

# South African business: shifting the focus to performance

CDP South Africa 100 Climate Change Report 2012

On behalf of 655 investors with assets of US\$78 trillion



Lead Partner National Business Initiative



Report written by Incite Sustainability



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## **Foreword**



"Within the context of a year which has seen notable extreme weather events with substantial impacts on food security and price volatility, the balance required between economic development amidst an increasing complexity of challenges calls on us all to find innovative and transformative solutions."

The year 2011 was a milestone year for South Africa, with successful hosting of the Climate Change Conference – COP 17 – which succeeded in galvanising key stakeholders and the private sector in particular, in showcasing South Africa as an important player amongst nations in its resolve to combat climate change. Not only did we manage a critical year of action in climate change negotiations but we also used the platform well in articulating the work of South Africa in transitioning to a low carbon and green economy.

Through collaborative effort, we also opened further corridors of engagements between government and the private sector in the lead up to COP 17. This was complimented by the launching of many new green initiatives and supporting policies, with the National Climate Change Response Policy being one of them. It was therefore particularly pleasing to hear that in its 5th launch of the Carbon Disclosure Report, the leading Top 100 JSE listed companies took 2nd place in their disclosure, ahead of the Global Fortune 500. It is with great pleasure again that we congratulate you in 2012 for retaining second position because it tells us that the South African private sector has already come a long way in assessing itself in terms of risks and opportunities and taking action in response to climate change.

Those companies who are acknowledged for improved or good performance in this year's report deserve special recognition for their efforts since there is no doubt that 2012 has ushered in a new phase of stocktaking and implementation to inform our future sustainability within the national and global context. Within the national context, our priority is to focus our efforts on implementing our climate response measures. This includes actions

to mitigate our emissions while giving equal attention to building our resilience in areas such as water, agriculture and forestry, health, biodiversity and human settlements. This focus requires collective action from all sectors of our society.

Mindful of the outcomes of RIO +20, and including the 10th anniversary of the World Summit on Sustainable Development which gave rise to the Johannesburg Plan of Implementation and introduced numerous sustainable development initiatives, it is now fitting to give account of what progress we have made and give added impetus to measuring and verifying our performance into the future. South Africa remains committed to heeding the call from the global community towards reducing its emissions. Such commitment will be honoured within the necessary conditions of support and must take cognisance of the need for economic growth while embracing sustainable development goals that provide opportunities for job creation, poverty alleviation and responsible utilisation of our natural resources. We believe that these goals are within our reach if we partner appropriately within our various roles and responsibilities and build on our successes and learn from our failures.

Within the context of a year which has seen notable extreme weather events with substantial impacts on food security and price volatility, the balance required between economic development amidst an increasing complexity of challenges calls on us all to find innovative and transformative solutions.

#### Edna Molewa, MP

Minister of Water and Environment Affairs

## **CEO Foreword**



"Enabling better decisions by providing investors, companies and governments with high quality information on how companies are managing their response to climate change and mitigating the risks from natural resource constraints has never been more important."

The pressure is growing for companies to build long-term resilience in their business. The unprecedented debt crisis that has hit many parts of the world has sparked a growing understanding that short-termism can bring an established economic system to breaking point. As some national economies have been brought to their knees in recent months, we are reminded that nature's system is under threat through the depletion of the world's finite natural resources and the rise of greenhouse gas emissions.

Business and economies globally have already been impacted by the increased frequency and severity of extreme weather events, which scientists are increasingly linking to climate change. Bad harvests due to unusual weather have this year rocked the agricultural industry, with the price of grain, corn and soybeans reaching an all-time high. Last year, Intel lost \$1 billion in revenue and the Japanese automotive industry lost \$450 million of profits as a result of the business interruption floods caused to their Thailand-based suppliers.

It is vital that we internalize the costs of future environmental damage into today's decisions by putting an effective price on carbon. Whilst regulation is slow, a growing number of jurisdictions have introduced carbon pricing with carbon taxes or cap-and-trade schemes. The most established remains the EU Emissions Trading Scheme but moves have also been made in Australia, California, China and South Korea among others. Enabling better decisions by providing investors,

1. The State of the Climate in 2011 report, led by the National Oceanographic and Atmospheric Administration (NOAA) in the US and published as part of the Bulletin of the American Meteorological Society (BAMS).

companies and governments with high quality information on how companies are managing their response to climate change and mitigating the risks from natural resource constraints has never been more important.

CDP has pioneered the only global system that collects information about corporate behavior on climate change and water scarcity, on behalf of market forces, including shareholders and purchasing corporations. CDP works to accelerate action on climate change through disclosure and more recently through its Carbon Action program. In 2012, on behalf of its Carbon Action signatory investors, CDP engaged 205 companies in the Global 500 to request they set an emissions reduction target; 61 of these companies have now done so.

CDP continues to evolve and respond to market needs. This year we announced that the Global Canopy Program's Forest Footprint Disclosure Project will merge with CDP over the next two years. Bringing forests, which are critically linked to both climate and water security, into the CDP system will enable companies and investors to rely on one source of primary data for this set of interrelated issues.

Accounting for and valuing the world's natural capital is fundamental to building economic stability and prosperity. Companies that work to decouple greenhouse gas emissions from financial returns have the potential for both short and long-term cost savings, sustainable revenue generation and a more resilient future.

#### **Paul Simpson**

CEO Carbon Disclosure Project

## **NBI** Foreword



With regard to climate change, the year 2011, culminating at COP17 in Durban, was a formative one for South Africa. The South African government played a pivotal role in uniting all Parties to the UNFCCC behind a single negotiation track – the *Ad Hoc* Working Group on the Durban Platform for Enhanced Action. Domestically the South African government has had its work cut out with the implementation of the National Climate Change Response White Paper.

The steadily improving results of South African companies in the Carbon Disclosure Project suggest that a reduction in public pronouncements on climate change by South African companies following COP 17 is in no way an indication of commitment or performance. In a context where investor confidence in South Africa is under pressure, South African transparency and performance in what is an investor lead initiative is a shining light.

It would appear that South African businesses have also entered an implementation phase and have been focussing on practical steps to improve disclosure. We remain the region in the world with the second highest response rate (jointly with the FTSE All-World, behind the Global 500). This year's disclosure scores have improved from a median score of 77 in 2011 to 82 in 2012. This means that the top half of responding companies all score 82 or higher. To qualify for the Carbon Disclosure Leadership Index (CDLI) in 2010 you needed a score of 85. This year 34 companies achieved that score. The score needed in 2011 was 87 and 27 companies achieved that in 2012. This is impressive progress and companies on the 2012 CDLI are separated by only 5% with the top performing company scoring a perfect 100 (a first in South Africa).

Given the declining significance of competition between top disclosers, and the implications of domestic climate change policy and mooted market measures, South African companies are at the point of shifting focus from disclosure to performance. While the change in the most common performance band from C in 2011 to B in 2012 is encouraging, the spread of performance scores is far greater than that of disclosure. The bottom half of the sample score a C or worse with the majority scoring a D. There is still clearly much to consider, especially as disclosing companies get to grips with the complexities of scope 3 emissions and the additional rigour and verification that may be required under mandatory reporting systems.

Companies must support their discussion of risk, strategy and targets with management systems that deliver consistent, verifiable data. The needs of science and the requirements of national policy will require us to perform with increased rigour. Furthermore, although climate change is an important issue, if there is one thing 2012 has taught us, our collective consideration of implementation needs to extend to the subtle interactions between economic, social and environmental issues. We need a holistic, participative approach as we transition to a green and sustainable economy.

#### Joanne Yawitch

**CEO National Business Initiative** 

## **CDP Investor Members 2012**

CDP works with investors globally to advance the investment opportunities and reduce the risks posed by climate change by asking almost 6,000 of the world's largest companies to report on their climate strategies, GHG emissions and energy use in the standardized Investor CDP format. To learn more about CDP's member offering and becoming a member, please contact us or visit the CDP Investor Member section at

https://www.cdproject.

Aegon
AKBANK T.A.Ş.
Allianz Global Investors
Aviva Investors
AXA Group
Bank of America Merrill
Lynch
Bendigo and Adelaide Bank

Blackrock
BP Investment
Management

California Public Employees Retirement System - CalPERS

California State Teachers Retirement Fund -CalSTRS

Calvert Asset Management Company

Catholic Super

**CCLA** 

Daiwa Asset Management Co. Ltd.

Generation Investment Management

**HSBC** Holdings

**KLP** 

Legg Mason

**London Pension Fund** 

**Authority** 

Mongeral Aegon Seguros e

Previdência S/A Morgan Stanlev

**National Australia Bank** 

**NEI Investments** 

Neuberger Berman

**Newton Investment** 

**Management Ltd** 

Nordea Investment

Management

Norges Bank Investment

Management

PFA Pension

Robeco

Rockefeller & Co.

SAM Group

Sampension KP

Livsforsikring A/S

**Schroders** 

**Scottish Widows** 

**Investment Partnership** 

**SEB** 

Sompo Japan Insurance Inc Standard Chartered

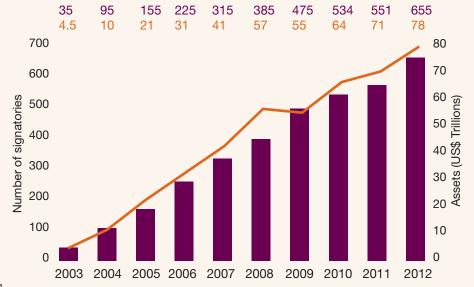
TD Asset Management Inc. and TDAM USA Inc.

The RBS Group

**The Wellcome Trust** 

## CDP INVESTOR SIGNATORIES & ASSETS (US\$ TRILLION) AGAINST TIME

- Investor CDP Signatories
- Investor CDP Signatory Assets



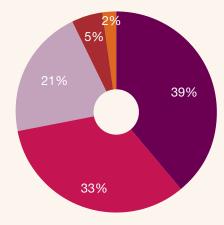
## 2012 SIGNATORY INVESTOR BREAKDOWN

259 Asset Managers220 Asset Owners

143 Banks

33 Insurance

13 Other



## **CDP Signatory Investors 2012**

655 financial institutions with assets of US\$78 trillion were signatories to the CDP 2012 information request dated February 1st, 2012

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

AFP Integra

AIG Asset Management

AK Asset Management Inc

Alberta Investment Management Corporation (AIMCo)

Alberta Teachers Retirement Fund

Alcyone Finance

AllenbridgeEpic Investment Advisers Limited

Allianz Elementar Versicherungs-AG

Allianz Global Investors Kapitalanlagegesellschaft mbH

Allianz Group

Altira Group

Amalgamated Bank AMP Capital Investors

AmpegaGerling Investment GmbH

ANBIMA - Associação Brasileira das Entidades dos

Mercados Financeiro e de Capitais

Antera Gestão de Recursos S.A

APG

AQEX LLC Aquila Capital

Arisaig Partners Asia Pte Ltd

Arma Portföy Yönetimi A.Ş

ASM Administradora de Recursos S.A.

**ASN Bank** 

Assicurazioni Generali Spa

ATI Asset Management

ATP Group

Australia and New Zealand Banking Group Limited

Australian Ethical Investment

AustralianSuper

Avaron Asset Management AS

Aviva Investors Aviva plc

AXA Group

Baillie Gifford & Co.

BANCA CÍVICA S.A

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 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

Bank Handlowy w Warszawie S.A.

Bank of America Merrill Lynch Bank of Montreal

Bank Vontobel

Bankhaus Schelhammer & Schattera

Kapitalanlagegesellschaft m.b.H.

