years and a quarter are seen as being current (Figure 5). Opportunities that are viewed as high impact and high likelihood (21%) are approximately the same proportion as the described risks (20%), and 78% are viewed as medium to high likelihood and medium to high impact (compared with 76% of risks) (Figure 6).

Figure 4: Percentage of risks viewed as high likelihood and high impact[6]

5 With regard to likelihood, HIGH covers virtually certain, very likely and likely; MEDIUM covers more likely than not, about as likely as not, and unlikely; and LOW covers very unlikely, exceptionally unlikely and unknown. With regard to magnitude, HIGH covers Medium-High and High; MEDIUM covers Low-Medium and Medium; and LOW covers Unknown and Low categories.

6 'Other' risks includes a variety of categories such as uncertainty in market signals, changing consumer behaviour, reputation, fluctuating socio-economic demands and increasing humanitarian demands.

Figure 5: Percentage of all reported opportunities expected to materialise in certain timeframes

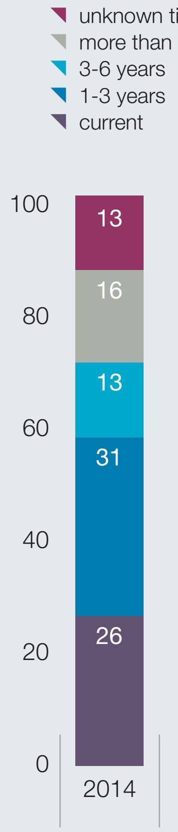
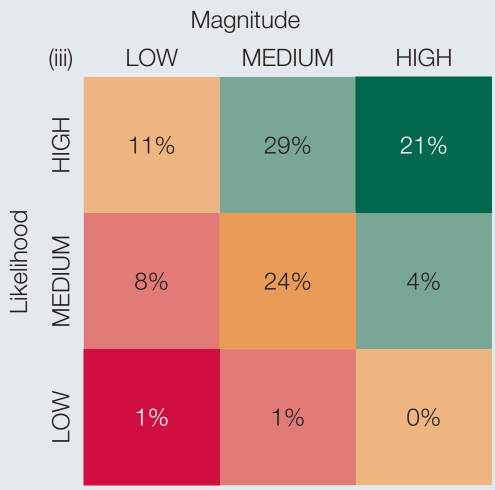


Figure 6: Opportunity perception matrix: Opportunity Likelihood against Opportunity Magnitude for all reported opportunities



BOX 1: South Africa in context – How the global landscape is changing

Understanding of climate change continues to develop and create an ever-changing set of concerns for businesses. Many reports highlighting the urgent need for more decisive action to combat climate change have been published recently. The Intergovernmental Panel on Climate Change's Fifth Assessment Report contains a marked increase in the levels of confidence of the causes and observed effects of climate change, while the World Economic Forum's Global Risks Report 2014 lists climate change as one of the top five "most likely" and "most potentially impactful" risks.

As research develops and new information comes to light, there have also been developments in public policy. In the USA, for example, the Obama administration has implemented tough new rules to cut carbon emissions from power plants by 30% by 2030, while the Chinese government is reported to be considering introducing a national carbon market as soon as 2016. An increasing number of organisations, including the International Energy Agency, are calling for the phase out of fossil fuel subsidies. Although not directly linked to climate change, air pollution is becoming an urgent issue for some cities; actions to curb the problem could have a knock on impact on carbon emissions. Beijing, for example, plans to reduce the number of new cars sold annually by 90,000 from next year onwards.

Investors are also beginning to take more decisive action. The International Finance Corporation's GHG performance standards for project financing have been revised to require direct and indirect emissions to be quantified for projects emitting more than 25,000 tCO_2 per annum. The third iteration of the Equator Principles has been strengthened to include mandatory reporting of GHG emissions of more than 100,000 tCO_2 per annum. Since July 2013, several international financial institutions (including the World Bank, the European Investment Bank, and European Bank for Reconstruction and Development) have limited their assistance to coal-fired power plants. Some investors and ratings agencies (such as Standard and Poors and HSBC) have begun to recognise the need to 'stress test' their investments against lower fossil fuel demand (see Box 2). Similarly, experts at the World Health Organization's first-ever Health and Climate Change Conference called on the medical sector to divest from the fossil fuels industry.

Against this backdrop, it is clear that the UN Climate Summit held in September 2014 could be a pivotal event. The Summit, hosted by Ban Ki-Moon, intended to realign global political will for countries to unite in combating climate change. The debate, combined with the recent affirmation of the science released in the Fifth Assessment Report, will set the tone for the crucially important 2015 COP in Paris and could shape the future direction of climate change policy.

Key messages continued

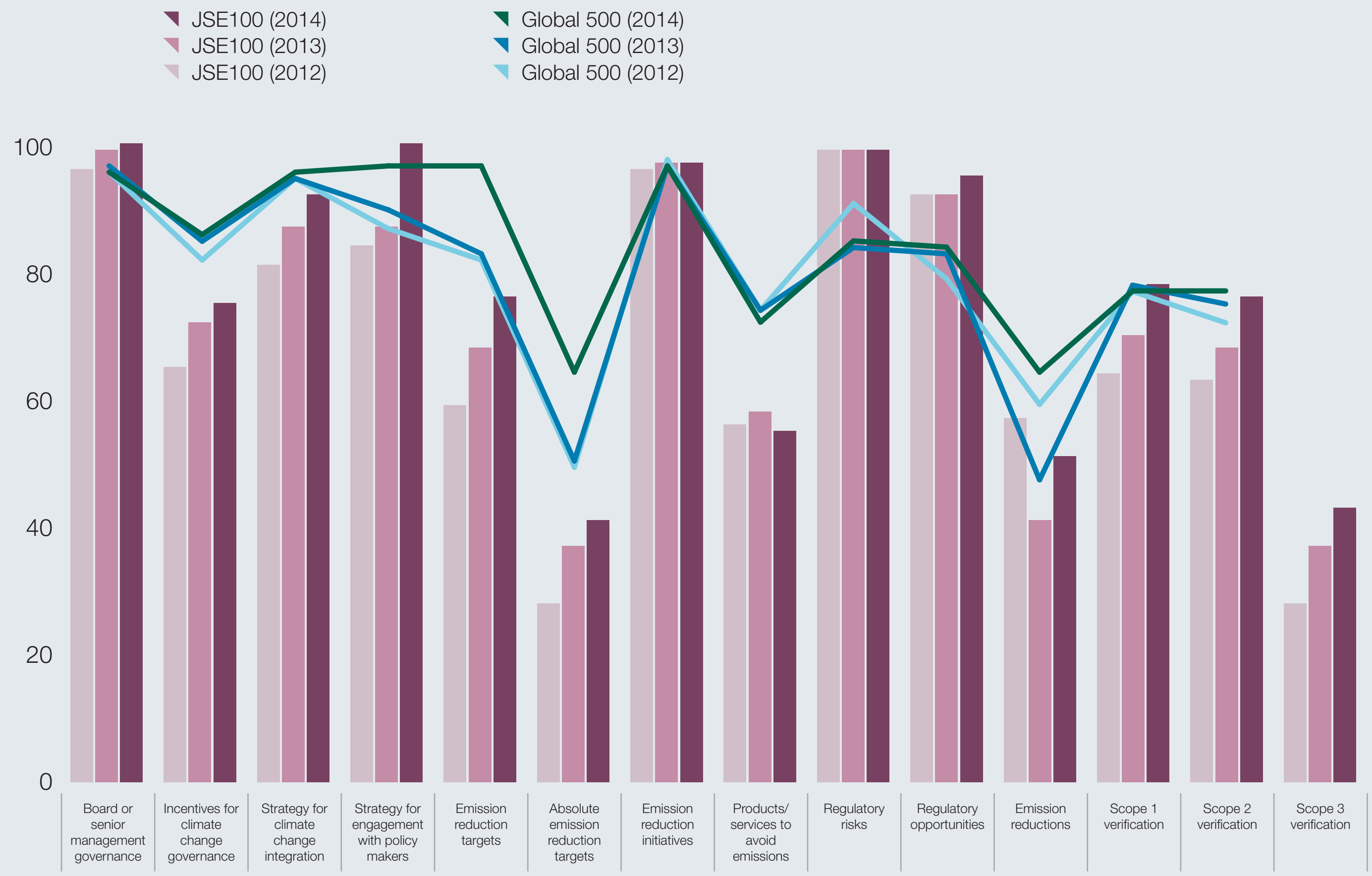
KEY MESSAGE 3: There have been improvements in climate change performance, with nine companies making the Global Climate Performance Leadership Index.

While performance as measured by the CDP scoring continues to improve, these improvements are often small. In aggregate, South African companies' performance generally tracks the Global 500, and appears stronger on regulatory-related issues.

South African companies are reporting and explaining their actions well, thereby setting the stage for the challenge of addressing performance. The JSE100 companies showed improved performance scores compared with 2013, with 58% of companies achieving an A or B grade (51% in 2013) and 83% achieving a C or above (72% in 2013).

Looking at the data in more detail reveals improvements across most areas (Figure 7), with sizeable increases in some categories such as emission reduction targets (76% from 68% in 2013), and companies with a strategy for engaging with policy makers (100% up from 87% in 2013). Generally, the JSE100 performs as well as the Global 500, and in some cases, performs better than the global average, for example, in showing awareness of regulatory risks and opportunities, and having a strategy for engagement with policy-makers. This could be a consequence of companies' awareness of developing South African legislation affecting emissions and emissions accounting and reporting (carbon tax, mandatory GHG reporting, energy reporting, air quality, offsets, and Desired Emissions Reduction Outcomes).

Figure 7: Year-on-year percentage key trends in JSE100 compared with Global 500



KEY MESSAGE 4: Despite the improvements in performance, there is a gap between the recognition of risk (or opportunity) and the management actions that companies are taking. In some key areas, South African companies are lagging behind the Global 500 performance.

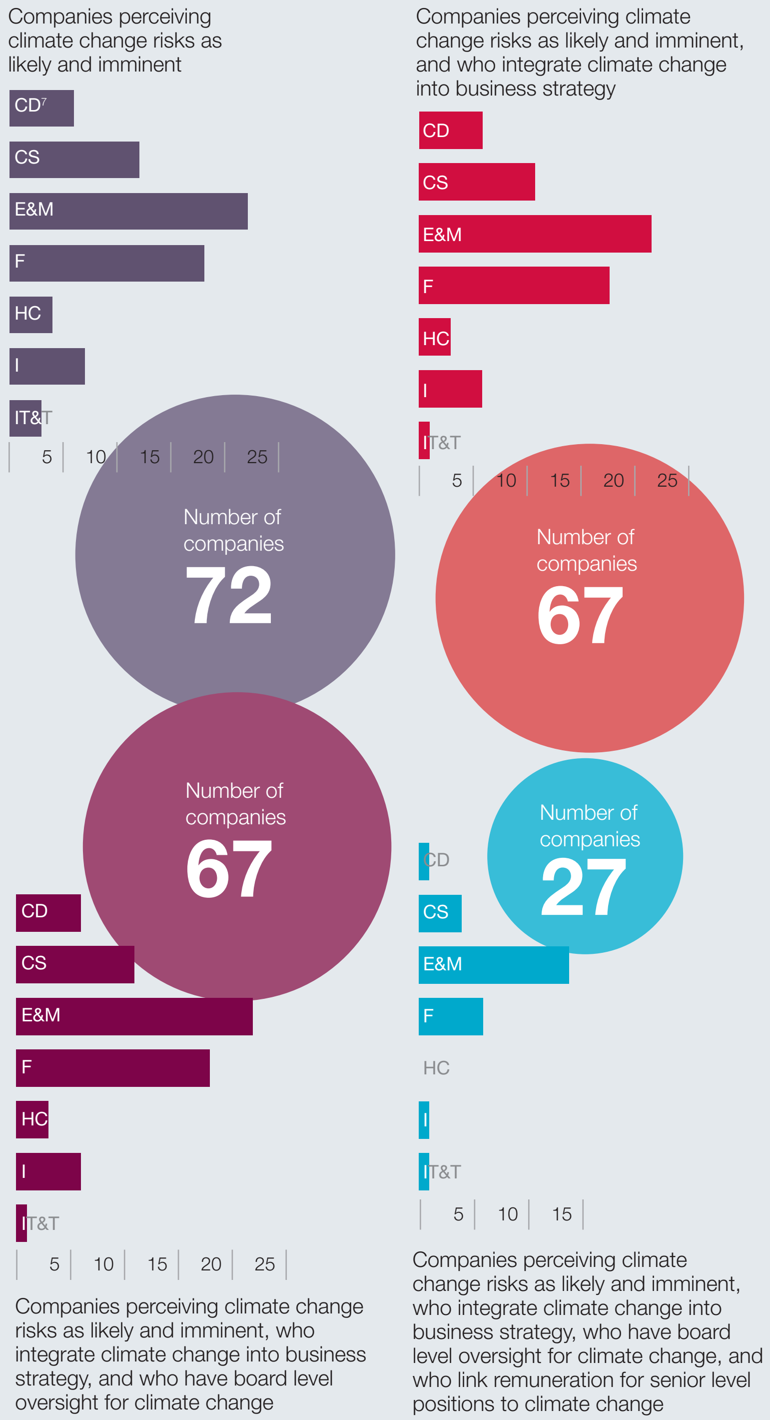
Given the magnitude, likelihood and timeframe in which companies perceive climate change risks, it might be expected that most companies would have a comprehensive management approach to understanding and managing these risks. However, based on the submissions from the companies, it is not clear that this is the case. In certain performance areas, the JSE100 is not performing as well as the Global 500.

While companies are achieving annual, incremental improvements on some of the performance indicators, they still have considerable room for progress on indicators that lag the Global 500. Areas for particular improvement include the incentives for climate change governance, number of companies with absolute emission reduction targets, Scope 3 verification, and products/services to avoid emissions (Figure 7). A critical area of performance is emissions reductions: there has been a significant improvement this year in the number of companies achieving net emission reductions (51% compared with 41% in 2013), yet even this improvement means only half the companies are showing reductions – too low a number to make any significant impact. This may in part reflect the structure of the South African economy and the critical importance of extractive and highly energy-intensive industries.

While almost all companies say they are managing climate risk (97%), this does not appear to translate into an integrated and wide-reaching risk management response. Nineteen of the 63 companies who view the impacts of climate change on reputation as a risk, report that this risk is exclusively managed by reporting to the CDP, an activity which does not mitigate against underlying poor practice. While transparent reporting is valuable, a company's reputation is in the hands of multiple stakeholders and reporting will ultimately only have an impact on reputation if the reported actions are seen to be addressing the risks and exploiting the opportunities.

Figure 8 provides an illustration of a lack of sufficient strategic integration. Ninety-five per cent of companies view some risks associated with climate change as

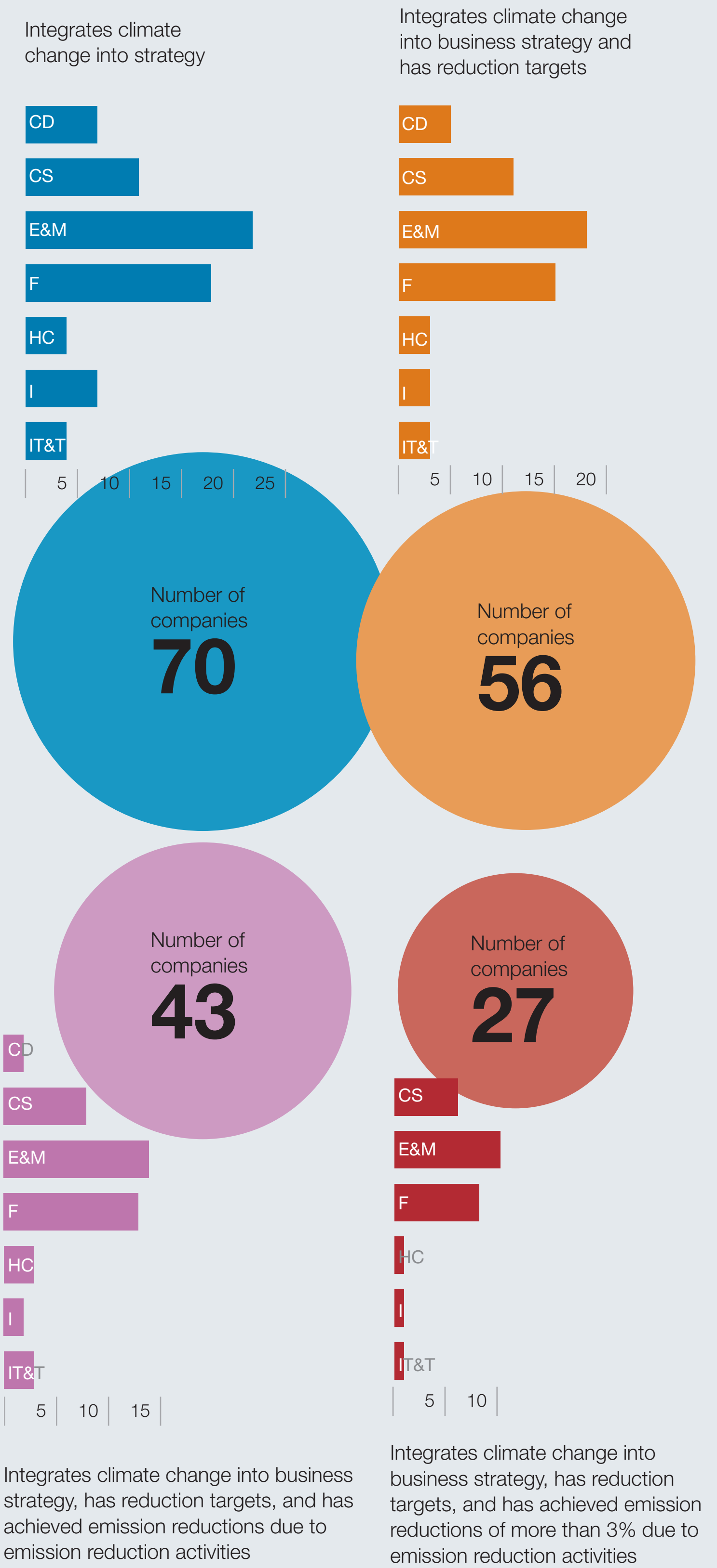
Figure 8: Management practices for companies reporting that risks from climate change are likely and imminent



7 The sectors have been abbreviated throughout the report as: CD:Consumer Discretionary, CS: Consumer Staples, E&M: Energy & Materials, F: Financials, HC: Health Care, I: Industrials, and IT&T: Information Technology & Telecoms.

Key messages continued

Figure 9: Acting on emissions: companies with targets and those with emission reduction activities and significant reductions



likely (rated likely or very likely) and imminent (within three years), and while the majority are integrating climate change into their strategy and have board level oversight, only 38% of these companies link senior management remuneration to climate change. Similarly, of the 70 companies integrating climate change into their strategy, 80% also set targets, 61% have set targets and achieved emission reductions of some degree, but just 39% of those companies have achieved reductions of more than 3% (Figure 9). In order to improve performance to the degree prescribed by science, companies need to integrate the management of climate change and cascade climate governance throughout their business, with the goal of achieving significant emission reductions.

The same issue applies to management of opportunities. Although nearly half of all recognised opportunities have a high likelihood of arising within three years (46%). It appears that few companies are managing the potential opportunities associated with climate change in a strategic way to really realise them. While opportunities, such as enhancing reputation and changing consumer behaviour, have been reported, the management methods disclosed focus on risk management or liability reduction, such as lowering tax or compliance burdens. Few opportunities have been financially quantified, and not many are focused on true revenue enhancing actions such as developing new products and services, creating new partnerships or research opportunities, and developing competitive advantage. This suggests a lack of thinking at a strategic level about the scale or nature of the potential opportunities.

KEY MESSAGE 5: While more companies are voluntarily establishing reduction targets, the scale and ambition of most companies' emission reduction targets does not yet match the scale of the challenge or the contribution promised by South Africa.

More companies are setting emission reduction targets, but the majority are short-term. In aggregate, achieving these targets will result in negligible annual reductions and only half the companies are meeting the targets they have set themselves.

Greenhouse gas reduction targets are important, as they require conscious senior management decisions and show a tangible commitment to tackling climate change. In South Africa, the targets set by companies are all voluntary, so it is encouraging to see that 76% of the companies have targets (58 companies, up from 52 in 2013). There are 22 companies with absolute targets, 27 with intensity targets and nine with both. Table 1 sets out a selection of some of the targets from the JSE100 sample.

The majority of targets are short-term: 80 of 128 targets described by companies expire on or before 2017 and a further 39 on or before 2020, which suggests a disconnect between long-term strategic planning and target setting. Only three companies have targets that went to 2030 (Bidvest Group, Sasol, which has already met the target, and British American Tobacco, which also had a 2050 target).

Table 1: Examples of JSE100 carbon reduction targets reported through CDP 2014[8]

Company	Target	Year	Scope and description
Anglo American	19% from 2011	2015	Scope 1 and 2: "Our overall targets for greenhouse gas (GHG) emission reduction is 19%, against the projected business-as-usual (BAU) level in 2015."
British American Tobacco	80% from 2000	2050	Scope 1 and 2: "Reduce our emissions by 46% by 2017; by 50% by 2030; and 80% by 2050 against our 2000 baseline of 1.52 tonnes per million cigarettes equivalent."
Exxaro Resources	5% year-on-year reduction	2013	Scope 2: For key Business Units: "Annual emission target based on electricity usage target which is set as a range of intensities dependent on tonnage achievement. Improvements measured as change in electricity used at achieved tonnage against target electricity usage at that same tonnage."
FirstRand	34% reduction from 2008 levels	2020	Scope 1+2+3: "Due to FirstRand exceeding their carbon emissions reduction target and saving 24% against the Baseline Year of 2007/2008 FY, a decision was made, after reviewing operations and projected emissions reductions projects, to increase the absolute emissions reduction target to 34% by 2020, in line with the South African government commitment at COP15 in Copenhagen."
Harmony Gold Mining Co	2% reduction from 2014 (2005 base year)	2018	Scope 1 and 2: "Since the target reached completion in this reporting year, Harmony has since reviewed its strategy and has published a new emission intensity reduction target. This target, encompassing the South African and PNG operations, involves a 2% Scope 1 and Scope 2 emission-intensity reduction between 2014 and 2018, with 2005 as a base year. This is a realistic target, which is set against the backdrop of a 15% emission intensity reduction achievement between 2005 and 2013."
Nedbank	7% reduction per employee based on 2013	2020	Scope 1+2+3: "The new target is a 7% reduction based on end-of-2013 levels. This implies a target of 7.08 tCO_2e per FTE by the end of 2020."
Old Mutual	20% from 2010	2020	Scope 1 and 2: "The data concerning investment property portfolio including base year emissions relates purely to current properties, to ensure any reduction figure is accurate and not related purely to removal of properties. The portfolio includes the property asset management business and properties invested in and managed to create value and client returns."
RCL Foods	20% and 30% from 2010	2020	Scope 1 and 2: "RCL Foods targets GHG emissions in line with Government's target of a 34% reduction by 2020. kWhs consumed from the grid is targeted to reduce by 30% by 2020. Fuel used in vehicles is targeted to reduce by 20% by 2020."
Sappi	23% from 2000	2015	Scope 1 and 2: "The South African target follows an SA industry initiative to achieve a 15% reduction in specific purchased fossil fuels by 2015."
Tongaat Hulett	20% from 2013	2020	Scope 1: "Tongaat Hulett has updated its baseline from 2011 to 2013 considering improved reporting. The business is committed to reducing its greenhouse gas emissions by 5% per annum for the next 5 years and is targeting at least a 20% reduction by 2020 from a 2013 baseline."

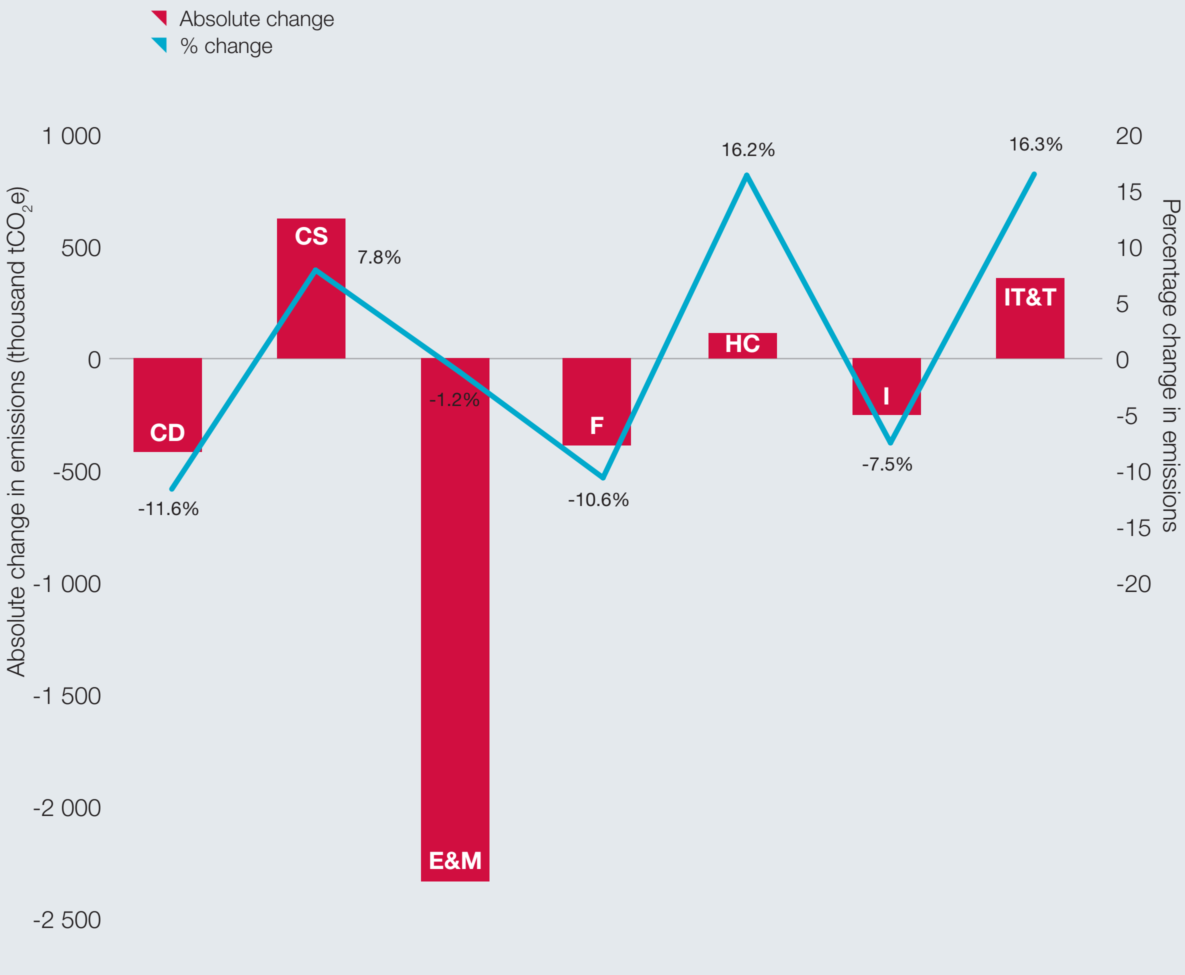
8 We selected these targets on the basis of providing examples of good practice from among the targets reported.

Key messages continued

Some South African companies have set challenging targets aligned to the requirements of science, however, in aggregate the targets are low, which is reflected in the actual emission reductions of the JSE100. The Scope 1 and 2 targets reported by the JSE100 would lead to pro rata global emission reductions of 1.549 million tCO_2e per annum for 2014, slightly less than the reduction actually achieved this year (1.796 million tCO_2e), and a mere 0.7% of this year's total emissions. It would appear therefore that those companies setting and achieving targets are not setting particularly ambitious ones, and also that they are outweighed by the growth in emissions from the remaining companies in the sample.

Only 56% of companies with targets are ahead of them or are meeting them. The Financial sector has most success in meeting its targets, followed by Consumer Staples and Energy & Materials. This may be because most of the Financial sector targets focus on paper usage and the energy efficiency of their buildings, and may be easier and less costly to achieve than the efficiency of large-scale manufacturing processes (as is the focus of most of the targets set by the Energy & Materials sector). It is concerning that five of the 18 companies without targets are from the Industrials sector and four from Energy & Materials – the two sectors with the highest levels of direct emissions.

Figure 10: Emissions changes between 2014 and 2013 by sector



KEY MESSAGE 6: Although there has been a small reduction in total reported emissions, this reduction appears to reflect methodological and sampling issues rather than a significant change in underlying performance.

In total, there has been a minor reduction (from 2013) in emissions reported from JSE100 respondents. Absolute reductions were achieved by half the companies, including most of the top emitters, but few companies have made big reductions and many companies are increasing levels of emissions. A like-for-like comparison between companies reporting in both 2013 and 2014 shows that South African Scope 1 and 2 emissions are down by 4%.

In order to consider a more accurate comparison between 2013 and 2014, and remove differences caused by the slightly different samples in 2013 and 2014[9], only companies that were in both samples have been included in the following tally of emissions, creating a sample size of 72. However, it should be noted that there are still differences between the years, for example, as they seek to improve their disclosure, some companies report for different operations and locations. These 72 companies reported combined global Scope 1 and 2 emissions of 211 tCO_2e, a reduction of 0.6% on a like-for-like basis from 2013 (212.2 million tCO_2e). These companies reported South African Scope 1 and 2 emissions of 147.2 million tCO_2e in 2014, a like-for-like reduction of 4% from 2013 (154 million tCO_2e). Out of the like-for-like sample, 35 companies reported reductions, 33 companies reported emission increases and four companies reported no change.

Looking at the whole reporting sample for 2013 and 2014 (not just the like-for-like data), there have been net emission increases in Telecoms, Health Care and Consumer Staples, and decreases in Consumer Discretionary, Financials and Industrials (Figure 10). The Energy & Materials sector showed a net decrease comprising the largest decrease by sector in emissions from the Energy sub-sector (due to Sasol), and the largest increase by sector in the Materials sub-sector.

Although almost all the companies are implementing emission reduction initiatives, only 67% of these report achieving actual reductions as a result of those initiatives. These initiatives do not cover net company emissions, but rather specific programmes within parts of the business. They tend to focus on actions such as changing light bulbs and reducing paper consumption (the most reported initiative is improving energy efficiency through building services), rather than strategic business changes. The reality is that few companies are making significant reductions, and just 51% of JSE100 companies responding have achieved net emission reductions.

It would be interesting to consider how these emissions reductions compare with company growth. While CDP does not collect this data, it is important to understand that the changing shape of the economy and the changing intensity of a company's emissions also impact on performance. The Global 500 2014 report includes analysis on the Climate Performance Leadership Index, comparing its performance to the Bloomberg World Index and the Dow Jones Sustainability World Index; CPLI outperforms them both.

The efficacy of mitigation action under the National Climate Change Response White Paper will be measured against the benchmark National GHG Emissions Trajectory Range, which reflects South Africa's 'fair contribution' to global efforts to limit anthropogenic climate change to below a maximum of 2°C above pre-industrial levels. This benchmark 'peak, plateau and decline' trajectory defines a peak in GHG emissions in the period 2020 to 2025, a plateau for up to ten years (with an upper limit of 614 million tCO_2e), and a decline in absolute GHG emissions from 2036 onwards to a range with lower limit of 212 tCO_2e and upper limit of 428 million tCO_2e by 2050. Given current and anticipated emissions levels, and the recognised need for economic growth, it is evident that significant additional mitigation effort is required for the South African corporate sector to be aligned with this benchmark trajectory.

Voluntary targets can drive investment in emission reduction activities, but it is the need to comply with regulation that is reported to be the most common driver of investment (49% of companies) in emission reduction activities (Figure 11). Companies report that energy efficiency (47% of companies) has also been a key driver of action. As energy prices continue to rise in South Africa, there is a noticeable focus on energy efficiency as a method of reducing GHG emissions and presumably to allow cost savings from reduced energy consumption. The reports do not indicate the magnitude of the emission reductions achieved by each investment driver. It may well be that in absolute terms, targets and other mechanisms are more important. It is interesting to note how few companies report that an internal price

9 Samples are different due to changes in the JSE100 and delisting and listing of high value entrants. The samples are also different because companies may report to the CDP one year but not in another year.

Key messages continued

for carbon has been instrumental in driving investment in abatement technology.

Behavioural change (such as awareness-raising aimed at reducing energy consumption, recycling and switching from paper to electronic communication) is commonly reported and has a short payback time making it an easy low cost activity for many companies. Energy efficiency options and transportation also have potential for short payback periods (Figure 12) in some sectors.

The data highlights the continuing predominant contribution of a few large GHG emitters to South Africa's emissions, and shows that they have virtually all reduced their emissions from 2013 levels. The majority of these reductions do not come from emission reduction activities but from other reasons such as reduced production and acquisitions or divestments.

The nine largest public emitters this year, emitting 80% of the JSE100 responding total Scope 1 and 2 emissions, are: Sasol, Arcelor Mittal South Africa Ltd, BHP Billiton, Anglo American, Anglo American Platinum, PPC Ltd, Sibanye Gold Ltd, Sappi, and AngloGold Ashanti. The top ten in 2013 included Goldfields and Mondi and did not include Sibanye Gold Ltd[10]. BHP Billiton achieved the largest decrease in South African emissions, although it has seen a significant increase in its global emissions (due to acquisition, increased

10 In February 2013, Gold Fields unbundled its mature, underground KDC and Beatrix mines in South Africa into an independent and separately listed company – Sibanye Gold. Mondi plc's response was non-public this year.

Figure 11: Percentage of responding companies reporting methods used to drive investment in emission reduction activities

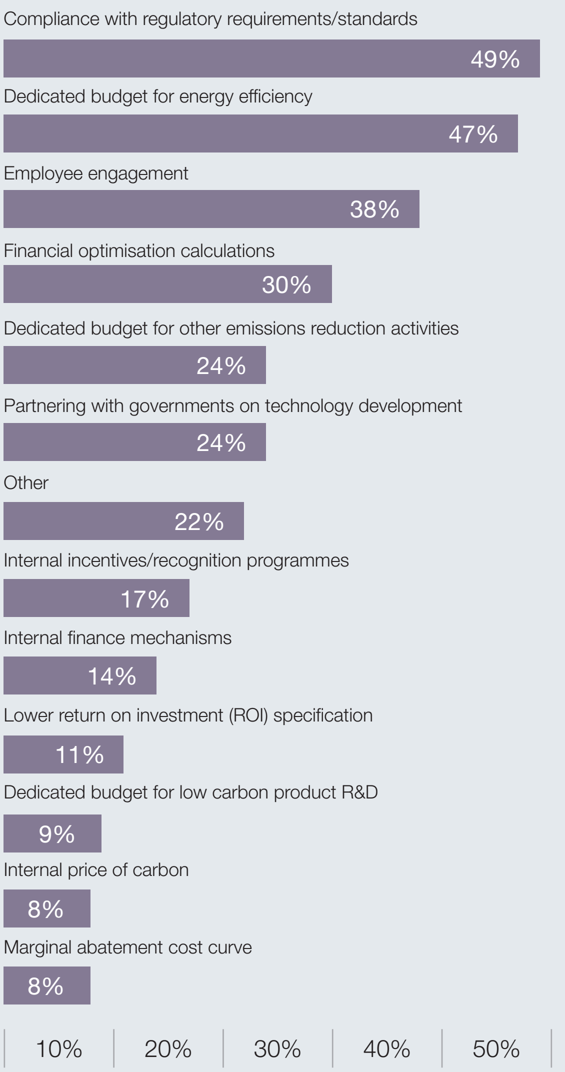
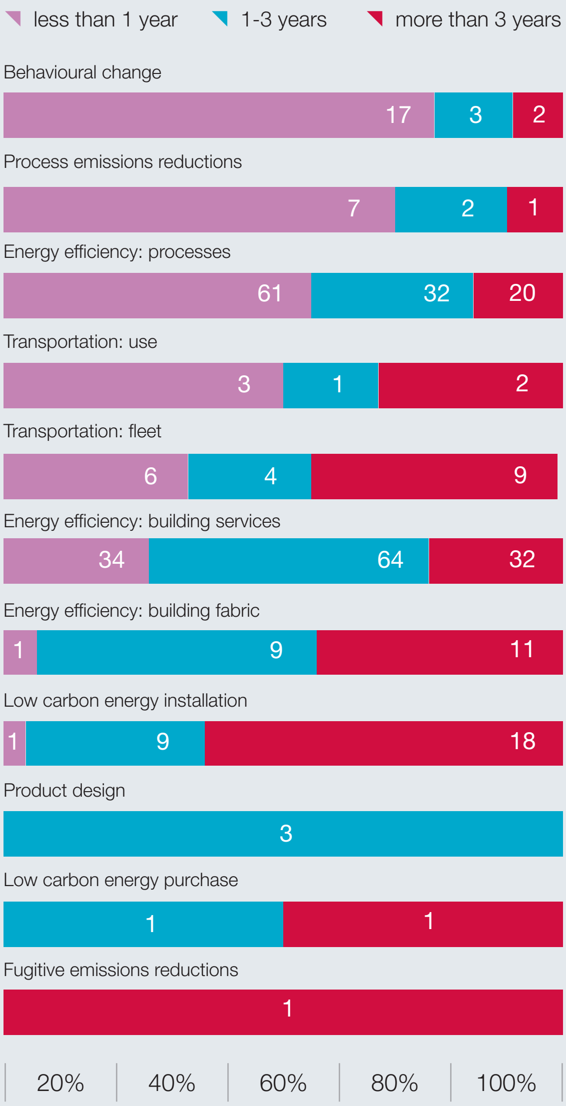


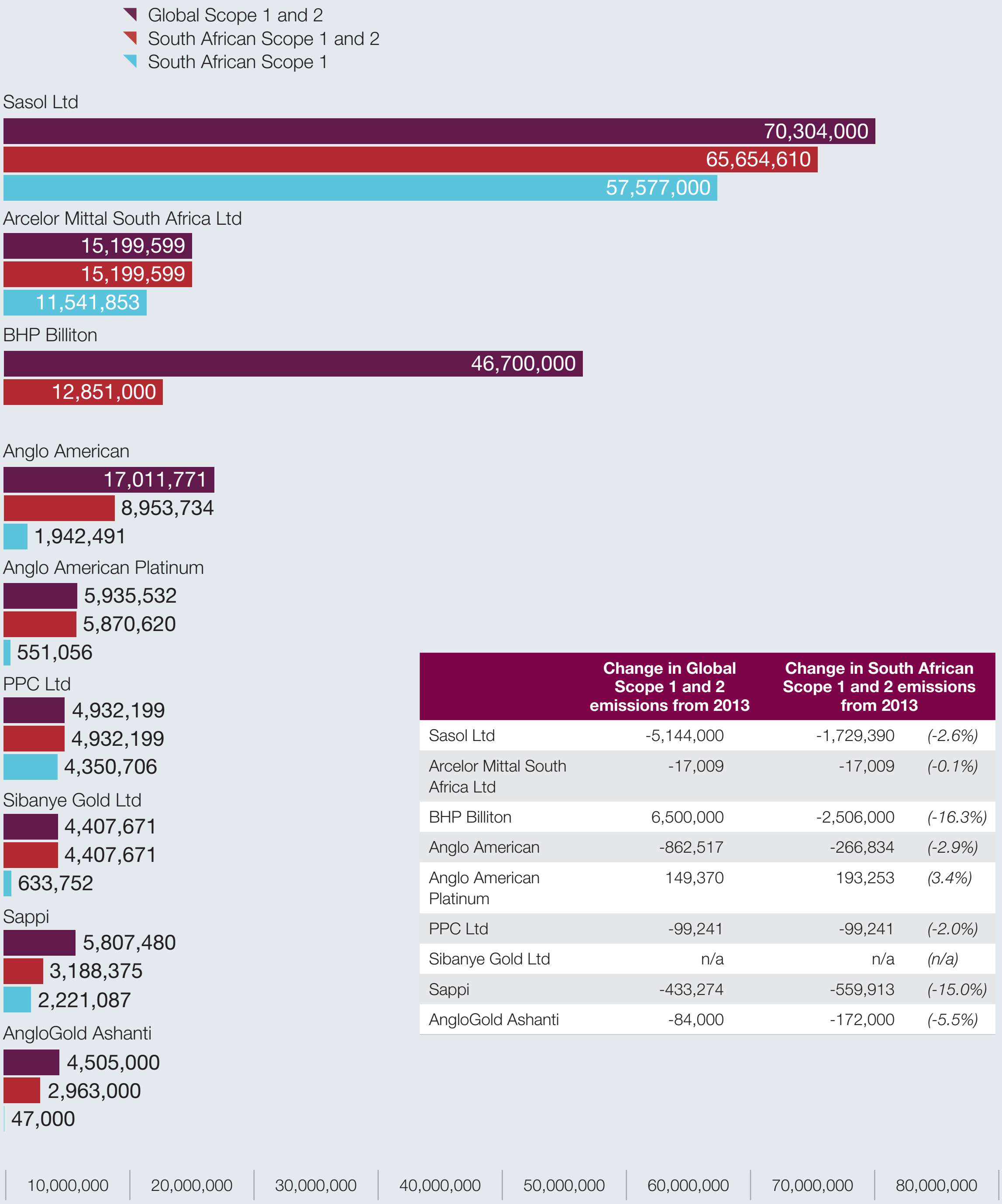
Figure 12: Payback time for emissions reduction activities by activity



production and a temporary change in fuel source). Sappi saw a considerable percentage decrease (due to reduced production and curtailed operations), and Sasol achieved the second largest absolute emissions decrease – as a result primarily of a change in methodology leading to a restatement of methane emissions at the Secunda facility and also emission reduction activities.

Figure 13 provides a breakdown of the top nine publicly reported Scope 1 and 2 emitters. The companies are ranked according to their South African Scope 1 and 2 emissions levels. They are all in the Energy & Materials or Industrials sectors.

Figure 13: Top public nine emitters of global Scope 1 and 2 emissions listed in order of South African Scope 1 and 2 (tCO_2e)[11]



	Change in Global Scope 1 and 2 emissions from 2013	Change in South African Scope 1 and 2 emissions from 2013	
Sasol Ltd	-5,144,000	-1,729,390	*(-2.6%)*
Arcelor Mittal South Africa Ltd	-17,009	-17,009	*(-0.1%)*
BHP Billiton	6,500,000	-2,506,000	*(-16.3%)*
Anglo American	-862,517	-266,834	*(-2.9%)*
Anglo American Platinum	149,370	193,253	*(3.4%)*
PPC Ltd	-99,241	-99,241	*(-2.0%)*
Sibanye Gold Ltd	n/a	n/a	*(n/a)*
Sappi	-433,274	-559,913	*(-15.0%)*
AngloGold Ashanti	-84,000	-172,000	*(-5.5%)*

11 Note that BHP Billiton does not disclose separate Scope 1 emissions for South Africa.

Key messages continued

KEY MESSAGE 7: While the proposed carbon tax is reported as a significant risk by many companies, there are substantial differences in the perceived magnitude of the impact and the required management response.

The carbon tax is a key concern for the majority of companies and is anticipated as very likely to occur within three years. There is considerable divergence in the magnitude of the perceived impacts of the tax and in how best to prepare.

The National Treasury has postponed implementation of the Carbon Tax until 2016 to allow for further consultation on a 'package of measures' that is needed to address climate change[12]. While this may have introduced some uncertainty for companies, it also provides an opportunity for the tax to be aligned with new measures such as desired emission reduction outcomes.

The carbon tax is the top cited risk, by 95% of companies, of which 83% believe that it is virtually certain or very likely to happen and 84% believe it will be implemented in the next 1-3 years. Eighty-two per cent of companies (62 companies) have quantified the risk (those that have not explain that this is due to a lack of certainty in the policy documents).

Interestingly, the carbon tax is seen as an opportunity by 37% of companies. These opportunities focus mainly on reducing liabilities associated with the carbon tax, such as using carbon offsets to lower their tax liability and also to create offset projects to trade with others. However, some companies view the tax as providing an incentive for revenue-enhancing opportunities, such as incentives to develop Carbon Capture and Storage, revenue opportunities for efficient products and services and new revenue streams from increased demand in renewable energy (see Table 2).

While the tax is viewed as highly likely to occur within three years, there appears to be some confusion or lack of deep understanding regarding the impacts of the risk. Figure 14 is a heat map of risks, showing indirect and direct impacts against magnitude of impact. Each dot represents a unique risk identified, with more than one risk identified by some companies. There continues to be a wide divergence on both magnitude and type of risk identified. There has been little change from 2012 to 2013 and now to 2014.

The perceived direct risks are spread fairly evenly from low to high magnitude, although Energy & Materials tend to perceive it as having a greater magnitude than other sectors. That some companies within the same sector should perceive it as high impact and others low is surprising. In addition, very few risks are identified as indirect, yet there will be many impacts that will be faced indirectly as a result of pass through costs of the carbon tax in companies' supply chains.

Table 2 sets out a selection of companies' approaches to the carbon tax, showing their perspectives on the tax, their main risk management methods and whether or not they see any opportunities arising from the tax. Virtually all the companies that report they are engaging with policy makers on the carbon tax classify themselves as supporting the tax to some degree. Three companies report that they support it without exception (Woolworths, Tiger Brands and Old Mutual plc) and 13 report that they support it with minor exceptions, eight with major exceptions and only two report opposing it (Sasol and Royal Bafokeng). There appears to be support for a carbon pricing mechanism in the form of a tax, provided that it is aligned with other policies and that trade-offs with development and competitiveness are addressed.

The majority of companies report that they are managing the carbon tax risk by focusing on energy efficiency measures to reduce their footprint, many are engaging with government directly or through industry groups, and some are investing in new technologies and new products. The expectation of the tax has also prompted some companies to undertake energy and emissions audits and auditing processes.

12 2014 Budget Speech of Minister of Finance Pravin Gordhan on 26 February 2014: http://www.treasury.gov.za/documents/national%20 budget/2014/speech/speech.pdf

Figure 14: Perceived impacts of the carbon tax

Direct risks	Consumer Discretionary	Consumer Staples	Energy & Materials	Financials	Health Care	Industrials	IT & Telecoms
High	•	•••	•••••••••••	•			
Medium-High	•	•	••••	•••			•
Medium		•••	•	••	••	••••	
Low-Medium	••	••	••	•••		•••	•
Low	•	•••	••	••••••	••	•	•
Number of companies	**5**	**12**	**20**	**15**	**4**	**8**	**3**

Indirect risks	Consumer Discretionary	Consumer Staples	Energy & Materials	Financials	Health Care	Industrials	IT & Telecoms
High				•			
Medium-High			•				
Medium							
Low-Medium	•			••			
Low	•		•	•	•		
Number of companies	**2**	**0**	**2**	**4**	**1**	**0**	**0**

There appears to be some confusion regarding the impacts of the risk from the carbon tax. Companies continue to have diverging views on both magnitude and type of risk identified.

The carbon tax is seen as an opportunity by 37% of companies.

Key messages continued

Table 2: A selection of approaches to the carbon tax as reported by the JSE100: company perspective, management method and opportunity

COMPANY	PERSPECTIVE	MANAGEMENT METHOD	OPPORTUNITY
Woolworths Holdings Ltd (Support)	Engagements with concerned stakeholders to assist business in identifying areas of conflict and alignment with regards to the future carbon tax.	In order to minimise taxes paid on our carbon emissions, we are actively looking to implement cleaner sources of energy where feasible. Also, our energy reduction activities will continue to enable us to effectively monitor and reduce where required.	Being more efficient than the industry benchmark means companies can be allocated additional percentage reductions in their carbon tax liability.
Old Mutual (Support)	Old Mutual is committed to seeing South Africa make the successful transition into operating as a less carbon intensive economy. The Carbon Tax should encourage growth in the renewable and green energy sector which will support this transition.	Our property business continues to monitor and manage the impact the carbon tax will have on the business and our tenants. At a direct operations level we continue to record our carbon emissions on a site level basis allowing us to set site specific reduction targets as we aim to 'green' our buildings.	Opportunity to increase our investments in the renewable energy sector, in … low carbon business with the view that we will see an increase in these investment returns. There is an opportunity for us to sell offsets, invest in green energy products, in infrastructure and to help transform South Africa into a green economy and the potential to provide products to a client base with an increased appetite for carbon efficient financial products.
Harmony Gold Mining Co Ltd (Not specified)	The current taxation structure means that many of Harmony's marginal operations will no longer remain profitable after tax implementation.	Lobbying through the Chamber of Mines to implement a carbon tax that is reasonable, does not destroy international competitiveness; and recognises 'early movers'. Proposed adjustments will reduce overall tax liability.	Carbon offset scheme will enable business to lower their carbon tax liability and make investments that will reduce GHG emissions.
Massmart Holdings Ltd (Neutral)	Whilst Massmart supports initiatives that incentivise carbon emissions reductions, Massmart is of the view that emphasis needs to be placed on the rollout of green energy technologies through subsidies and low interest financing.	Energy efficiency measures including programmable meters to monitor energy consumption, new refrigeration plants, reclaiming the heat thereby reducing its overall Carbon Footprint, the bulk of which is comprised of Scope 2 emissions.	None
Arcelor Mittal South Africa Ltd (Support with minor exceptions)	While the company appreciates that government's aim in introducing carbon tax is to change industry behaviour and reduce South Africa's carbon footprint, the reality is that there is limited scope for steel producers to reduce carbon emissions. It is our firm belief that the introduction of the carbon tax in its proposed form will contribute to the further deindustrialisation of the country at a time when it can least afford it.	Engage with government on the level at which the proposed carbon tax will affect business. Discuss a way forward in terms of areas where AMSA will be exempt from the carbon tax.	None
BHP Billiton (Support with minor exceptions)	We actively engage with the South African government in the development of the proposed carbon tax. As with emissions trading schemes, the detail of its design should take into account impacts on competitiveness.	Engage directly and through ITTCC with SA government to ensure policy design is effective and addresses competitiveness concerns.	None
Barloworld (BAW) (Support with minor exceptions)	BAW is supportive of the drive to reduce emissions. However, BAW is equally mindful of the risk to growth and jobs posed by the introduction of a carbon price. BAW believes that the design of the carbon tax needs to be carefully considered to avoid adverse impacts on growth and jobs.	Focused on improving emissions efficiency against a business as usual scenario.	May increase demand for BAW's energy efficient equipment and offerings. Opportunity for BAW to develop and sell new products that reduce the impact of a carbon tax on its customer base. The potential is to reduce emissions and energy consumption, reduce operational costs and reduce the impact of the carbon tax.
Standard Bank (Support with minor exceptions)	The proposed carbon taxes could have a notable financial impact on our operations and those of our customers. We are engaging regularly with the relevant authorities to transfer understanding of market-based solutions and how they might be combined with the tax to improve the outcomes in terms of both economic stability and reduced carbon emissions.	We work with government and regulators in developing environmental policy and legislation and to understand where the interests of the bank and its stakeholders intersect.	None

COMPANY	PERSPECTIVE	MANAGEMENT METHOD	OPPORTUNITY
Imperial Holdings (Support with minor exceptions)	There is concern that the carbon tax will not be ring-fenced and will not be used to mitigate the effects of climate change. The implications for the transport sector and its consequent implications for inflation and economic development must be considered. The carbon tax in conjunction with fuel levies and e-tolling should be considered.	Management methods include setting targets for fuel consumption reduction, investing in new technologies and implementing fuel reduction initiatives.	Opportunity to be leaders in introducing new innovative technologies in reduced carbon emissions with regards to car models and brands to certain markets.
Anglo American (Support with major exceptions)	We supported the National Treasury's move to engage on the development of policies to address climate change and adaptation. As such, Anglo American suggested that pricing policies must be developed on a sound fact base; and that carbon pricing should be considered as part of other complementary measures while maintaining industry competitiveness and remaining revenue neutral.	Engaged with the government via the ITTCC.	CCS has been identified as one of the eight priority programmes for South Africa and will prove it is possible for coal-fired power to have very low emissions.
African Rainbow Minerals (Support with major exceptions)	ARM would support a policy of carbon taxation that is designed to adequately manage the short term and long term developmental impacts. Design and implementation should, for example, balance negative international competitiveness concerns against the other objectives of the tax.	We are formulating an energy and climate change policy and strategy to deal with the potential effects of carbon tax. Every effort is made to reduce consumption of energy by enhancing efficiency e.g. installing solar power plant; conduction energy and carbon review identifying energy savings, capital allowance for energy efficiency projects.	None
Hosken Consolidated Investments (Support with major exceptions)	Concerns relating to the reporting boundaries for the carbon tax and the allocation of revenues derived from the tax. Fiscal Policy measures should be put in place to ensure that carbon revenues are reinvested in renewable energy and energy efficiency.	Appointed a service provider to investigate the potential impacts of the tax and engage National Treasury on the implementation. Incorporated emissions reductions into the group's strategy.	None
Illovo Sugar Ltd (Support with major exceptions)	While we support the principle of reducing GHGs we have concerns that the proposed system will not achieve its intended purpose.	A Performance Optimisation Plan has been employed to improve energy efficiencies within the South African mills; set a target to reduce its annual coal consumption by 25% by 2017, thereby reducing the company's future carbon tax liability; Illovo has also lobbied through the SASA and provided a formal response to the Carbon Tax Policy Paper.	None
Royal Bafokeng (Oppose)	Expected to have a negative effect on company profitability, which will affect business viability. Further, systems to measure and monitor carbon management performance across the various economic sectors have not been developed to a sufficient degree to enable fair and equitable carbon taxation principles.	Institute programmes that initiate an absolute carbon emissions and carbon intensity from energy reduction and efficiency strategies to reduce energy usage, increase energy efficiency and reduce Scope 2 emissions. In medium to long term, alternative energy systems are being investigated.	None
Sasol (Oppose)	Sasol supports a response to climate change that is based on clear and accurate information and identifies the opportunities and reflects the constraints of a transition to a lower carbon and climate resilient South African economy. A range of trade-offs may be required to achieve the overall national imperatives of economic growth, job creation and poverty alleviation.	Management interventions such as setting targets, reviewing long-term GHG emission ambition, Sasol New Energy established to focus on low carbon technologies, and reducing GHG emissions forms part of the risk profile of all new projects exceeding R150 million and influences final investment decisions.	Development and sales of offsets to firstly offset the company's own emissions and then look to sell or trade any offsets.

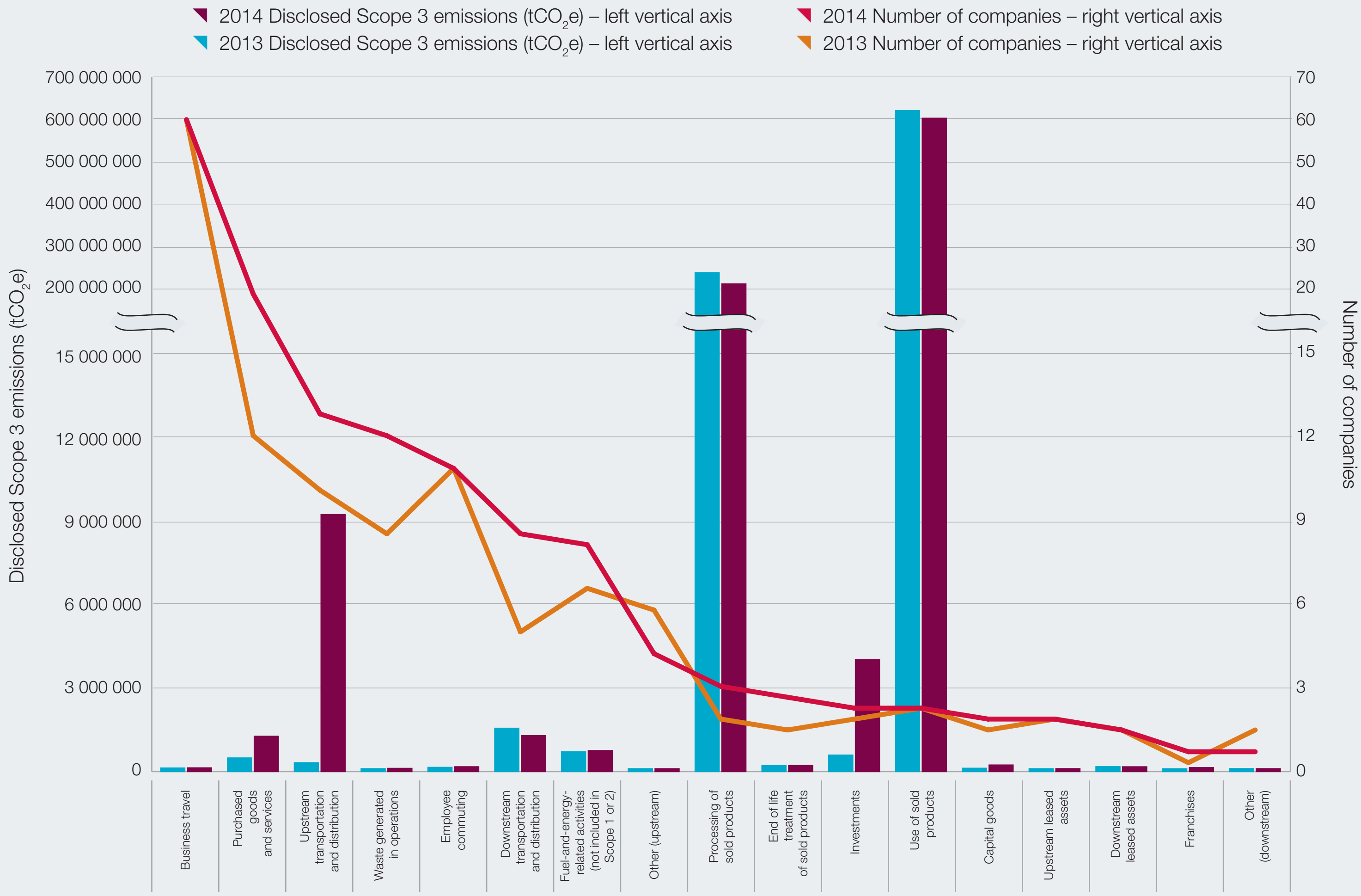
KEY MESSAGE 8: Too few companies seem to appreciate the climate change risks or emissions levels in their value chain, even though some companies are providing more accurate reporting.

More companies disclosed Scope 3 emissions data this year, and they reported from more areas of the value chain and provided more verified data. While some aspects of Scope 3 are only relevant to some sectors, companies are still not focusing enough on the potential impact of emissions elsewhere along their value chain and instead are reporting low volume emission catagories like business transport.

This year 69 companies (91%) reported 977.64 million tCO_2e Scope 3 emissions (up from 891.65 million tCO_2e in 2013 reported by 65 companies). In addition, the reporting companies have provided information from more areas of the value chain; for example, purchased goods and services are reported by 44 companies (31 in 2013), waste generated in operations is reported by 31 (22 in 2013), upstream transportation and distribution by 33 (26 in 2013) and downstream transportation and distribution by 22 (13 in 2013). Similarly, 43% of companies verified their Scope 3 emissions data, an improvement on 37% last year.

Companies are still not focusing enough on Scope 3 emissions from the areas where emissions are most significant. There is a significant disconnect between the activities from which most value chain emissions are reported and the activities that companies are measuring and reporting (Figure 15). For example, while use of sold products can be very substantial, accounting for 62%

Figure 15: Number of companies reporting Scope 3 data and emissions by category



of reported Scope 3 emissions, only six companies are measuring this category and 87% of these reported emissions come from just two companies (Anglo American and BHP Billiton). Similarly, while processing of sold products accounts for 21% of Scope 3 emissions, only eight companies are measuring this category. Conversely, business travel is reported by 60 companies yet it accounts for 0.05% of emissions, and purchased goods and services is reported by 44 companies yet accounts for only 1.2% of emissions.

Companies that are transparent about their Scope 3 emissions can use this to enhance their reputation with investors and customers as a responsible business.

BOX 2: Finding value in Scope 3 emissions reporting
Copy compiled by the NBI

Companies are becoming increasingly aware that there are significant risks to their business from events (ranging from extreme weather events to labour disruptions) both upstream and downstream in their value chain. This is also true for more gradual climate change related risks. In order to address the need for companies and investors to understand their value chain risk, CDP has aligned its value chain emissions reporting with the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

Companies responding in 2013 and 2014 have been required to report on their Scope 3 emissions in 15 different categories and, as disclosed elsewhere in this report, we found that companies are not reporting their most relevant value chain emissions. Instead of focusing on the parts of their value chains most at risk, companies focus on where the data is easy to gather. As a result, reported Scope 3 emissions often underestimate the full carbon impact of companies' activities.

Reporting on all 15 categories of Scope 3 emissions can be daunting and it is almost impossible to accurately measure each of them. It seems that too many companies begin reporting their value chain emissions by collecting data and measuring emissions without fully understanding the priority focus areas. It is better that companies conduct a screening assessment using various available tools to help them quickly identify relevant, hotspot categories and focus on these. Identifying hotspots enables companies to focus more on categories that are carbon intensive or that they have the biggest ability to influence and manage.

Companies that are transparent about their Scope 3 emissions can use this to enhance their reputation with investors and customers as a responsible business. A good understanding of Scope 3 emissions can also help companies mitigate risks, reduce costs and drive top-line growth. For example, a company that is dependent on purchased carbon-intensive goods also has a dependency on fossil fuels and is likely to be vulnerable to price volatility through increasing fuel prices and carbon tax pass-through costs. Similarly, looking downstream, a company can innovate and design low-emission/ efficient products that drive customer loyalty and demand.

Measuring Scope 3 emissions is challenging, but it is important and, if done well, it is manageable and valuable. To assist companies, the NBI has produced a reference guide that describes the benefits of reporting Scope 3 emissions and provides guidance on how to prioritise analyses. Following this process will yield deep insight into risks, as well as provide practical information for reporting and engagement with the company's supply chain. For more information or to access the report please contact Zarina Moolla (moolla.zarina@nbi.org.za).

Key messages continued

BOX 3: The Carbon Bubble or Unburnable Carbon

The concept of 'unburnable carbon' refers to the observation that a large proportion of the world's proven fossil fuel reserves cannot be burned if the world is to remain within the 'carbon budget' required to limit global warming to 2°C. Since first proposed, the idea has caught the attention of investors, policy makers and major fossil fuel companies and the importance of the carbon budget has been reinforced by analysis in the recently published summary of climate science, the Fifth IPCC Assessment Report.

In October 2013, 45 international oil & gas, coal and power companies, including BHP Billiton, Exxaro, Glencore Xstrata, and Anglo American, received letters on behalf of a group of 70 major investors[13] asking questions about unburnable carbon risks: *'We would like to understand what options there are for [the company] to manage these risks by, for example, reducing the carbon intensity of its assets, divesting its most carbon intensive assets, diversifying its business by investing in lower carbon energy sources or returning capital to shareholders.'*. Answers were required by the following round of AGMs in early 2014 and some companies, including Exxon Mobil, published detailed responses.

Given the public attention, it was notable that this year's CDP responses did not include reference to the issue as a climate risk[14]. Even more surprising when one considers that South Africa's recoverable coal reserves (approximately 49,000Mt) are the world's sixth-largest[15] with a reserve/production ratio of more than 200 years. There are significant implications for investors and companies, including many of the responding companies. For example:

- A carbon budget will not affect all fossil fuel reserves or companies in the same manner; it creates competitive issues between different fossil fuels and the companies that sell them, as well as increasing the competitiveness of some clean energy technologies;
- The impact on the energy industry will reflect ownership structures, capital investment needs, reserve characteristics and the regulatory circumstances of each company and their portfolio of assets;
- As the costs of renewable energy continue to fall, there could be a 'tipping point' where uncertainties about climate regulation make fossil fuel investments more risky than clean energy;
- The means by which a carbon budget is developed and is enforced – explicitly through an international agreement, by national governments or through sectoral agreements, or implicitly from the actions of financiers or stakeholder pressure - could be as important as the size of the budget;
- Maximising the returns from fossil fuel-based assets and reserves under a carbon budget constraint will require a different strategy than simply minimising the cost of carbon emissions;
- Governments will have a key role in determining the impact, if any, of unburnable carbon, but will also be directly affected themselves; and
- A decline in demand for fossil fuels could affect tax revenue, sovereign credit ratings, balance of payments and economic development programmes.

The collective political or economic resolve to take decisive action on carbon budgets may not exist at present. However, should stringent carbon budgets become a reality, the potential implications are much more complex than recent debate would suggest. Aside from the specific questions currently being asked by investors, high-emitting or resource intensive companies may need to start asking themselves challenging questions to identify and respond effectively to the issue.

13 http://www.ceres.org/press/press-releases/investors-ask-fossil-fuel-companies-to-assess-how-business-plans-fare-in-low-carbon-future

14 In addition, companies in the Oil & Gas sector were asked by CDP to provide information on this issue in the specific Oil & Gas module.

15 South African Coal Road Map (2013) http://www.fossilfuel.co.za/initiatives/2013/SACRM-Roadmap.pdf

Understanding the sample

In this report, the JSE100 refers to the 100 largest companies (by market capitalisation) listed on the Johannesburg Stock Exchange (JSE) as at 2 January 2014.

One hundred companies were approached this year, 80 of which answered the questionnaire, while 12 declined to participate and eight did not respond to the information request. This is a lower response rate than 2013 (83%) and the Global 500 2014 (83%). Four companies reported via another listed company in the sample and are included in Figure 16, but are not included in the overall sample (Redefine International plc, Investec plc, Mondi Ltd and Rmb Holdings). A total of 76 companies' responses were therefore quantitatively analysed for the purposes of this report, of which seven were non-public. Two companies that submitted responses last year did not submit responses this year (Naspers and The Spar Group Ltd).

This year's sample includes three new companies: Hyprop Investments, RCL Foods and Sibanye Gold. There are ten companies listed in the JSE that are also included in the Global 500 sample: Anglo American, BHP Billiton, British American Tobacco, Capital and Counties Properties, Hosken Consolidated Investments, Intu Properties, Lonmin, Mondi plc, Old Mutual plc and SABMiller. These companies have been included in this report.

Industry sectors were identified using the Global Industry Classification Standard (GICS). The companies are classified into seven key sectors to ease analysis and maintain comparability with previous years' reporting. The JSE100 continues to be dominated by the Financials sector (31) and Energy & Materials (24).

Response rates were highest in the Health Care (100%), Energy & Materials (96%), Consumer Staples (86%), and Industrials (80%) sectors and lowest in Financials (71%), Consumer Discretionary (64%) and IT&Telecoms (60%) (Figure 16).

A high degree of caution is required when making comparisons between the data and between years. Challenges in using this data to compare company performance include different company boundaries and accounting approaches, the use of differing conversion factors, the subjective interpretation of data, and differences in the quality of data. These make it difficult to undertake robust comparisons and analysis. Table 3 (Overview of all responses) and Appendices 2 (Emission reduction targets) and 3 (Exclusions and qualifying remarks) are included in order to provide some caveats and supporting data that should be considered when comparing companies. There is no substitute for reading the actual response of any company that any investor or other stakeholder is interested in.