BANKIA S.A

BANKINTER BankInvest

Banque Degroof

Banque Libano-Francaise

Basellandschaftliche Kantonalbank

BASF Sociedade de Previdência Complementar Basler Kantonalbank

Bâtirente

Baumann and Partners S.A

Bayern LB

BayernInvest Kapitalanlagegesellschaft mbH

BBC Pension Trust Ltd

Bedfordshire Pension Fund

Beetle Capital

**BEFIMMO SCA** 

Bendigo & Adelaide Bank Limited

Bentall Kennedy

Berenberg Bank

Berti Investments

BioFinance Administração de Recursos de Terceiros Ltda

BlackRock

Blom Bank SAI

Blumenthal Foundation

BNP Paribas Investment Partners

BNY Mellon

BNY Mellon Service Kapitalanlage Gesellschaft

Boston Common Asset Management, LLC

BP Investment Management Limited

Brasilprev Seguros e Previdência S/A British Airways Pension Investment Management Limited British Columbia Investment Management Corporation

BT Investment Management

Busan Bank

CAAT Pension Plan

Cadiz Holdings Limited Caisse de dépôt et placement du Québec

Caisse des Dépôts

Caixa Beneficente dos Empregados da Companhia

Siderurgica Nacional - CBS

Caixa de Previdência dos Funcionários do Banco do

Nordeste do Brasil (CAPEF)

Caixa Econômica Federal

Caixa Geral de Depositos

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 Friends Service Committee (Quakers)

Canadian Imperial Bank of Commerce (CIBC) Canadian Labour Congress Staff Pension Fund

CAPESESP

Capital Innovations, LLC

CARE Super

Carmignac Gestion Catherine Donnelly Foundation

CBF Church of England Funds

CBRE

Cbus Superannuation Fund

CCLA Investment Management Ltd

Celeste Funds Management Limited Central Finance Board of the Methodist Church

CERES-Fundação de Seguridade Social

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 Advisors Climate Change Capital Group Ltd

CM-CIC Asset Management Colonial First State Global Asset Management

Comerica Incorporated

COMGEST

Commerzbank AG

CommInsure

Commonwealth Bank Australia

Commonwealth Superannuation Corporation

Compton Foundation

Concordia Versicherungsgruppe

Connecticut Retirement Plans and Trust Funds

Co-operative Financial Services (CFS) Credit Suisse

Daegu Bank

Daesung Capital Management

Daiwa Asset Management Co. Ltd

Daiwa Securities Group Inc.

Dalton Nicol Reid

de Pury Pictet Turrettini & Cie S.A

DekaBank Deutsche Girozentrale

Delta Lloyd Asset Management Deutsche Asset Management Investmentgesellschaft mbH

Deutsche Bank AG

Development Bank of Japan Inc.

Development Bank of the Philippines (DBP)

Dexia Asset Management Dexus Property Group

DnB ASA

Domini Social Investments LLC

Dongbu Insurance

DWS Investment GmbH Earth Capital Partners LLP

East Sussex Pension Fund

Ecclesiastical Investment Management

Ecofi Investissements - Groupe Credit Cooperatif Edward W. Hazen Foundation

EEA Group Ltd

Elan Capital Partners

Element Investment Managers

ELETRA - Fundação Celg de Seguros e Previdência

Environment Agency Active Pension fund

Epworth Investment Management

Equilibrium Capital Group

equinet Bank AG

Erik Penser Fondkommission Erste Asset Management

Erste Group Bank Essex Investment Management Company, LLC

Eureka Funds Management

**Eurizon Capital SGR** Evangelical Lutheran Church in Canada Pension Plan for

Clergy and Lay Workers

Evangelical Lutheran Foundation of Eastern Canada Evli Bank Plc

F&C Investments FACEB - FUNDAÇÃO DE PREVIDÊNCIA DOS

EMPREGADOS DA CEB FAELCE - Fundação Coelce de Seguridade Social

FAPERS- Fundação Assistencial e Previdenciária da Extensão Rural do Rio Grande do Sul

FASERN - Fundação COSERN de Previdência

Complementar

Fédéris Gestion d'Actifs FIDURA Capital Consult GmbH

FIM Asset Management Ltd

FIPECq - Fundação de Previdência Complementar dos

Empregados e Servidores da FINEP, do IPEA, do CNPq

FIRA. - Banco de Mexico First Affirmative Financial Network, LLC

First Swedish National Pension Fund (AP1)

Firstrand Group Limited Five Oceans Asset Management

Florida State Board of Administration (SBA)

Folketrygdfondet Folksam

Fondaction CSN

Fondation de Luxembourg Forma Futura Invest AG

Fourth Swedish National Pension Fund, (AP4) FRANKFURT-TRUST Investment-Gesellschaft mbH

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 -

Fundação Corsan - dos Funcionários da Companhia Riograndense de Saneamento

Fundação de Assistência e Previdência Social do BNDES FUNDAÇÃO ELETROBRÁS DE SEGURIDADE SOCIAL -

Fundação Forluminas de Seguridade Social - FORLUZ Fundação Itaipu BR - de Previdência e Assistência Social

FUNDAÇÃO ITAUBANCO

Fundação Itaúsa Industrial

Fundação Promon de Previdência Social Fundação Rede Ferroviária de Seguridade Social - Refer FUNDAÇÃO SANEPAR DE PREVIDÊNCIA E ASSISTÊNCIA

SOCIAL - FUSAN

**ELETROS** 

Fundação Sistel de Seguridade Social (Sistel) KDR Daewoo Securities Nedbank Limited Fundação Vale do Rio Doce de Seguridade Social - VALIA FUNDIÁGUA - FUNDAÇÃO DE PREVIDENCIA KEPLER-FONDS Kapitalanlagegesellschaft m. b. H. Needmor Fund NEI Investments KfW Bankengruppe COMPLEMENTAR DA CAESB Nelson Capital Management, LLC Killik & Co LLP Futuregrowth Asset Management Neuberger Berman Garanti Bank Kiwi Income Property Trust New Alternatives Fund Inc GEAP Fundação de Seguridade Social Kleinwort Benson Investors New Amsterdam Partners LLC Generali Deutschland Holding AG KlimalNVEST New Mexico State Treasurer Generation Investment Management KLP New York City Employees Retirement System Genus Capital Management Korea Investment Management Co., Ltd. New York City Teachers Retirement System New York State Common Retirement Fund (NYSCRF) Gjensidige Forsikring ASA Korea Technology Finance Corporation (KOTEC) Global Forestry Capital SARI KPA Pension Newton Investment Management Limited NGS Super GLS Gemeinschaftsbank eG Kyrkans pensionskassa Goldman Sachs Group Inc La Banque Postale Asset Management NH-CA Asset Management GOOD GROWTH INSTITUT für globale La Financiere Responsable Nikko Asset Management Co., Ltd Vermögensentwicklung mbH Lampe Asset Management GmbH Nipponkoa Insurance Company, Ltd Governance for Owners Nissay Asset Management Corporation NORD/LB Kapitalanlagegesellschaft AG Landsorganisationen i Sverige Government Employees Pension Fund ("GEPF"), Republic LBBW - Landesbank Baden-Württemberg LBBW Asset Management Investmentgesellschaft mbH of South Africa Nordea Investment Management GPT Group LD Lønmodtagernes Dyrtidsfond Norfolk Pension Fund Graubündner Kantonalbank Legal & General Investment Management Norges Bank Investment Management Greater Manchester Pension Fund Legg Mason Global Asset Management North Carolina Retirement System Green Cay Asset Management LGT Capital Management Ltd. LIG Insurance Co., Ltd Northern Ireland Local Government Officers' Superannuation Green Century Capital Management Committee (NILGOSC) GROUPAMA EMEKLILIK A.Ş. Light Green Advisors, LLC NORTHERN STAR GROUP GROUPAMA SIGORTA A.Ş. Living Planet Fund Management Company S.A. Northern Trust Lloyds Banking Group Groupe Crédit Coopératif Northward Capital Pty Ltd Local Authority Pension Fund Forum Groupe Investissement Responsable Inc. Nykredit GROUPE OFI AM Local Government Super Oddo & Cie Grupo Financiero Banorte SAB de CV OECO Capital Lebensversicherung AG Local Super Grupo Santander Brasi Logos portföy Yönetimi A.Ş. Gruppo Bancario Credito Valtellinese London Pensions Fund Authority Old Mutual plc Guardians of New Zealand Superannuation Lothian Pension Fund OMERS Administration Corporation LUCRF Super Hanwha Asset Management Company Ontario Teachers' Pension Plan Harbour Asset Management Lupus alpha Asset Management GmbH OP Fund Management Company Ltd Oppenheim & Co. Limited Harrington Investments, Inc Macquarie Group Limited Hauck & Aufhäuser Asset Management GmbH MagNet Magyar Közösségi Bank Zrt. Oppenheim Fonds Trust GmbH Hazel Capital LLP MainFirst Bank AG Opplysningsvesenets fond (The Norwegian Church HDFC Bank Ltd MAMA Sustainable Incubation AG Endowment) Healthcare of Ontario Pension Plan (HOOPP) Man OPTrust MAPFRE Helaba Invest Kapitalanlagegesellschaft mbH Oregon State Treasurer Henderson Global Investors Hermes Fund Managers Maple-Brown Abbott Orion Energy Systems Marc J. Lane Investment Management, Inc. Osmosis Investment Management HESTA Super Maryland State Treasurer Parnassus Investments HIP Investor Matrix Asset Management Pax World Funds Holden & Partners MATRIX GROUP LTD Pensioenfonds Vervoer HSBC Global Asset Management (Deutschland) GmbH McLean Budden Pension Denmark MEAG MUNICH ERGO AssetManagement GmbH HSBC Holdings plc Pension Fund for Danish Lawyers and Economists HSBC INKA Internationale Kapitalanlagegesellschaft mbH Meeschaert Gestion Privée Pension Protection Fund HUMANIS Meiji Yasuda Life Insurance Company Pensionsmyndigheten Hyundai Marine & Fire Insurance. Co., Ltd. Mendesprev Sociedade Previdenciária Perpetual Investments Hyundai Securities Co., Ltd. Merck Family Fund PETROS - The Fundação Petrobras de Seguridade Social PFA Pension **IBK Securities** Mercy Investment Services, Inc IDBI Bank Ltd Mergence Investment Managers PGGM Vermogensbeheer Illinois State Board of Investment Meritas Mutual Funds Phillips, Hager & North Investment Management Ltd. Ilmarinen Mutual Pension Insurance Company MetallRente GmbH PhiTrust Active Investors Pictet Asset Management SA Impax Asset Management Metrus - Instituto de Seguridade Social IndusInd Bank Limited Metzler Asset Management Gmbh Pioneer Investments MFS Investment Management Industrial Alliance Insurance and Financial Services Inc. PIRAEUS BANK Midas International Asset Management Industrial Bank (A) PKA Industrial Bank of Korea Miller/Howard Investments Pluris Sustainable Investments SA Industrial Development Corporation PNC Financial Services Group, Inc. Mirae Asset Global Investments Co. Ltd. Industry Funds Management Pohjola Asset Management Ltd Mirae Asset Securities Polden-Puckham Charitable Foundation Mirvac Group Ltd Infrastructure Development Finance Company ING Group N.V. Missionary Oblates of Mary Immaculate Portfolio 21 Investments Insight Investment Management (Global) Ltd Mistra, Foundation for Strategic Environmental Research Porto Seguro S.A. Instituto de Seguridade Social dos Correios e Telégrafos-Mitsubishi UFJ Financial Group Power Finance Corporation Limited PREVHAB PREVIDÊNCIA COMPLEMENTAR Mitsui Sumitomo Insurance Co.,Ltd Postalis Instituto Infraero de Seguridade Social - INFRAPREV Mizuho Financial Group, Inc. PREVI Caixa de Previdência dos Funcionários do Banco Instituto Sebrae De Seguridade Social - SEBRAEPREV do Brasil Mn Services Insurance Australia Group Momentum Manager of Managers (Pty) Limited PREVIG Sociedade de Previdência Complementar ProLogis IntReal KAG Monega Kapitalanlagegesellschaft mbH Provinzial Rheinland Holding Investec Asset Management Mongeral Aegon Seguros e Previdência S/A Investing for Good CIC Ltd Morgan Stanley Prudential Investment Management Mountain Cleantech AG Irish Life Investment Managers Prudential Plc MTAA Superannuation Fund Itau Asset Management Psagot Investment House Ltd PSP Investments Itaú Unibanco Holding S A Mutual Insurance Company Pension-Fennia Janus Capital Group Inc. Nanuk Asset Management Q Capital Partners Jarislowsky Fraser Limited Natcan Investment Management QBE Insurance Group JOHNSON & JOHNSON SOCIEDADE PREVIDENCIARIA Nathan Cummings Foundation, The Rabobank JPMorgan Chase & Co. National Australia Bank Raiffeisen Fund Management Hungary Ltd. Jubitz Family Foundation National Bank of Canada Raiffeisen Kapitalanlage-Gesellschaft m.b.H. NATIONAL BANK OF GREECE S.A. Raiffeisen Schweiz Genossenschaft Jupiter Asset Management Rathbones / Rathbone Greenbank Investments Kaiser Ritter Partner (Schweiz) AG National Grid Electricity Group of the Electricity Supply KB Kookmin Bank Pension Scheme RCM (Allianz Global Investors) KBC Asset Management NV National Grid UK Pension Scheme Real Grandeza Fundação de Previdência e Assistência KBC Group National Pensions Reserve Fund of Ireland Social KCPS Private Wealth Management National Union of Public and General Employees (NUPGE) Rei Super Reliance Capital Ltd KDB Asset Management Co., Ltd. **NATIXIS** 