Figure 16: Number of companies per sector and number of respondents per sector

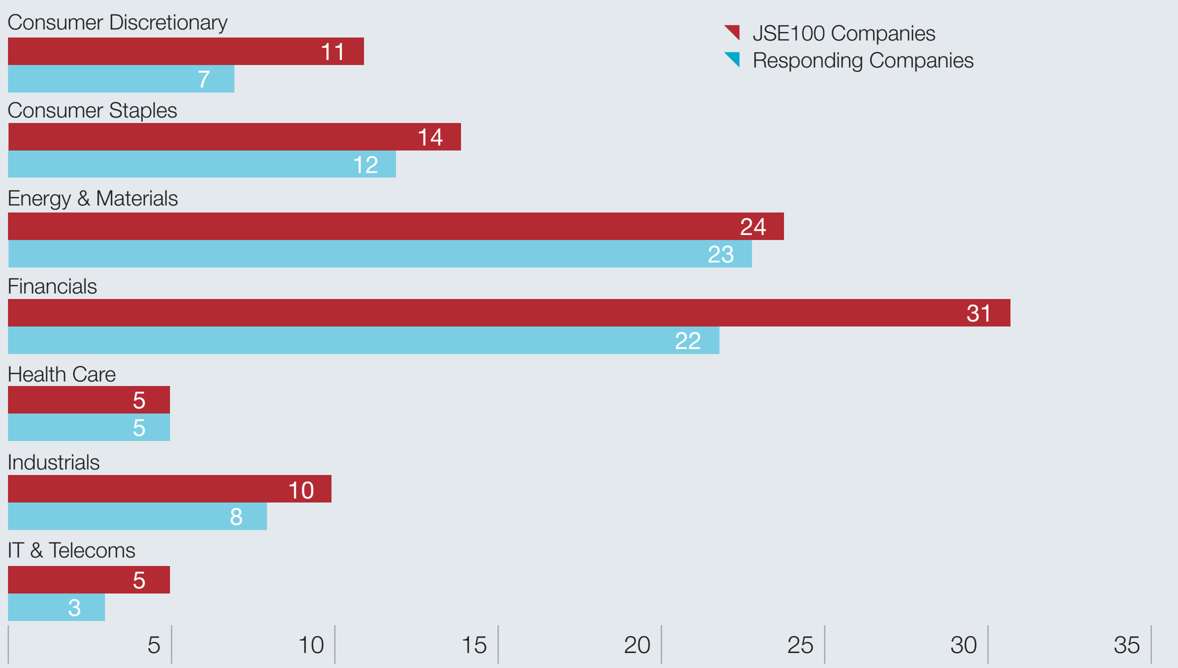


Table 3: Overview of all responses

Company	Sector	Sub-Sector	2014 Response	2013 Response	2012 Response	2011 Response	2010 Response	Scope 1 South Africa (tCO_2e)	Scope 1 Global (tCO_2e)
Adcock Ingram	Health Care	Pharmaceuticals	AQ	AQ	AQ	AQ	AQ	15,357	16,895
AECI Ltd Ord	Materials	Chemicals	AQ	AQ	AQ	AQ	AQ	320,402	329,822
African Bank Investments Ltd	Financials	Diversified Financial Services	AQ	AQ	AQ	AQ	DP	23,703	23,703
African Rainbow Minerals	Materials	Metals & Mining	AQ	AQ	AQ	AQ	AQ	322,263	327,756
Anglo American	Materials	Metals & Mining	AQ	AQ	AQ	AQ	AQ	1,942,491	7,279,561
Anglo American Platinum	Materials	Metals & Mining	AQ	AQ	AQ	AQ	AQ	551,056	557,773
AngloGold Ashanti	Materials	Metals & Mining	AQ	AQ	AQ	AQ	AQ	47,000	1,277,000
Arcelor Mittal South Africa Ltd	Materials	Metals & Mining	AQ	AQ	AQ	AQ	AQ	11,541,853	11,541,853
Aspen Pharmacare Holdings	Health Care	Pharmaceuticals	AQ	AQ	AQ	AQ	DP	4,030	10,769
Assore Ltd	Materials	Metals & Mining	AQ (np)	AQ (np)	AQ (np)	NR	/		
Attacq Ltd	Financials	Real Estate Management & Development	DP	/	/	/	/		
Aveng Ltd	Industrials	Construction & Engineering	AQ	AQ	AQ	AQ	AQ (np)	460,699	575,370
Avi Ltd	Consumer Staples	Food Products	DP	DP	DP	DP	DP		
Barclays Africa	Financials	Commercial Banks	AQ	AQ	AQ	AQ	AQ	18,712	19,302
Barloworld	Industrials	Trading Companies & Distributors	AQ	AQ	AQ	AQ	AQ	166,046	187,490
BHP Billiton	Materials	Metals & Mining	AQ	AQ	AQ	AQ	AQ	0	22,000,000
Bidvest Group Ltd	Industrials	Industrial Conglomerates	AQ	AQ	AQ	AQ	AQ	166,742	383,034
Brait SA	Financials	Diversified Financial Services	DP	DP	DP	/	/		
British American Tobacco	Consumer Staples	Tobacco	AQ	AQ	AQ	AQ	/	20,977	358,723
Capital & Counties Properties	Financials	Real Estate Management & Development	AQ	AQ (np)	/	/	/	0	2,907
Capital Property Fund	Financials	Real Estate Investment Trusts (REITs)	NR	NR	DP	NR	DP		
Capitec Bank Holdings Ltd	Financials	Commercial Banks	AQ (np)	AQ (np)	AQ (np)	NR	/		
Clicks Group Ltd	Consumer Staples	Food & Staples Retailing	AQ	AQ	AQ	AQ	AQ	2,218	2,218
Compagnie Financière Richemont SA	Consumer Discretionary	Textiles, Apparel & Luxury Goods	AQ	AQ	AQ (np)	AQ (np)	AQ (np)	0	18,291
Coronation Fund Managers Ltd	Financials	Diversified Financial Services	NR	NR	DP	/	/		
Datatec	Information Technology	Software & Services	DP	DP	DP	/	NR		
Discovery Holdings Ltd	Financials	Insurance	AQ	AQ	AQ	AQ	AQ	748	748
EOH Holdings	IT & Telecoms	IT Consulting and Other Services	DP	/	/	/	/		
Exxaro Resources Ltd	Energy	Oil, Gas & Consumable Fuels	AQ	AQ	AQ	AQ	AQ	235,506	235,506
Famous Brands Limited	Consumer Discretionary	Consumer Services	NR	NR	/	/	/		
FirstRand Ltd	Financials	Diversified Financial Services	AQ	AQ	AQ	AQ	AQ	0	10,253
Foschini Group Ltd	Consumer Discretionary	Specialty Retail	AQ (np)	AQ (np)	AQ (np)	AQ (np)	AQ (np)		
Gold Fields Ltd	Materials	Metals & Mining	AQ	AQ	AQ	AQ	AQ	11,708	420,296
Grindrod Ltd	Industrials	Marine	AQ	AQ	AQ	AQ	AQ	164,535	479,216
Growthpoint Properties	Financials	Real Estate Investment Trusts (REITs)	AQ	AQ	AQ	AQ	AQ	42	42
Harmony Gold Mining Co Ltd	Materials	Metals & Mining	AQ	AQ	AQ	AQ	AQ	31,391	94,314
Hosken Consolidated Investments	Industrials	Industrial Conglomerates	AQ	AQ	AQ	AQ	AQ	107,436	117,324
Hyprop Investments Ltd	Financials	Real Estate Investment Trusts (REITs)	AQ (np)	DP	DP	NR	DP		
Illovo Sugar Ltd	Consumer Staples	Food Products	AQ	AQ	AQ	AQ (np)	DP	186,071	385,084
Impala Platinum Holdings	Materials	Metals & Mining	AQ	AQ	AQ	AQ	AQ	442,926	468,713
Imperial Holdings	Consumer Discretionary	Distributors	AQ	AQ	AQ	AQ	AQ	0	924,771
Intu Properties plc	Financials	Real Estate Investment Trusts (REITs)	AQ	AQ	/	/	/	0	5,557
Investec Ltd	Financials	Capital Markets	AQ	AQ	AQ	AQ	AQ	1,802	2,507
Investec plc	Financials	Capital Markets	AQ (sa)	AQ (sa)	/	AQ	AQ		
Invicta Holdings	Industrials	Trading Companies & Distributors	NR	/	/	/	/		
Kumba Iron Ore	Materials	Metals & Mining	AQ	AQ	AQ	AQ	AQ	582,725	582,725
Liberty Holdings Ltd (incorporating Liberty Life Group Ltd)	Financials	Insurance	AQ (np)	AQ	AQ	AQ	AQ		

Company	Scope 2 South Africa (tCO_2e)	Scope 2 Global (tCO_2e)	Scope 1&2 South Africa (tCO_2e)	Scope 1 & 2 Global (tCO_2e)	Scope 3 Global (tCO_2e)	Number of Scope 3 Categories Reportedc	Verification/ Assurance Status	Targets Reported	2014 Score	2013 Score	2012 Score
Adcock Ingram	45,396	50,538	60,753	67,432	19,836	5		No	58 E	71 D	84 D
AECI Ltd Ord	182,692	209,557	503,094	539,379	15,221	4	VAA S1 S2	Abs	91 B	87 B	77 D
African Bank Investments Ltd	81,243	81,243	104,946	104,946	20,241	5	VAA S1 S2 S3	Abs	84 B	92 C	93 B
African Rainbow Minerals	916,336	916,424	1,238,599	1,244,180	91,048,883	5	VAA S1 S2	No	93 B	96 B	77 C
Anglo American	7,011,243	9,732,210	8,953,734	17,011,771	279,384,525	13	VAA S1 S2 S3	Abs	95 B	96 A	94 A
Anglo American Platinum	5,319,564	5,377,759	5,870,620	5,935,532	1,259,666	9	VAA S1 S2 S3	Int	99 A	99 A-	96 B
AngloGold Ashanti	2,916,000	3,228,000	2,963,000	4,505,000	20,000	3	VAA S1 S2 VAR S3	Int	89 C	87 B	78 C
Arcelor Mittal South Africa Ltd	3,657,746	3,657,746	15,199,599	15,199,599	903,460	2	VAA S1 S2	Int	67 D	81 C	78 D
Aspen Pharmacare Holdings	90,438	120,288	94,468	131,057	4,885	3	VAA S1 S2	No	89 C	87 C	72 D
Assore Ltd											
Attacq Ltd											
Aveng Ltd	81,558	107,344	542,257	682,714	456	1	VAA S1	No	81 C	79 D	81 D
Avi Ltd											
Barclays Africa	293,896	321,171	312,608	340,473	26,342	1	VAA S1 S2 S3	Abs	86 B	83 B	85 B
Barloworld	64,113	80,134	230,159	267,624	93,233	2	VAA S1 S2	Int	93 B	97 A	93 A
BHP Billiton	12,851,000	24,700,000	12,851,000	46,700,000	362,657,000	2	VAA S1 S2 S3	Abs	87 B	75 C	71 B
Bidvest Group Ltd	196,183	291,374	362,925	674,408	19,420	2	VAA S1 S2	Abs & Int	92 B	78 B	86 C
Brait SA											
British American Tobacco	49,753	389,242	70,730	747,965	212,334	4	VAA S1 S2 VAR S3	Int	91 B	94 B	86 B
Capital & Counties Properties	0	8,241	0	11,148	63,680	2	VAR S1 S2	Abs	87 B		
Capital Property Fund											
Capitec Bank Holdings Ltd											
Clicks Group Ltd	98,645	98,645	100,863	100,863	25,765	4	VAA S1 S2 S3	Abs & Int	95 B	94 B	92 B
Compagnie Financière Richemont SA	0	56,849	0	75,140	104,221	2	VAA S1 S2 S3	Int	75 C	79 B	
Coronation Fund Managers Ltd											
Datatec											
Discovery Holdings Ltd	33,083	33,083	33,831	33,831	15,175	5	VAA S1 S2 VAR S3	Int	95 C	95 B	86 C
EOH Holdings											
Exxaro Resources Ltd	532,153	532,153	767,659	767,659	72,842,009	12	VAA S1 S2 S3	Int	98 B	97 B	100 B
Famous Brands Ltd											
FirstRand Ltd	0	238,434	0	248,688	22,572	3	VAA S1 S2 S3	Abs	99 A	96 A	97 A
Foschini Group Ltd											
Gold Fields Ltd	548,043	814,968	559,751	1,235,264	496,072	9	VAA S1 S2 S3	Abs	96 B	100 A-	99 A
Grindrod Ltd	17,023	22,059	181,558	501,275	11,101	3	VAA S1 S2	Abs	56 D	84 C	88 B
Growthpoint Properties	1,834	1,834	1,875	1,875	698,037	6	VAA S1 VAR S2	Abs	90 B	93 A	95 B
Harmony Gold Mining Co Ltd	2,648,126	2,648,126	2,679,517	2,742,440	616,979	8	VAA S1 S2 S3	Abs & Int	100 A	98 A	98 B
Hosken Consolidated Investments	311,224	343,278	418,660	460,602	4,801,144	3		No	64 D	63 D	77 C
Hyprop Investments Ltd											
Illovo Sugar Ltd	49,180	164,917	235,251	550,001	225,922	2		Abs & Int	74 C	69 C	70 D
Impala Platinum Holdings	2,819,594	3,119,040	3,262,520	3,587,753	58,104	5	VAA S1 S2	Abs	89 B	91 B	91 B
Imperial Holdings	0	209,899	0	1,134,670	14,097	3		No	86 C	82 C	80 D
Intu Properties plc	0	39,762	0	45,319	0	0	VAA S1 S2	Abs	82 C	74 B	
Investec Ltd	29,979	38,493	31,781	41,000	0	0	VAA S1 S2 S3	Abs	91 B	99 A-	90 C
Investec plc											
Invicta Holdings											
Kumba Iron Ore	527,112	527,112	1,109,837	1,109,837	105,367,143	10	VAA S1 S2 S3	Abs	95 B	98 B	88 C
Liberty Holdings Ltd (incorporating Liberty Life Group Ltd)										62 D	76 D

Company	Sector	Sub-Sector	2014 Response	2013 Response	2012 Response	2011 Response	2010 Response	Scope 1 South Africa (tCO_2e)	Scope 1 Global (tCO_2e)
Life Healthcare Group Holdings Ltd	Health Care	Health Care Providers & Services	AQ	AQ	DP	NR	/	0	0
Lonmin	Materials	Metals & Mining	AQ	AQ	AQ	AQ	AQ	101,900	101,900
Massmart Holdings Ltd	Consumer Staples	Food & Staples Retailing	AQ	AQ	AQ	AQ	AQ	46,801	46,922
Mediclinic International	Health Care	Health Care Providers & Services	AQ	AQ	AQ	AQ	AQ	0	21,869
MMI Holdings Ltd	Financials	Insurance	AQ	AQ	AQ	AQ	AQ	963	963
Mondi Ltd	Materials	Paper & Forest Products	AQ (sa)	AQ (sa)	AQ (sa)	AQ (sa)	/		
Mondi plc	Materials	Paper & Forest Products	AQ	AQ	AQ	AQ	AQ		
Mr Price Group Ltd	Consumer Discretionary	Specialty Retail	DP	DP	DP	AQ	AQ (np)		
MTN Group	IT & Telecoms	Wireless Telecommunication Services	AQ	AQ	AQ	AQ	AQ	21,386	769,471
Murray & Roberts Holdings Ltd	Industrials	Construction & Engineering	AQ	AQ	AQ	AQ	AQ	306,229	314,803
Nampak Ltd	Materials	Containers & Packaging	AQ	AQ	AQ	AQ	AQ	134,851	212,544
Naspers	Consumer Discretionary	Media	NR	AQ (np)	DP	AQ (np)	AQ (np)		
Nedbank Ltd	Financials	Commercial Banks	AQ	AQ	AQ	AQ	AQ	800	800
Netcare Ltd	Health Care	Health Care Providers & Services	AQ	AQ	AQ	AQ	AQ	38,332	38,332
New Europe Property Investments plc	Financials	Real Estate Operating Companies	NR	/	/	/	/		
Northam Platinum Ltd	Materials	Metals & Mining	AQ	AQ	AQ	AQ	AQ	15,509	15,509
Oceana	Consumer Staples	Food Products	AQ	AQ	AQ	/	/	78,228	140,490
Old Mutual plc	Financials	Insurance	AQ	AQ	AQ	AQ	AQ	7,921	14,717
Omnia Holdings Ltd	Materials	Chemicals	DP	NR	DP	/	/		
Pick n Pay Stores Ltd	Consumer Staples	Food & Staples Retailing	AQ	AQ	AQ	AQ	AQ	71,331	71,331
Pioneer Foods	Consumer Staples	Food Products	AQ	AQ (np)	AQ (np)	AQ (np)	DP	134,126	134,126
PPC Ltd	Materials	Construction Materials	AQ	AQ	AQ	AQ	AQ	4,350,706	4,350,706
PSG Group	Financials	Other Diversified Financial Services	NR	/	DP	DP	/		
RCL Foods Ltd	Consumer Staples	Food Products	AQ	/	/	/	/	0	167,950
Redefine International Plc	Financials	Real Estate Management & Development	AQ (sa)	/	/	/	/		
Redefine Properties Ltd	Financials	Real Estate Investment Trusts (REITs)	AQ	AQ	DP	NR	DP	269	269
Reinet Investments	Financials	Diversified Financial Services	NR	DP	DP	DP	DP		
Remgro	Financials	Diversified Financial Services	AQ	AQ	AQ	AQ	AQ	0	415,582
Resilient Prop Inc	Financials	Real Estate Management & Development	NR	NR	DP	NR	DP		
Reunert	Industrials	Industrial Conglomerates	AQ	AQ	AQ	AQ	AQ (np)	9,091	9,091
Rmb Holdings Ltd	Financials	Diversified Financial Services	AQ (sa)	AQ (sa)	AQ (sa)	AQ (sa)	AQ (sa)		
RMI Holdings	Financials	Insurance	DP	DP	DP	/	/		
Royal Bafokeng Platinum Ltd	Materials	Metals & Mining	AQ	AQ	AQ	AQ (np)	/	3,494	3,494
SABMiller	Consumer Staples	Beverages	AQ	AQ	AQ	AQ	AQ	226,468	1,007,221
Sanlam	Financials	Insurance	AQ	AQ	AQ	AQ	AQ	68	68
Santam Ltd	Financials	Insurance	AQ	AQ	AQ	AQ	AQ	46	46
Sappi	Materials	Paper & Forest Products	AQ	AQ	AQ	AQ	AQ	2,221,087	4,054,730
Sasol Ltd	Energy	Oil, Gas & Consumable Fuels	AQ	AQ	AQ	AQ	AQ	57,577,000	61,292,000
Shoprite Holdings Ltd	Consumer Staples	Food & Staples Retailing	AQ (np)	AQ (np)	AQ (np)	AQ (np)	DP		
Sibanye Gold Ltd	Materials	Metals & Mining	AQ	/	/	/	/	633,752	633,752
Standard Bank Group	Financials	Commercial Banks	AQ	AQ	AQ	AQ	AQ	8,179	8,179
Steinhoff International Holdings	Consumer Discretionary	Household Durables	AQ	AQ	AQ	AQ (np)	AQ (np)	513,501	579,029
Sun International Ltd	Consumer Discretionary	Hotels, Restaurants & Leisure	AQ	AQ	AQ (np)	NR	DP	12,257	32,466
Telkom SA Limited	IT & Telecoms	Diversified Telecommunication Services	AQ	AQ	AQ	AQ	DP	49,353	49,353
The Spar Group Ltd	Consumer Staples	Food & Staples Retailing	DP	AQ	AQ	AQ	AQ		
Tiger Brands	Consumer Staples	Food Products	AQ	AQ	AQ (np)	AQ	AQ	278,538	296,805
Tongaat Hulett Ltd	Consumer Staples	Food Products	AQ	AQ	AQ	AQ	AQ	749,529	860,054
Trencor	Industrials	Marine	DP	DP	/	/	/		
Truworths International	Consumer Discretionary	Specialty Retail	AQ	AQ	AQ	AQ	AQ	466	466
Tsogo Sun Holdings Ltd	Consumer Discretionary	Casinos & Gaming	NR	/	/	/	/		
Vodacom Group	IT & Telecoms	Wireless Telecommunication Services	AQ	AQ	AQ	AQ	AQ	13,467	46,590
Wilson Bayly Holmes-Ovcon Ltd	Industrials	Construction & Engineering	AQ	AQ	AQ	AQ	AQ	38,790	38,790
Woolworths Holdings Ltd	Consumer Discretionary	Multiline Retail	AQ	AQ	AQ	AQ	AQ	12,704	12,704

VAA: Verification/Assurance approved. Companies have reported that they have verification complete or underway with last year's certificate available and have been awarded the full points available for their statement.

VAR: Verification/Assurance reported. Companies have reported that the have verification complete or underway with last year's statement available but the verification statement provided has not been awarded the full points available, or they have not been scored and therefore their verification statement has not been assessed.

Company	Scope 2 South Africa (tCO_2e)	Scope 2 Global (tCO_2e)	Scope 1&2 South Africa (tCO_2e)	Scope 1 & 2 Global (tCO_2e)	Scope 3 Global (tCO_2e)	Number of Scope 3 Categories Reportedc	Verification/ Assurance Status	Targets Reported	2014 Score	2013 Score	2012 Score
Life Healthcare Group Holdings Ltd	157,102	157,102	157,102	157,102	0	0		Int	60 C	56 E	
Lonmin	1,540,095	1,540,095	1,641,995	1,641,995	59,876	7	VAA S1 S2 S3	Int	96 B	88 B	78 B
Massmart Holdings Ltd	376,846	381,539	423,647	428,461	61,270	6	VAA S1 S2	Abs & Int	85 C	87 B	79 C
Mediclinic International	0	151,156	0	173,026	42,014	7	VAA S1 S2 S3	Int	99 A	99 B	97 B
MMI Holdings Ltd	59,573	59,573	60,536	60,536	9,122	2	VAA S1 S2 S3	No	84 D	75 D	78 D
Mondi Ltd											
Mondi plc										87 B	88 A
Mr Price Group Ltd											
MTN Group	405,213	636,184	426,599	1,405,655	115,240	2	VAA S1 S2	No	84 C	76 D	69 C
Murray & Roberts Holdings Ltd	70,442	75,169	376,671	389,972	1,579,462	3		No	85 D	83 D	79 D
Nampak Ltd	594,308	640,392	729,160	852,936	13,138	4	VAA S1 S2 S3	Abs	99 A-	97 A	95 B
Naspers											
Nedbank Ltd	150,539	162,610	151,339	163,410	57,969	3	VAA S1 S2 S3	Abs & Int	99 A-	100 B	92 B
Netcare Ltd	0	232,276	38,332	270,608	5,995	4	VAA S1 S2 S3	Abs & Int	82 B	84 B	84 B
New Europe Property Investments plc											
Northam Platinum Ltd	619,694	619,694	635,203	635,203	0	0	VAA S1 S2	No	80 C	89 B	81 D
Oceana	56,899	62,782	135,126	203,272	25,377	4	VAA S1 S2 S3	Int	97 B	95 B	95 B
Old Mutual plc	843,680	865,182	851,601	879,899	32,556,803	4	VAA S1 S2 S3	Int	98 B	91 B	85 B
Omnia Holdings Ltd											
Pick n Pay Stores Ltd	511,188	511,188	582,518	582,518	5,246,692	4	VAA S1 S2 S3	Abs	98 A	95 A	96 B
Pioneer Foods	319,369	319,369	453,495	453,495	0	0		Int	82 D		
PPC Ltd	581,493	581,493	4,932,199	4,932,199	0	0	VAA S1 S2	Int	90 B	77 C	82 D
PSG Group											
RCL Foods Ltd	0	335,920	0	503,870	62,524	4		Abs	95 B		
Redefine International Plc											
Redefine Properties Ltd	44,575	44,575	44,844	44,844	481,803	4	VAA S1 S2 S3	Int	90 A	87 D	
Reinet Investments											
Remgro	0	365,045	0	780,627	49,384	4	VAA S1 S2 S3	Abs	100 B	99 A	97 B
Resilient Prop Inc											
Reunert	52,317	52,443	61,408	61,534	18,165	3		No	73 C	75 D	83 D
Rmb Holdings Ltd											
RMI Holdings											
Royal Bafokeng Platinum Ltd	289,279	289,279	292,773	292,773	355	1	VAA S1 S2	No	87 C	90 B	89 C
SABMiller	220,520	832,192	446,988	1,839,413	5,515,174	9	VAA S1 S2	Int	85 A	74 B	68 C
Sanlam	39,056	39,056	39,124	39,124	14,709	4	VAA S1 S2	Int	94 A	96 B	97 B
Santam Ltd	7,623	7,623	7,669	7,669	7,796	6	VAA S1 S2	Int	71 C	82 C	90 B
Sappi	967,288	1,752,750	3,188,375	5,807,480	15	2	VAR S1 VAA S2	Abs & Int	91 C	78 C	88 C
Sasol Limited	8,077,610	9,012,000	65,654,610	70,304,000	6,075,766	8	VAA S1 S2	Abs & Int	95 A-	96 B	81 C
Shoprite Holdings Ltd											
Sibanye Gold Ltd	3,773,919	3,773,919	4,407,671	4,407,671	571,471	8	VAA S1 S2	Abs	97 B		
Standard Bank Group	345,816	345,816	353,995	353,995	32,304	3	VAA S1 S2 S3	Abs	80 A	71 C	74 D
Steinhoff International Holdings	341,842	427,487	855,343	1,006,516	0	0		Int	84 C	86 C	82 D
Sun International Ltd	256,931	283,675	269,188	316,141	24,964	4	VAA S1 S2	Abs	90 B	58 D	
Telkom SA Limited	643,536	643,536	692,889	692,889	47,087	4	VAA S1 S2 S3	No	89 B	75 C	79 C
The Spar Group Ltd										73 D	85 D
Tiger Brands	282,939	285,079	561,477	581,884	3,607	1	VAA S1 S2 S3	Int	96 B	68 C	
Tongaat Hulett Ltd	239,818	273,320	989,347	1,133,374	6,946	3	VAA S1 S2 S3	Abs	83 B	76 C	79 B
Trencor											
Truworths International	176,852	176,852	177,318	177,318	13,027	4		No	91 D	81 D	73 D
Tsogo Sun Holdings Ltd											
Vodacom Group	373,614	403,938	387,081	450,528	31,796	7	VAA S1 S2 S3	Int	96 B	94 B	88 B
Wilson Bayly Holmes-Ovcon Ltd	21,973	21,973	60,762	60,762	4,858	1		No	88 D	83 D	82 D
Woolworths Holdings Ltd	311,969	312,298	324,672	325,002	77,258	5	VAA S1 S2 S3	Int	94 B	77 B	94 A

Key:

AQ Answered Questionnaire
AQ np Answered Questionnaire but declined permission to make this public
AQ sa Answered Questionnaire via another listed company (also in sample)
DP Declined to Participate
NR No Response
“ / “ Company not included in the sample

Companies in 2014 not in 2013
Hyprop Investments Ltd
RCL Foods Ltd
Sibanye Gold Ltd

Guest comment: KPMG South Africa

> By providing a credible and open platform for the disclosure of company emissions, CDP continues to play a vital role in inspiring confidence in the sustainable capital markets that depend entirely on the performance of companies.

Doing business with purpose

Inspiring confidence and empowering change through the CDP

What is the purpose of business? This question has occupied the minds of great social scientists since the very creation of the concept of the enterprise decades ago. It has deep resonance with me today, as I know it does with other South African and global business leaders as we look to the enormous developmental challenges facing our beautiful country and world. The work of CDP – and the proud association of KPMG with it over a number of years – has helped me make some sense of this existential and critical question. I see CDP (and the organisations contributing to and associated with it) as serving society and more specifically fulfilling a sense of higher purpose.

Firstly, by providing a credible and open platform for the disclosure of company emissions, CDP continues to play a vital role in inspiring confidence in the sustainable capital markets that depend entirely on the performance of companies. There can be no doubt that any assessment of future value of companies would be incomplete without a view of how a company plans to manage the inevitable risks and opportunities associated with climate change. Some argue that the reporting of non-financial data, including carbon emissions, remains tangential at best to the investment decisions of capital owners and managers, particularly in the short term. Whilst this may indeed be the case in some instances, I believe that this position misses the clear direction of travel towards a longer-term view of business performance and the issues that are material to future success. We expand on this theme in KPMG's most recent report entitled 'A New Vision of Value' that I hope will make a significant contribution to the topic of long-term value creation.

In serving this purpose of inspiring confidence through meaningful disclosure, the companies that make up the CDP in South Africa have continued to do exceptionally well. Almost half the companies responding this year scored above 90 out of 100 (up from a median of 83 in 2013) and obtained an average disclosure score of 87 out of 100 (up from 83 in 2013). I'm also encouraged to see that disclosure on Scope 3 emissions, which was highlighted as a key area requiring attention in 2013, has improved. This year, 60 companies (79%) reported 977 million tonnes Scope 3 emissions (up from 891 million tonnes reported by 65 companies last year). On these and other accounts of disclosure, I am proud of what 'SA Inc.' has achieved and, whilst there is always room for improvement, I believe we are in good shape.

The way in which the work of the companies in the CDP fulfils a sense of higher purpose is by not only inspiring others to do more but in empowering change through action on climate change. Despite political action on climate change moving slower than we'd all like, I am always energised when we interact with our clients taking real actions to reduce emissions and to adapt to the impacts of a changing climate. With many companies now more powerful economic entities than entire nation states, we must never forget the power of individual and collective corporate action on issues that the global governance model seems largely unable to address.

The CDP data shows that businesses continue to act. There has been a significant improvement this year in the number of companies achieving net emission reductions (51% compared with 41% in 2013). Further, 58 companies (76%) of companies have set emission reduction targets, up from 52 last year. What all of this means in actual fact is that the Scope 1 and 2 emissions of South African companies are down 4% in 2014 compared to 2013 (based on the set of companies that responded in both years), which is a noteworthy achievement by any standard, although clearly more still needs to be done.

So what is that 'more' that needs to be done and, between us all, how can we make it happen? In specific relation to the disclosure and management of emissions, I am convinced that investing in a better understanding of the most significant sources of emissions in a company's supply chain is an important and necessary step. The supply chain is the next great frontier for making a sizeable impact in reducing emissions and adapting to climate change. Closely linked to this, making climate change and the management of positive and negative impacts of a business on society a core part of everyone's job is the next challenge for business leaders. Even when other issues can seem to be more important in the short term, I hope we will find the courage to persevere with this critical journey to building sustainability into the heart of business.

I am convinced that bravely moving forward and taking bold steps on any issue of significance has always been driven by a deep personal conviction and belief in purpose. Of course, as business leaders, it would be irresponsible for us to act without a clear commercial rationale; we must always allocate our limited capital wisely and appropriately manage risk. Yet, it would be equally irresponsible for us to act only when the business case is clear and fully worked through on an issue as critical as climate change. Not only would the world have left us behind by then, we would also have missed a wonderful opportunity to demonstrate that the future of business lies in leading with purpose.

Moses Kgosana
Chief Executive, KPMG South Africa

It would be equally irresponsible for us to act only when the business case is clear and fully worked through on an issue as critical as climate change.

About KPMG's Global Climate Change & Sustainability Practice
KPMG's Climate Change and Sustainability Services (CC&S) professionals provide sustainability and climate change assurance, Tax and Advisory services to organisations to help them apply sustainability as a strategic lens to their business operations. We have more than 25 years experience working with leading businesses and public sector organisations which has enabled us to develop extensive relationships with the world's leading companies and to contribute to shaping the sustainability agenda.

About KPMG International
KPMG is a global network of professional firms providing Audit, Tax, and Advisory services. We operate in 150 countries and have 138,000 people working in member firms around the world. The independent member firms of the KPMG network are affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. Each KPMG firm is a legally distinct and separate entity and describes itself as such.

Self-selected companies

This year, 15 companies outside of the JSE100 sample voluntarily submitted responses through the CDP online response system (Table 4). This compares with 13 self-selected companies in 2013, 13 self-selected respondents in 2012, and three in 2011. The 15 respondents for 2014 are: Allied Electronics Corporation Ltd (Altron), Basil Read, Distell Group Ltd, Emira Property Fund, Eskom, Group Five Ltd, Hulamin, Industrial Development Corporation, JSE Ltd, KAP Industrial Holdings Ltd, KPMG South Africa, National Business Initiative (NBI), Raubex Group Limited, South African Post Office and Transnet.

The data submitted by these organisations has not been included in the main analysis, and these organisations were not scored for climate disclosure or performance.

Table 4: Overview of self-selected company responses outside the JSE100 sample

Company	Sector	Sub-Sector	2014 Resonse	2013 Response	2012 Response	Scope 1 South Africa (t CO_2e)	Scope 1 Global (t CO_2e)	Scope 2 Global (t CO_2e)	Scope 1 & 2 Globals (tCO_2e)	Scope 3 (tCO_2e)	Number of Scope 3 Categories Reported	Verification/ Assurance Status	Targets Reported
Allied Electronics Corporation Ltd (Altron)	Industrials	Industrial Conglomerates	Self Selected Respondent	AQ	AQ	18 545	18 696	131 921	150 617	14 647	2	VAR S1 S2 S3	Abs
Basil Read	Industrials	Construction & Engineering	Self Selected Respondent	Self Selected Respondent	Self Selected Respondent		60 012	4 449	64 461	8 468	1		Int
Distell Group Ltd	Consumer Staples	Beverages	Self Selected Respondent	Self Selected Respondent	Self Selected Respondent		76 604	84 032	160 636	416 356	4	VAR S1 S2 S3	
Emira Property Fund	Financials	Real Estate Investment Trusts (REITs)	Self Selected Respondent	AQ	AQ		458	178 307	178 765	1 238	5		
Eskom	Energy & Materials	Energy	Self Selected Respondent	DP	Self Selected Respondent		233 343 992	346 080	178 765	0	0	VAR S1	
Group Five Ltd	Industrials	Construction & Engineering	Self Selected Respondent	Self Selected Respondent	Self Selected Respondent	37 217	67 827	61 163	128 990	641 857	4	VAR S1 S2	
Hulamin	Materials	Metals & Mining	Self Selected Respondent	Self Selected Respondent	Self Selected Respondent		98 532	254 349	352 881	6 692	1	VAR S1 S2 S3	Int
Industrial Development Corporation	Financials	Diversified Financial Services	Self Selected Respondent (non-public)	Self Selected Respondent (non-public)	Self Selected Respondent (non-public)								
JSE Ltd	Financials	Diversified Financial Services	Self Selected Respondent	Self Selected Respondent	AQ		17	9 425	9 442	486	1		
KAP Industrial Holdings Ltd	Industrials	Industrial Conglomerates	Self Selected Respondent	AQ	/		479 524	259 512	739 036	0	0		
KPMG South Africa	Financials	Diversified Financial Services	Self Selected Respondent	Self Selected Respondent	Self Selected Respondent		187	12 590	12 777	3 284	1		Int
National Business Initiative (NBI)	Industrials	Professional Services	Self Selected Respondent	Self Selected Respondent	/		0	95	95	104	4		Abs & Int
Raubex Group Limited	Industrials	Construction & Engineering	Self Selected Respondent	Self Selected Respondent	Self Selected Respondent	161 036	161 827	17 290	179 117	0	0		
South African Post Office	Industrials	Air Freight & Logistics	Self Selected Respondent	Self Selected Respondent	Self Selected Respondent		13 677	43 333	57 010	0	0		Abs
Transnet	Industrials	Air Freight & Logistics	Self Selected Respondent	Self Selected Respondent	Self Selected Respondent		693 422	3 531 548	4 224 970	0	0	VAR S1 S2	Abs & Int

Guest comments:
IDC and South African Post Office

IDC, and partners, are developing carbon risk measurement guidelines for global financial institutions.

The role of investors in responding to climate change

Climate change is one of the most significant environmental issues facing the world today. The majority of institutional investors and funders have been slow in taking a proactive role around climate change. This may seem surprising given the potentially major financial implications of climate change for companies both directly through the physical impacts of climate change (for example, the impacts of extreme weather events on water supply, and on the insurance and reinsurance industries) and indirectly (for example, through regulatory compliance costs to encourage business to reduce greenhouse gas emissions).

The IDC has partnered with the United Nations Environmental Programme Financial Institutions (UNEP FI), and the World Resource Institute (WRI) and various global investors to develop carbon risk measurement guidelines for global financial institutions to complement the Durban Platform and other climate change initiatives.

The IDC continues to support the NBI in its drive to raise climate change awareness, and build capacity for carbon measurements.

We are happy to support the CDP Climate Change Report 2014 and welcome the considerable progress made by companies in South Africa.

Alfred Netch
Head of Environment, Health and Safety, IDC

SAPO is diversifying into electronic or digital opportunities to create alternative revenue streams and reduce emissions.

Climate change is driving business model changes at the South African Post Office

The South African Post Office (SAPO) business model is to receive, sort and dispatch mail. Currently, this business model relies heavily on human capital deployed in buildings and transportation within our distribution networks. Both buildings and fleets utilise coal-based electricity and liquid fuels. SAPO's biggest impact on the environment emanates from indirect emissions (Scope 2) from purchased electricity and other indirect emissions (Scope 3) from transport. For instance, over 51% of mail transported via the national networks is subcontracted.

SAPO has begun to diversify into electronic or digital opportunities, such as E-Business, in order to create alternative revenue streams. This electronic model will complement hybrid mail technology as well as electronic bill postal and payment and will reduce direct and indirect transport emissions.

Hybrid mail is a one-stop computerised mail production and delivery service. It is an integrated mail service with a comprehensive offering of print-to-post for all communication requirements. A core benefit of the hybrid mail is to minimise Scope 3 emissions generated by subcontracted transport of mail. The hybrid mail facilities print, package and deliver mail locally by using SAPO's own controlled fleet. As a result, reliance on fossil fuel is reduced, minimising emissions through improved efficiencies and shorter delivery times and distances. In addition, the printing of mail is prepared using a Forest Stewardship Council certified paper with recyclable ink cartridges.

Within our facilities, SAPO has rolled out video and teleconferencing facilities in our six major operational hubs around the country and at head office. This has led to a drastic reduction in business travel. In addition to reducing emissions from business travel, teleconferencing has also enabled quick decision making and cost savings.

Furthermore, SAPO is also exploring the use of alternative fuels in our direct operations and our value chain. For example, a gas-fuelled vehicle has been included as part of operations to lower carbon emissions and we are investigating electric scooters as a possible solution to improve efficiencies in the current delivery model.

SAPO is pleased and proud to sponsor the CDP Climate Change Report for 2014 as we recognise that this is an important issue for business.

Mlu Mathonsi
COO, SAPO

The Climate Leaders 2014

Explanation

2014 Leadership Criteria

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

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

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

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

What are the CPLI and CDLI criteria?

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

- Make its response public and submit via CDP's Online Response System
- Attain a performance score greater than 85
- Score maximum performance points on question 12.1a (absolute emissions performance) for GHG reductions due to emission reduction actions over the past year (4% or above in 2014)
- Disclose gross global Scope 1 and Scope 2 figures
- Score maximum performance points for verification of Scope 1 and Scope 2 emissions
- 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.

To enter the CDLI, a company must:

- Make its response public and submit via CDP's Online Response System
- Achieve a score within the top 10% of the total regional sample population[16]

How are the CPLI and CDLI used by investors?

Good performance and disclosure 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 major UK-listed utilities and extractives companies to aim for inclusion in the CPLI. This may involve filing supportive shareholder resolutions for Annual General Meetings occurring after September 2014.

Investors are also using CDP scores for the 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.

16 While it is usually 10%, in some regions the CDLI cut-off may be based on other criteria, please see local reports for information.

Climate Performance Leadership Index

South African companies are improving their performance

This year, nine companies qualified for the CPLI: Anglo American Platinum, FirstRand Ltd, Harmony Gold Mining Co Ltd, Mediclinic International, Pick n Pay Stores Ltd, Redefine, SABMiller, Sanlam and Standard Bank. This is up from previous years (eight companies in 2013, six in 2012 and two in 2011) (Table 5). There are significant changes in the make-up of the CPLI from 2013: five companies have dropped out, being replaced with six new companies. Standard Bank and Redefine in particular have seen large improvements on their 2013 performance, jumping two and three grades respectively. Given that getting onto the CPLI requires leading year-on-year reductions in comparison with their peers, staying on the CPLI for multiple years in a row is a significant achievement.

The JSE100 companies' overall performance has improved this year, but not significantly (Figure 17). The median performance band of the JSE 100 has increased over time from C (2011 and 2012) to B (2013 and 2014). The majority of companies got a B or above (58% up from 51% in 2013), and 83% companies got a C or above (up from 72% in 2013). The distance between the first and third quartiles has decreased, suggesting more companies are doing well overall.

Again, the Financials sector has done well, with four companies in the CPLI, Energy & Materials and Consumer Staples each had two and Health Care had one. The Industrials sector lies within the lowest quartile for each category of performance (Figure 18), while the Energy & Materials sector has performed best overall.

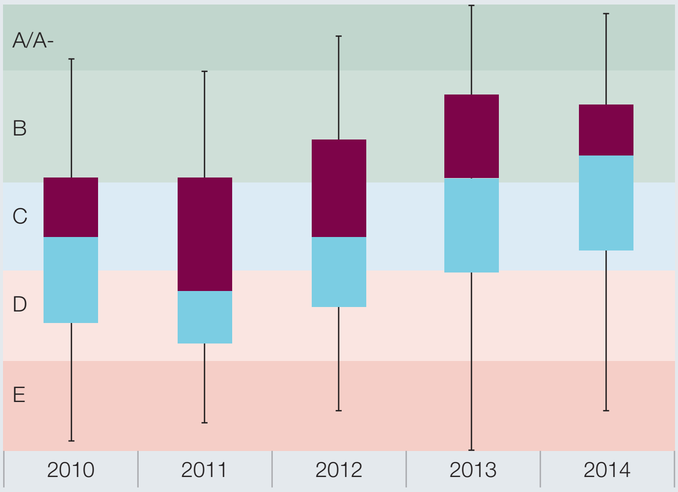
Some areas that are most notable in distinguishing leaders are: providing independent third party verification of Scope 1, 2 and 3 emissions; demonstrating emission reductions with emission reduction activities; and providing substantial detail on how climate change is integrated into risk management and strategic planning.

Table 5: Top performers in the CPLI from 2011 to 2014

Indicates CPLI members for the respective years

Company Name	Sector	2014 Performance	2013 Performance	2012 Performance	2011 Performance
Anglo American Platinum	Materials	A	A-	B	C
FirstRand Ltd	Financials	A	A	A	B
Harmony Gold Mining Co Ltd	Materials	A	A	B	B
Mediclinic International	Health Care	A	B	B	C
Pick n Pay Stores Ltd	Consumer Staples	A	A	B	A-
Redefine Properties Ltd	Financials	A	D		
SABMiller	Consumer Staples	A	B	C	C
Sanlam	Financials	A	B	B	B
Standard Bank Group	Financials	A	C	D	C
Nampak Ltd	Materials	A-	A	B	B
Anglo American	Materials	B	A	A	C
Barloworld	Industrials	B	A	A	B
British American Tobacco	Consumer Staples	B	B	B	A
Gold Fields Ltd	Materials	B	A-	A	A
Growthpoint Properties	Financials	B	A	B	C
Mondi plc	Not public	/	B	A	B
Remgro	Financials	B	A	B	A-
Woolworths Holdings Ltd	Consumer Discretionary	B	B	A	A-
TOTAL NUMBER IN CPLI		**9**	**8**	**6**	**2**

Figure 17: JSE100 performance scores over time (2010 – 2014) showing minimum, first quartile, median, third quartile and maximum scores



Band A/A- (>85%)
Fully integrated climate change strategy driving significant reduction in emissions due to climate change initiatives. An "A" signifies that in addition to achieving a score of more than 85, the company has met the additional criteria for entry into the Climate Performance Leadership Index (see below). An "A-" signifies that the company has achieved the high score, but not met the additional criteria.

Band B (>60%)
Integration of climate change recognized as priority for strategy, not all initiatives fully established.

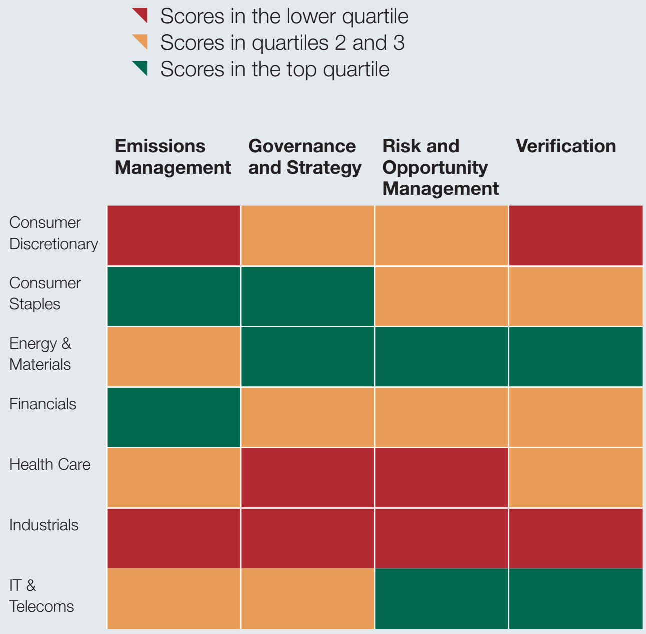
Band C (>40%)
Some activity on climate change with varied levels of integration of those initiatives into strategy.

Band D (>20%)
Limited evidence of mitigation or adaptation initiatives and no/limited strategy on climate change.

Band E (>0%)
Little evidence of initiatives on carbon management potentially due to companies just beginning to take action on climate change.

No performance band is allocated below a disclosure score of 50, as there would be insufficient information on which to base a performance score.

Figure 18: Sectoral assessment of performance by category



Climate Disclosure Leadership Index

South African companies are doing particularly well at disclosure and continue to show improvement

The lowest score for companies that qualified for the CDLI is 98/100 (97/100 in 2013). Ten companies whose scores were within the top 10% of the JSE100 qualified for this year's CDLI (Table 6). The mean disclosure score of all responding companies is 87/100, showing a continued increase on previous years (up from 83 in 2013), and the median disclosure score is 89, a large increase from 83 in 2013 and 82 in 2012. The range of scores of the top 10% companies has also improved, to 98-100, from 97-100 (in 2013) and 95-100 (2012). Approximately half the sample scored more than 90 (49%), and only 8% scored between 50 and 70 (Figure 19).

This is the second year there have been two overall leaders with full marks for disclosure: Harmony Gold Mining Co and Remgro. Energy & Materials achieved the highest sector score, followed by IT & Telecoms. Six companies that achieved membership of the CDLI repeated their achievements for the third year, demonstrating consistent commitment to providing high quality disclosure, and three companies (FirstRand, Pick n Pay and Old Mutual plc) are new entrants. Four companies dropped out of the CDLI this year (Barloworld (scored 93), Gold Fields Ltd (scored 96), Investec Ltd (scored 91), and Kumba Iron Ore (scored 95)).

As with performance, the Industrials sector has not performed well – coming in the lowest quartile within each category. Energy & Materials and Consumer Staples have performed well, coming in the top quartile for three of four categories (Figure 20).

Table 6: Top performers in the CDLI since 2011

Companies highlighted are included in the CDLI for that year

Company Name	Sector	2014 Disclosure Score	2013 Disclosure Score	2012 Disclosure Score	2011 Disclosure Score
Harmony Gold Mining Co Ltd	Materials	100	98	98	91
Remgro	Financials	100	99	97	80
Anglo American Platinum	Materials	99	99	96	85
Firstrand Limited	Financials	99	96	97	88
Mediclinic International	Health Care	99	99	97	74
Nampak Ltd	Materials	99	97	95	85
Nedbank Limited	Financials	99	100	92	96
Exxaro Resources Ltd	Energy	98	97	100	94
Old Mutual plc	Financials	98	91	85	85
Pick n Pay Stores Ltd	Consumer Staples	98	95	96	86
Oceana	Consumer Staples	97	95	95	
Gold Fields Limited	Materials	96	100	99	98
Kumba Iron Ore	Materials	95	98	88	82
Sanlam	Financials	94	96	97	88
Woolworths Holdings Ltd	Consumer Discretionary	94	77	94	90
Barloworld	Industrials	93	97	93	89
Bidvest Group Ltd	Industrials	92	78	86	88
British American Tobacco	Consumer Staples	91	94	86	91
Investec Limited	Financials	91	99	90	79
Growthpoint Properties	Financials	90	93	95	83
Group 5	Industrials	/	/	/	87
TOTAL NUMBER IN CDLI		**10**	**11**	**12**	**11**

Figure 19: Improving scores for the CDLI JSE100 over time from 2007

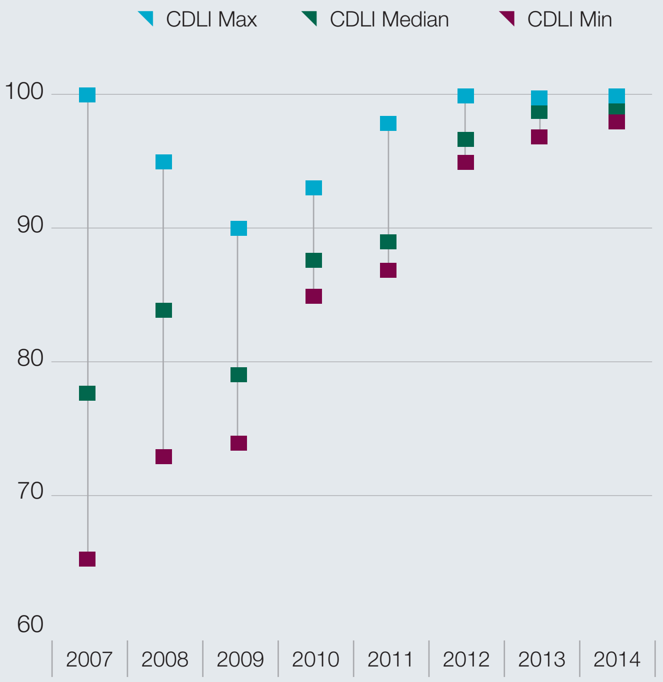


Figure 20: Sectoral assessment of disclosure by category.

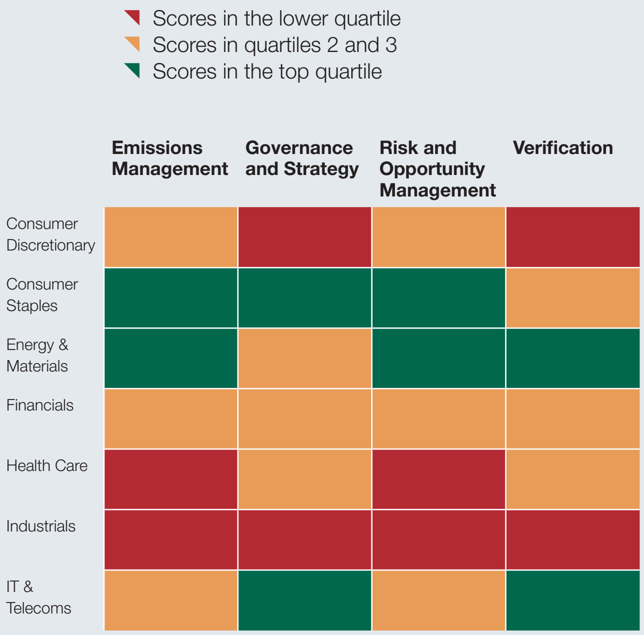
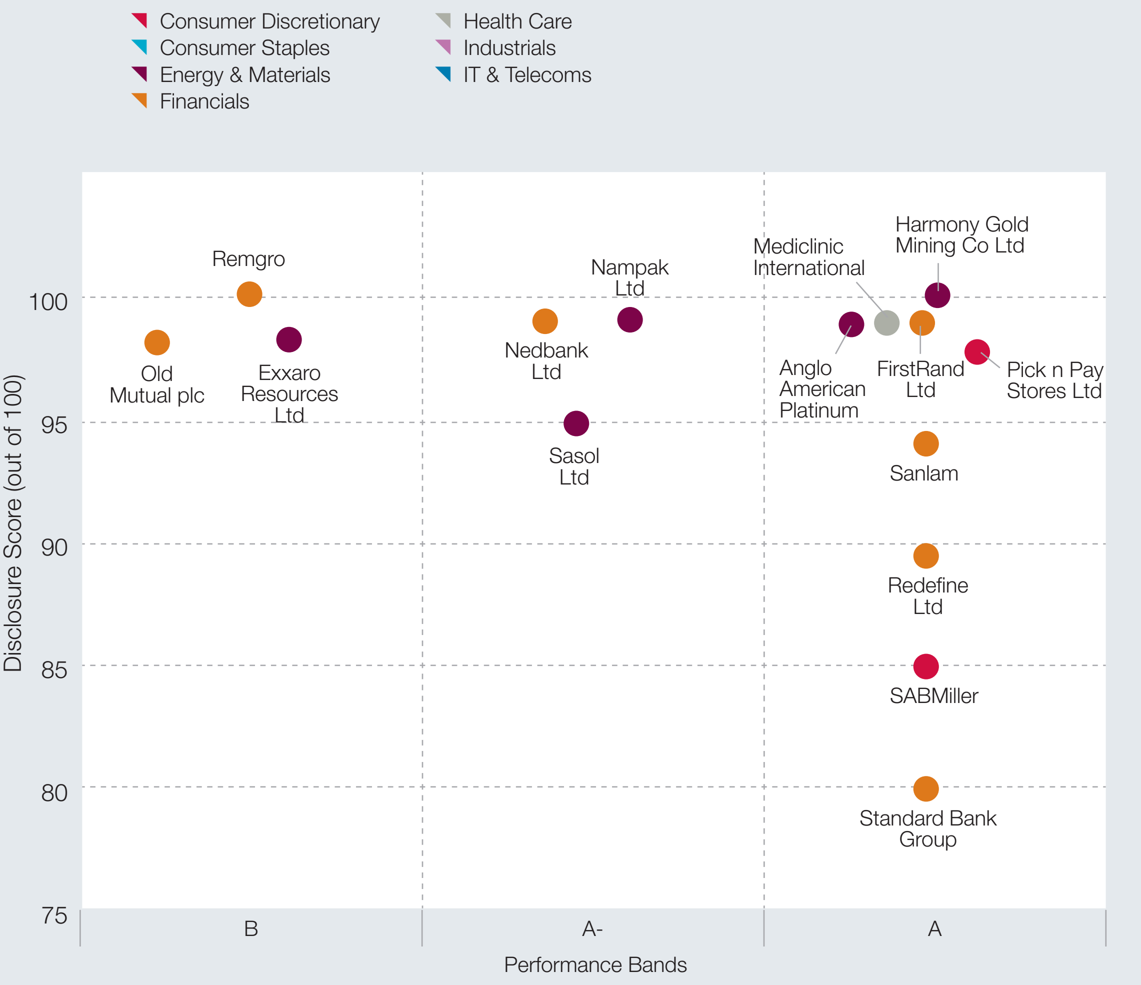


Figure 21 identifies those companies best rated in terms of both disclosure and performance. Although CDP scoring methodology does not take into account any actions undertaken by a company but not reported in the CDP response, and it does not evaluate materiality, the results provide a proxy for understanding the level to which a company is managing its impacts on a yearly basis. The results provide an indication of those companies leading the way. The top scorer in 2014 with Band A performance and 100 marks for disclosure is Harmony Gold Mining Ltd.

Figure 21: Top disclosure scores and top performance bands matrix



BOX 4: Mandatory reporting: connecting the IPCC Guidelines with corporate GHG reporting
Copy compiled by the NBI

With the South African government's intention to introduce mandatory reporting, a carbon tax, company level carbon budgets and Desired Emission Reduction Outcomes in the near future, companies need to start thinking about how best to report their greenhouse gas (GHG) emissions in line with national requirements. The requirements for national reporting are aligned with the Intergovernmental Panel for Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories. Most companies, however, follow the GHG Protocol standards to report their GHG emissions. This could create challenges for companies who are already overwhelmed with various requests to report information in many different formats.

The IPCC Guidelines are designed for reporting national GHG inventories rather than corporate inventories. They are focused on improving the completeness and accuracy of the national dataset for reporting to the UNFCCC and to drive emission reductions in the country. The main purpose of corporate GHG reporting is to help companies assess and report their direct and indirect emissions, so they can manage and reduce their emissions effectively and identify potential risks and opportunities. The IPCC Guidelines therefore have different underlying reporting requirements to the GHG Protocol.

An important difference between the IPCC Guidelines and the GHG Protocol relates to the boundaries that determine what emissions need to be included in an inventory. As the IPCC Guidelines are designed for national inventories, the boundary is set at a national level, and there is no clear guidance around how companies reporting for the national inventory should set their boundaries. The IPCC Guidelines only refer to direct emissions and, as such, companies are only required to report their direct emissions in the particular country. The boundary or consolidation approach that a company chooses will determine which emissions to report as direct or indirect. When using the GHG Protocol, companies categorise emissions under Scopes 1, 2 and 3, enabling them to account for and mitigate all direct and indirect emissions that occur as a consequence of their activities. Different consolidation approaches may result in a different categorisation of emissions under Scopes 1 and 3 with the result that emissions reported under the GHG Protocols may not exactly align with reporting categories that comply with the IPCC Guidelines.

The NBI is producing a paper on reporting in accordance with the IPCC Guidelines, which is due for release in late 2014. The paper will provide practical guidance to companies on how to address the challenges of the different reporting requirements, including differences in sectors and activities, methodological approaches and emissions factors and units, and sets out how to reposition a GHG Protocol based report for mandatory reporting purposes. For more information or to access a copy of the report, please contact Zarina Moolla (Moolla.zarina@nbi.org.za).

Key disclosure statistics

Figure 22 is based on the sample of 80 companies that responded to the CDP and includes companies that reference a holding company's response. Analysis in the rest of the report is based on 76 responses received by 1 July 2014 and does not include companies that reference a holding company's response.

Key emissions statistics: Scope 1–3 and verification

The total Scope 1 emissions for JSE100 decreased to 128.8 million tCO_2e (from 134.6 million tCO_2e in 2013). The decrease is partly due to changes in the reporting sample.

Scope 2 figures are comparable with 2013 as the approach to accounting was the same[17]. Total Scope 2 emissions increased from 85 million tCO_2e in 2013 to 88.4 million tCO_2e.

Only companies reporting Scope 3 emissions using the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard categories (see Box 4), and where those categories have been 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.

Although there is still a significant gap between those companies reporting emissions and those companies that are independently verifying them, there is continued improvement in the proportion of emissions being verified. This is important, for it leads to increased trust in climate data and therefore its use, both internally and externally. Seventy-eight per cent of responding companies verified their Scope 1 emissions, and 76% their Scope 2 emissions in 2014, an increase from 2013 (70% and 68% respectively). Forty-three per cent of companies verified their Scope 3 emissions, compared with 37% in 2013.

17 The approach was altered between 2012 and 2013 so that companies can incorporate specific emissions factors associated with renewable energy purchases where supported by appropriate tracking instruments.

Figure 22: Year-on-year percentage response rate to the CDP climate change questionnaire

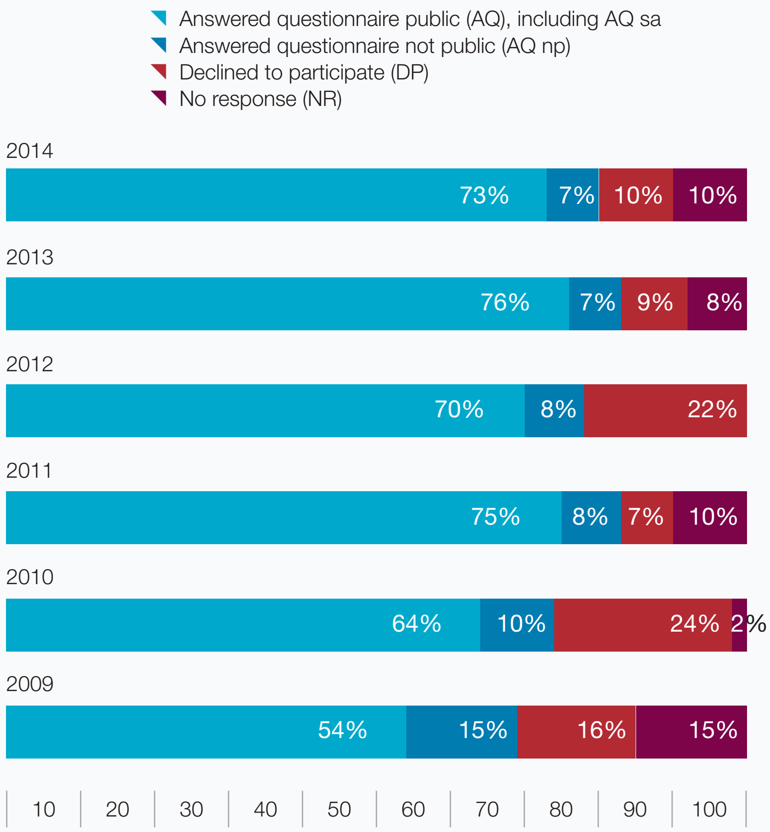
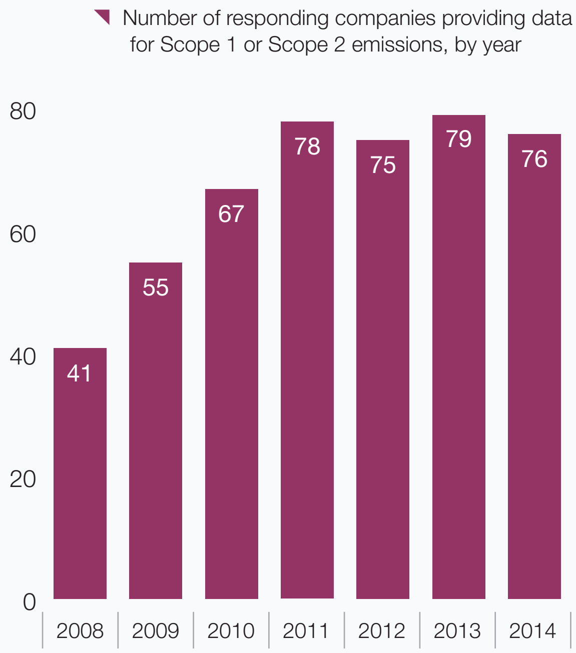


Figure 23: Year-on-year disclosure of Scope 1 and 2 emissions by JSE100 (2008 – 2014)



CDP climate change analytics tool

CDP's data and analytics tool enables a company to benchmark its performance and understand best practices related to carbon and water management. Using CDP data can inform a company's approach to sustainability and leads to reduced costs, greater innovation and enhanced environmental and financial performance.

Using CDP analytics, companies can bring CDP data to life through easily exportable charts and reports. Data can be filtered by a range of categories, including company, industry, and country, enabling companies to measure their performance against direct peers and build a business case for investments in sustainability.

The dashboards in the tool are built around the main CDP climate change questionnaire sections such as risks and opportunities, emissions management and Scope 3 and value chain. The tool has been designed with simplicity and ease of use as its aim – it does not require extensive training to use and and users should quickly discover valuable insights. Both the visualisations and underlying data can be exported to excel or PDF with a single click so it can be easily used for presentations.

Different versions of the tool exist for companies and investors and cities. For responding companies there are two platforms. The first is for Reporter Services members and is intended to help them improve their own reporting and to benchmark their performance against peers. The second version for companies is available through the Supply Chain membership and allows member companies to track and analyse the data provided by their own suppliers. The investor version is available to Investor members and uses the data differently to allow for portfolio analysis. See https://www.cdp.net/en-US/Pages/disclosure-analytics-2014.aspx for more information.

Figure 24: Global Scope 1 and 2 emissions by sector excluding the top nine emitters

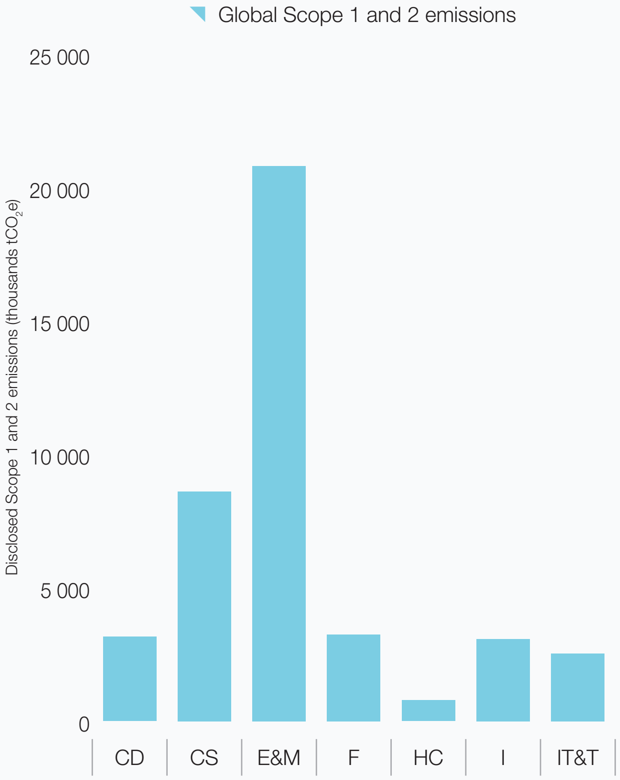
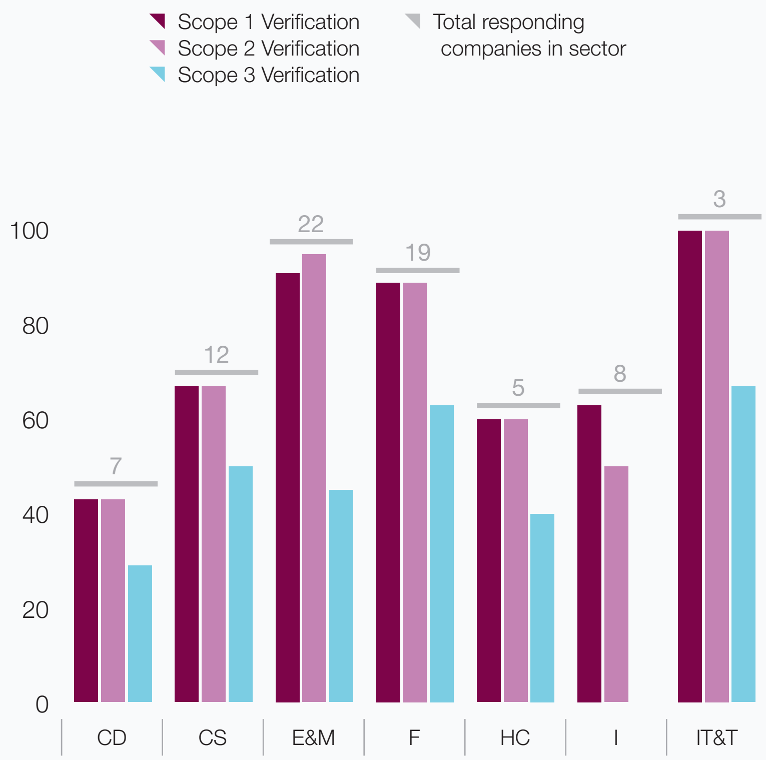


Figure 25: Percentage of companies with verified GHG emissions by sector



Key management statistics

Companies have achieved small, annual improvements in some of the key performance statistics (Figure 26). However, there are three areas in which companies have performed less well in 2014 than they did in 2013: board oversight, meeting targets, and disclosing climate change information in other filings.

Energy & Materials are performing particularly well at some of the key performance statistics, such as rewarding climate change progress through monetary incentives, and providing evidence of climate change disclosure in filings and publications.