Resolution Resona Bank, Limited Reynders McVeigh Capital Management Robecc Robert & Patricia Switzer Foundation Rockefeller Financial (trade name used by Rockefeller & Rose Foundation for Communities and the Environment Rothschild Royal Bank of Canada Royal Bank of Scotland Group RPMI Railpen Investments RREEF Investment GmbH Russell Investments SAM Group SAMPENSION KP LIVSFORSIKRING A/S SAMSUNG FIRE & MARINE INSURANCE Samsung Securities Sanlam Life Insurance Ltd Santa Fé Portfolios Ltda Santam Sarasin & Cie AG SAS Trustee Corporation Sauren Finanzdienstleistungen GmbH & Co. KG Scotiabank Scottish Widows Investment Partnership SEB Asset Management AG Second Swedish National Pension Fund (AP2) Seligson & Co Fund Management Plc SERPROS - Fundo Multipatrocinado Service Employees International Union Pension Fund 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 Smith Pierce, LLC SNS Asset Management Social(k) Sociedade de Previdencia Complementar da Dataprev -Socrates Fund Management Solaris Investment Management Limited Sompo Japan Insurance Inc. Sopher Investment Management SouthPeak Investment Management SPF Beheer by Sprucegrove Investment Management Ltd Standard Bank Group Standard Chartered Standard Chartered Korea Limited Standard Life Investments State Bank of India State Street Corporation StatewideSuper StoreBrand ASA Strathclyde Pension Fund Stratus Group Sumitomo Mitsui Financial Group Sumitomo Mitsui Trust Holdings, Inc. Sun Life Financial Inc. Superfund Asset Management GmbH SUSI Partners AG Sustainable Capital Sustainable Development Capital Svenska Kyrkan, Church of Sweden Swedbank AB Swift Foundation Swiss Re Swisscanto Asset Management AG Syntrus Achmea Asset Management T. SINAI KALKINMA BANKASI A.Ş. Tata Capital Limited TD Asset Management Inc. and TDAM USA Inc Teachers Insurance and Annuity Association - College Retirement Equities Fund Telluride Association

Tempis Asset Management Co. Ltd

TerraVerde Capital Management LLC

Terra Forvaltning AS

TfL Pension Fund
The ASB Community Trust
The Brainerd 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 Daly Foundation The Environmental Investment Partnership LLP The Hartford Financial Services Group, Inc. The Joseph Rowntree Charitable Trust The Korea Teachers Pension (KTP) 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 United Church of Canada - General Council The University of Edinburgh Endowment Fund The Wellcome Trust Third Swedish National Pension Fund (AP3) Threadneedle Asset Management Tokio Marine Holdings, Inc Toronto Atmospheric Fund Trillium Asset Management Corporation Triodos Investment Management Tri-State Coalition for Responsible Investment Tryg Unibail-Rodamco UniCredit SpA Union Asset Management Holding AG Union Investment Privatfonds GmbH Unione di Banche Italiane S.c.p.a. Unipension UNISON staff pension scheme UniSuper Unitarian Universalist Association United Methodist Church General Board of Pension and Health Benefits United Nations Foundation Unity Trust Bank Universities Superannuation Scheme (USS) Vancity Group of Companies VCH Vermögensverwaltung AG Ventas, Inc Veris Wealth Partners Veritas Investment Trust GmbH Vermont State Treasurer Vexiom Capital, L.P. VicSuper Victorian Funds Management Corporation VietNam Holding Ltd. Voigt & Coll. GmbH VOLKSBANK INVESTMENTS Waikato Community Trust Inc Walden Asset Management, a division of Boston Trust & Investment Management Company WARBURG - HENDERSON Kapitalanlagegesellschaft für Immobilien mbH

WARBURG INVEST KAPITALANLAGEGESELLSCHAFT MBH

Winslow Management, A Brown Advisory Investment Group

Water Asset Management, LLC Wells Fargo & Company

West Yorkshire Pension Fund

Westpac Banking Corporation

WHEB Asset Management

Youville Provident Fund Inc.

Zevin Asset Management

Zurich Cantonal Bank

Zegora Investment Management

White Owl Capital AG

YES BANK Limited

York University Pension Fund

Woori Bank

WestLB Mellon Asset Management (WMAM)

Woori Investment & Securities Co., Ltd.

The Bullitt Foundation

CalSTRS (California State Teachers Retirement System)

"CalSTRS' board has made climate risk management the signature issue in our corporate governance engagement program. CDP data is an essential input and is reviewed prior to meeting with companies on any issue to ensure that the discussion covers climate risk if warranted. CDP data is also very important to CalSTRS as we develop and execute our shareholder resolutions."

Jack Ehnes, CEO

## **Executive Summary**

This is the sixth successive year in which the Carbon Disclosure Project (CDP) has sent a request to the CEOs of South Africa's top listed companies asking them to measure and disclose what climate change means for their business. This report is written by Incite Sustainability in partnership with the National Business Initiative (NBI). It provides a concise analysis of the responses to the CDP 2012 questionnaire that was sent to the JSE 100 companies on behalf of 655 institutional investors (CDP signatories) representing \$78 trillion in assets.

Building on previous years, the results of CDP South Africa 2012 reflects the trend of increasing engagement by the South African business sector in anticipating and responding to climate change issues. In the context of the international climate change negotiations and the disappointing outcome document of the Rio+20 Summit, it is encouraging to see the continuing improvements in performance and disclosure for almost all indicators by the participating South African companies. This improvement is commendable. It is anticipated, however, that significant further progress will be required in emissions reductions by South African business to make a fair and equitable contribution to the global ambition of limiting warming to 2°C on pre-industrial levels that was reaffirmed at the UN climate summit in Durban in December 2011<sup>2</sup>.

## The JSE 100 response rate reaffirms South African business as a global leader in terms of their participation in the CDP.

- South Africa's sixth CDP information request generated a response rate of 78% ranking the South African CDP response rate as the second highest internationally by geographic region. The slight drop on last year's response rate (83%) is largely due to new companies entering the JSE 100 sample, most of which chose not to participate in their first year.<sup>3</sup> This suggests that there may be low levels of climate change reporting outside of the JSE Top 100.
- Of the 78 responding companies, eight companies chose not to make their submissions publicly available, the same as in 2011. Two companies who completed the information request in 2011 declined to participate in 2012: Mr Price Group and Naspers.
- The Real Estate sub-sector continues to show the lowest response rate, with only three out of ten companies responding. Consumer Staples showed the highest levels of participation, with only one company (out of 12) declining to participate.
- There has been an encouraging increase in the voluntary participation of companies that fall outside the JSE 100 sample. This year 13 companies outside

2. United Nations FCCC (15 March 2012) Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011. http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf

3. Two companies answered through a parent company also listed in the JSE 100 sample; thus, while 78% of companies answered the questionnaire in 2012, a total of 76 questionnaires were quantitatively analysed for this report.

the JSE 100 sample responded voluntarily to the CDP questionnaire (see page 30).

## CDP 2012 saw continuing improvements in disclosure by South African companies in all key indicators.

- The average carbon disclosure score of all publicly responding companies is 82, up from 76 in 2011, 74 in 2010, and 62 in 2009. This compares favourably with the average disclosure score of 77 for the Global 500. The range of scores for the top 10% of companies that qualified for the Carbon Disclosure Leadership Index (CDLI) has also improved, from 87-98 in 2011 to 95-100 in 2012. With the lowest score on the CDLI at 95, these companies have demonstrated exceptional transparency and data management.
- Twelve companies qualified for this year's CDLI.
   Exxaro Resources Ltd is the overall leader with 100
   normalised points, followed by Gold Fields Ltd with 99
   and Harmony Gold Mining Co Ltd with 98. Gold Fields
   Ltd was last year's highest scorer with 98. Energy &
   Materials achieved the highest average disclosure
   score for a sector, followed closely by Industrials and
   Health Care.
- All but one of the 76 company responses analysed, disclosed figures for global scope 1 and/or scope 2 emissions. This represents a significant improvement on measurement and disclosure evident when the CDP first engaged the JSE 100 in 2008, when only 41 companies reported emissions. This has been accompanied by a continuation of high levels of voluntary disclosure of emissions data in annual reports, with 74 companies (97% of respondents) reporting GHG information in their annual reports.
- There has been an increase in the number of companies calculating and disclosing scope 3 emissions; this is up from 61 (78%) companies in 2011 to 71 (93%).
- There has been an increase in levels of emissions verification: 37 companies (49% of respondents) have emissions verification complete or underway for scope 1 and 2 emissions (reported & approved)<sup>4</sup>, up from 27 (35%) in 2011. Twenty-two companies (29%) have verification complete or underway for scope 3 emissions (reported & approved).

## The improvements in disclosure have been accompanied by improvements in climate change governance, risk management and performance.

 There has been a general increase in rating in terms of carbon performance bands, accompanied by an increase in the number of companies qualifying for the Carbon Performance Leadership Index (CPLI). This year six companies qualified for the CPLI: Anglo American PLC, Barloworld, FirstRand Limited, Gold Fields Ltd,

4. "Reported and approved" refers to criteria used to assess whether a company has effectively verified emissions data. These criteria are set out in the scoring methodology. Companies that do not provide required evidence of an appropriate verification process are not awarded performance points and are not regarded as having verified emissions data.

## THE JSE 100 CARBON DISCLOSURE LEADERSHIP INDEX (CDLI)

Rank	Company	Sector	2012 Score	2011 Score
1	Exxaro Resources Ltd	Materials	100	94
2	Gold Fields Ltd	Materials	99	98
3	Harmony Gold Mining Co Ltd	Materials	98	91
4	FirstRand Ltd	Financials	97	88
	Mediclinic International	Health Care	97	74
	Remgro	Financials	97	80
	Sanlam	Financials	97	88
8	Anglo American Platinum	Materials	96	85
	Pick 'n Pay Holdings Ltd	Consumer Staples	96	86
10	Growthpoint Properties	Financials	95	83
	Nampak Ltd	Materials	95	82
	Oceana	Consumer Staples	95	Not in JSE 100 sample

Companies in orange were not in the JSE 100 CDLI in 2011

Companies in purple have been in the JSE 100 CDLI for three consecutive years

## THE JSE 100 TOP PERFORMERS AND CARBON PERFORMANCE LEADERSHIP INDEX (CPLI)

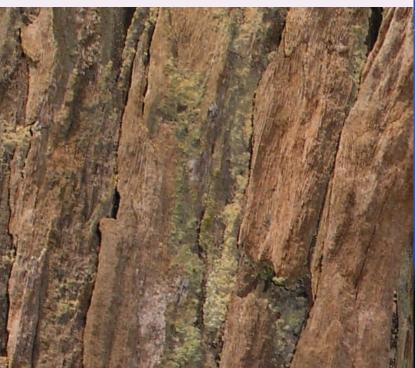
Company (listed alphabetically)	Sector	2012 Performance Band	2011 Performance Band
Anglo American	Materials	_	С
Barloworld	Industrials	-	В
FirstRand Limited	Financials		В
Gold Fields Limited	Materials	A (CPLI)	Α
Mondi PLC	Materials		В
Woolworths Holdings Ltd	Consumer Discretionary		A-

Mondi PLC and Woolworths Holdings Ltd (listed alphabetically), up from two companies in 2011 (British American Tobacco and Gold Fields Ltd).