Figure 26: Year-on-year number of companies reporting key performance statistics

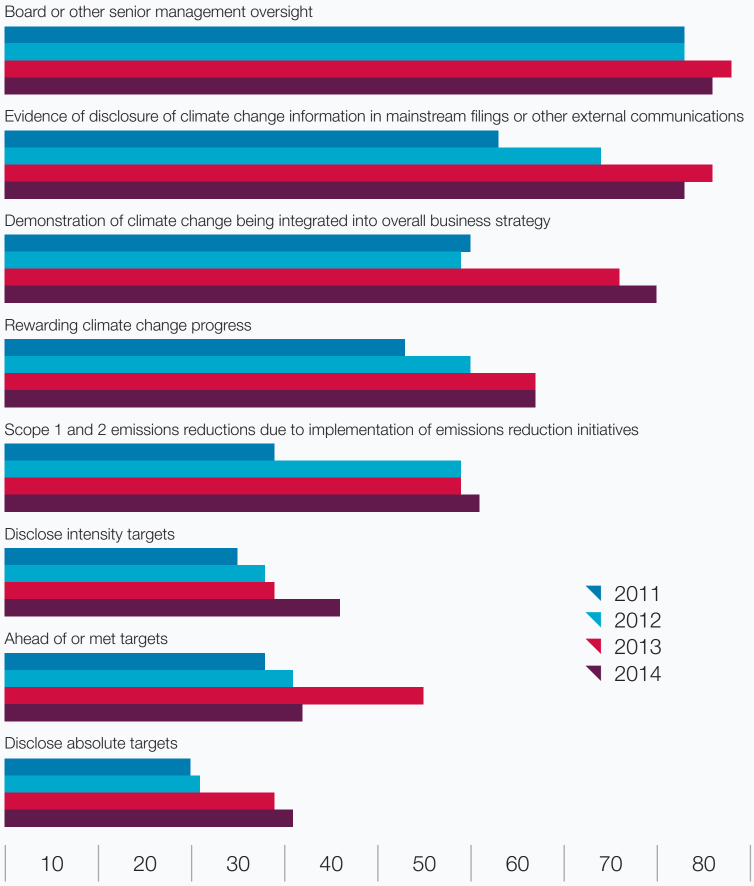


Figure 27: Percentage of JSE100 responding companies with board level oversight by sector

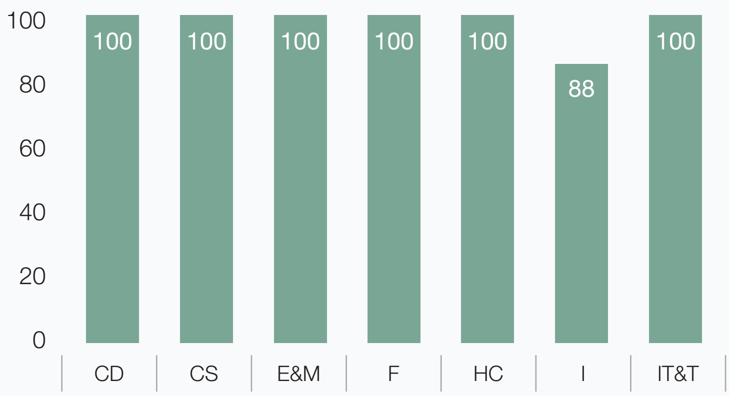


Figure 28: Percentage of JSE100 responding companies rewarding climate change progress by sector

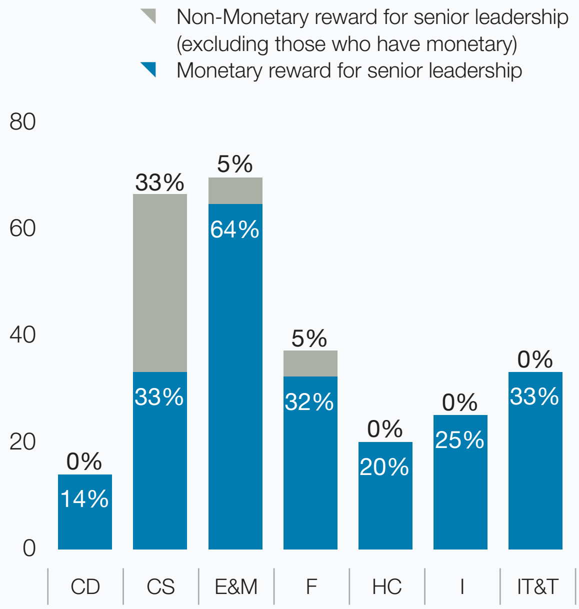
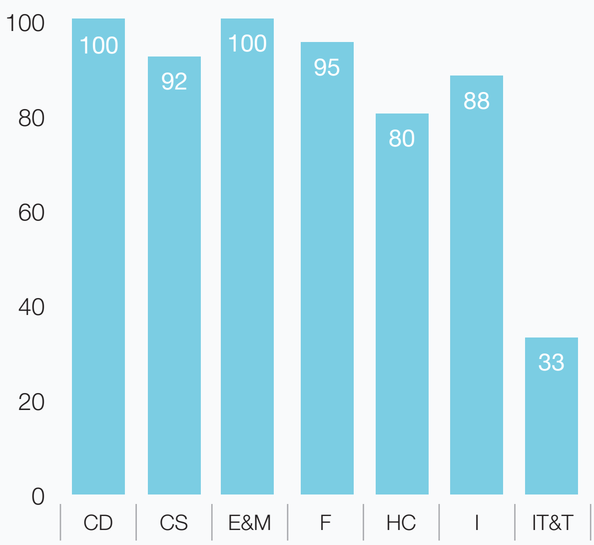


Figure 29: Percentage of JSE100 responding companies demonstrating climate change being integrated into overall business strategy by sector



Key emission reduction 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 intensity targets.

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, 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.

Figure 30: Percentage of JSE100 responding companies with evidence of disclosure of climate change information in mainstream filings or other external communications by sector

Figure 31: Percentage of JSE100 responding companies with absolute emission reduction targets and intensity targets by sector

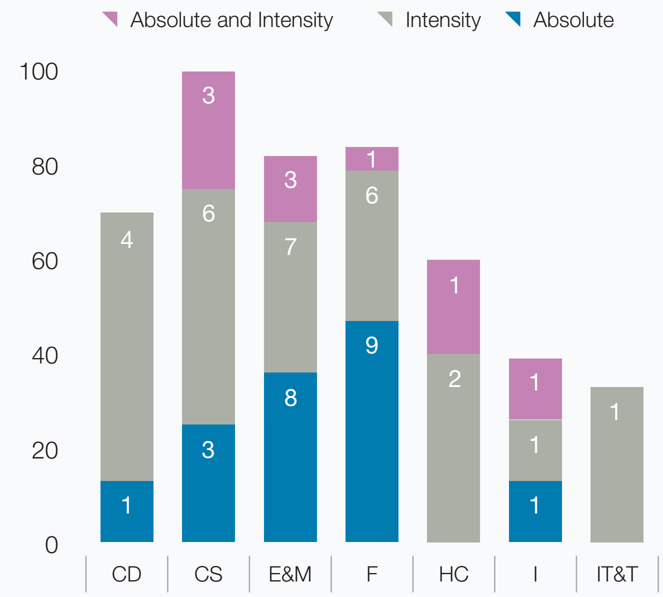


Figure 32: Percentage of JSE100 responding companies ahead of, or having met, targets to reduce emissions by sector

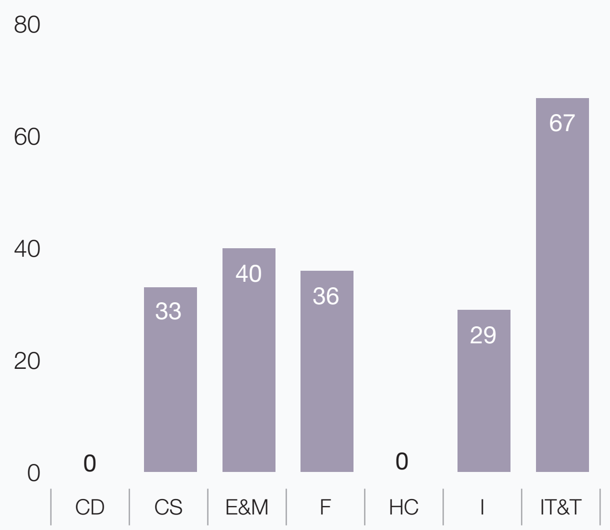
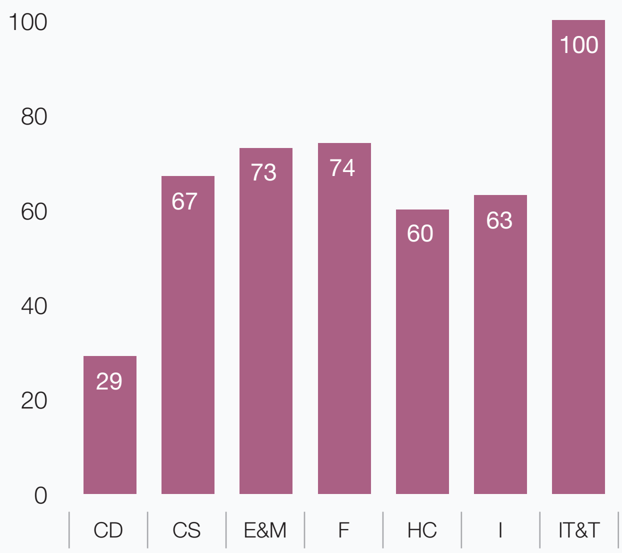


Figure 33: Percentage of JSE100 responding companies with emission reductions due to reduction initiatives by sector



Sector analysis

Each industry sector has its unique challenges and regulatory constraints. Looking at the sector within which a company sits can provide a useful benchmark and lead to more meaningful comparison. It can enable a more valuable assessment of company disclosure and performance.

This section reviews the CDP 2014 results in the context of the following sectors and associated sub-sectors:

- *Consumer Discretionary* – Apparel & Luxury Goods, Apparel Retail, Apparel, Accessories & Luxury Goods, Department Stores, Home Furnishing Retail, Publishing;
- *Consumer Staples* – Beverages, Brewers, Food Distributors, Food Products, Food Retail, Personal Products, Tobacco;
- *Energy & Materials* – Chemicals, Construction Materials, Energy, Gold, Metals & Mining, Paper Packaging, Paper Products, Precious Metals & Minerals, Steel;

Figure 34: Sectoral analysis of response rate (%)

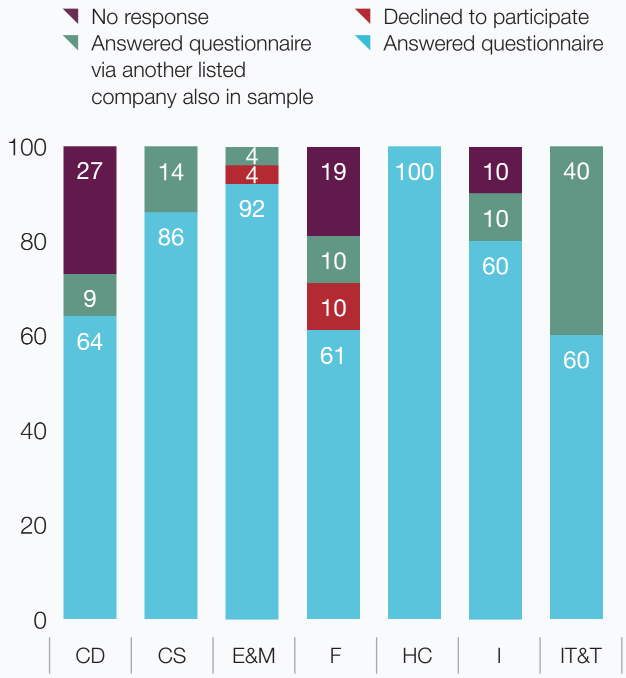
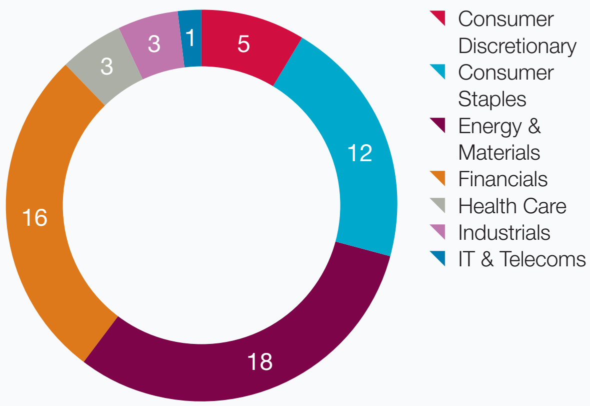


Figure 35: Sectoral analysis of performance band (%)

Figure 36: Number of companies with targets by sector



- *Financials* – Diversified Banks, Diversified Financial Services, Insurance Brokers, Real Estate;
- *Health Care* – Pharmaceuticals, Health Care;
- *Industrials* – Construction & Engineering, Electrical Components & Equipment, Industrial Conglomerates, Industrial Machinery, Trading Companies & Distributors; and
- *Information Technology & Telecoms* – Electronic Equipment & Instruments, Wireless Telecommunication Services, Integrated Telecommunication Services.

Each of these sector snapshots contains:

- A summary of the key findings for the sector;
- A summary of the current response rate, emissions data (Scope 1 South Africa, Scope 1 Global, Scope 2 Global and emissions intensity) and information on targets and verification;
- The CDP sectoral response rate over the past four years;
- A breakdown of the sectoral performance scores by questionnaire section, comparing the sector against the JSE100 average and the CDLI;
- A graphical representation of the individual company disclosure scores and performance bands; and
- A brief review of the Scope 3 emissions categories reported plotted against total emissions reported for each category.

Table 7: Global 500 and JSE100 response rates by sector

Sector		Response Rate
Consumer Discretionary	JSE100	64%
	Global 500	75%
Consumer Staples	JSE100	86%
	Global 500	96%
Energy & Materials	JSE100	96%
	Global 500	80%
Financials	JSE100	71%
	Global 500	81%
Health Care	JSE100	100%
	Global 500	87%
Industrials	JSE100	80%
	Global 500	88%
IT & Telecoms	JSE100	60%
	Global 500	85%

Global 500 and JSE100: a sectoral comparison

- The JSE100 companies do not perform as well as the Global 500 in terms of response rate across most sectors. However, Energy & Materials and Health Care have higher response rates (Table 7).
- In the JSE100, Health Care and Energy & Materials showed the highest levels of participation (100% and 96% respectively). IT & Telecoms and Consumer Discretionary had lower rates than they did in 2013, while Financials (lowest in 2013) showed improvement this year (71% up from 65%).
- The JSE100 compared favourably with the Global 500 in terms of the disclosure scores across most sectors, although Consumer Discretionary, Health Care and Industrials scored lower than the global average (Table 8). Energy & Materials in South Africa did particularly well, scoring 11 points higher than their global counterparts.
- In terms of performance, the JSE100 is aligned with the Global 500 across all sectors apart from Consumer Discretionary and Industrials, which achieved lower performance bands than their global sector averages (Table 8). Two sectors, Consumer Staples and IT & Telecoms, went up a performance band compared with 2013 from performance band C to a B.

Table 8: Global 500 and JSE100 mean disclosure and performance scores by sector

Sector	CDP Global 500 2014		CDP JSE100			
	2014		2014		2013	
	Disclosure	Performance	Disclosure	Performance	Disclosure	Performance
Consumer Discretionary	88	B	84	C	74	C
Consumer Staples	86	B	89	B	80	C
Energy & Materials	81	B	92	B	90	B
Financials	82	B	87	B	84	B
Health Care	83	C	78	C	79	C
Industrials	82	B	79	C	83	C
IT & Telecoms	82	B	90	B	82	C

Consumer Discretionary

RESPONSE RATE – 2014

64% (7 of 11)

RESPONSE RATE – 2013

83% (10 of 12)

Response of industries within the sector:

Casino and Gaming *(0 of 1)*
Consumer Services *(0 of 1)*
Distributors *(1 of 1)*
Hotels, Restaurants & Leisure *(1 of 1)*
Household Durables *(1 of 1)*
Media *(0 of 1)*
Multiline Retail *(1 of 1)*
Specialty Retail *(2 of 3)*
Textiles, Apparel & Luxury Goods *(1 of 1)*

3 186 733 tCO_2e

Total Scope 1+2 emissions 2014

3 604 248 tCO_2e

Total Scope 1+2 emissions 2013

-11.6%

Decrease in Scope 1+2 emissions since 2013

1.5%

of total JSE100 emissions

84/C Mean disclosure score / performance band

Key Findings:

- The response rate has declined considerably compared with 2013. It is unclear why companies who responded in 2013 have declined to participate in 2014.
- Those that have responded have provided better quality of data and performed better than last year on disclosure, scoring 84 on average compared with 74. Their performance has remained the same (band C). Just 29% of the sector scored a B or above for performance.
- The sector contributes a small proportion of overall emissions from the JSE100, as is expected. The companies have limited direct carbon impacts and emissions are focused on either shop/buildings or in their supply chain and logistics networks and in the consumer use of products.
- The sector has shown an 11.6% decrease in emissions since 2013, but this may be due to a smaller sample size of seven companies this year (compared with ten in 2013).

Figure 37: Percentage response rate by year: Consumer Discretionary

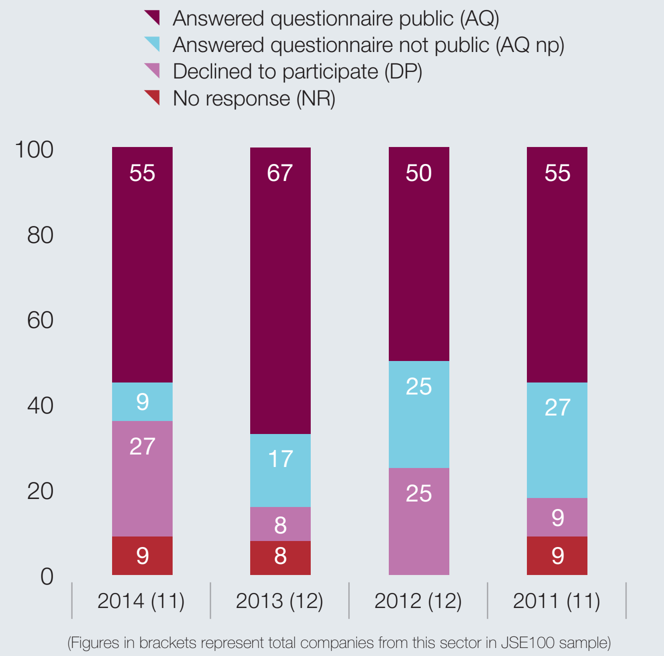


Figure 38: Performance score breakdown: Consumer Discretionary

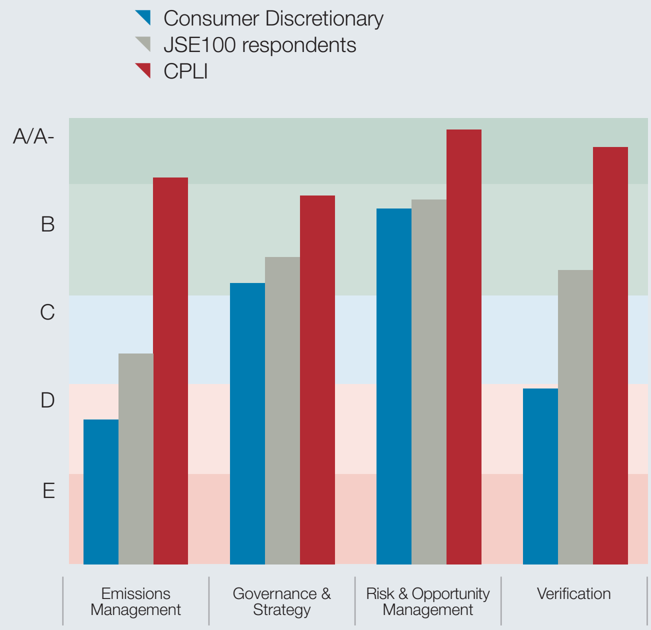


Figure 39: Disclosure and performance bands: Consumer Discretionary

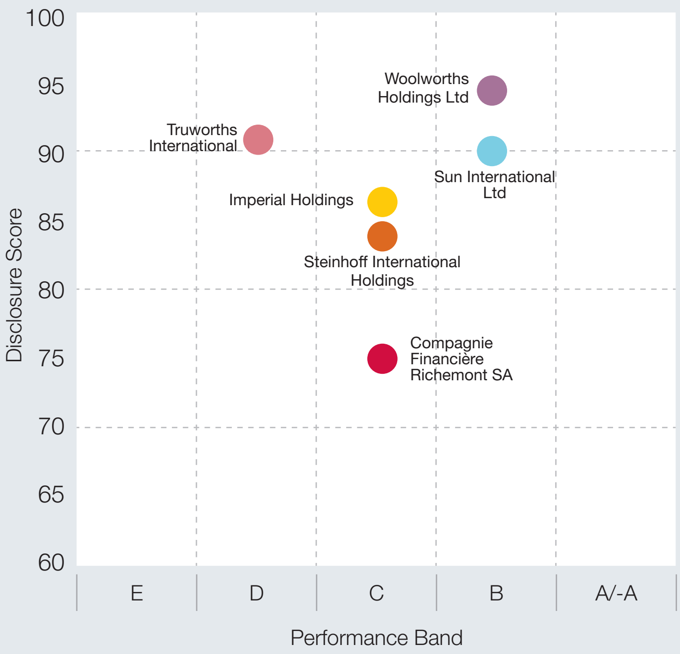
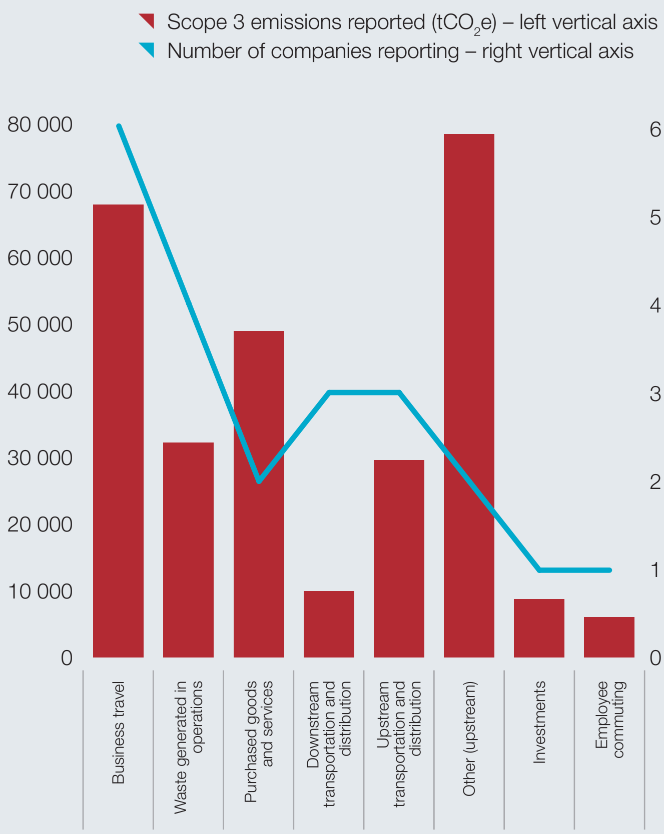


Figure 40: Scope 3 disclosed emissions by category and number of companies reporting: Consumer Discretionary



Consumer Staples

RESPONSE RATE – 2014

86% (12 of 14)

RESPONSE RATE – 2013

92% (11 of 12)

Response of industries within the sector:

Beverages *(1 of 1)*
Food & Staples Retailing *(4 of 5)*
Food Products *(6 of 7)*
Tobacco *(1 of 1)*

8 645 111 tCO_2e

Total Scope 1+2 emissions 2014

8 022 721 tCO_2e

Total Scope 1+2 emissions 2013

7.8%

Increase in Scope 1+2 emissions since 2013

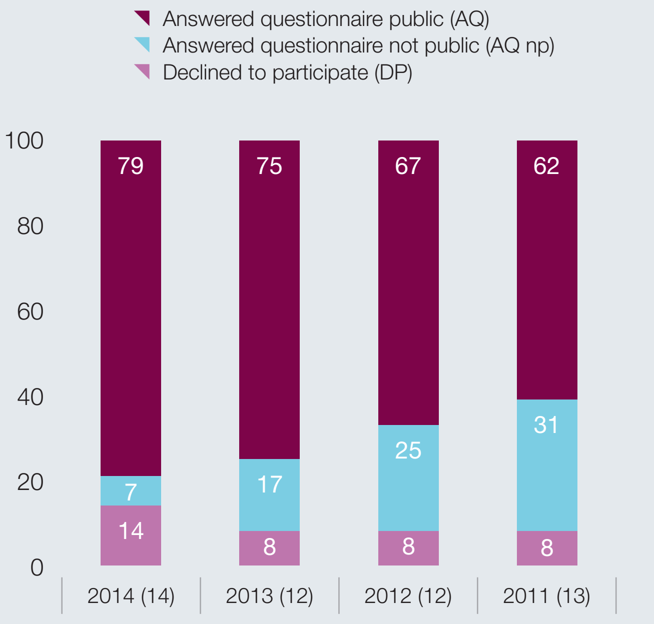
89/B Mean disclosure score / performance band

4%
of total JSE100 emissions

Key Findings:

- This sector has a lower response rate than in 2013, but more companies are included in the sample this year.
- However, the companies have shown good improvement on 2013 with an average disclosure score of 89 (compared with 80 in 2013) and performance band B (compared with C in 2013). Two-thirds of the sector scored a B or above for performance, and two companies in the sector are in the CPLI.
- The sector contributes just 4% to the JSE100's overall emissions. Retailers can contribute to reductions in their supply chain, while primary producers have the potential to implement significant reductions. It is encouraging that the sector reports Scope 3 emissions from upstream transport and distribution as this is an emissions intensive activity.
- The sector has increased its emissions by 8% since 2013. This is partly because there is an extra company in the sample.
- The sector has the highest proportion of companies with targets.

Figure 41: Response rate by year: Consumer Staples



(Figures in brackets represent total companies from this sector in JSE100 sample)

Figure 42: Performance score breakdown: Consumer Staples

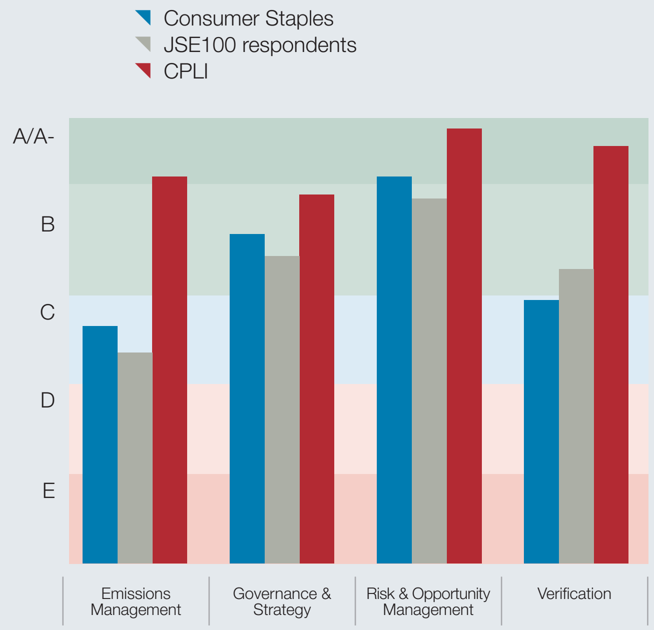


Figure 43: Disclosure and performance bands: Consumer Staples

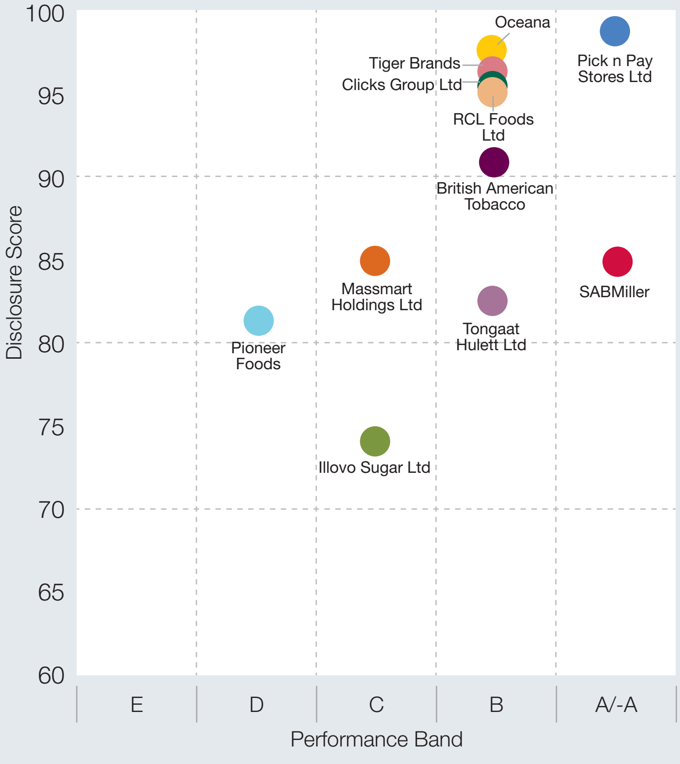
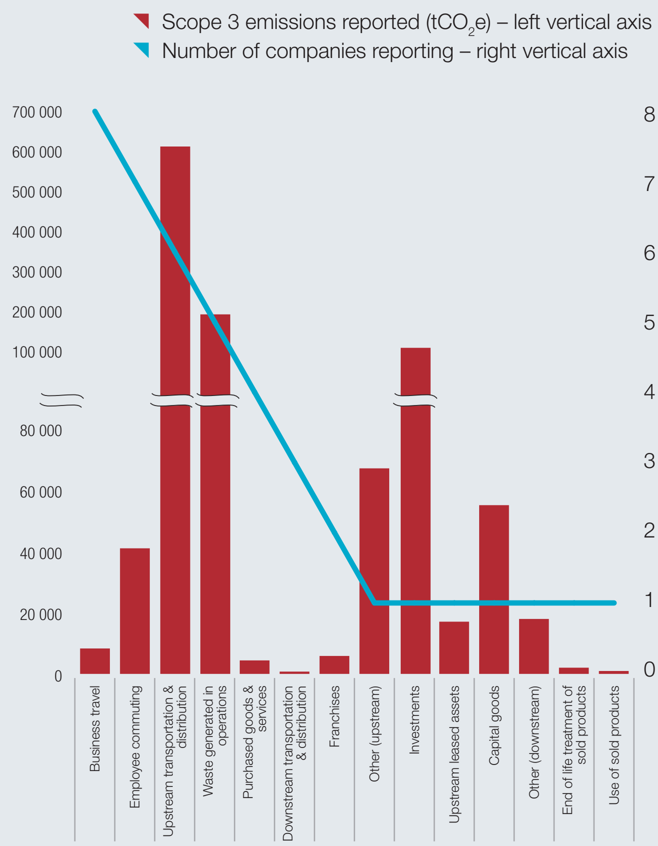


Figure 44: Scope 3 disclosed emissions by category and number of companies reporting: Consumer Staples



Energy & Materials

RESPONSE RATE – 2014

96% (23 of 24)

RESPONSE RATE – 2013

95% (21 of 22)

Response of industries within the sector:

Chemicals *(1 of 2)*
Construction Materials *(1 of 1)*
Containers & Packaging *(1 of 1)*
Metals & Mining *(15 of 15)*
Oil, Gas & Consumable Fuels *(2 of 2)*
Paper & Forest Products *(3 of 3)*

195 682 569 tCO_2e

Total Scope 1+2 emissions 2014

198 018 041 tCO_2e

Total Scope 1+2 emissions 2013

-1.2%

Decrease in Scope 1+2 emissions since 2013

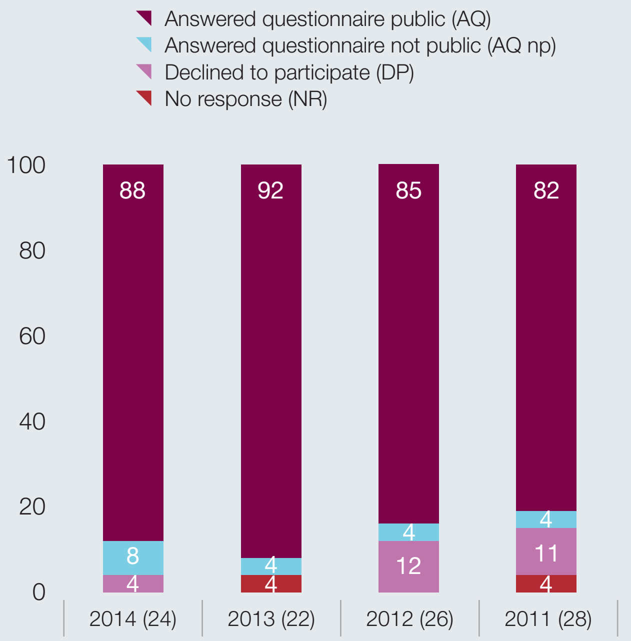
90.1%
of total JSE100 emissions

92/B Mean disclosure score / performance band

Key Findings

- The sector has a similarly high response rate to 2013 but this year there are two new companies, and one has not responded. Metals and mining make up the majority of the sector.
- This sector has performed well this year, with an improved mean disclosure score of 92 (compared with 90 in 2013) and performance band B (as in 2013) and is the highest scoring sector for disclosure. The sector had the highest proportion of companies achieving a B or above for performance (73%) and two Materials companies are in the CPLI.
- This is a key sector in the JSE100 as it is particularly emissions intensive – contributing 90% of the overall emissions in the JSE100. It is therefore of critical importance in the private sector contribution to South Africa's emissions.
- The sector has achieved the largest absolute emissions reductions this year, albeit in percentage terms it is only 1.2%. This is largely due to two companies in the sector (Sasol and BHP Billiton) but most of the companies had individual reductions.
- More than 80% of the sector has emission reduction targets, and at least half the companies are meeting or are ahead of their targets.
- The sector has the highest proportion of companies rewarding their senior management with monetary incentives.
- The sector has significant direct impacts and levels of vulnerability to climate change. There is an expectation that the sector will invest in energy efficiency and water efficiency measures and explore new clean technologies.