- Encouragingly, the number of companies with GHG emissions reduction targets continues to increase.
   This year, 43 companies reported having emissions reduction targets; this compares with 40 in 2011.
   These targets comprise a mix of both absolute and intensity-based reduction targets, and continue to show significantly varying levels of ambition and time frame (see Appendix 2). Consumer Staples has the highest proportion of companies with targets (73%), followed by Energy & Materials (68%) and Financials (63%).
- Seventy-three companies (96% of respondents)
  report having a board committee or executive body
  with responsibility for climate change. Forty-seven
  companies (62%) provide monetary incentives for
  management performance related to the achievement
  of climate change objectives.
- Energy efficiency remains a core focus. Fifty-seven (75%) companies reported implementing energy efficiency initiatives related to processes, building services and building fabrics. Several companies continued to report that a significant proportion of these initiatives have relatively short payback periods.
- There has been a material reduction in the reported greenhouse gas emissions of South Africa's top companies. Total reported direct (scope 1) emissions for 2012 decreased from 137 million tons of carbon dioxide equivalent (tCO2e) in 2011 to 132 million tCO2e in 2012,

- while indirect (scope 2) emissions reduced from 98.4 million tCO2e in 2011 to 86.6 million tCO2e in 2012. Most of these emissions reductions are attributable to reductions achieved by leading emitters in the Materials sector, as well as by the non-inclusion this year in the JSE100 of a top emitter in 2011 (*Evraz Highveld Steel And Vanadium Limited*).
- A few carbon-intensive companies continue to dominate South Africa's direct GHG emissions. The data highlights the continuing predominant contribution of a few large emitters, notably Sasol (with reported annual scope 1 emissions of 61.4 million tCO2e), followed by BHP Billiton (3.2 million tCO2e), Anglo American (3 million tCO2e), and Sappi (2.8 million tCO2e). Placing this in context, Eskom's publicly reported calculated emissions of carbon dioxide for the year ending March 2012, is 231.9 million tCO2e<sup>5</sup>. Additionally, Transnet's total GHG emissions for 2011/2012 were reported at 4.3 million tCO2e<sup>6</sup>. Taken together with Eskom, the responding companies in the JSE account for 64% of the country's total estimate emissions of approximately 510 million tCO2e<sup>7</sup>.
- 5. Eskom Annual Integrated Report 2012: Partnering for a Sustainable Future.
- 6. Transnet Sustainability Report 2012.
- 7. Witi, J. 2011. Department of Environmental Affairs. Personal communication, 26 September 26 and 9 October 2012. The figure used here is the same as in 2011. This is because the Department of Environmental Affairs is currently updating the national greenhouse gas inventory for the period 2001-2010. An updated figure for 2011 and 2012 could not be provided for this reason.

## Guest Commentary





## Should we give up on an international climate treaty?

Progress towards an international agreement on tackling climate change has been painfully slow, dogged by fundamental disagreements between the countries involved and exacerbated by the financial crisis. Little is expected of the upcoming COP 18 meeting in Doha – so is it time to abandon the idea of a climate treaty altogether? Why not give up and focus on national and regional efforts to tackle climate change?

After all, negotiating a global deal is a slow, frustrating business. Not only is climate science constantly evolving, but the 197 countries that will meet in Doha often have diametrically opposed interests and points of view. Blocking progress is ridiculously easy.

Many of the differences between countries revolve around the concept of historic responsibility. This is the idea that industrialized countries got rich on the back of emitting greenhouse gases, so they should act first, and developing countries should be allowed to develop before being called upon to limit their own emissions.

The lack of commitment from much of the industrialized world to accept this burden has contributed to a certain obstructiveness among developing countries. The rich countries are not just reluctant to pay to tackle climate change in poorer countries – they are unwilling to commit resources at home as well. Pre-occupied by the financial crisis, most countries have not seen tackling climate change as something that is in their national interest.

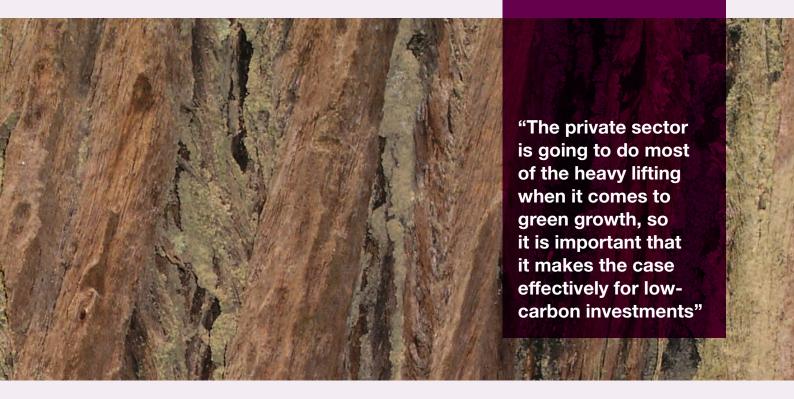
Nonetheless, a global deal remains worth fighting for. Governments, businesses and civil society all have much to gain, for four key reasons. The biggest benefit would be for the very national regional efforts mentioned above. A global deal would bring a robustness and a consistency to climate policies in individual countries. The Montreal Protocol tackling ozone-depleting chemicals, signed 25 years ago, is a case in point. While countries can make changes on their own, acting together can be much more effective.

A more consistent policy framework would bring a second benefit. With a legally-binding global agreement in place, businesses and investors will know that the direction of travel is not going to change regardless of day-to-day events. Only then will they have the clarity and security they need to make the long-term technology investments that can tackle climate change. Making the wrong assumptions because long-term policies are unclear can lead to costly mistakes in the form of stranded assets, particularly in the field of energy.

Thirdly, a global agreement would create transparency, allowing the efforts of one country to be measured against another and helping to ensure that tackling climate change in one place does not simply move harmful activities to other countries.

Finally, it would also bring an element of standardization so that all countries would know they are fighting the same battle under the same rules. It would also mean that compliance with these rules would be overseen by civil society groups that could hold parties to account and ensure that countries deliver on their obligations.

The impacts of climate change have started to become clearer in developing and developed countries alike. Many governments are starting to recognize that it is in their interests to act now, regardless of who is responsible for historic emissions and who is to pay for



reducing future emissions. The increasing frequency and severity of extreme weather events like Hurricane Sandy in the US is beginning to bring the issues into sharper focus for many.

And progress is being made. Following the 2009 climate change talks in Copenhagen, countries responsible for more than 80% of global emissions developed targets to cut or limit the growth of their emissions. The ambitions for last year's meeting in Durban were low, yet it produced major achievements. These included kick-starting the US\$100 billion per year Green Climate Fund and setting in train a second commitment period for the Kyoto Protocol.

More importantly, though, the Durban meeting also started the international community down the road of all nations working together subject to one legally binding instrument to cut emissions. And crucially, this outcome was evidence of a new spirit of determination within the international community, with delegates refusing to close the conference until an agreement was signed.

But for the agreement to succeed, the benefits of green growth need to be clearer to everyone. Political consensus is important to building a strategy that will survive electoral changes, but the business community must also play a central role. The private sector is going to do most of the heavy lifting when it comes to green growth, so it is important that it makes the case effectively for low-carbon investments.

While it's important that all countries are committed to action to cut emissions, and that those actions should be real, measurable and verifiable, it's also clear that many countries will need help from the international community to do so. That help should be subject to the same stringent accountability requirements as the emissions-

cutting actions themselves. The best way to achieve this is through an international treaty – yet another reason that such a treaty is worth fighting for at Doha this year.

#### Yvo de Boer

KPMG Special Global Advisor Climate Change & Sustainability

## 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 organizations 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 organizations 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.

## Guest Commentary





## **An Investor Perspective on Climate Change**

About 650 signatory investors, nearly 20% more than 2011, called on global companies to respond to the 2012 Carbon Disclosure Project (CDP). The world is still experiencing the effects of the financial crises but there is growing investor awareness that the 'creeping' risks of climate change, water scarcity and the destruction of biodiversity, could create even greater future investment challenges. This awareness is beginning to persuade institutional investors that the risks and opportunities of climate change need to be integrated into investment analysis and decision making. Transparency of risks, opportunities and specific GHG data is necessary to undertake an appropriate valuation of the company and to ensure these risks have been identified and action is being taken to mitigate them.

From 1 January 2012, the South African regulation 28 to the Pension Funds Act requires trustees to apply a responsible investment approach when deploying capital into markets across all asset classes. Appropriate consideration must be given to material Environmental, Social and Governance (ESG) factors that can affect the long-term sustainable performance of a fund's assets. In addition, the Code for Responsible Investing in South Africa (CRISA) provides responsible investment guidance to institutional investors through 5 principles and practice recommendations. CRISA is the first investor code in the world to require the integration of sustainability considerations into investment analysis and decision making.

Element Investment Managers (Element) participated and helped sponsor the first South African CDP report in 2007. Our purpose was to encourage company participation and to secure access to climate change information and data. In 2012 South Africa's response rate was the second highest in the world. Company CDP participation, disclosure and the quality of data continues to improve. This improvement allows analysts to be more confident about the data they integrate into their valuations. Our engagement activity has moved from the early focus on company participation, to improving the quality of the company submissions and transparency.

The CDP Global 500 Climate Change Report for 2012 lists physical change, regulation, stakeholder pressure and customer behaviour as drivers for companies to take action. 81% of companies reported physical risks. What was interesting was the change in the number of companies that included physical risks (including extreme weather events, rise in temperature and water scarcity) as current risks, jumped from 10% in 2010 to 37% in 2012. The material change in expected timing of the physical risk has been driven by recent company experience of extreme weather events and the impact of temperature change on supply chains. Clearly these events affect expected company earnings, capital allocation decisions and cash flow.

We make investment decisions on behalf of our clients based on future earnings and cash flow expectations. The evidence continues to grow that climate change requires investor attention. The Carbon Disclosure Project is an important resource to help investors identify the potential impact of climate change on future earnings and cash flows of companies.

#### **David Couldridge**

Investment Analyst Element Investment Managers



"The evidence continues to grow that climate change requires investor attention. The Carbon Disclosure Project is an important resource to help investors identify the potential impact of climate change on future earnings and cash flows of companies."

## BOX 1 THE CLIMATE DISCLOSURE STANDARDS BOARD (CDSB)

The Climate Disclosure Standards Board (CDSB), a special project of CDP, is an international organisation committed to the integration of climate change-related information into mainstream corporate reporting. Established in 2007 at the World Economic Forum, CDSB is a coalition of environmental and business NGOs, accountancy professionals, companies and representatives from the investment community, advancing its mission by acting as a forum for collaboration on how existing standards and practices can be supported and enhanced so as to link financial and climate change-related reporting and respond to regulatory developments.

In September 2010, CDSB launched its internationally accepted Climate Change Reporting Framework designed for use by companies in making disclosures in, or linked to, their mainstream financial reports about the risks and opportunities that climate change presents to their strategy and financial performance. It has been developed using existing standards and practices to ensure a clear harmonised approach to reporting rather than creating a new standard and in so doing, it leads to globally consistent and comparable information reaching financial markets. Designed in line

with the objectives of financial reporting and rules on non-financial reporting, and complementing the work of the International Integrated Reporting Council (IIRC), CDSB's Climate Change Reporting Framework offers a leading example of how to apply the principles of integrated reporting with respect to reporting on climate change.

CDP's disclosure system, which is the mechanism for organisations worldwide to measure and disclose greenhouse gas emissions and climate change risk information which is of value to investors, helps companies understand what is material to their specific businesses and take strategic action and prepares companies for mandatory reporting. Together CDP and CDSB provide a full disclosure toolkit for companies on carbon and climate change, both in reporting to financial markets and in preparing for and adhering to mandatory reporting around the world. Companies are advised to disclose in full to their shareholders and customers through CDP, and can then pull the information that is most financially material into their mainstream reports using the reporting requirements as outlined in CDSB's framework.

Further information on CDSB, including a copy of CDSB's climate change reporting framework, is available at www.cdsb.net

# 1. CDP South Africa 2012: An Overview

This is the sixth annual CDP report for the South African business sector. In South Africa the CDP is run through a partnership between the CDP headquartered in London and the National Business Initiative (NBI) in Johannesburg. The NBI manages the partnership with the CDP and all other stakeholders, including businesses, government, sponsors and the JSE. The CDP South Africa 2012 report is supported by KPMG, Element Investment Management, the Industrial Development Corporation (IDC), and the South African Post Office.

Incite Sustainability undertook the background analysis and wrote this report. The report presents an objective and largely quantitative account of the corporate responses, enabling readers to make their own informed judgements on companies' climate-related actions. It pulls together the information in a manner that will assist investors, policy-makers, climate change practitioners and other interested parties to undertake further analysis, and to adopt their own approach in seeking to foster corporate accountability. Although the report provides broad indications of climate-related performance and trends, it does not provide independent critical commentary on the quality and nature of performance. For all responding companies making their submissions publicly available, these responses can be downloaded from the CDP website for further analysis by interested stakeholders.