Figure 45: Response rate by year: Energy & Materials



(Figures in brackets represent total companies from this sector in JSE100 sample)

Figure 46: Performance score breakdown: Energy & Materials

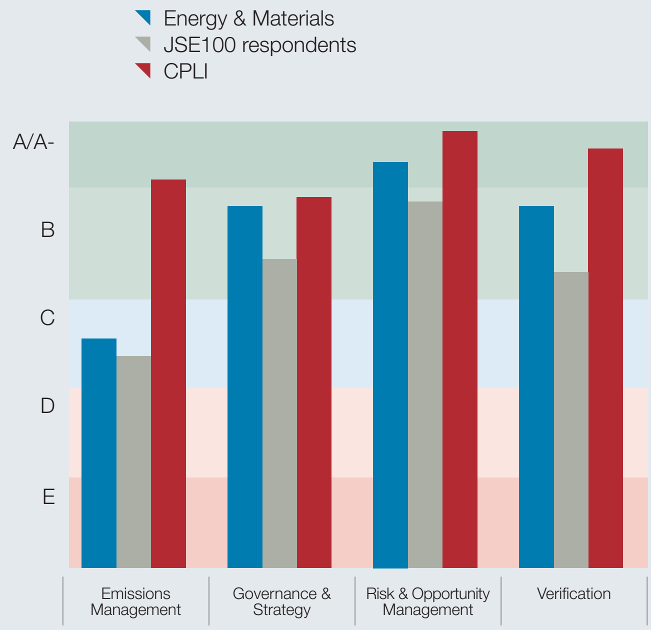


Figure 47: Disclosure and performance bands: Energy & Materials

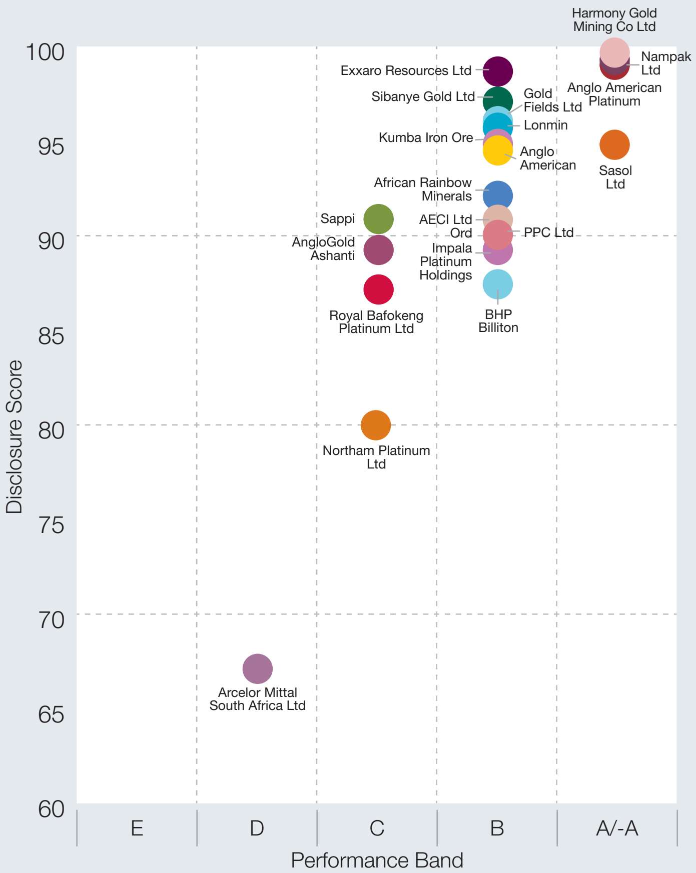
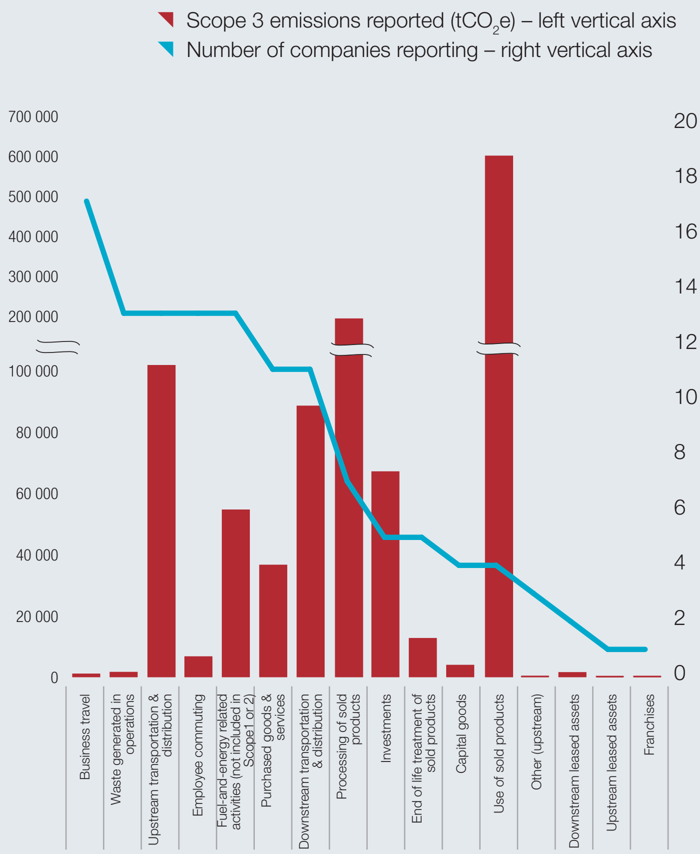


Figure 48: Scope 3 disclosed emissions by category and number of companies reporting: Energy & Materials



Financials

RESPONSE RATE – 2014

71% (22 of 31)

RESPONSE RATE – 2013

65% (20 of 31)

Response of industries within the sector:

Capital Markets *(2 of 2)*
Commercial Banks *(4 of 4)*
Diversified Financial Services *(4 of 7)*
Insurance *(6 of 7)*
Other: Diversified Financial Services *(0 of 1)*
Real Estate Investment Trusts *(4 of 5)*
Real Estate Management & Development *(2 of 4)*
Real Estate Operating companies *(0 of 1)*

3 269 991 tCO_2e

Total Scope 1+2 emissions 2014

3 659 533 tCO_2e

Total Scope 1+2 emissions 2013

-10.6%

Deccrease in Scope 1+2 emissions since 2013

1.5%

of total JSE100 emissions

87/B Mean disclosure score / performance band

Key Findings

- The sector had a higher response rate than in 2013 with two additional companies in the sample. Diversified financial services and real estate management companies showed the lowest response. The history of performance and disclosure improvement shown by Growthpoint Properties and Redefine Properties Ltd suggest that real estate management companies see significant benefits once they start managing climate change risk.
- The sector has seen a minor improvement in disclosure since 2013 (87 up from 84) and no change in performance (band B). Sixty-three per cent of the sector achieved a B or above for performance and it had the highest number of companies in the CPLI (four).
- While the sector has limited direct emissions, contributing just 1.5% to overall JSE 100 emissions, the finance sector can be a key enabler of a low carbon economy through its ability to invest in low carbon companies, technologies and infrastructure. There are also opportunities for new products and services.
- The sector reports a small absolute reduction in emissions, yet in percentage terms this is a substantial 10% decrease in emissions from 2013, despite having more companies (22) this year than last year (20).

Figure 49: Response rate by year: Financials

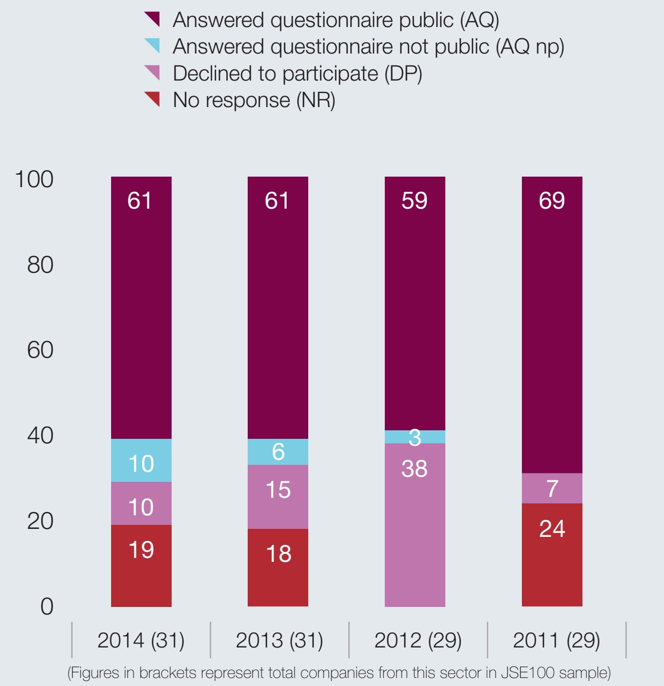


Figure 50: Performance score breakdown: Financials

Figure 51: Disclosure and performance bands: Financials

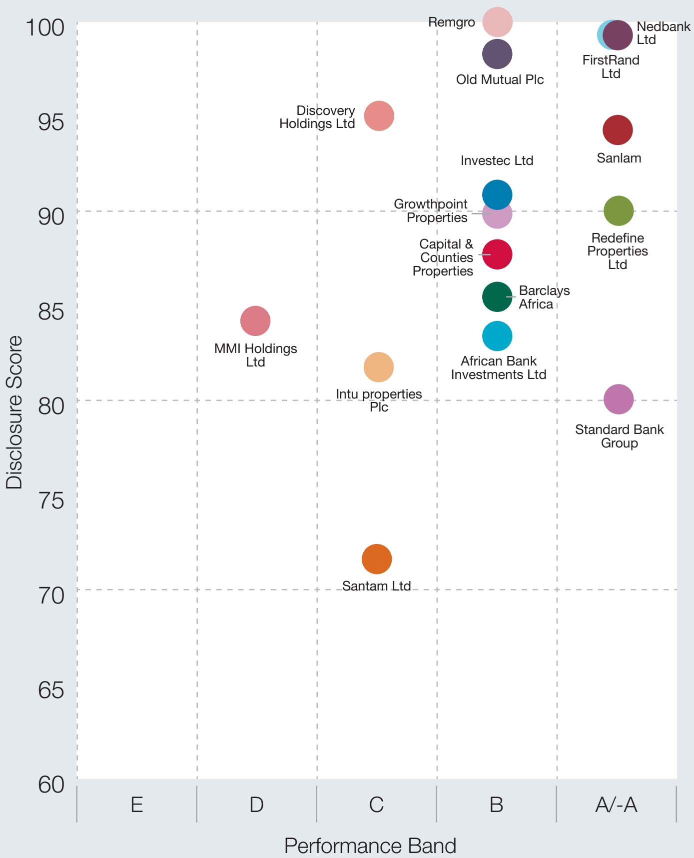
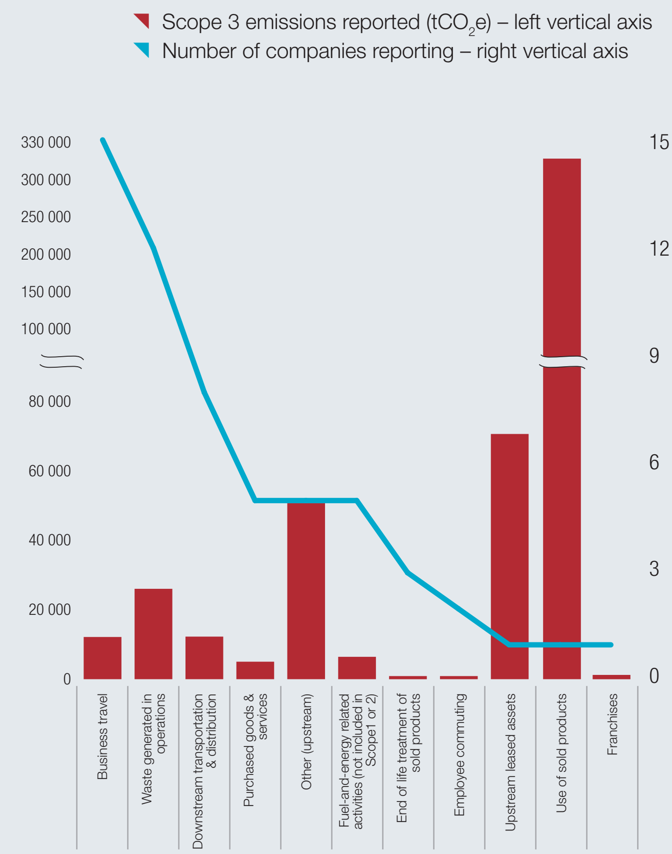


Figure 52: Scope 3 disclosed emissions by category and number of companies reporting: Financials



Health Care

RESPONSE RATE – 2014

100% **(5 of 5)**

RESPONSE RATE – 2013

100% **(5 of 5)**

Response of industries within the sector:

Health Care Providers & Services *(3 of 3)*
Pharmaceuticals *(2 of 2)*

799 224 tCO_2e

Total Scope 1+2 emissions 2014

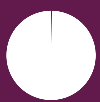
687 740 tCO_2e

Total Scope 1+2 emissions 2013

16.2%

Increase in Scope 1+2 emissions since 2013

78/C Mean disclosure score / performance band



0.4%
of total JSE100 emissions

Key Findings:

- All the companies in the sector responded giving it a 100% response rate.
- The sector has more or less the same scores as in 2013: disclosure is 78 (down from 79 in 2013) and performance remains a band C. Forty per cent of the sector achieved a B or above for performance and it scored the lowest mean disclosure score.
- The sector makes the smallest contribution to the overall JSE100 emissions, yet it has seen a significant increase at 16.2% (although that it is half the increase it saw in 2013). All the companies in the sector saw their overall global Scope 1 and 2 emissions rise, although Netcare had the largest sector percentage decrease in its SA emissions.
- None of the companies in the sector is ahead of, or meeting, its targets.

Figure 53: Response rate by year: Health Care

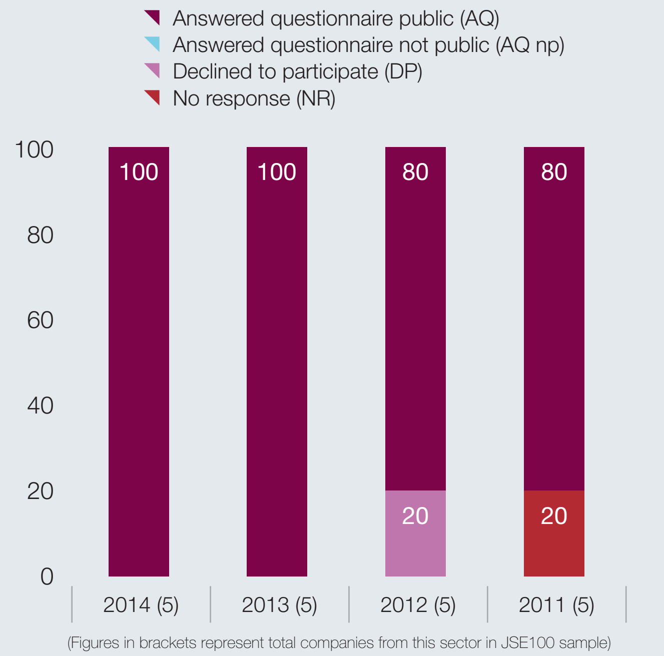


Figure 54: Performance score breakdown: Health Care

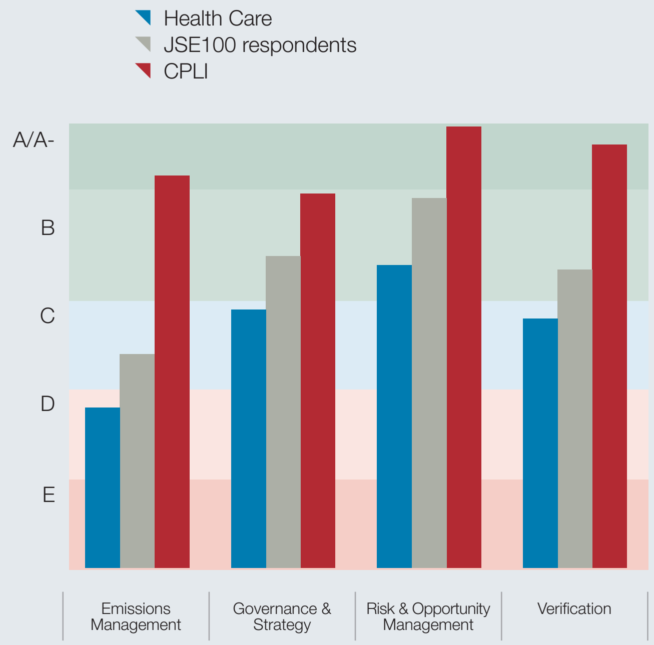


Figure 55: Disclosure and performance bands: Health Care

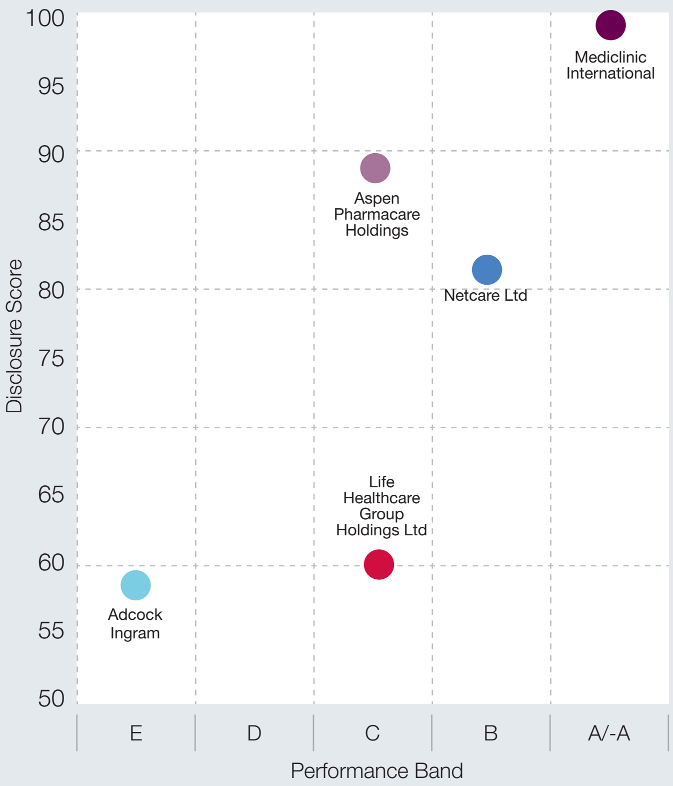
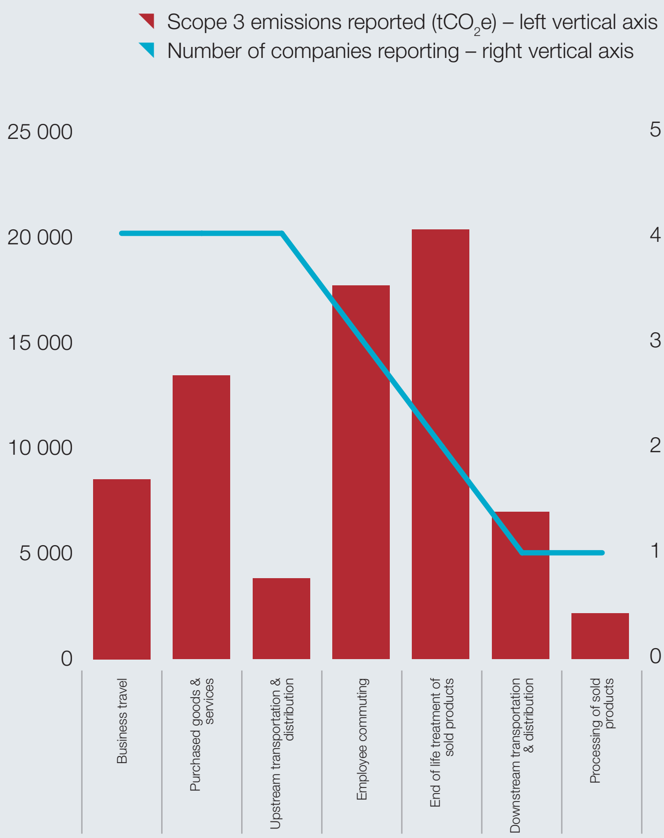


Figure 56: Scope 3 disclosed emissions by category and number of companies reporting: Health Care



Industrials

RESPONSE RATE – 2014

80%

(8 of 10)

RESPONSE RATE – 2013

90%

(9 of 10)

Response of industries within the sector:

Construction & Engineering *(3 of 3)*
Industrial Conglomerates *(3 of 3)*
Marine *(1 of 2)*
Trading Companies & Distributors *(1 of 2)*

3 098 892 tCO_2e

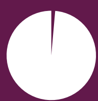
Total Scope 1+2 emissions 2014

3 351 400 tCO_2e

Total Scope 1+2 emissions 2013

-7.5%

Decrease in Scope 1+2 emissions since 2013



1.4%

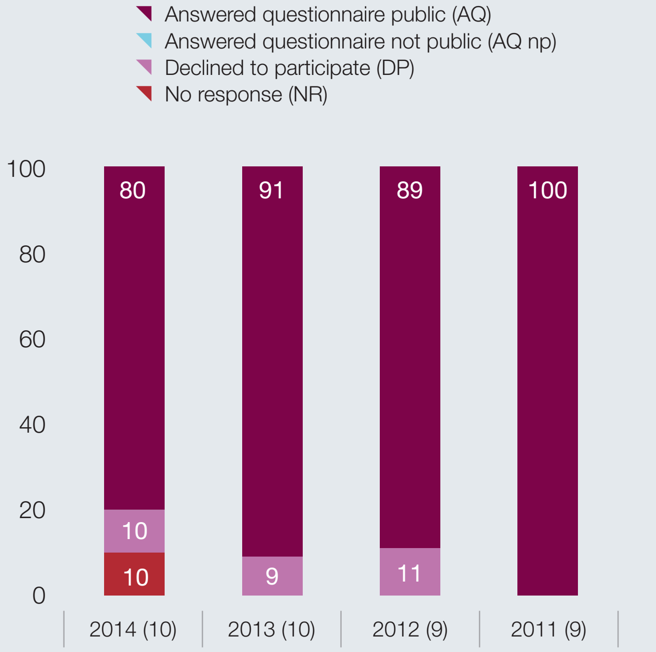
of total JSE100 emissions

79/C Mean disclosure score / performance band

Key Findings:

- The response rate of the sector is high, albeit lower than in 2013 with one less company responding.
- This was the worst performing sector in terms of performance, coming within the lowest quartile of scores across all performance areas. There was a decline in its disclosure score from 83 to 79, and its performance remained the same (C band). Only one-quarter of the sector scored a B or above for performance.
- Despite this, the sector saw a net decrease in emissions overall, although half the companies in the sector increased their emissions, and the other half reduced their emissions. Its emissions made a small contribution to the JSE100 overall.
- Risks and opportunities management and verification are particularly weak areas for the sector.

Figure 57: Response rate by year: Industrials



(Figures in brackets represent total companies from this sector in JSE100 sample)

Figure 58: Performance score breakdown: Industrials

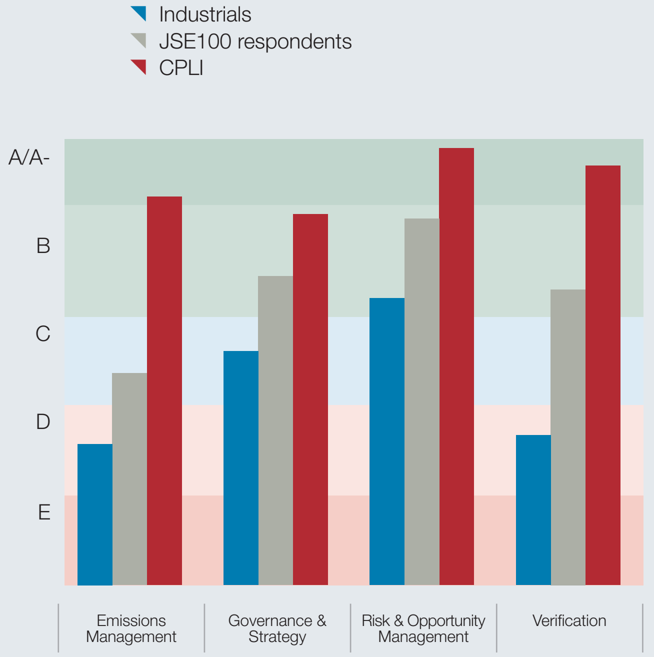


Figure 59: Disclosure and performance bands: Industrials

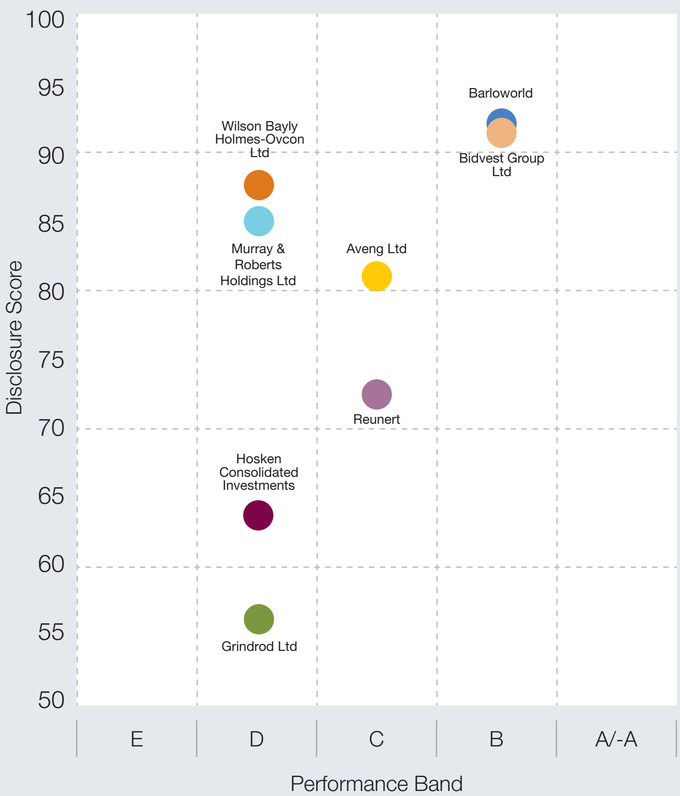
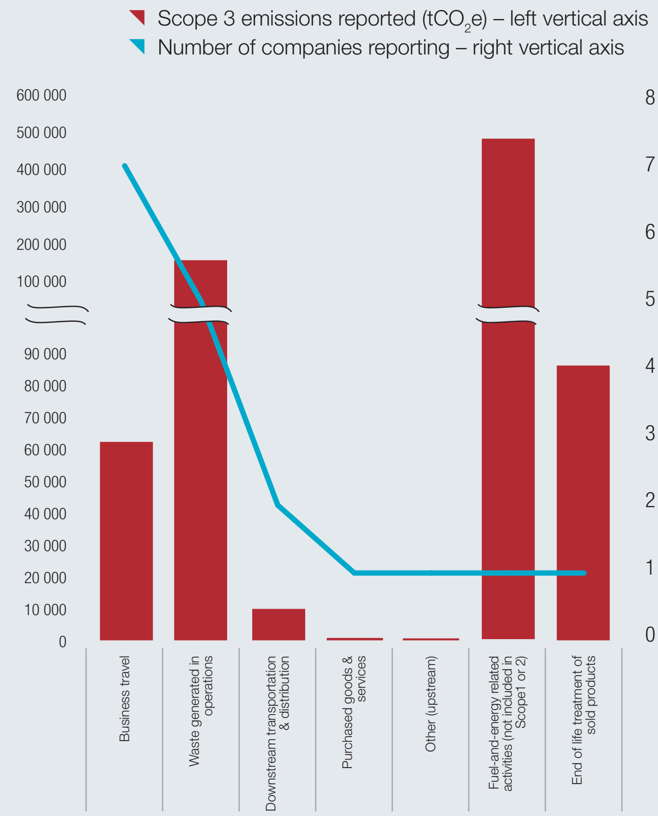


Figure 60: Scope 3 disclosed emissions by category and number of companies reporting: Industrials



IT & Telecoms

RESPONSE RATE – 2014

60% (3 of 5)

RESPONSE RATE – 2013

75% (3 of 4)

Response of industries within the sector:

Diversified Telecommunication Services *(1 of 1)*
IT Consulting and Other Services *(0 out of 1)*
Software & Services *(0 of 1)*
Wireless Telecommunication Services *(2 of 2)*

2 549 072 tCO_2e

Total Scope 1+2 emissions 2014

2 192 182 tCO_2e

Total Scope 1+2 emissions 2013

16.3%

Increase in Scope 1+2 emissions since 2013

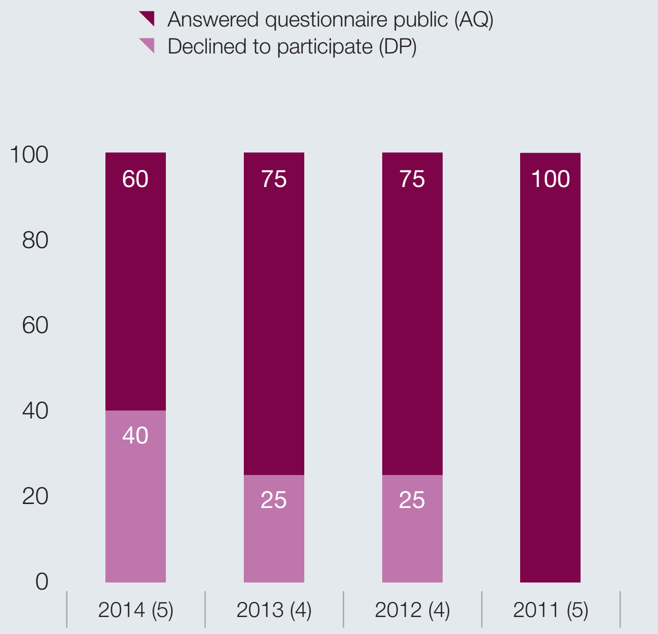
90/B Mean disclosure score / performance band

1.2% of total JSE100 emissions

Key Findings:

- The same three companies that reported in 2013 responded again in 2014, but the response rate is lower than in 2013 as an additional company was asked to respond but declined to participate. There are no companies responding from the IT sub-sector.
- The sector saw an improvement in average disclosure, scoring 90 up from 82 in 2013, and better performance, achieving a B (up from C in 2013). The sector does well in verification and governance/strategy compared with the JSE100 overall. Two-thirds of the sector achieved a score of B or above for performance.
- Although the sector makes a small contribution to overall JSE100 emissions, just 1.2%, the three companies saw a significant 16.3% increase in emissions from 2013.
- While the sector has low direct emissions, ICT technology can be a key enabler for mitigation generally, so it is an important sector that should be seeing opportunities.