#### CDP 2012: The JSE 100 Sample

The JSE 100 sample for CDP 2012 was identified on the basis of market capitalisation as at 30 November 2011 (Table 2). At the time of selection, the list included 100 companies from different industry sectors identified using the Global Industry Classification Standards (GICS). As the South Africa 100 sample is limited to companies that are listed on the JSE, it does not include large parastatal emitters such as Eskom or Transnet, nor does it include potentially large emitters from non-listed private companies.

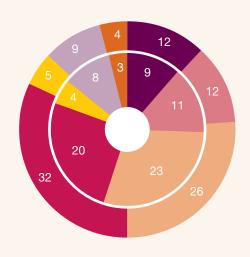
FIGURE 1 COMPOSITION OF JSE 100 BY
NUMBER OF COMPANIES (OUTER) AND
RESPONDENTS (INNER) PER SECTOR

#### Companies per Sector 2012

- 12 Consumer Discretionary
- 12 Consumer Staples
- 26 Energy and Materials
- 32 Financials
- 5 Health Care
- 9 Industrials
- 4 IT & Telecomms

#### Respondents per Sector 2012

- 9 Consumer Discretionary
- 11 Consumer Staples
- 23 Energy and Materials
- 20 Financials
- 4 Health Care
- 8 Industrials
- 3 IT & Telecomms



#### TABLE 1 NEW ENTRANTS INTO THE JSE 100 SAMPLE

2012	Respor	Listing i
cials DI	P JS	SE 100 in 2010
cials DI	P N	ew entrant
DI	P J	SE 100 in 2010
rials A0	Q N	ew entrant
umer Staples A0	Q J	SE 100 in 2010
rials DI	P N	ew entrant
rials DI	P N	ew entrant
rials DI	P N	ew entrant
cials DI	P N	ew entrant
cials DI	P J	SE 100 in 2010
trials DI	P J	SE 100 in 2010
	ncials D ncials D ncials D prials A sumer Staples A rials D	ncials DP JS ncials DP N DP JS erials AQ N sumer Staples AQ JS erials DP N

To facilitate sectoral analysis, and to maintain comparability with the previous years' reporting, the companies have been clustered into seven key sectors (Figure 1)8. By number of companies, the predominant sectors on the JSE are Financials (32), Energy & Materials (26), Consumer Discretionary (12) and Consumer Staples (12). By market capitalisation (Figure 2), the JSE is dominated by Energy & Materials (37%), followed by Consumer Staples (24%) and Financials (18%). The samples for 2011 and 2012 are largely comparable in terms of the composition of companies per sector. The following companies were not included in the 2011 CDP sample: Acucap, Coronation Fund Managers, Datatec, Metorex, Oceana, Omnia Holdings Ltd, Optimum Coal Holdings, Palabora Mining Co Ltd, RMI Holdings, SA Corporate Real Estate Fund and Trencor. Of these companies, only Metorex and Oceana chose to respond to the CDP for 2012 (Table 1).

The following JSE-listed companies scored by PwC are also included in the Global 500 sample: Anglo American, Anglo American Platinum, AngloGold Ashanti, Aquarius Platinum, BHP Billiton, British American Tobacco, Capital Shopping Centres Group, Compagnie Financière Richemont SA, Kumba Iron Ore, Lonmin, Mondi PLC, MTN Group, Naspers, Old Mutual, SABMiller, Sasol, Standard Bank Group and Vodacom Group. All of these companies except Naspers responded to the CDP.

8. A more detailed description of the composition of each sector is presented on page 38.

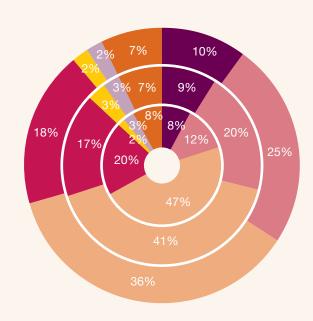
PERCENTAGE OF TOTAL MARKET FIGURE 2 **CAPITALISATION OF JSE 100 BY SECTOR** (OUTER WHEEL 2012 2011 2010)

(OUTER WE	1EEL 2	012, 2011, 2010)
	2010	2011
Consumer Discretionary	8%	9%
Consumer Staples	12%	20%
Energy & Materials	47%	41%
Financials	20%	5 17%
Health Care	2%	3%
Industrials	3%	3%
IT & Telecomms	8%	7%
	2012	
Consumer Discretionary	10%	(ZAR 601 671 359 719)
Consumer Staples	25%	(ZAR 1 502 487 131 184)
Energy & Materials	36%	(ZAR 2 232 955 371 388)
Financials	18%	(ZAR 1 115 261 648 309)
Health Care	2%	(ZAR 115 814 771 970)
Industrials	2%	(ZAR 133 918 603 004)
IT & Telecomms	7%	(ZAR 432 530 996 652)

#### The Carbon Disclosure Project (www.cdproject.net)

Since 2000 the Carbon Disclosure Project (CDP) has challenged the world's largest companies to disclose their greenhouse gas emissions, identify the perceived risks and opportunities that climate change presents for their business, and describe their strategic responses to these risks and opportunities. This year, CDP acts on behalf of 655 signatory investors holding US\$78 trillion in assets. The increase in fiduciary backing of the 2012 CDP questionnaire, up from 551 signatories in 2011, is illustrative of the investor community's growing interest in environmental, social and governance (ESG) issues.

The CDP has been engaging South African listed companies since 2007. In the first year it approached only the JSE Top40; since 2008 it is has been engaging the JSE 100. The CDP questionnaire focuses on three key areas: climate change management, risks and opportunity identification, and GHG emissions accounting and performance. By benchmarking company actions across and within specific sectors, the CDP reporting process encourages knowledge sharing, the setting of informed reduction targets and the uptake of best practice initiatives. The data from the CDP reporting process is made available to a wide audience including institutional investors, corporations, policymakers and advisors, public sector organisations, government bodies, academics and the public, with the aim of facilitating more informed engagement with business on climate change. In 2007, the CDP established the Climate Disclosure Standards Board (CDSB), an international organisation committed to the integration of climate change-related information into mainstream corporate reporting (Box 1; see page 13).



#### TABLE 2 OVERVIEW OF COMPANY RESPONSES

This table provides an overview of key data elements drawn from company responses. Where companies have isolated their South African emissions from their global emissions, this figure has been provided. This was not required by the CDP methodology. However, it is important to consider this information when interpreting the carbon

emissions data of large companies with global footprints. This is significant when making comparisons between different companies. The emissions data must be read with the explanatory information provided in Appendix 3.

Company	npany Sector Sub-Sector		2012 <sup>a</sup> Response	2011 Response	2010 Response	
Absa Group	Financials	Commercial Banks	AQ	AQ	AQ	
Acucap	Financials	Real Estate Management & Development	DP	/	DP	
Adcock Ingram	Health Care	Pharmaceuticals	AQ	AQ	AQ	
AECI Ltd Ord	Materials	Chemicals	AQ	AQ	AQ	
African Bank Investments Limited	Financials	Diversified Financial Services	AQ	AQ	DP	
African Rainbow Minerals	Materials	Metals & Mining	AQ	AQ	AQ	
Allied Electronics Corporation Ltd (Altron)	Industrials	Industrial Conglomerates	AQ	AQ	AQ	
Anglo American	Materials	Metals & Mining	AQ	AQ	AQ	
Anglo American Platinum	Materials	Metals & Mining	AQ	AQ	AQ	
AngloGold Ashanti	Materials	Metals & Mining	AQ	AQ	AQ	
Arcelor Mittal South Africa Ltd	Materials	Metals & Mining	AQ	AQ	AQ	
Aspen Pharmacare Holdings	Health Care	Pharmaceuticals	AQ	AQ	DP	
Assore Ltd	Materials	Metals & Mining	AQ np	NR	/	
Aveng Ltd	Industrials	Construction & Engineering	AQ	AQ	AQ np	
Avi Ltd	Consumer Staples	Food Products	DP	DP	DP	
Barloworld	Industrials	Trading Companies & Distributors	AQ	AQ	AQ	
BHP Billiton	Materials	Metals & Mining	AQ	AQ	AQ	
Bidvest Group Ltd	Industrials	Industrial Conglomerates	AQ	AQ	AQ	
Brait SE	Financials	Diversified Financial Services	DP	/	/	
British American Tobacco	Consumer Staples	Tobacco	AQ	AQ	/	
	Financials	Real Estate Investment Trusts	DP	NR	DP	
Capital Property Fund	Financials		AQ	AQ	AQ	
Capital Shopping Centres Group PLC		Real Estate Investment Trusts (REITs)				
Capitec Bank Holdings Ltd	Financials	Commercial Banks	AQ np	NR	/	
Clicks Group Ltd	Consumer Discretionary	Multiline Retail	AQ	AQ	AQ	
Compagnie Financière Richemont SA	Consumer Discretionary	Textiles, Apparel & Luxury Goods	AQ np	AQ np	AQ np	
Coronation Fund Managers Ltd	Financials	Diversified Financial Services	DP	/	/	
Datatec	IT	Software & Services	DP	/	NR	
Discovery Holdings Ltd	Financials	Insurance	AQ	AQ	AQ	
Emira Property Fund	Financials	Real Estate Investment Trusts (REITs)	AQ	AQ	DP	
Exxaro Resources Ltd	Materials	Metals & Mining	AQ	AQ	AQ	
Firstrand Limited	Financials	Diversified Financial Services	AQ	AQ	AQ	
Foschini Group Ltd	Consumer Discretionary	Specialty Retail	AQ np	AQ np	AQ np	
Fountainhead Property Trust	Financials	Real Estate Investment Trusts	DP	NR	DP	
Gold Fields Limited	Materials	Metals & Mining	AQ	AQ	AQ	
Grindrod Ltd	Industrials	Marine	AQ	AQ	AQ	
Growthpoint Properties	Financials	Real Estate Management & Development	AQ	AQ	AQ	
Harmony Gold Mining Co Ltd	Materials	Metals & Mining	AQ	AQ	AQ	
Hosken Consolidated Investments	Financials	Diversified Financial Services	AQ	AQ	AQ	
Hyprop Investments Ltd	Financials	Real Estate Management & Development	DP	NR	DP	
llovo Sugar Ltd	Consumer Staples	Food Products	AQ	AQ np	DP	
mpala Platinum Holdings	Materials	Metals & Mining	AQ	AQ	AQ	
mperial Holdings	Consumer Discretionary	Distributors	AQ	AQ	AQ	
nvestec Limited	Financials	Capital Markets	AQ	AQ	AQ	
JD Group Ltd	Consumer Discretionary	Specialty Retail	DP	DP	DP	
JSE Ltd	Financials	Diversified Financial Services	AQ	AQ	AQ np	
Kumba Iron Ore	Materials	Metals & Mining	AQ	AQ	AQ	
Lewis Group	Consumer Discretionary	Specialty Retail	AQ	AQ	AQ np	
Liberty Holdings Ltd (incorporating Liberty Life Group Ltd)	Financials	Insurance	AQ	AQ	AQ	
Life Healthcare Group Holdings Ltd	Health Care	Health Care Providers & Services	DP	NR	/	
Lonmin	Materials	Metals & Mining	AQ	AQ	AQ	
	Consumer Staples	Food & Staples Retailing	AQ	AQ	AQ	
Massmart Holdings Ltd						
Massmart Holdings Ltd  Mediclinic International	Health Care	Health Care Providers & Services	AQ	AQ	AQ	

Scope 1 South Africa (tCO2e)	Scope 1 Global (tCO2e)	Scope 2 Global (tCO2e)	Scope 1 & 2 Global (tCO2e)	Scope 3 Global (tCO2e)	Number of Scope 3 Categories Reported <sup>b</sup>	Verification/ Assurance Status <sup>c</sup>	Targets Reported <sup>d</sup>	2012 Score <sup>e</sup>	2011 Score
	19,821	324,290	344,111	14,927	1	VAA S1, S2, S3	Abs	85 B	74 B
16,024	17,077	32,456	49,533	57,007	6			84 D	80 E
296,582	329,909	247,569	577,478		0	VAA S1, S2		77 D	84 C
	20,468	39,044	59,512	13,961	4	VAA S1, S2, S3	Abs	93 B	74 D
	386,232	1,200,816	1,587,048	393,102	2			77 C	48 -
12,432	14,900	134,223	149,123	13,231	2	VAA S1, S2, S3		85 B	72 D
3,020,716	9,361,858	9,482,604	18,844,462	179,147,872	5	VAA S1, S2	Abs	94 A	81 C
534,431	540,537	5,450,076	5,990,613	264,535	10	VAA S1, S2, S3	Int	96 B	85 C
73,000	1,235,000	3,322,000	4,557,000	31,300	3	VAR S1, S2	Int	78 C	74 C
	10,961,907	4,487,197	15,449,104	910,467	2			78 D	82 D
	11,545	95,492	107,037	7,874	3			72 D	63 E
367,987	392,405	42,650	435,055	14,174	1	VAA S1		81 D	66 D
70.100	400.005	70 700	100.040	01.100		VAA 04 00		00.4	00 D
79,123	109,305	79,738	189,043	91,428	2	VAA S1, S2	Int	93 A	89 B
3,187,000	19,863,000	20,963,000	40,826,000	315,720,000	2	VAA S1, S2, S3	Int	71 B	73 B
144,290	375,234	303,291	678,525	13,685	1*	VAA S1, S2	Abs, Int	86 C	88 B
	355,410	373,680	729,090	187,436	3*	VAA S1, S2, S3	Int	86 B	91 A
	5,220	46,710	51,930		0	VAR S1, S2	Abs	71 C	63 C
	1,945	91,555	93,500	26,548	3	VAA S1, S2, VAR S3	Abs, Int	92 B	84 B
	4,170	29,719	33,889	14,246	5		Int	86 C	69 D
	1,182	221,691	222,873	3,194	3*			81 D	70 D
436,681	443,037	2,041,095	2,484,132	71,022,006	6	VAA S1, S2, S3	Abs	100 B	94 A-
	12,255	249,207	261,462	19,202	2	VAA S1, S2	Abs	97 A	88 B
622,591	1,009,662	4,835,940	5,845,602	791,968	8*	VAA S1, S2, S3	Abs, Int	99 A	98 A-
	340,438	24,326	364,764	10,161	3	VAA S1, S2	Abs, Int	88 B	63 E
	23	1,899	1,922	808,844	5	VAA S1, S2	Abs	95 B	83 C
32,851	67,166	3,249,167	3,316,333	296,129	3	VAA S1, S2, VAR S3	Int	98 B	91 B
126,231	135,418	306,350	441,768	4,905,581	4			77 C	78 D
180,086	319,024	174,429	493,453	1,037	1		Abs	70 D	
477,062	527,579	3,208,182	3,735,761	58,004	3*	VAA S1, S2	Abs	91 B	80 C
	873,154	167,126	1,040,280		0			80 D	55 D
740	2,057	41,789	43,846	17,806	4*	VAF S1, S2	Abs	90 C	79 B
	24	10,288	10,312	296	1			71 E	59 D
	387,813	519,329	907,142	25,744,756	6	VAR S1, S2	Abs	88 C	82 B
21,646	23,983	25,736	49,719	161	1	VAA S1, S2, S3		81 D	53 D
	2,650	44,773	47,423	3,057	2	VAA S1, S2, S3		76 D	71 C
	101 049	1 5/1 7/7	1 642 005	5 240	4	V/AA C1 C0 C0	let.	70 D	6E C
	101,248	1,541,747	1,642,995	5,348	1	VAA S1, S2, S3	Int Abo Int	78 B	65 C
	25,004 19,826	278,912 152,858	303,916 172,684	90,476	5 3*	VAA S2 VAA S1, S2, S3	Abs, Int Int	79 C 97 B	71 C 74 C
0		•				VAA 01, 02, 03	IIIL	97 B 65 E	740
	25,570	1,186	26,756	3,204	2			00 E	

Company	mpany Sector Sub-Sector		2012 <sup>a</sup> Response	2011 Response	2010 Response
MMI Holdings Ltd	Financials	Insurance	AQ	AQ	AQ
Mondi Limited - see Mondi PLC	Materials	Paper & Forest Products	AQ sa	AQ sa	/
Mondi PLC	Materials	Paper & Forest Products	AQ	AQ	AQ
Mr Price Group Ltd	Consumer Discretionary	Speciality Retail	DP	AQ	AQ np
MTN Group	Telecommunication Services	Wireless Telecommunication Services	AQ	AQ	AQ
Murray & Roberts Holdings Limited	Industrials	Construction & Engineering	AQ	AQ	AQ
Nampak Ltd	Materials	Containers & Packaging	AQ	AQ	AQ
Naspers	Consumer Discretionary	Media	DP	AQ np	AQ np
Nedbank Limited	Financials	Commercial Banks	AQ	AQ	AQ
Netcare Limited	Health Care	Health Care Providers & Services	AQ	AQ	AQ
Northam Platinum Ltd	Materials	Metals & Mining	AQ	AQ	AQ
Oceana	Consumer Staples	Food Products	AQ	/	/
Old Mutual plc	Financials	Insurance	AQ	AQ	AQ
Omnia Holdings Ltd	Materials	Chemicals	DP	/	/
Optimum Coal Holdings	Materials	Metals & Mining	DP	/	/
Palabora Mining Co Ltd	Materials	Metals & Mining	DP	/	/
Pick 'n Pay Holdings Ltd	Consumer Staples	Food & Staples Retailing	AQ	AQ	AQ
Pioneer Foods	Consumer Staples	Food Products	AQ np	AQ np	DP
Pretoria Portland Cement Co Ltd	Materials	Construction Materials	AQ	AQ	AQ
PSG Group	Financials	Diversified Financial Services	DP	DP	/
Redefine Properties Ltd	Financials	Real Estate Management & Development	DP	NR	DP
Reinet Investments	Financials	Diversified Financial Services	DP	DP	DP
Remgro	Financials	Diversified Financial Services	AQ	AQ	AQ
Resilient Prop Inc	Financials	Real Estate Management & Development	DP	NR	DP
Reunert	Industrials	Industrial Conglomerates	AQ	AQ	AQ np
Rmb Holdings Ltd - see Firstrand	Financials	Diversified Financial Services	AQ sa	AQ sa	AQ sa
RMI Holdings	Financials	Insurance	DP	/	/
Royal Bafokeng Platinum Ltd	Materials	Metals & Mining	AQ	AQ np	/
SA Corporate Real Estate Fund	Financials	Real Estate Investment Trusts	DP	/	DP
SABMiller	Consumer Staples	Beverages	AQ	AQ	AQ
Sanlam	Financials	Insurance	AQ	AQ	AQ
Santam Ltd	Financials	Insurance	AQ	AQ	AQ
Sappi	Materials	Paper & Forest Products	AQ	AQ	AQ
Sasol Limited	Energy	Oil, Gas & Consumable Fuels	AQ	AQ	AQ
Shoprite Holdings Ltd	Consumer Staples	Food & Staples Retailing	AQ np	AQ np	DP
Standard Bank Group	Financials	Commercial Banks	AQ	AQ	AQ
Steinhoff International Holdings	Consumer Discretionary	Household Durables	AQ	AQ np	AQ np
Sun International Ltd	Consumer Discretionary	Hotels, Restaurants & Leisure	AQ np	NR	DP
Telkom SA Limited	Telecommunication Services	Diversified Telecommunication Services	AQ	AQ	DP
The Spar Group Ltd	Consumer Staples	Food & Staples Retailing	AQ	AQ	AQ
Tiger Brands	Consumer Staples	Food & Staples Retailing	AQ np	AQ	AQ
Tongaat Hulett Ltd	Consumer Staples	Food Products	AQ	AQ	AQ
Trencor	Industrials	Marine	DP	/	DP
Truworths International	Consumer Discretionary	Specialty Retail	AQ	AQ	AQ
Vodacom Group	Telecommunication Services	Wireless Telecommunication Services	AQ	AQ	AQ
Wilson Bayly Holmes-Ovcon Ltd	Industrials	Construction & Engineering	AQ	AQ	AQ
Woolworths Holdings Ltd	Consumer Discretionary	Multiline Retail	AQ	AQ	AQ

#### Key to Table 2

a. AQ Answered Questionnaire

AQ np Answered Questionnaire but declined permission to make this public

AQ sa Answered Questionnaire via parent

company also in sample

DP Declined to Participate

NR No Response

"/" Company not included in the sample

b. Only scope 3 categories reported using the Greenhouse Gas
 Protocol scope 3 named categories (as provided in the Online
 Response System) are included when determining the number
 of categories reported. For companies that have reported

one or more additional categories of "Other upstream" and/or "Other downstream", these categories are excluded, but these companies are indicated with an asterisk (\*). Where companies have not provided emissions data or where they have not reported a named scope 3 category according to the GHG Protocol scope 3 standard, this column is blank.

c. 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.

**VAF:** Verification/Assurance reported as underway, first year. Companies have reported that the have verification underway but that it is the first year they have undertaken verification. In this

Scope 1 South Africa (tCO2e)	Scope 1 Global (tCO2e)	Scope 2 Global (tCO2e)	Scope 1 & 2 Global (tCO2e)	Scope 3 Global (tCO2e)	Number of Scope 3 Categories Reported <sup>b</sup>	Verification/ Assurance Status°	Targets Reported <sup>d</sup>	2012 Score <sup>e</sup>	2011 Score
	1,035	61,421	62,456	6,776	1*	VAA S1, S2, S3		78 D	75 D
878,910	4,546,577	1,224,901	5,771,478	2,061,268	5	VAA S1, S2, S3	Int	88 A	84 B
070,910	4,540,577	1,224,301	3,771,470	2,001,200		VAA 01, 02, 00		- 00 A	04 B
12,241	536,541	407,492	944,033	6,531	1			69 C	75 D
254,068	303,137	157,045	460,182	12,091	1			79 D	75 D
	160,738	633,116	793,854	16,346	3*	VAA S1, S2, S3	Abs	95 B	85 B
	777	162,742	163,519	54,439	3	VAR S1, S2, S3	Int	92 B	96 A-
0	34 157	156 758	190 915	2 637	1*	VAR S1, S2, S3	Int	84 B	85 B
	15,234	615,078	630,312	913	1	VAR S1, S2		81 D	84 B
74,275	134,537	58,057	192,594	13,973	3*	VAA S1, S2, S3	Int	95 B	
10,085	12,068	555,726	567,794	38,549	3	VAA S1, S2, VAR S3	Int	85 B	85 B
	79,021	528,135	607,156	40,623	2	VAA S1, S2	Abs	96 B	86 A-
	4,728,271	582,841	5,311,112	191,200	*	VAR S1, S2	Int	82 D	76 C
	366,625	364,897	731,522	48,236	3*	VAA S1, S2, S3	Abs	97 B	80 A-
	7,957	56,000	63,957	1,222	2*			83 D	41 -
	2,262	293,577	295,839	5,055	1*	VAA S1, S2		89 C	
244.065	1 410 125	702.072	2 102 200	206 712	1	VAP 61 60	Int	60.0	62.0
344,965	1,410,135 101	783,073 39,489	2,193,208 39,590	396,712 11,200	<u> </u>	VAR S1, S2 VAA S1, S2	Int Int	68 C 97 B	63 C 88 B
	159	7,807	7,966	5,906	4	VAA S1, S2. VAR S3	Int	90 B	80 B
2,829,691	4,632,448	1,785,962	6,418,410	919,464	4	VAR S1, S2, VAA S3	Int	88 C	80 C
61,396,000	65,469,000	9,308,000	74,777,000	1,121,576	3	VAA S1, S2	Abs, Int	81 C	79 C
	9,154	151,036	160,190	20,213	2	VAR S1, S2, S3		74 D	74 C
352,654	421,529	323,666	745,195	0	0			82 D	
	51,081	665,927	717,008	67,535	4	VAA S1, S2, S3		79 C	76 D
	37,430	43,560	80,990	5,750	2		Int	85 D	88 C
									68 D
475,296	593,732	433,837	1,027,569	485	4		Abs, Int	79 B	70 D
	412	76,240	76,652	8,894	3			73 D	72 E
13,415	46,680	384,292	430,972	27,629	4*	VAA S1, S2, S3	Int	88 B	81 B
	26,833	6,376	33,209	10,742	1			82 D	77 D
1,390	1,390	294,485	295,875	1,032,971	5*	VAA S1, S2, S3	Int	94 A	90 A-

case there is no verification statement available for assessment. **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.

**S1:** Scope 1; verification/assurance applies to scope 1 emissions. **S2:** Scope 2; verification/assurance applies to scope 2 emissions.