Figure 61: Response rate by year: IT & Telecoms



(Figures in brackets represent total companies from this sector in JSE100 sample)

Figure 62: Performance score breakdown: IT & Telecoms

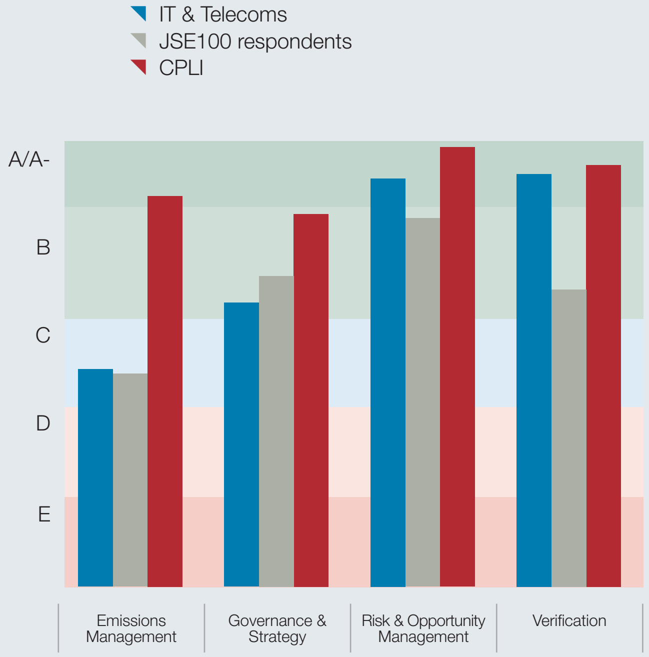


Figure 63: Disclosure and performance bands: IT & Telecoms

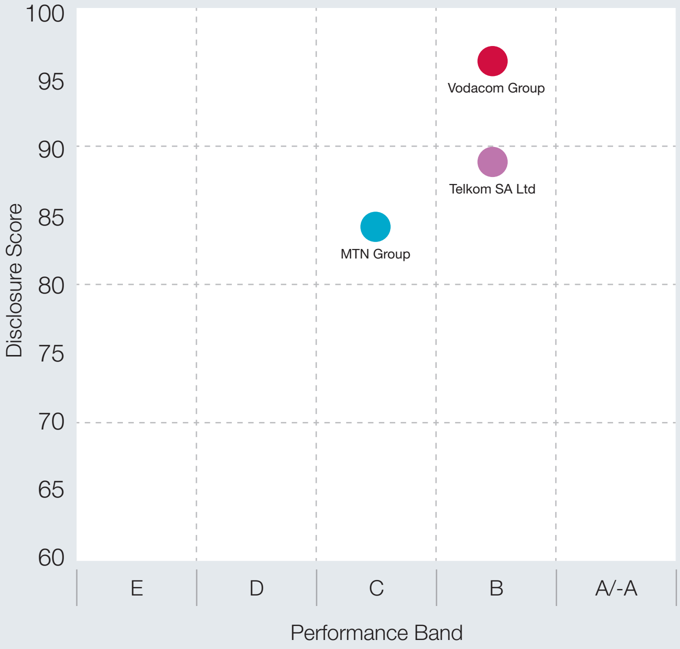


Figure 64: Scope 3 disclosed emissions by category and number of companies reporting: IT & Telecoms

Appendix 1: Global key trends 2014[18]

Statistic	Asia ex-Japan	ASX 200	Benelux	Bonds	Brazil	Canada	China	DACH	Electric Utilities	Emerging Markets	Euro	France
Number of companies in sample	400	200	150	180	100	200	100	350	300	800	300	250
% sample answering CDP 2014	40%	44%	42%	81%	57%	59%	45%	50%	27%	39%	90%	39%
AQ	145	85	58	144	52	109	45	169	78	279	266	94
SA (AQ)	15	2	5	1	5	9	0	7	2	33	5	4
Number of companies answering CDP 2014	174	91	69	149	67	129	45	184	105	376	281	103
Reporting Board or other senior management responsibility for climate change	91%	96%	98%	99%	85%	95%	78%	91%	92%	96%	98%	94%
Reporting climate change as being integrated into their business strategy	92%	89%	93%	97%	77%	89%	89%	80%	94%	91%	95%	89%
Reporting emission reduction targets	72%	98%	100%	100%	98%	99%	18%	98%	97%	92%	100%	100%
Absolute emissions (Scope 1 and 2) have decreased compared to last year due to ERAs	52%	80%	79%	85%	42%	67%	9%	64%	68%	62%	87%	74%
Reporting emissions data for 2 or more named Scope 3 categories	66%	95%	98%	100%	88%	92%	11%	87%	86%	86%	97%	94%
Reporting engagement with policymakers on climate issues to encourage mitigation or adaptation	77%	98%	100%	99%	96%	100%	29%	97%	96%	94%	99%	100%
Seeing regulatory opportunities	88%	80%	86%	85%	79%	78%	89%	72%	90%	90%	92%	83%
Seeing regulatory risks	90%	85%	84%	88%	77%	86%	93%	64%	88%	91%	89%	85%
Products and services directly enable third parties to avoid GHG emissions	69%	60%	84%	71%	75%	72%	60%	64%	86%	64%	76%	84%
Reporting absolute emission reduction targets	40%	75%	72%	74%	69%	72%	13%	72%	79%	60%	65%	55%
Reporting active emissions reduction initiatives in the reporting year	88%	85%	95%	99%	77%	86%	87%	86%	88%	90%	98%	99%
Reporting any portion of Scope 1 emissions data as independently verified	54%	64%	74%	82%	58%	47%	7%	53%	64%	68%	88%	88%
Reporting any portion of Scope 2 emissions data as independently verified	54%	64%	74%	82%	58%	47%	7%	53%	64%	68%	88%	88%
Reporting incentives for the management of climate change issues	61%	68%	81%	94%	62%	72%	22%	55%	74%	71%	88%	78%

18 Selected countries and indices.

	Global 500	Iberia	India	Indonesia	Ireland	Italy	Japan	Korea	Latin America	Nordic	NZX 50	Russia	S&P 500	South Africa	Switzerland	Taiwan	Transport	Turkey
	500	125	200	10	30	100	500	250	80	261	50	50	500	100	119	25	100	100
	83%	43%	30%	20%	30%	53%	46%	35%	61%	56%	34%	10%	69%	80%	55%	56%	55%	28%
	411	51	48	2	9	47	220	87	40	146	17	3	346	76	66	13	55	25
	4	3	11	0	0	6	11	0	9	0	0	2	1	4	0	1	0	3
	440	59	81	2	9	58	256	87	57	150	17	9	355	87	66	16	56	32
	96%	94%	98%	100%	100%	81%	95%	94%	93%	97%	94%	100%	92%	100%	95%	100%	96%	88%
	96%	94%	92%	50%	78%	79%	94%	90%	95%	91%	94%	100%	87%	92%	80%	92%	91%	80%
	97%	100%	98%	100%	100%	94%	99%	94%	100%	99%	100%	100%	97%	100%	97%	100%	98%	100%
	80%	90%	56%	50%	78%	72%	79%	75%	58%	76%	71%	33%	73%	76%	71%	77%	76%	64%
	93%	100%	94%	50%	100%	85%	93%	85%	95%	95%	88%	67%	94%	99%	95%	92%	93%	88%
	97%	98%	98%	100%	100%	100%	97%	99%	100%	99%	100%	67%	97%	100%	98%	100%	98%	100%
	84%	90%	90%	100%	78%	85%	90%	89%	93%	84%	47%	33%	70%	95%	71%	92%	75%	88%
	85%	92%	88%	50%	89%	83%	94%	93%	90%	86%	71%	67%	76%	99%	65%	92%	87%	92%
	72%	80%	65%	50%	56%	74%	79%	59%	83%	77%	65%		62%	55%	61%	92%	71%	64%
	64%	78%	38%	100%	67%	85%	74%	69%	60%	60%	76%	67%	65%	64%	74%	62%	55%	88%
	97%	96%	92%	50%	78%	91%	97%	83%	95%	88%	82%	67%	91%	97%	95%	92%	96%	84%
	77%	88%	63%		89%	66%	57%	79%	70%	58%	47%	67%	57%	78%	50%	69%	69%	36%
	77%	88%	63%		89%	66%	57%	79%	70%	58%	47%	67%	57%	78%	50%	69%	69%	36%
	86%	84%	71%	50%	67%	72%	84%	82%	63%	66%	53%		78%	75%	56%	92%	76%	80%

Appendix 2: Emission reduction targets

Company	SubSector	Type of Target	Scope	Base Year	Base Year Emissions	Metric	Target Year (expiry year)	Reduction from base year (%)	Is the intensity target an increase or decrease in absolute emissions
Consumer Discretionary									
Compagnie Financière Richemont SA	Textiles, Apparel & Luxury Goods	Intensity	Scope 1+2+3	2013	1 680	metric tonnes CO_2e per FTE employee	2018	20	Decrease
Compagnie Financière Richemont SA	Textiles, Apparel & Luxury Goods	Intensity	Scope 1+2	2013	20.1	metric tonnes CO_2e per square meter	2018	10	Decrease
Compagnie Financière Richemont SA	Textiles, Apparel & Luxury Goods	Intensity	Scope 1+2	2013	111	metric tonnes CO_2e per square meter	2018	10	Decrease
Steinhoff International Holdings	Household Durables	Intensity	Scope 2	2010	0.120	metric tonnes CO_2e per square meter	2017	10	Decrease
Sun International Ltd	Hotels, Restaurants & Leisure	Absolute	Scope 3: Waste generated in operations	2013	9 132	tCO_2e	2014	5	
Sun International Ltd	Hotels, Restaurants & Leisure	Absolute	“Scope 3: Purchased goods & services”	2013	4 351	tCO_2e	2014	5	
Sun International Ltd	Hotels, Restaurants & Leisure	Absolute	Scope 2	2013	273 079	tCO_2e	2014	3	
Woolworths Holdings Ltd	Multiline Retail	Intensity	Scope 1+2	2007	0.910	metric tonnes CO_2e per square meter	2015	40	Decrease
Consumer Staples									
British American Tobacco	Tobacco	Intensity	Scope 1+2+3	2000	1.52	metric tonnes CO_2e per unit of production	2017	46	Decrease
British American Tobacco	Tobacco	Intensity	Scope 1+2+3	2000	1.52	metric tonnes CO_2e per unit of production	2030	50	Decrease
British American Tobacco	Tobacco	Intensity	Scope 1+2+3	2000	1.52	metric tonnes CO_2e per unit of production	2050	80	Decrease
Clicks Group Ltd	Food & Staples Retailing	Absolute	Scope 3: Upstream transportation & distribution	2008	13 941	tCO_2e	2015	10	
Clicks Group Ltd	Food & Staples Retailing	Absolute	Scope 2	2010	91 098	tCO_2e	2017	5	
Clicks Group Ltd	Food & Staples Retailing	Intensity	Scope 1+2	2008	6,20	metric tonnes CO_2e per unit hour worked	2015	5	Decrease
Clicks Group Ltd	Food & Staples Retailing	Intensity	Scope 2	2008	0.290	metric tonnes CO_2e per square meter	2015	10	Decrease
Illovo Sugar Ltd	Food Products	Absolute	Other: Scope 1 (coal): South African operations	2009	109 171	tCO_2e	2017	25	
Illovo Sugar Ltd	Food Products	Absolute	Scope 1+2	2010	478 682	tCO_2e	2020	10,7	
Illovo Sugar Ltd	Food Products	Intensity	Scope 1+2	2011	0.139	Other: Per tonne of sugar produced	2018	20	Increase
Massmart Holdings Ltd	Food & Staples Retailing	Absolute	Scope 2	2010	271 534	tCO_2e	2020	10	
Massmart Holdings Ltd	Food & Staples Retailing	Intensity	Scope 2	2010	26 139	metric tonnes CO_2e per square meter	2020	10	Decrease
Massmart Holdings Ltd	Food & Staples Retailing	Intensity	Scope 2	2010	5 415	metric tonnes CO_2e per square meter	2020	0	Not Captured
Massmart Holdings Ltd	Food & Staples Retailing	Intensity	Scope 2	2010	5 453	metric tonnes CO_2e per square meter	2020	15	Decrease
Massmart Holdings Ltd	Food & Staples Retailing	Intensity	Scope 2	2010	24 092	metric tonnes CO_2e per square meter	2020	18	Decrease
Massmart Holdings Ltd	Food & Staples Retailing	Intensity	Scope 2	2010	8 375	metric tonnes CO_2e per square meter	2020	10	Decrease
Massmart Holdings Ltd	Food & Staples Retailing	Intensity	Scope 2	2010	101 877	metric tonnes CO_2e per square meter	2020	16	Decrease
Massmart Holdings Ltd	Food & Staples Retailing	Intensity	Scope 2	2010	64 931	metric tonnes CO_2e per square meter	2020	25	Decrease

Progress against target	Comment
0	Business travel including owned vehicles, e.g. company cars, and not-owned vehicles, e.g. air travel.
0	2 of 2 parts - Manufacturing and Logistics sites. Five-year target for buildings intensity.
0	1 of 2 parts - Boutiques and Offices. Five-year target for buildings intensity.
5	Divisional Target: Conforama (part of Europe Retail) set a 10% reduction per m2 of electricity consumption based on 2010's average consumption for the period 1 January 2012 to the 31 December 2017. This target is relevant to Scope 2 electricity (i.e. excluding a small proportion of heat from the Scope 2 total). This excludes Scope 2 from KAP Industrial and JD Group. The 16% reflects Conforamaís proportion of Steinhoff International Operations electricity consumption.
0	This target refers to waste. In the 2014 financial period a comprehensive baseline assessment has been worked on by collecting data and measuring emissions via a new collection tool on a quarterly basis. This has ensured an appropriate level of accuracy and thus the new baseline will be set as the 2014 financial period (July 2013 to June 2014).
100	This target refers to water. In the 2014 financial period a comprehensive baseline assessment has been worked on by collecting data and measuring emissions via a new collection tool on a quarterly basis. This has ensured an appropriate level of accuracy and thus the new baseline will be set as the 2014 financial period (July 2013 to June 2014).
33	In the 2014 financial period a comprehensive baseline assessment has been worked on by collecting data and measuring emissions via a new collection tool on a quarterly basis. This has ensured an appropriate level of accuracy and thus the new baseline will be set as the 2014 financial period (July 2013 to June 2014).
83	Based on carbon emissions per square metre of trading space
98,7	Reduce our CO_2e emissions by 46% by 2017 against our 2000 baseline of 1.52 tonnes per million cigarettes equivalent.
90,8	Reduce our CO_2e emissions by 50% by 2030 against our 2000 baseline of 1.52 tonnes per million cigarettes equivalent.
56,7	Reduce our CO_2e emissions by 80% by 2050 against our 2000 baseline of 1.52 tonnes per million cigarettes equivalent.
100	This is an absolute target to reduce emissions from the distribution of products from our suppliers to our warehouses.
0	This is an absolute target to reduce emissions from electricity consumption.
100	Please note that this intensity metric is expressed as tonnes CO_2e per 1000 man hours worked.
100	No Additional Comment Provided
0	A broad scale Performance Optimisation Plan (POP) has been employed to improve energy efficiencies at an operational level within the South African mills, with the aim to reduce emissions from coal combustion by 25% during the crushing season by 2017.
100	We aim to reduce GHG emissions from energy consumption across the Group by 10.7% (relative to 2010 emissions levels) by 2020.
17	No Additional Comment Provided
Not Specified	Massmart has set Business as Usual (BAU) divisional energy targets using 2010 as a baseline, Builders Warehouse have committed to being 12% more energy efficient by 2020, while Game and Makro have set energy targets of 9% and 13% respectively. Overall, Massmartís goal is to be 10% more energy efficient by 2020 as compared with our current BAU. While this target was defined in 2013, it is worth noting that it was signed off in January 2014
0	This intensity target is specifically for the Masscash division, with the exclusion of Cambridge stores. Please note that this target is based on a BAU model. While this target was defined in 2013, it is worth noting that it was signed off in January 2014.
Not Specified	No intensity target has been set for Builders Trade Depot, as we work on converting these stores to Builders Express stores.
0	This intensity target is specifically for Builders Express stores within the Massbuild division. Please note that this target is based on a BAU model. While this target was defined in 2013, it is worth noting that it was signed off in January 2014.
0	This intensity target is specifically for Builders Warehouse stores within the Massbuild division. Please note that this target is based on a BAU model. While this target was defined in 2013, it is worth noting that it was signed off in January 2014.
0	This intensity target is specifically for DionWired stores within the Massdiscounters division. Please note that this target is based on a BAU model. While this target was defined in 2013, it is worth noting that it was signed off in January 2014.
0	This intensity target is specifically for Game stores within the Massdiscounters division. Please note that this target is based on a BAU model. While this target was defined in 2013, it is worth noting that it was signed off in January 2014.
0	This intensity target is specifically for Makro stores within the Masswarehouse division. Please note that this target is based on a BAU model. While this target was defined in 2013, it is worth noting that it was signed off in January 2014.

Company	SubSector	Type of Target	Scope	Base Year	Base Year Emissions	Metric	Target Year (expiry year)	Reduction from base year	Is the intensity target an increase or decrease in absolute emissions
Oceana	Food Products	Intensity	Scope 1+2	2010	1 162	metric tonnes CO_2e per metric tonne of product	2013	15	Decrease
Oceana	Food Products	Intensity	Scope 1+2	2009	1 198	metric tonnes CO_2e per metric tonne of product	2013	2,5	Decrease
Oceana	Food Products	Intensity	Scope 1+2	2009	1 117	metric tonnes CO_2e per metric tonne of product	2013	20	Decrease
Oceana	Food Products	Intensity	Scope 1+2	2009	78.8	metric tonnes CO_2e per metric tonne of product	2013	20	Decrease
Oceana	Food Products	Intensity	Scope 1+2	2009	1 586	metric tonnes CO_2e per metric tonne of product	2013	2,5	Decrease
Oceana	Food Products	Intensity	Scope 1+2	2009	369	metric tonnes CO_2e per metric tonne of product	2013	10	Decrease
Pick n Pay Stores Ltd	Food & Staples Retailing	Absolute	Scope 1+2	2010	559 772	tCO_2e	2015	15	
Pioneer Foods	Food Products	Intensity	Scope 2	2012	0.016	metric tonnes CO_2e per unit revenue	2017	14	Not Captured
Pioneer Foods	Food Products	Intensity	Scope 1	2012	0.028	metric tonnes CO_2e per unit revenue	2017	14	Decrease
RCL Foods Ltd	Food Products	Absolute	Scope 2	2010	323 536	tCO_2e	2020	30	
RCL Foods Ltd	Food Products	Absolute	Scope 1	2010	15 664	tCO_2e	2020	20	
SABMiller	Beverages	Intensity	Scope 1+2+3	2010	68.8	Other: $kgCO_2$e/hl	2020	25	Decrease
SABMiller	Beverages	Intensity	Scope 1+2+3	2010	12.7	Other: $kgCO_2$e/hl	2020	25	Decrease
SABMiller	Beverages	Intensity	Scope 1+2+3	2010	21.1	Other: $kgCO_2$e/hl	2020	25	Decrease
SABMiller	Beverages	Intensity	Scope 1+2	2008	15.0	Other: $kgCO_2$e/hl	2020	50	Decrease
Tiger Brands	Food Products	Intensity	Scope 1+2	2013	0.160	metric tonnes CO_2e per metric tonne of product	2016	0	Decrease
Tongaat Hulett Ltd	Food Products	Absolute	Scope 3: Business travel	2013	1 179	tCO_2e	2020	40	
Tongaat Hulett Ltd	Food Products	Absolute	Scope 2	2013	360 258	tCO_2e	2020	24	
Tongaat Hulett Ltd	Food Products	Absolute	Scope 1	2013	885 976	tCO_2e	2020	3	
Energy									
Exxaro Resources Ltd	Oil, Gas & Consumable Fuels	Intensity	Scope 2	2012	120 000	Other: metric tonnes CO_2e per tonne of ore mined	2013	5	Decrease
Exxaro Resources Ltd	Oil, Gas & Consumable Fuels	Intensity	Scope 2	2012	48 500	Other: metric tonnes CO_2e per tonne of ore mined	2013	5	Decrease
Exxaro Resources Ltd	Oil, Gas & Consumable Fuels	Intensity	Scope 2	2012	23 200	Other: metric tonnes CO_2e per tonne of ore mined	2013	5	Decrease
Exxaro Resources Ltd	Oil, Gas & Consumable Fuels	Intensity	Scope 2	2012	7 300	Other: metric tonnes CO_2e per tonne of ore mined	2013	5	Decrease
Exxaro Resources Ltd	Oil, Gas & Consumable Fuels	Intensity	Scope 2	2012	235 000	Other: metric tonnes CO_2e per tonne of ore mined	2013	5	Decrease
Exxaro Resources Ltd	Oil, Gas & Consumable Fuels	Intensity	Scope 2	2012	434 000	Other: metric tonnes CO_2e per tonne of ore mined	2013	5	Decrease
Sasol Limited	Oil, Gas & Consumable Fuels	Absolute	Scope 1+2	2005	3 000 000	tCO_2e	2020	20	
Sasol Limited	Oil, Gas & Consumable Fuels	Absolute	Scope 1+2	2005	3 000 000	tCO_2e	2030	30	
Sasol Limited	Oil, Gas & Consumable Fuels	Intensity	Scope 1+2	2000	0.000	Other: GJ per tonne of production	2015	15	Not Captured
Sasol Limited	Oil, Gas & Consumable Fuels	Intensity	Scope 1+2+3	2005	69 404 000	metric tonnes CO_2e per unit of production	2020	15	Increase

Progress against target	Comment
33	This is an intensity target specific to Etosha. The 4% refers to the percentage of Oceana's total emissions that Etosha contributes towards in 2013. All Intensity targets are per 1000 tonnes of product.
0	This is an intensity target specific to OLSF. The 10% refers to the percentage of Oceana's total emissions that OLSF contributes towards in 2013. All Intensity targets are per 1000 tonnes of product.
25	This is an intensity target specific to Blue Continent Products. The 52% refers to the percentage of Oceana's total emissions that Blue Continent Product contributes towards in 2013. All Intensity targets are per 1000 tonnes of product.
100	This is an intensity target specific to Commercial Cold Storage. The 15% refers to the percentage of Oceana's total emissions that Commercial Cold Storage contributes towards in 2013. All Intensity targets are per 1000 tonnes of product.
100	This is an intensity target specific to Lucky star (Oceana Brands). The 18% refers to the percentage of Oceana's total emissions that Oceana Brands contributes towards in 2013. All Intensity targets are per 1000 tonnes of product.
100	This is an intensity target for all of Oceana's operations. The target is based on the intensity targets at a business unit level. All Intensity targets are per 1000 tonnes of product.
100	Our base year emissions had to be recalculated during FY14. We verified the results of this process with an independent third party certifier.
0	We have set a target of 14% reduction on Scope 1 & 2 emissions (as measured in our 2011/2012 financial year) over the next 5 years.
100	We have set a target of 14% reduction on Scope 1 & 2 emissions (as measured in our 2011/2012 financial year) over the next 5 years.
2,42	RCL Foods targets GHG emissions in line with Governmentsís target of a 34% reduction by 2020. kWhs consumed from the grid is targeted to reduce by 30% by 2020.
0	Our base year emissions had to be recalculated during FY14. We verified the results of this process with an independent third party certifier.
40	SABMiller ExCom approved a 25% per hl value chain carbon reduction ambition by 2020 of a 2010 baseline. This includes agriculture, maltings, manufacturing, packaging, cooling, logistics and end-of-life.
40	A new target was approved during the last year looking at a reduction of our refrigeration related emissions of 2020 by 25 % per hl of product (on a Scope 3 basis including refrigeration equipment not owned by the company).
40	A new target was approved during the last year looking at a reduction of our packaging related emissions of 2020 by 25 % per hl of product.
60	By 2020 we aim to halve our fossil fuel emissions from on-site energy use per hectoliter of beer produced, compared with 2008.
0	Tiger Brands had an emission reduction target to reduce emissions by 10% in 2012 (compared to 2009 levels). The second phase is to reduce emissions year-on-year by 5% from 2013 to 2016 (therefore reducing emissions by 15% in 2016).
60	Tongaat Hulett has updated its baseline from 2011 to 2013 considering improved reporting. The business is committed to reducing its greenhouse gas emissions by 5% per annum for the next 5 years and is targeting at least a 20% reduction by 2020 from a 2013 baseline. This years total Scope 3 emissions eminating from business travel was 703 metric tonnes CO_2e.
76	Tongaat Hulett has updated its baseline from 2011 to 2013 considering improved reporting. The business is committed to reducing its greenhouse gas emissions by 5% per annum for the next 5 years and is targeting at least a 20% reduction by 2020 from a 2013 baseline. This years total Scope 2 emissions were 273320 metric tonnes CO_2e.
15	Tongaat Hulett has updated its baseline from 2011 to 2013 considering improved reporting. The business is committed to reducing its greenhouse gas emissions by 5% per annum for the next 5 years and is targeting at least a 20% reduction by 2020 from a 2013 baseline. This years total Scope 1 emissions were 860054 metric tonnes CO_2e.
73	Matla:100% of the BU Scope 2 emissions. Annual emission target based on electricity usage target which is set as a range of intensities dependent on tonnage achievement. Improvements measured as change in electricity used at achieved tonnage against target electricity usage at that same tonnage.
0	Arnot:100% of the BU scope 2 emissions. Annual emission target based on electricity usage target which is set as a range of intensities dependent on tonnage achievement. Improvements measured as change in electricity used at achieved tonnage against target electricity usage at that same tonnage.
77	Leeuwpan:100% of the BU scope 2 emissions. Annual emission target based on electricity usage target which is set as a range of intensities dependent on tonnage achievement. Improvements measured as change in electricity used at achieved tonnage against target electricity usage at that same tonnage.
0	Inyanda:100% of the BU Scope 2 emissions. Annual emission target based on electricity usage target which is set as a range of intensities dependent on tonnage achievement. Improvements measured as change in electricity used at achieved tonnage against target electricity usage at that same tonnage.
0	Grootegeluk:100% of the BU scope 2 emissions. Annual emission target based on electricity usage target which is set as a range of intensities dependent on tonnage achievement. Improvements measured as change in electricity used at achieved tonnage against target electricity usage at that same tonnage.
0	Selected Business Units (BUs): Grootegeluk, Inyanda, Leeuwpan, Arnot, Matla. 87% of total Exxaro Scope 2 emissions. Annual emission targets based on electricity usage target which is set as a range of intensities dependent on tonnage achievement. Improvements measured as change in electricity used at achieved tonnage against target electricity usage at that same tonnage.
100	This was applicable to all new CTL plants commissioned before 2020 (with the average 2005 CTL design as the baseline). Based on the new strategy, these targets are complete and were met. Sasol made a decision not to pursue selective growth in coal-to-liquids (CTL) operations, but to focus singularly on accelerated GTL growth ñ natural gas being a far cleaner hydrocarbon and a bridge to a lower-carbon economy.
100	This was applicable for plants commissioned before 2030 (with the average 2005 CTL design as the baseline). Based on the new strategy, these targets are complete and were met. Sasol made a decision not to pursue selective growth in coal-to-liquids (CTL) operations, but to focus singularly on accelerated GTL growth natural gas being a far cleaner hydrocarbon and a bridge to a lower-carbon economy.
Not Specified	Sasol has voluntarily committed to a government strategy for energy efficiency of our utilities. Base year = 21GJ/t. (in South Africa only)
0	On-going. We have set ourselves clear carbon-intensity reduction targets over the medium and long term and are exploring opportunities for lowering the carbon intensity of our products taking into account the entire product lifecycle. Lower-carbon electricity and energy efficiency options are being pursued by Sasol New Energy and the business units in order to achieve this target. Note that the scope 3 emissions included in this target represent 32% of the Scope 3 emissions reported in this CDP (i.e. Sasol has not included all Scope 3 categories in targeted emissions). Following our review of GHG data, we will also be reviewing the group's GHG targets in line with international developments and our gas-to-liquids (GTL) growth aspirations, instead of CTL growth.

Company	SubSector	Type of Target	Scope	Base Year	Base Year Emissions	Metric	Target Year (expiry year)	Reduction from base year	Is the intensity target an increase or decrease in absolute emissions
Financials									
African Bank Investments Limited	Diversified Financial Services	Absolute	Scope 1+2	2010	123 088	tCO_2e	2014	10	
Barclays Africa	Commercial Banks	Absolute	Scope 1+2+3	2012	405 164	tCO_2e	2015	19,4	
Capital & Counties Properties	Real Estate Management & Development	Absolute	Scope 1+2	2012	13 065	tCO_2e	2013	3	
Discovery Holdings Ltd	Insurance	Intensity	Scope 2	2012	4.50	metric tonnes CO_2e per FTE employee	2013	5	Increase
Firstrand Limited	Diversified Financial Services	Absolute	Scope 2	2007	354 865	tCO_2e	2015	15	
Firstrand Limited	Diversified Financial Services	Absolute	Scope 1+2+3	2008	371 450	tCO_2e	2020	34	
Growthpoint Properties	Real Estate Investment Trusts (REITs)	Absolute	Scope 1+2	2011	2 054	tCO_2e	2016	10	
Intu Properties plc	Real Estate Investment Trusts (REITs)	Absolute	Scope 1+2	2011	51 930	tCO_2e	2014	30	
Investec Limited	Capital Markets	Absolute	Scope 2	2009	5 535	tCO_2e	2020	34	
Nedbank Limited	Commercial Banks	Absolute	Scope 3: Purchased goods & services	2010	4 156	tCO_2e	2016	16,4	
Nedbank Limited	Commercial Banks	Intensity	Scope 1+2+3	2007	9.15	metric tonnes CO_2e per FTE employee	2015	12	Decrease
Old Mutual plc	Insurance	Intensity	Scope 1+2	2010	0.210	metric tonnes CO_2e per square meter	2020	20	Decrease
Old Mutual plc	Insurance	Intensity	Scope 1+2	2010	4.17	metric tonnes CO_2e per FTE employee	2020	20	Decrease
Redefine Properties Ltd	Real Estate Investment Trusts (REITs)	Intensity	Scope 1+2	2012	0.016	metric tonnes CO_2e per square meter	2015	13	Decrease
Remgro	Diversified Financial Services	Absolute	Scope 2	2010	236 625	tCO_2e	2020	30	
Remgro	Diversified Financial Services	Absolute	Scope 1	2010	11 544	tCO_2e	2020	20	
Sanlam	Insurance	Intensity	Scope 3: Business travel	2010	0.770	metric tonnes CO_2e per FTE employee	2015	5	No change
Sanlam	Insurance	Intensity	Scope 2	2010	0.370	metric tonnes CO_2e per square meter	2015	20	Decrease
Sanlam	Insurance	Intensity	Scope 1+2+3	2010	11.8	metric tonnes CO_2e per FTE employee	2015	15	Decrease
Santam Ltd	Insurance	Intensity	Other: Total Carbon Reduction	2010	15 112	metric tonnes CO_2e per FTE employee	2015	15	Not Captured
Santam Ltd	Insurance	Intensity	Other: Office Paper (inclusive of policy printing)	2010	618	Other: Kg/R of turnover	2015	15	Not Captured
Santam Ltd	Insurance	Intensity	Scope 3: Business travel	2010	1 371	metric tonnes CO_2e per FTE employee	2015	15	Not Captured
Santam Ltd	Insurance	Intensity	Scope 3: Waste generated in operations	2010	0.000	metric tonnes CO_2e per FTE employee	2015	15	Not Captured
Santam Ltd	Insurance	Intensity	Scope 2	2010	6 999	metric tonnes CO_2e per square meter	2015	20	Decrease
Standard Bank Group	Commercial Banks	Absolute	Scope 3: Purchased goods & services	2011	10 398	tCO_2e	2015	16	
Standard Bank Group	Commercial Banks	Absolute	Scope 2	2012	363 916	tCO_2e	2015	6	

Progress against target	Comment
100	The baseline was recalculated because in the 2010 financial year the Scope 1 and 2 emissions were based on projections and assumptions as all data was not available. The reporting boundary has also changed since the 2010 FY to the 2013 FY. The rebaselined calculation was based on trading space. 2011 was ABILís first year of reporting. Since then processes have been put in place to collect actual electricity consumption. The Scope 1 emissions reported included non-Kyoto gases namely R22.
48	The global target is a 10% carbon footprint reduction by 2015. Barclays Africa Group has a target derived from an energy efficiency target in the building portfolio and a global travel reduction target. Together, they are used to calculate a % reduction target for Barclays Africa Group. **Note: Target data includes two countries (Egypt and Zimbabwe) information which we manage but they are not yet part of data reported against the Barclays Africa Group Limited legal entity.
100	No Additional Comment Provided
100	Note as this intensity target is a year-on-year rolling target, the base year given is the previous reporting period. The full carbon footprint baseline is considered the 2010/11 assessment period. Discovery is not planning to implement absolute targets.
100	This target specifically relates to the Scope 2 electricity consumption by the operations of FirstRand, and was set as a result of the South African Energy Efficiency Accord, developed by the Department of Energy. FirstRand is a signatory to this accord, and as such monitors performance against the set targets in the accord.
79,4	During the 2011/2012 year, FirstRand had to review and recalculate the absolute emission reduction targets due to the completion of the previous emission reduction targets of 11% by 2012. A new absolute emissions reduction target for the South African operations was calculated using a 2007/2008 financial year baseline for Scope 1, 2 and 3 emissions. Due to FirstRand exceeding their carbon emissions reduction target and saving 24% against the Baseline Year of 2007/2008 FY, a decision was made, after reviewing operations and projected emissions reductions projects, to increase the absolute emissions reduction target to 34% by 2020, in line with the South African government commitment at COP15 in Copenhagen. This will primarily be achieved with a continued focus on energy efficiency and energy reduction initiatives, due to the materiality of energy consumption to the FirstRand carbon footprint.
86,6	We have set our target at 10% of the combined Scope 1 and Scope 2 emissions by 2016. The target is measured from the emissions disclosed in our base year of 2011 which was verified and adjusted following recommendations from an audit by KPMG in 2012.
18	No Additional Comment Provided
82,6	The Gresham Street office (UK) has a target of reducing energy consumption and carbon emissions by 34% in 2020 with the 2009 financial year as base year.
100	A 10% reduction by the end of 2016 based on 2010 levels. The 2013 paper consumption was 1603 tonnes (2012: 1850 tonnes, 2010: 1917 tonnes). This implies that paper was reduced by 16.4% from 2010 and the target was exceeded. A new target was set at the end of 2013 as the end-of-2016 target was met early. The new target is a 15% reduction based on end-of-2013 levels. This implies a target of 1443 tonnes by the end of 2020.
100	Nedbank has set a 12% GHG emissions reduction target per FTE, based on the 2007 emissions report. In 2007 (base and start year) the pollution rate was 9.15 tCO_2e per FTE. Progress to the 2013 reporting year was 7.61 tCO_2e per FTE. This equates to a 16.79% reduction from the 2007 base year. By 2015 (target year) a value of 7.67 tCO_2e per FTE was set as the target. This will imply a 12% reduction from the 2007 base. This has already been achieved. A new target was set at the end of 2013 as the end-of-2015 target was met early. The new target is a 7% reduction based on end-of-2013 levels. This implies a target of 7.08 tCO_2e per FTE by the end of 2020.
0	The data concerning investment property portfolio including base year emissions relates purely to current properties, to ensure any reduction figure is accurate and not related purely to removal of properties. The portfolio includes the property asset management business and properties invested in and managed to create value and client returns. In 2010, Scope 1 + 2 emissions were 567,929 tCO_2e across 2,684,430 m2.
0	Employee occupied properties include all locations where Old Mutual employees are based and operate from. As per our operational control approach, we include 100% of employees and emissions in our calculations, even in areas where we do not own 100% of the business (such as Nedbank). In 2010, Scope 1 and 2 emissions were 232,465 t CO_2e with 55.730 employees.
100	Redefine have a target to reduce scope 1 and 2 emissions by 5% in 2015. Redefine, being a property company, buy and sell properties constantly and this affects the absolute footprint of the company. The company has decided to use the intensity target of metric tonnes CO_2e per square meter as this can ensure the target can be tracked accurately year on year. Please note this does not include scope 3 emissions and out of scope (non-Kyoto) emissions. While Scope 3 emissions make up a 91% of Redefine's footprint (primarily due to tenant electricity consumption), Redefine have chosen to focus on reducing Scope 1 and 2 emissions as this is where the company has the most operational control.
0	RCL Foods targets GHG emissions in line with Governments's target of a 34% reduction by 2020. kWhs consumed from the grid is targeted to reduce by 30% by 2020.
0	RCL Foods targets GHG emissions in line with Government's target of a 34% reduction by 2020. Fuel used in vehicles is targeted to reduce by 20% by 2020.
0	Air and road travel as well as overnight accommodation will be reduced by using video- and tele-conferencing where appropriate instead of travelling.
86	Electricity consumption to be reduced through energy efficiency initiatives.
100	Measures for energy efficiency, travelling and paper, will bring down levels of carbon emissions.
0	No Additional Comment Provided
0	No Additional Comment Provided
45	No Additional Comment Provided
0	Waste generated in 2010 was not measured. We therefore have no baseline figure.
0	No Additional Comment Provided
100	In 2009 we set a target on reducing paper consumed in tons 10% reduction by 2015 which effectively would reduce the carbon emissions by the same %. 2015 target: 3 003 tons (based on a 100% scope of measurement in 2011). 2013 measure: 2 842 tons.
40	In 2009 we set a 15% target on reducing electricity consumed in kwh by 2015 which effectively would reduce the carbon emissions by the same %. In 2012 we increased our scope of measurement to 100% of premises and recalculated the 2015 target using the 2012 consumption. The new target became 312 452 956 kilowatt hours. 2013 measure: 345 816 037 kilowatt hours, we decreased our purchased electricity consumption by around 4% compared to 2012. Progress: Between 2009 and 2012 many eficiency initiatives were delivered but cannot be measured because of the large increase in scope of measurement from 2012. In 2013 many energy efficiency initiatives undertaken have been implemented in the Rosebank building. While the dual operation of offices has obscured the energy savings achieved for 2013.