**S3:** Scope 3; verification/assurance applies to scope 3 emissions.

 d. Abs: Absolute target. Companies have reported 'absolute targets' or 'absolute and intensity targets' and have provided supporting information: percentage reduction from base year; base year; base year emissions; and target year.

**Int:** Intensity target. Companies have reported 'intensity targets' or 'absolute and intensity targets' and have provided supporting information: percentage reduction from base year; metric; base year; normalised base year emissions; and target year.

e. The 2012 score is comprised of the disclosure score number and performance score letter. Only companies that have scored more than 50 for their disclosure score are given a performance score.

#### CDP 2012: Evaluating the responses

## CDP 2012 response rate places South Africa as a global leader in CDP engagement

Figure 3 provides a summary of the CDP South Africa response rate for the past four years. A more detailed overview of the response of each JSE 100 company is provided in Table 2 and Chapter 3. Of the 100 companies approached this year, 78 answered the questionnaire and 22 declined to participate<sup>9</sup>. Two of the responding companies (Mondi Limited and RMB Holdings) answered through a parent company also listed in the JSE 100 sample. Thus, while 78% of companies answered the questionnaire in 2012, a total of 76 questionnaires were quantitatively analysed for this report. Of the 78 responding companies, eight made 'non-public' responses<sup>10</sup>. Two companies (*Mr Price Group* and *Naspers*) that participated last year declined to participate this year.

The response rate of 78% ranks South Africa as the second highest response rate internationally by geographic region. The South African sample follows the Europe 300 that had a response rate of 92%. South Africa compares very positively, particularly in comparison to developing region samples such as Brazil 80 (65%), China 100 (23%), India 200 (26%) and Russia 50 (8%) (Appendix 1).

9. Except when referring to overall disclosure rates, the total number of direct/unique companies in the sample that are AQ (not including SA) is used as a denominator for calculating "% of responding companies". This is in line with the CDP methodology.

10. For the purposes of this report, the data from these companies that are 'non-public' will only be used in aggregate trends and will not be reflected by company name.

Consumer Staples showed the highest levels of participation, with only one company out of 12 declining to participate. The Financials sector showed the worst response rate with 12 companies out of 32 declining to participate, predominantly from the Real Estate subsector.

Given the current economic and regulatory context this continuing high response rate by the South African business sector suggests that the assessment and disclosure of climate change risks and opportunities is seen as being of strategic, operational and reputational value. The comparative leadership being demonstrated by South African business parallels the leading role that it is seen to be playing internationally on issues such as corporate governance standards, and sustainability and integrated reporting.

11. This data is drawn from the CDP Global 500 analysis. For 2012 data values and indicators representing the x-axis categories, please see the Global Key Trends summary table in Appendix 1. Please note that for certain statistics the values for 2011 and 2012 are not one hundred percent comparable due to a change in calculation methodology between 2011 and 2012. As a result of the former, and as a result of a deviation in the 'responding companies' sample size analysed by the CDP global team, there are also slight discrepancies between certain values in these figures and the values represented for similar statistics elsewhere in the report. In most cases, the values for retrospective statistics appearing in figures elsewhere in the report have been recalculated using the 2012 methodology and are thus preferable for detailed comparisons.

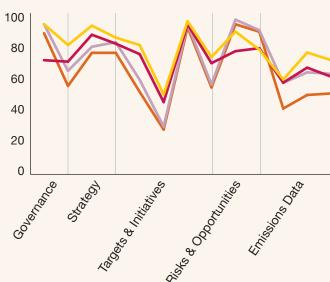
#### FIGURE 3 JSE 100 RESPONSE RATE BY YEAR

- Answered questionnaire public (AQ)
- Answered questionnaire not public (AQ np)
- Declined to participate (DP)
- No response (NR)



## FIGURE 4 KEY DISCLOSURE TRENDS OVER TIME: JSE 100 COMPARED WITH THE GLOBAL 500<sup>11</sup>

- Global 500 (2012)
- Global 500 (2011)
- South Africa JSE100 (2012)
- South Africa JSE100 (2011)



## Continuing improvement in disclosure on all indicators

This year saw further improvements in disclosure by most companies in all of the key disclosure areas.

The disclosure by South African companies compares favourably with the disclosure of the Global 500 on most parameters (Figure 4). Interestingly, while South African companies disclose more than their global counterparts on the perceived risks and opportunities, they lag in terms of disclosure and activities relating to various aspects of climate change governance. There is room for further improvement in several areas, including: the provision of incentives and integration in business strategy; the development and implementation of targets (particularly absolute targets); driving innovation in terms of products and services that enable third parties to reduce emissions; and increasing the verification of emissions data.

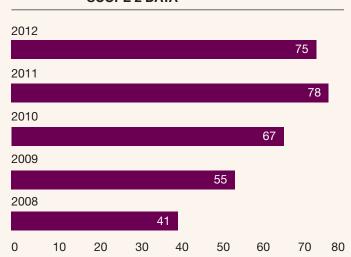
The year-on-year improvement in disclosure amongst South African respondents is reflected in the increase in average carbon disclosure score of all the publicly responding companies. This year the average score was 82, up from 76 in 2011, 74 in 2010, and 62 in 2009. This compares very favourably with the average disclosure score for the Global 500, which is at 77 (Table 7; see page 39). Similarly, the qualifying score for the Carbon Disclosure Leadership Index (CDLI) has improved from 87 in 2011 to 95 in 2012, with the leading score increasing from 98 to 100.

All but one of the 76 responding company responses that were analysed, disclosed figures for global scope 1 and/or scope 2 emissions<sup>12</sup>. This represents a significant improvement on the level of measurement and disclosure that was evident when the CDP first engaged the JSE 100 in 2008, when only 41 companies reported their emissions (Figure 5). There has also been a general increase both in the number of companies that are calculating and disclosing their scope 3 emissions, as well as in the number of categories and instances of scope 3 emissions reporting (Figure 6). This year 71 (93%) companies reported scope 3 emissions covering 10 categories, as compared with 61 companies (78%) in 2011. The nature of the scope 3 emissions disclosure by company and sector is reviewed further in Chapter 3.

The increase in the quality of disclosure through the CDP has been accompanied by a continuing high level of disclosure of emissions data in corporate annual reports. This year 74 companies (97% of respondents) reported GHG information in their annual reports, the same number of companies as in 2011. This voluntary public reporting of emissions data is further reflected by the fact that several companies that fall outside of the JSE 100 have chosen to voluntarily submit responses to the CDP.

12. Where data about GHG emissions has been noted either in the text of this report or in graphs, figures have been rounded.

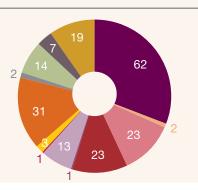
## FIGURE 5 NUMBER OF SA COMPANIES PROVIDING EMISSIONS FIGURES FOR SCOPE 1 OR SCOPE 2 DATA



#### FIGURE 6

#### NO OF COMPANIES REPORTING SCOPE 3 EMISSIONS WITH EMISSIONS DATA, BY CATEGORY

- Business travel
- Downstream leased assets
- Downstream transportation and distribution
- Employee commuting
- End-of-life treatment of sold products
- Fuel- and energy-related activities (not included in scopes 1 or 2)
- Investments
- Processing of sold products
- Purchased goods & services
- Upstream leased assets
- Upstream transportation & distribution
- Use of sold products
- Waste generated in operations





"The JSE's Socially Responsible Investment (SRI) Index now incorporates criteria focused on climate change, aimed at encouraging companies to consider and report on related indicators that assist in the mitigation of and adaptation to climate change...we are looking at how to improve price transparency in the South African market with the aim of encouraging more projects that reduce carbon emissions."

JSE

FIGURE 7

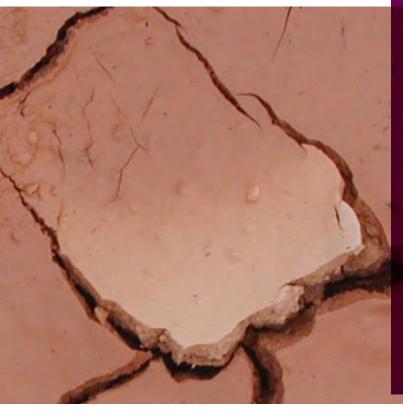
Verification of emissions data remains a strongly weighted issue in the CDP questionnaire and accompanying scoring (Box 2). This is understandable given the growing focus on the introduction of mandatory emissions reporting requirements and potential market and fiscal policy measures, both of which place a high expectation on emissions data being measurable, reportable and verifiable (MRV).

In this context it is encouraging to see an increase in the number of companies verifying their emissions. This year, 37 companies (49% of respondents) are approved as having emissions verification complete or underway for scope 1 and scope 2 emissions, as compared with 27 (35%) in 2011 (Figure 7). Twenty-two companies (29%) are approved as having verification complete or underway for scope 3 emissions. Overall, 51 companies (67%) reported emissions verification complete or underway for any of scope 1, 2 and 3 emissions. Of these 51 companies, 40 (53%) are approved ('reported and approved')<sup>13</sup> as having emissions verification complete or underway for any of scope 1, 2 or 3 emissions.

**VERIFYING SCOPE 1 AND 2 EMISSIONS (2012 & 2011)**  2012 Scope 1 2012 Scope 2 2011 Scope 1 2011 Scope 2 IT & telecommunications 67 Industrials 63 Health Care 0 Financials **Energy & Materials** 55 59 Consumer Staples Consumer Discretionary 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70

PERCENTAGE OF JSE 100 COMPANIES

<sup>13. &</sup>quot;Reported and approved" refers to criteria used to assess whether a company has effectively verified emissions data. These criteria are set out in the scoring methodology. Companies that do not provide required evidence of an appropriate verification process are not awarded performance points and are not regarded as having verified emissions



"Oceana commissioned a White Paper: The Fishing Industry's Role in Adapting to Climate Change. This was a first of its kind for the fishing industry in South Africa and possibly in the world. The paper outlines potential risks and possible adaptation measures and opportunities that may exist for the industry. Oceana has updated the paper and is now looking at the next steps in an adaptation management plan."

Oceana

## FIGURE 8 **KEY PERFORMANCE STATISTICS 2011** VS. 2012 2012 2011 Board or other senior management oversight Rewarding climate change progress Demonstration of climate change being integrated into overall business strategy 49 Disclose absolute targets 21 Disclose intensity targets Ahead of or met targets Evidence of disclosure of climate change information in mainstream filings or other external communications Emissions reductions due to implementation of activities

50

40

Number of companies

60

70

80

10

20

## BOX 2 **VERIFICATION OF EMISSIONS DISCLOSURE**

CDP is committed to increasing the level of verification of emissions disclosures to improve the quality of the information submitted by companies globally. This will allow for the increased use of the data in analysis and decision-making. Key drivers for verification include the increasing market demand from investors, customers, regulators, nongovernmental organisations and other stakeholders for assured and reliable climate data. Improving internal management processes that can be harnessed for competitive advantage is a key benefit of verification.

To support this, since 2011 the CDP has rewarded verification highly in both disclosure and performance scoring, and verification is a criterion for entry into the CPLI. In 2011, criteria were introduced to determine what is accepted as verification within CDP's scoring methodology. These criteria require that a verification statement is related to the relevant emission scope, clearly states the type of verification that has been given and the standard used, covers the current reporting year, and is undertaken by an independent third party. CDP has launched a verification white paper and consultation on a verification roadmap (2013-2018) aiming to encourage more companies to verify their climate data. Visit https://www.cdproject.net/verification to find out more.

The reported levels of verification of emissions decreased in the 2010-2011 year-on-year analysis as a result of CDP's strengthening the criteria relating to verification. As shown in Figure 7 there has been an encouraging improvement in verification of emissions in 2012.

## Evidence of improved climate change management and performance

The general improvement in carbon disclosure amongst South Africa's top listed companies has been accompanied by evidence of improved climate change governance practices, risk management and performance across most of the responding companies and sectors (Figure 8). This suggested improvement in performance is characterised by the increase in the average performance band from C in 2011 to B in 2012<sup>14</sup>, as well as by the increase in the number of companies qualifying for the Carbon Performance Leadership Index (CPLI). This year six companies qualified for the CPLI: *Anglo American PLC*, *Barloworld*, *FirstRand Limited*, *Gold Fields Ltd*, *Mondi PLC* and *Woolworths Holdings Ltd* (listed alphabetically), compared with two companies in 2011.