Company	SubSector	Type of Target	Scope	Base Year	Base Year Emissions	Metric	Target Year (expiry year)	Reduction from base year	Is the intensity target an increase or decrease in absolute emissions
Health Care									
Life Healthcare Group Holdings Ltd	Health Care Providers & Services	Intensity	Scope 2	2012	0.065	Other: Metric tonnes CO_2e per patient day (ppd)	2017	10	Increase
Mediclinic International	Health Care Providers & Services	Intensity	Scope 2	2013	0.084	Other: metric tonnes CO_2e per bed day sold	2014	3,09	Increase
Netcare Limited	Health Care Providers & Services	Absolute	Scope 2	0	232 276	tCO_2e	0	3	
Netcare Limited	Health Care Providers & Services	Intensity	Scope 1+2+3	2008	147	Other: metric tonnes CO_2e per 1000 patient days	2013	0	Decrease
Netcare Limited	Health Care Providers & Services	Intensity	Scope 1+2+3	2008	27.0	Other: metric tonnes CO_2e per R1million revenue	2013	7,4	Decrease
Netcare Limited	Health Care Providers & Services	Intensity	Scope 1+2+3	2013	128	Other: metric tonnes CO_2e per 1000 patient days	2018	2,7	Not Captured
Netcare Limited	Health Care Providers & Services	Intensity	Scope 1+2+3	2013	17.8	Other: metric tonnes CO_2e per R1m revenue	2018	24,7	Not Captured
Industrials									
Barloworld	Trading Companies & Distributors	Intensity	Scope 1+2	2009	4.40	metric tonnes CO_2e per unit revenue	2014	12	Increase
Bidvest Group Ltd	Industrial Conglomerates	Absolute	Scope 1	2012	19 942	tCO_2e	2014	5	
Bidvest Group Ltd	Industrial Conglomerates	Absolute	Scope 1	2013	56 978	tCO_2e	2014	5	
Bidvest Group Ltd	Industrial Conglomerates	Absolute	Scope 2	2012	19 693	tCO_2e	2014	10	
Bidvest Group Ltd	Industrial Conglomerates	Intensity	Scope 1	2011	0.002	metric tonnes CO_2e per metric tonne of product	2013	5	Not Captured
Bidvest Group Ltd	Industrial Conglomerates	Intensity	Scope 2	2012	393	Other: kWh electricity used per vehicles sold	2015	5	Not Captured
Bidvest Group Ltd	Industrial Conglomerates	Intensity	Scope 1	2012	93.6	“Other: Litres of petrol & diesel used per vehicle sold”	2015	5	Not Captured
Bidvest Group Ltd	Industrial Conglomerates	Intensity	Scope 1+2	2009	0.115	metric tonnes CO_2e per metric tonne of product	2015	13	Decrease
Bidvest Group Ltd	Industrial Conglomerates	Intensity	Scope 1+2	2007	16.6	metric tonnes CO2e per FTE employee	2050	80	Not Captured
Bidvest Group Ltd	Industrial Conglomerates	Intensity	Scope 1+2	2007	0.000	metric tonnes CO_2e per unit revenue	2050	80	Decrease
Grindrod Ltd	Marine	Absolute	0	2010	0	tCO2e	2020	5	
Grindrod Ltd	Marine	Absolute	Scope 2	2010	19170	tCO2e	2020	20	
Grindrod Ltd	Marine	Absolute	Scope 1	2011	1,47	tCO2e	2020	10	
Grindrod Ltd	Marine	Absolute	Scope 1	2010	10,44	tCO2e	2020	10	
Grindrod Ltd	Marine	Absolute	Scope 1+2+3	2010	294446	tCO2e	2020	10	
Materials									
AECI Ltd Ord	Chemicals	Absolute	Scope 1+2	2011	577 478	tCO_2e	2015	15	
Anglo American	Metals & Mining	Absolute	Scope 1+2	2011	18 773 623	tCO_2e	2015	19	
Anglo American Platinum	Metals & Mining	Intensity	Scope 1+2	2005	1.41	metric tonnes CO_2e per unit of production	2015	10	Increase
AngloGold Ashanti	Metals & Mining	Intensity	Scope 1+2	2007	0.770	Other: metric tonnes CO_2e per ounce of gold produced	2022	30	Decrease
Arcelor Mittal South Africa Ltd	Metals & Mining	Intensity	Scope 1+2	2007	0.000	metric tonnes CO_2e per metric tonne of product	2020	8	Increase

Progress against target	Comment
14	NOTE: The emission reduction target of 10% is over the next 5 years and was set for Scope 2 emissions for Life acute hospitals across Southern Africa only. All operations outside of South Africa and Life Esidimeni, admin offices and other buildings were excluded from the target.
100	The carbon emission reduction target of 3.09% per year was set for Scope 2 emissions for the 52 hospitals of Mediclinic Southern Africa only. Administration offices and other buildings are excluded from the target.
Not Specified	100% of emission in scope. Base year is FY2013. Percentage reduction from Base year = 3%. Base year emissions = 232276. Target year is FY2014. In FY2013 a lot of effort has gone in to develop a new strategy and new plan for the next 5 years to develop and FY2013 was identified as a new base year with new annual targets identified for each year, but to review these absolute targets each year to adjust it according with business growth, as a bigger business could mean bigger targets.
100	The original target was to stay under a 2% increase in the 2008 base year intensity. Netcare achieved a 12.7% reduction. Recorded 128.3T/1000 patient days for FY13. The original target set was to keep it under 150t/1000 patient days and it is safe to declare that Netcare overachieved on the original target set in the original base year of 2008. New target for FY18: Reduce 128.3T/1000 patient days to 96.2 and for FY14 reduce it to 124.8T/1000 patient days FY2013 will be used as a new base year.
100	Achieved 34.1% reduction from base year 2008. Recorded 17.8T/R1million revenue in FY13, which was below the target set of R25T/R1million and it is safe to say Netcare overachieved on the original target set in the original base year of 2008. New target for FY18: Reduce 17.8T/R1million revenue to 13.4 and for FY14 reduce it to 17.3T/R1million. FY2013 will be used as a new base year.
Not Specified	New targets
Not Specified	New targets
58	It is an aspirational target set for the end of the 2014 financial year and based on a ìbusiness as usualî scenario which tracks turnover as a proxy for business activity. It is not anticipated that progress towards the target will be in a linear manner on an annual basis. The intention is to focus attention and drive commitment to improving energy and emission efficiency with concomitant benefits of positively contributing to climate change & realising cost savings.
60	3663 (Europe): Improve average miles per gallon in truck fleet by 5% in sites fitted with telematics (about 35% of fleet).
54	3663 (Europe): Note, this is a year-on-year 5% rolling target to increase the proportion of low carbon fuels (biodiesel made from used cooking oil collected from customers) over diesel used in commercial fleet. Scope 1 emissions stem almost entirely (99%) from diesel. In the 2012 base year already 13.4% of all diesel used was sourced from collected cooking oil. The 5% target builds on that.
13,3	3663 (Europe). Share best practise from sites making gains in efficiencies in energy use and implement cost-effective technologies to reduce consumption of grid electricity by 10% by 2014 from a 2012 baseline.
84,4	BC (Freight). Target of 5% was not quite reached. Metric: metric tonnes CO_2e per metric tonne of product handled.
100	Automotive: Target is to reduce the electricity used by Automotive businesses per total vehicle sold.
100	Automotive: Target is to reduce the petrol and diesel used by Automotive businesses per total vehicle sold.
13	DELI XL (Europe): From 2009 base year, the intensity goal is to reduce emission per metric tonne of product handled by 20% by 2015.
Not Specified	3663 (Europe). Annual target of 2.5% reduction to 2050.
27	3663 (Europe). Annual target of 2.5% reduction to 2050.
Not Specified	To increase the proportion of renewable energy consumption (wind- and solar-produced electricity, use of biofuels etc) to 5% of total energy usage
8,8	To reduce normalised land-based Scope 2 electricity (i.e. electricity consumption in machinery and buildings on property owned and operated by Grindrod) usage by 20%
6,12	To reduce land-based GHG emissions per km by an average (across the transport fleet) by 10%
6,32	To reduce ship-based GHG emissions (gCO_2-e) per tonne/NM by an average (across the fleet) of 10%
15	To reduce normalised overall group emissions CO_2-e per Rand revenue by 10%
44	The bulk of reductions in emissions have been observed over the past year due to a concerted effort being made in terms of increasing efficiency and reducing resource consumption. It is anticipated that as more projects are approved and implemented, more significant savings will be realised.
89,54	Our overall targets for greenhouse gas (GHG)-emission reduction is 19%, against the projected business-as-usual (BAU) level in 2015.
48	Unit of production is refined ounce of PGMs and Gold. In going forward, we plan on moving away from an intensity target toward an absolute target that is measured against business-as-usual emissions. This approach is in line with a draft WRI standard for the accounting and reporting of policies and actions. The standard uses the concept of an ex-post baseline for setting targets. This is a baseline that takes into account existing measures that a company has taken to reduce GHG emissions to determine if the company is on track to meet its targets. The business-as-usual model takes into account changes in operation, new plant, plant closure, ramp up stages, increasing strip ratios, deeper mines, ore grade deterioration and longer haul roads which the intensity model does not cater for.
0	Because gold grades are reducing over time, an intensity target has the effect of reducing absolute emissions over time.
3	At a Group and Company level, the goal is to reduce CO2 emissions by 8% (230) kg/tonne of liquid steel produced by 2020.

Company	SubSector	Type of Target	Scope	Base Year	Base Year Emissions	Metric	Target Year (expiry year)	Reduction from base year	Is the intensity target an increase or decrease in absolute emissions
BHP Billiton	Metals & Mining	Absolute	Scope 1+2	2006	50.2	tCO_2e	2017	0	
Gold Fields Limited	Metals & Mining	Absolute	Scope 1+2	2012	1 234 179	tCO_2e	2016	13	
Harmony Gold Mining Co Ltd	Metals & Mining	Absolute	Scope 2	2012	3 349 780	tCO_2e	2013	4,6	
Harmony Gold Mining Co Ltd	Metals & Mining	Intensity	Scope 1+2	2005	0.249	metric tonnes CO_2e per tonne of ore processed	2013	15	Decrease
Impala Platinum Holdings	Metals & Mining	Absolute	Scope 2	2008	2 699 297	tCO_2e	2020	5	
Kumba Iron Ore	Metals & Mining	Absolute	Scope 1+2	2013	1 127 682	tCO_2e	2013	3,6	
Lonmin	Metals & Mining	Intensity	Scope 1+2	2012	1.16	Other: Kt CO_2e/ PGMoz	2017	4	Decrease
Nampak Ltd	Containers & Packaging	Absolute	Scope 2	2008	714 815	tCO_2e	2013	10	
PPC Ltd	Construction Materials	Intensity	Scope 2	2011	0.129	Other: tOther: tonnes of CO_2e per tonnes of clinker	2017	10	Increase
PPC Ltd	Construction Materials	Intensity	Scope 1+2	2011	1.18	Other: Other: tonnes of CO_2e per tonnes of clinker	2017	5	Increase
Sappi	Paper & Forest Products	Absolute	Scope 1+2	2000	4 145 268	tCO_2e	2015	23	
Sappi	Paper & Forest Products	Intensity	Scope 1+2	2011	0.295	metric tonnes CO_2e per metric tonne of product	2016	33,6	Decrease
Sappi	Paper & Forest Products	Intensity	Scope 1+2	2011	0.545	metric tonnes CO_2e per metric tonne of product	2017	0	Decrease
Sibanye Gold Ltd	Metals & Mining	Absolute	Scope 1+2	2012	4 580 510	tCO_2e	2013	2,5	
IT & Telecoms									
Vodacom Group	Wireless Telecommunication Services	Intensity	Scope 1+2	2013	39.8	Other: metric tonnes CO_2e per base station site	2014	5	Increase

Progress against target	Comment
25	We have been setting GHG targets for our business since 1996. In FY12, we exceeded our target to reduce our GHG intensity by 6% from our FY06 baseline, achieving a 16% reduction. We have now set ourselves a more challenging goal to limit our overall emissions by setting an absolute target, keeping our FY17 GHG emissions below our FY06 baseline while we continue to grow our business.
40,4	In 2012, Gold Fields set a group wide voluntary target of 13% carbon emission reductions against its ëbusiness as usualí carbon emissions by 2016. Because this target was ongoing during most of 2013, this submission will report on progress against this target. However, in late 2013, it was decided to re-evaluate this Group target due to significant changes to Gold Fieldsí operations and business model, including:
100	Harmony has a target to reduce electricity consumption of its operations by 5% every financial year. Since the South African grid emission factor from 2012 to 2013 increased by 0.4%, this electricity reduction target equates to a Scope 2 emission reduction target of 4.6%. (Harmonyís Papua New Guinea (PNG) operations are connected to a grid with a base load of 100% hydropower, and therefore there are no Scope 2 emissions associated with the use of grid electricity in PNG.)
100	Since the target reached completion in this reporting year, Harmony has since reviewed its strategy and has published a new emission intensity reduction target. This target, encompassing the South African and PNG operations, involves a 2% Scope 1 and Scope 2 emission-intensity reduction between 2014 and 2018, with 2005 as a base year. This is a realistic target, which is set against the backdrop of a 15% emission intensity reduction achievement between 2005 and 2013.
0	The Company has a growth strategy and hence absolute emissions will continue to increase in the future. The reduction strategy utilises 2007/2008 as baseline year and is aligned with the projected growth profile. Implats is however currently investigating initiatives to reduce direct and indirect emissions.
75	A Business-As-Usual (BAU) baseline projection has been established based on energy consumption/carbon emissions from 2011 to 2020. This takes into consideration factors such as life-of-mine plans and growth projects. Every year Kumba sets a BAU baseline based on the current mining conditions and calculates performance against the target. In 2013 the target was 40,596 tCO2e (3.6%) out of a BAU forecast of 1.13 MtCO2e.
0	Reduce our combined Scope 1 and Scope 2 emissions per unit of PGM production by 4% by 2017 from a 2012 baseline year.
100	Nampakís target is in line with Eskomís target to reduce electricity consumption by 10% over a 5 year period against a 2007/8 MWh baseline as per Eskomís records.
0	PPC Energy Policy internal target
53	The targets as indicated are internal targets based on the PPC Energy Policy.
100	The South African target follows an SA industry initiative to achieve a 15% reduction in specific purchased fossil fuels by 2015. Reduction mainly due to Tugela- and Enstra Millsí curtailed production.
0	Reduce the amount of total energy expended in making each ton of product by 10% by 2016.
0	Sappi Europeís 2017 target is the reduction of specific direct fossil CO_2 emissions (i.e. kg CO_2 per tonne of sold pulp and saleable paper), as well as reducing purchased power emissions (calculated at 400g/kWh), by 5%. Increase in emissions mainly due to reduced production in EU.
100	The carbon footprint of 2013 is 4 407 671.36 tonnes CO_2e (inclusive of fugitive mine methane from the Beatrix Operations).
100	This target relates to fuel and electricity consumption per base station site taking growth into account.

Appendix 3: Exclusions and qualifying remarks

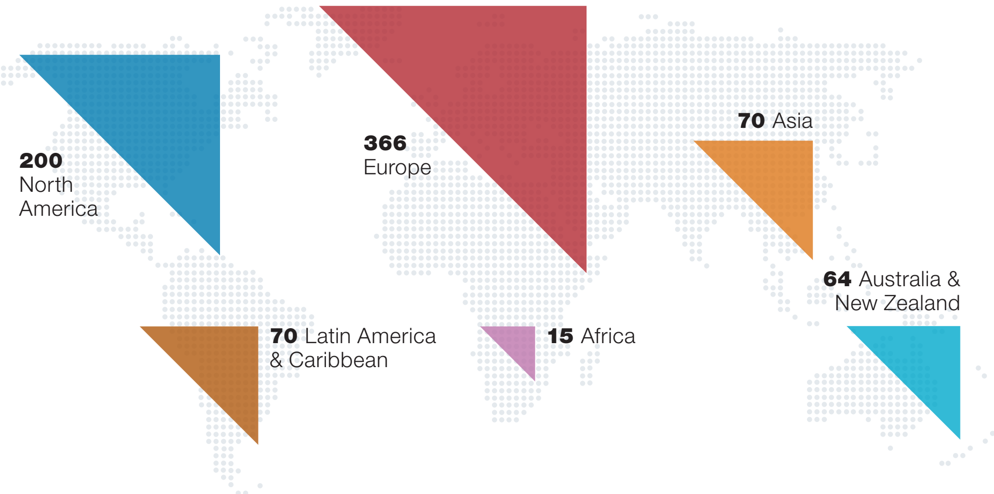
Company	Sub Sector	Scope	Source
Consumer Discretionary			
Steinhoff International Holdings	Household Durables	Scope 1 & 2	Geographies
Steinhoff International Holdings	Household Durables	Scope 1 & 2	Non-Kyoto direct emissions
Truworths International	Specialty Retail	Scope 1 & 2	All Scope 1 and Scope 2 emissions from activities beyond South Africa are excluded from Truworths operational carbon footprint. Operations outside of SA exist in Ghana, Zambia, Swaziland, Nigeria, Mauritius, Botswana, Kenya, Lesotho, Namibia.
Woolworths Holdings Ltd	Multiline Retail	Scope 1	Air-conditioning gas refills for some stores and DC's/stockrooms.
Woolworths Holdings Ltd	Multiline Retail	Scope 1	Australian operations – Country Road Group
Woolworths Holdings Ltd	Multiline Retail	Scope 2	Woolworths Financial Services
Woolworths Holdings Ltd	Multiline Retail	Scope 1 & 2	All non-SA operations (except Mauritius stores)
Consumer Staples			
Illovo Sugar Ltd	Food Products	Scope 1 & 2	Drainage & tillage of soil
Illovo Sugar Ltd	Food Products	Scope 1 & 2	Land use change
Illovo Sugar Ltd	Food Products	Scope 1 & 2	Onsite solid waste disposal
Illovo Sugar Ltd	Food Products	Scope 1 & 2	Refrigerants
Massmart Holdings Ltd	Food & Staples Retailing	Scope 1 & 2	Massmart non-South African operations
Pick n Pay Stores Ltd	Food & Staples Retailing	Scope 1 & 2	Boxer branded stores
Pick n Pay Stores Ltd	Food & Staples Retailing	Scope 1 & 2	Corporate stores in Southern Africa
Pioneer Foods	Food Products	Scope 1 & 2	All Corporate offices other than Pioneer Foods, and Bokomo Head Office
Pioneer Foods	Food Products	Scope 1 & 2	Lubricants used in vehicles and machinery
Pioneer Foods	Food Products	Scope 1 & 2	Nulaid and Bokomo: emissions from waste water treated onsite
Pioneer Foods	Food Products	Scope 1 & 2	Refrigerant gases
Pioneer Foods	Food Products	Scope 1 & 2	Sasko Bakeries Depots
Pioneer Foods	Food Products	Scope 1 & 2	Tydstroom & Nulaid: Methane from Chicken Manure
RCL Foods Ltd	Food Products	Scope 1 & 2	The data for Scope 1 refrigerants used in owned equipment was not available for some operations at the time of compiling the carbon footprint. There are no Scope 2 emissions associated with refrigerants.
Shoprite Holdings Ltd	Food & Staples Retailing	Scope 2	Corporate Offices: Refrigeration data portion only
Shoprite Holdings Ltd	Food & Staples Retailing	Scope 1 & 2	Geographical
Tiger Brands	Food Products	Scope 1 & 2	Exports and International were excluded from Tiger Brands carbon footprint, with the exception of: - Haco Tiger Brands (Kenya): Included - Chococam (Cameroon): Included - Langeberg & Ashton Foods (South Africa): Included
Energy & Materials			
AECI Ltd Ord	Chemicals	Scope 2	AECI Head Office
Anglo American	Metals & Mining	Scope 1 & 2	CO2 emissions from spontaneous combustion (sponcom)
Anglo American	Metals & Mining	Scope 1 & 2	F-gasses
Anglo American	Metals & Mining	Scope 1 & 2	N2O
Anglo American Platinum	Metals & Mining	Scope 1 & 2	Exploration activities outside South Africa and some Greenfields exploration within South Africa
Anglo American Platinum	Metals & Mining	Scope 1 & 2	Head Office
AngloGold Ashanti	Metals & Mining	Scope 1	Explosives
AngloGold Ashanti	Metals & Mining	Scope 1	Land Clearance
AngloGold Ashanti	Metals & Mining	Scope 1	Process Emissions
AngloGold Ashanti	Metals & Mining	Scope 2	Scope 2 emissions of some regional offices
Exxaro Resources Ltd	Oil, Gas & Consumable Fuels	Scope 1	Coal Discard Dumps
Harmony Gold Mining Co Ltd	Metals & Mining	Scope 1 & 2	Fugitive methane emissions: Methane is found in geological faults and liberated when the fault is encountered during the mining activity or exploration drilling. The origin of the methane in these faults is unknown. Scientific research indicates that it comes from a deep-seated source and that it may be of biological origin. Methane from gold mines is different to methane from coal mines. The methane from gold mines is not released homogeneously whereas the methane from coal mines is released homogeneously. Coal mine methane is a direct result of coal mining (i.e. if more coal is mined then more methane is released). This is not the case with gold mine methane. Hence, it is difficult to determine how much methane will be released and how long that methane source will continue to release methane.
Impala Platinum Holdings	Metals & Mining	Scope 2	Electricity Usage at Implats Head Office
Kumba Iron Ore	Metals & Mining	Scope 1 & 2	Exploration
Lonmin	Metals & Mining	Scope 1 & 2	Exploration portfolio

Company	Sub Sector	Scope	Source
Lonmin	Metals & Mining	Scope 1 & 2	Operational head office in Johannesburg, South Africa Office in London, United Kingdom
Nampak Ltd	Containers & Packaging	Scope 1	Activity – Scope 2 (purchased electricity) in Angola
Nampak Ltd	Containers & Packaging	Scope 1 & 2	Geographies – Ethiopia and Mozambique are excluded from carbon footprint
Northam Platinum Ltd	Metals & Mining	Scope 1 & 2	Corporate office in Johannesburg
PPC Ltd	Construction Materials	Scope 1 & 2	SA Aggregates operations
Sappi	Paper & Forest Products	Scope 2	Sappi Ltd. and Southern Africa head office
Sappi	Paper & Forest Products	Scope 2	Sappi Europe head office
Sappi	Paper & Forest Products	Scope 2	Sappi North America head office
Sappi	Paper & Forest Products	Scope 2	Sappi SA forests regional offices
Sappi	Paper & Forest Products	Scope 1 & 2	Sappi Forest Division
Sappi	Paper & Forest Products	Scope 1 & 2	Sappi Lomati Sawmill – South Africa
Sappi	Paper & Forest Products	Scope 1 & 2	Sappi Technology Centres in Europe, North America and South Africa
Sibanye Gold Ltd	Metals & Mining	Scope 1 & 2	Mine methane (all operations apart from Beatrix)
Health Care			
Adcock Ingram	Pharmaceuticals	Scope 2	Business travel in corporate jets
Adcock Ingram	Pharmaceuticals	Scope 1 & 2	Air conditioning and refrigeration gas refills
Adcock Ingram	Pharmaceuticals	Scope 1 & 2	Ghana, India, Kenya: Courier information
Adcock Ingram	Pharmaceuticals	Scope 1 & 2	Ghana, India, Kenya: Travel claims by employees using private vehicles for business purposes
Adcock Ingram	Pharmaceuticals	Scope 1 & 2	Kenya: Electricity purchased
Aspen Pharmacare Holdings	Pharmaceuticals	Scope 1 & 2	South Africa: Durban and Woodmead Corporate offices Australia: Sydney Corporate Offices
Life Healthcare Group Holdings Ltd	Health Care Providers & Services	Scope 1 & 2	Botswana, Max Healthcare hospitals in India, Scanmed hospital in Poland, theatre gasses
Mediclinic International	Health Care Providers & Services	Scope 1 & 2	Geographies – Hospitals belonging to Mediclinic International that are located outside of South Africa and Namibia, i.e. in the Middle East and Switzerland are excluded from the carbon footprint.
Netcare Limited	Health Care Providers & Services	Scope 1	Scope 1: Medical gasses: Some facilities excluded due to a lack in data availability. Refrigerant gas refills for all division outside of the Hospital division Stationary fuel used by the Primary Care division.
Industrials			
Aveng Ltd	Construction & Engineering	Scope 1 & 2	Methane from mining: Fugitive emissions of methane from mining activities is very often a large emission source for mines.
Aveng Ltd	Construction & Engineering	Scope 1 & 2	Raw materials: Aveng Group uses significant amounts of raw materials across most divisions. The embedded emissions from the manufacture of raw materials (for example cement or steel etc) are an indirect emission (Scope 3) and were excluded from the initial carbon assessment.
Bidvest Group Ltd	Industrial Conglomerates	Scope 1 & 2	Emissions from Bidvest Car Rental operations generated by customer usage of vehicles. (Scope 1)
Bidvest Group Ltd	Industrial Conglomerates	Scope 1 & 2	Employee commuting in company-owned or controlled vehicles. (Scope 1)
Bidvest Group Ltd	Industrial Conglomerates	Scope 1 & 2	Refills of air conditioning and refrigeration equipment owned or operated by Bidvest. (Scope 1)
Hosken Consolidated Investments	Industrial Conglomerates	Scope 1 & 2	Emissions from steam purchased by Seardel subsidiaries.
Hosken Consolidated Investments	Industrial Conglomerates	Scope 1 & 2	Emissions from the Montauk, a subsidiary based in the United States
Hosken Consolidated Investments	Industrial Conglomerates	Scope 1 & 2	Fugitive emmissions (i.e. HFCs)
Hosken Consolidated Investments	Industrial Conglomerates	Scope 1 & 2	Scope 1 emissions from Gallagher
Reunert	Industrial Conglomerates	Scope 1 & 2	Fugitive emissions
Wilson Bayly Holmes-Ovcon Ltd	Construction & Engineering	Scope 1 & 2	African (other than South Africa) and Australian operations
IT & Telecoms			
MTN Group	Wireless Telecommunication Services	Scope 1 & 2	Scope 1, 2 and 3 emissions from the following operating countries are not included: MTN Syria, MTN Benin; MTN Dubai Head Office, MTN South Sudan
Vodacom Group	Wireless Telecommunication Services	Scope 1	Activity – Air-conditioning and refrigeration gases from the Tanzania operations are excluded from the carbon footprint

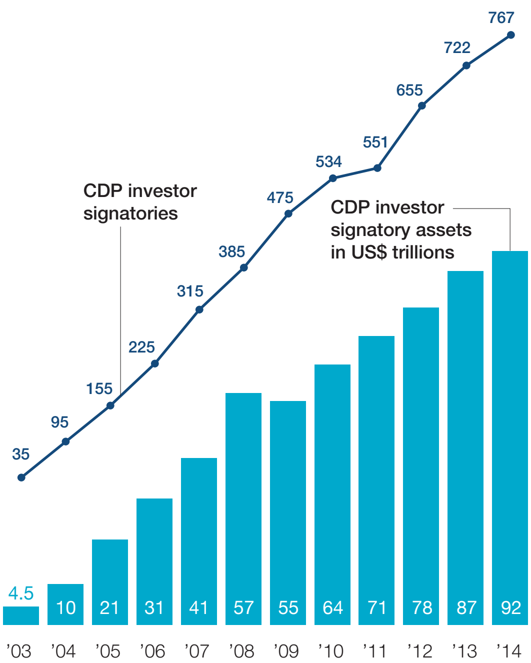
CDP investor members 2014

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 standardised format. To learn more about CDP's member offering and becoming a member, please contact us or visit **www.cdp.net/en-US/WhatWeDo/.**

Where are the signatory investors located?[19]



CDP investor base continues to grow*



Investors by type

312 Asset managers

256 Asset owners

152 Banks

38 Insurance

27 Other

CDP investor members 2014

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

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

CDP investor signatories 2014

767

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

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

Investor signatories *continued*

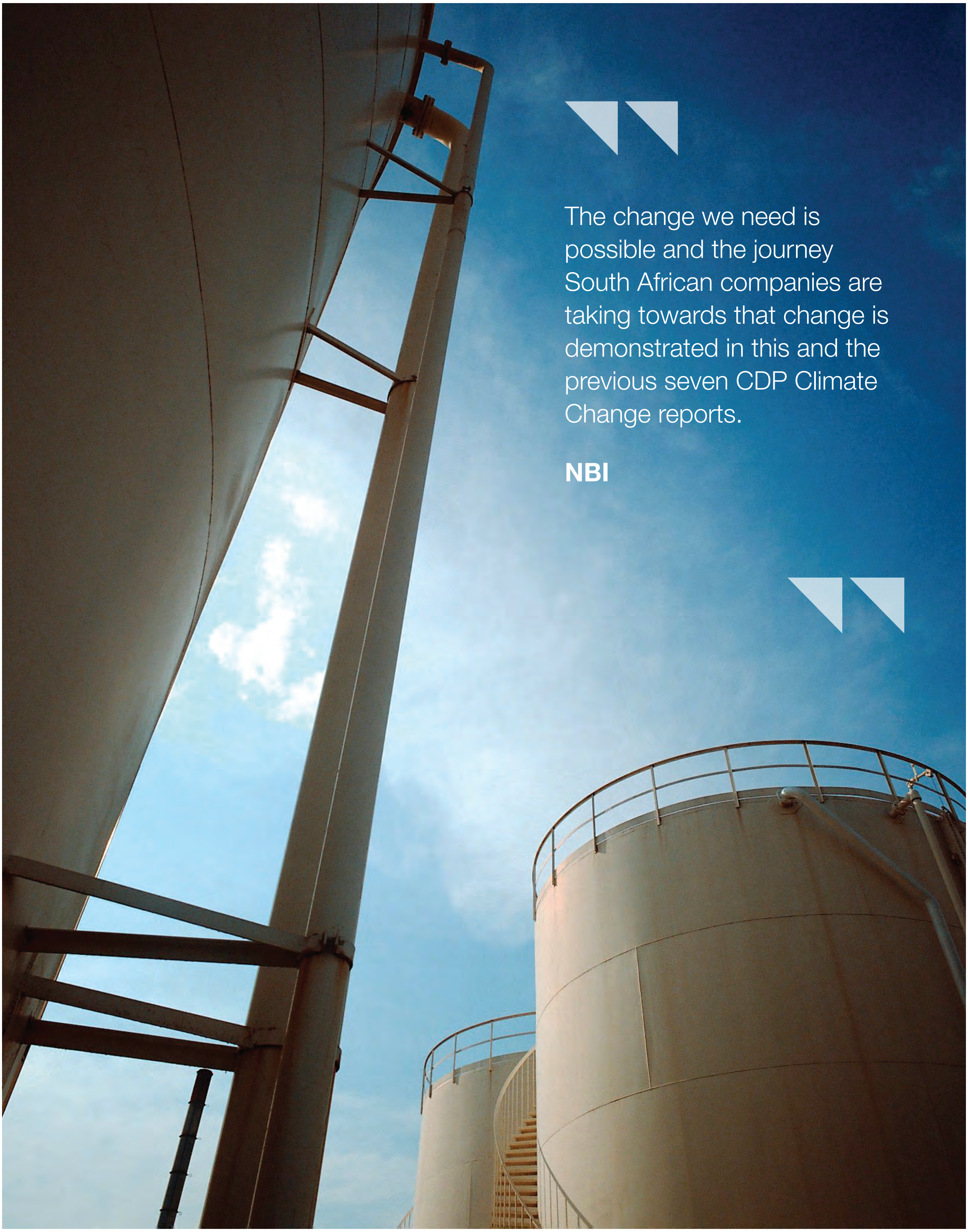
Challenger
Change Investment Management
Christian Brothers Investment Services
Christian Super
Christopher Reynolds Foundation
Church Commissioners for England
Church of England Pensions Board
CI Mutual Funds' Signature Global Advisors
City Developments Limited
Clean Yield Asset Management
ClearBridge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

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

Investor signatories *continued*

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

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


The change we need is possible and the journey South African companies are taking towards that change is demonstrated in this and the previous seven CDP Climate Change reports.
NBI

Lead Partner

NATIONAL BUSINESS INITIATIVE

Advisor, Scoring and Report Writing Partners

IRBARIS
strategy | sustainability | value

incite
rethinking value

Design and production

magenta media
www.magentamedia.co.za

Printing

triple green™ by sappi
sugar cane fibre. chlorine-free. sustainable afforestation.

Triple Green products are produced from sustainable resources (waste sugar cane fibre) and are recyclable and biodegradable.

CDP Contacts

Sue Howells
Co-Chief Operating Officer
Global Operations

Daniel Turner
Head of Disclosure

James Hulse
Head of Investor Initiatives

Antigone Theodorou
Director
Global Operations

CDP Worldwide
40 Bowling Green Lane
London, EC1R 0NE
United Kingdom
Tel: +44 (0) 20 7970 5660
Fax: +44 (0) 20 7691 7316
www.cdp.net

NBI Contacts

Steve Nicholls
Head of Climate Change,
Water and the Green
Economy
Nicholls.steve@nbi.org.za

Christine Dunbar
Project Support Climate &
Energy Unit
Dunbar.christine@nbi.org.za

Zarina Moolla
Project Manager: Mitigation
Moolla.zarina@nbi.org.za

National Business Initiative
3rd Floor, Building D
32 Princess of Wales Terrace
Sunnyside Office Park
Parktown, 2193
South Africa
Tel: +27 (11) 544 6000
www.nbi.org.za

Irbaris Contacts

David Hampton
Managing Partner
David.hampton@irbaris.com

Kate Weinberg
Senior Consultant
Kate.weinberg@irbaris.com

Irbaris LLP
Euston Tower
286 Euston Road
London NW1 3DP
United Kingdom
Tel: +44 (0) 203 3463 8787
www.irbaris.com

Incite Contacts

Jonathon Hanks
Managing Director
jon@incite.co.za

Dave Baxter
Consultant
dave@incite.co.za

Incite
PO Box 43937
Scarborough 7975
Cape Town
South Africa
Tel: +27 (21) 780 1799
www.incite.co.za

The National Business Initiative extends its sincere thanks to:
KPMG South Africa (our lead sponsor); the Industrial Development Corporation and the South African Post Office (our co-sponsors); Irbaris and Incite (for the analysis and writing of this report); and all those JSE Top 100 companies that responded to the 2014 questionnaire.

For further information on how you may become involved in the NBI's key initiatives, please visit our website (www.nbi.org.za) or contact Steve Nicholls (Nicholls.Steve@nbi.org.za)

Sponsors

Lead Sponsor of CDP 2014 (South Africa)

Co-sponsors