Underpinning this improved performance is the reported growing awareness by companies of the strategic significance of climate-related risks and opportunities. This is suggested not only by the number of companies

14. Due to the nature of the performance scoring, being a proxy for companies' carbon emissions measurement and management and continually being improved, a band rather than a score is disclosed for companies. The average discussed here is the mode for each respective sample. When comparing performance scores it is important to bear in mind that performance bandings are set relative to the company response data for each year. Performance scores are therefore not directly comparable. Year-on-year comparisons must be made with this caveat in mind.

"The interest in, and significance of the topic of climate change, is increasingly inducing changes in tenant and shareholder preferences. A growing shift in the consumer market towards consumer responsibility means that tenants and shareholders are increasingly taking matters of sustainability more seriously."

#### Growthpoint

reporting climate-related risks and opportunities, but (more significantly) by the growing number of companies awarded performance points<sup>15</sup> for managing risks in each risk category (Figure 9). While this figure shows a continuing gap between the number of companies that

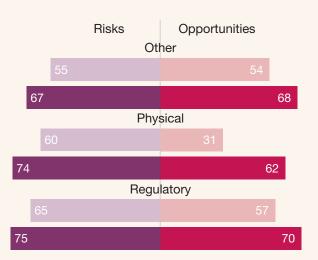
15. The performance points give an indication of companies that have disclosed risk management activities and implemented these activities. One point (amended from three points in 2011) was awarded if the actions to manage risks that are reported are currently being implemented, rather than only being in the planning stage.

## FIGURE 9 COMPANIES REPORTING CLIMATE RELATED RISKS AND OPPORTUNITIES

- Risks Managed
- Opportunities Managed
- Risks Reported
- Opportunities Reported

## FIGURE 10 PROPORTION OF DIRECT AND INDIRECT RISKS AND OPPORTUNITIES

- % direct
- % indirect
- % indirect (supply chain)



80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

Number of companies



Percentage of risks/opportunities reported

identify material risks and opportunities and those that report specific activities in response to these risks and opportunities, this gap is smaller than last year across all categories.

Looking in further detail at company disclosure on risks and opportunities, Figure 10 shows that between 2011 and 2012, there has been negligible change as to whether companies perceive climate-related risks to be either direct or indirect (impacting them either through client or supply-related channels). In terms of the projected timescales over which physical risks in particular are expected to materialise (Figure 11), in comparison with 2011 there has been a general shift in expectation that impacts are more likely to occur over the longer-term.

In the light of current policy discussion about a proposed carbon tax in South Africa, it is pertinent to consider how the JSE100 companies perceive the risks associated with such a tax. Figure 12 provides a "heat map" representing current company perceptions regarding the potential impact of the carbon tax, noting the extent to which the impact is seen to be high or low, and direct or indirect. Where companies have identified more than one risk in this regard, further coloured dots have been added to capture these risks. Companies are distinguished by sector.

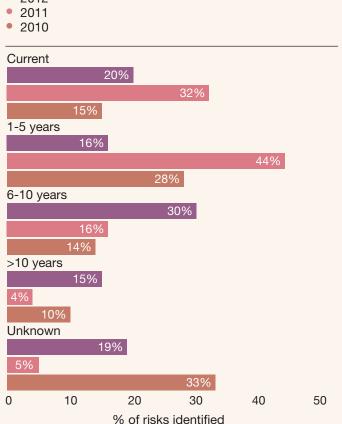
While most companies see the tax as predominantly having a direct impact, there is significant variance in perceptions regarding the severity of this impact, both "FirstRand encourages the use of carbon tax as a climate change mitigation strategy in South Africa. It advocates that the SA government should fully understand the economic and environmental impact of carbon taxation prior to formalising the carbon tax."

#### **First Rand**

within and between sectors. There is surprising variability in perceptions even within the more carbon-intense sectors, such as Energy & Materials and Industrials. In their responses, many companies specifically noted the nature of their engagement with policy makers on this issue, with responses varying between advocating for or against the proposed tax. Further detail is provided in the individual company responses available on the CDP website.

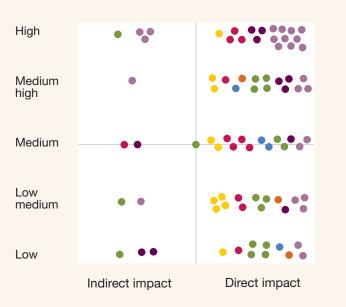
## FIGURE 11 TIMEFRAME FOR EXPECTED PHYSICAL RISK IMPACT (2012, 2011, 2010)

• 2012



## FIGURE 12 HEAT MAP OF PERCEIVED RISKS ASSOCIATED WITH A POSSIBLE CARBON TAX

- Consumer Discretionary
- Consumer Staples
- Energy & Materials
- Financials
- Health Care
- Industrials
- IT & Telecommunications



"The paper on carbon tax is considered too theoretical and does not take sufficient cognizance of South African circumstances to balance the need to reduce greenhouse gasses while keeping the economy on a job creating growth path. Rather, it focused on generating tax revenue with potentially major negative implications for the country."

#### **Mediclinic**

"Though Gold Fields supports mitigation actions and policies (as proven by its own commitment to reduce emissions), it has advocated for carbon budgets to be based on intensity values - as otherwise industry growth will be impacted – and for the carbon tax to be introduced gradually, while taking into account the impacts it will have on industry."

#### **Gold Fields**

"The Industry Task Team on Climate Change (ITTCC), of which Implats is a member, strongly advocates that a carbon tax is not viable in the foreseeable future and that alternative incentives should be investigated. Discussions are still ongoing in this regard."

#### **Impala Platinum**

In their response to these risks and opportunities, 73 companies (96% of respondents) reported having a board committee or executive body with responsibility for climate change, while 66 companies (87%) reported that climate related risks are 'integrated into multi-disciplinary company-wide risk management processes'. Fortyseven companies (62%) provide monetary incentives for management performance related to the achievement of climate change objectives

There has been a continued encouraging increase in the number of companies with GHG emissions reduction targets. This year 43 (57%) companies reported having emissions reduction targets, as compared with 40 companies in 2011. Figure 13 shows the number of companies within each sector that have adopted absolute and/or intensity-based emissions targets<sup>16</sup>. Consumer Staples has the highest proportion of companies with targets in place (73%), followed by Energy & Materials (68%) and Financials (63%). A detailed description of these targets is provided in Appendix 2, highlighting the significant variability in their scope, levels of ambition and time frames.

While the increase in voluntary emissions reduction targets is commendable, particularly given the current lack of regulatory requirement to reduce emissions, it is nevertheless anticipated that significant further progress will be required in emissions reductions to make a fair and equitable contribution to the global ambition of limiting

16. To be regarded as having targets in place, companies were required to state whether targets reported were absolute or intensity targets, and to provide data as evidence, including: percentage reduction from base year; base year; base year emissions; metrics for intensity targets; and target

#### FIGURE 13 COMPANIES WITH TARGETS BY SECTOR

- Absolute & Intensity Targets
- **Absolute Targets**
- Intensity Targets

Consumer Discretionary Consumer Staples **Energy and Materials** Financials Health Care 2 Industrials 2 1 IT & Telecomms 12 15 warming to 2°C on pre-industrial levels.<sup>17</sup> Given the economic development imperative in South Africa, it is clear that companies (and the government) are faced with significant trade-offs in seeking to find a balance between short-term economic growth, job creation and emissions reduction. Finding an appropriate balance will pose a particularly difficult challenge.

As in 2010 and 2011, energy efficiency initiatives relating to processes and to building services is the most common emission reduction activity type. Behavioural-change activities (including awareness-raising aimed at reducing energy consumption), recycling, and switching from paper to electronic communication, are also commonly reported (Figure 14 and Figure 15).

Figure 15 shows the payback periods for various emissions reduction activities, with behavioural change, transportation and energy efficiency initiatives demonstrating significant potential for short payback periods. Given the context of increasing energy prices and current constraints with electricity generation in South Africa, there is a noticeable focus on energy efficiency initiatives as a contributor to GHG emissions reductions. This trend is evident in the notable decrease in scope 2 emissions (Figure 16).

"The issue of water supply and security is regarded as one of our material risks and, given that climate change is anticipated to impact water availability in South Africa, Sasol has entered into a number of external water conservation partnerships and is focused on reducing the water intensity of its operations."

Sasol

17. This commitment was reaffirmed at the UNFCCC COP17 meeting in Durban: Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011. http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf

18. This graph does not represent companies whose overall emissions have decreased due to emissions reduction activities; only those who have experienced a decrease in at least a portion of their emissions specifically due to emissions reduction activities for either scope 1&2 or scope 3 emissions.

## FIGURE 14 PERCENTAGE OF RESPONDING COMPANIES ACHIEVING EMISSIONS REDUCTIONS SPECIFICALLY DUE TO EMISSIONS REDUCTION ACTIVITIES<sup>18</sup>

#### Consumer Discretionary Consumer Staples **Energy & Materials** 68% **Financials** 63% Health Care Industrials 50% IT & Telecommunications 100% 20 40 60 80 100%

## FIGURE 15 PAYBACK PERIODS FOR EMISSION REDUCTION INITIATIVE

Emission Reduction Activity	<1 year	1-3 years	>3 years
Transportation: use	75%	0%	25%
Transportation: fleet	17%	33%	50%
Product design	50%	50%	0%
Process emissions reductions	27%	36%	36%
Low carbon energy purchase	0%	0%	100%
Low carbon energy installation	26%	30%	43%
Fugitive emissions reductions	20%	0%	80%
Energy efficiency: processes	30%	34%	37%
Energy efficiency: building services	28%	38%	34%
Energy efficiency: building fabric	18%	18%	64%
Behavioural change	79%	7%	14%

## Reported greenhouse gas emissions of South Africa's top companies has reduced

The total reported direct (scope 1) emissions from the responding JSE 100 companies decreased from 137.2 million tCO2e in 2011 to 132.9 million tCO2e in 2012. There was similarly a reduction in scope 2 emissions, from 98.4 million tCO2e in 2011, to 86.6 million tCO2e<sup>19</sup> in 2012 (Figure 16). While it is not possible to provide a detailed explanation for this decrease in emissions, there are a few contributory factors that can be identified.

- The largest decrease in scope 1 emissions by sector was in Energy & Materials, which saw a decrease in emissions of almost 5 700 000 tCO2e. This is greater than the absolute decrease of 4 000 000 tCO2e for the JSE 100 sample taken as a whole (including Energy & Materials). In other words, increases in scope 1 emissions for other sectors cancelled out a portion of these reductions.
- One of the top ten emitters from the 2011 sample (Evraz Highveld Steel & Vanadium with scope 1 emissions of 2 799 579 tCO2e in 2011) is no longer included in the JSE 100 sample.
- Substantial decreases in scope 1 emissions were also reported by Harmony (a reduction of 2 036 045 tCO2e), Arcelor Mittal South Africa Ltd (a reduction of 976 945 tCO2e), Anglo American and African Rainbow Minerals (reductions of almost 0.5 million tCO2e each), and Gold Fields (reduction of 0.3 million tCO2e).

The number of companies reporting scope 1 and scope 2 emissions remains high, building on progress over the past five years (Figure 5). As in previous years, a few carbonintensive companies continue to dominate South Africa's direct (scope 1) GHG emissions. South Africa's total emissions level from all sources has been estimated at approximately 510 million tCO2e<sup>20</sup>. Placing this in context, Eskom's publicly reported calculated emissions of carbon dioxide for the year ending March 2012, is 231.9 million tCO2e21. Additionally, Transnet's total GHG emissions for 2011/2012 were reported at 4.3 million tCO2e<sup>22</sup>. For the 75 JSE companies that reported their emissions - including those companies whose emissions have not been made public – the total scope 1 emissions (excluding emissions associated with Eskom-generated electricity usage) for the South African operations is 96 million tCO2e<sup>23</sup>.

19. These figures refer to global emissions. Where companies have operations in more than one country or region, some elected to account for South African emission separately, allowing for direct comparison with other South African emissions. However, some companies did not specify South African emissions. This should be borne in mind when comparing companies' emissions. See Table 2.

20. Witi, J. 2011. Department of Environmental Affairs. Personal communication, 26 September 26 and 9 October 2012. The figure used here is the same as in 2011. This is because the Department of Environmental Affairs is currently updating the national greenhouse gas inventory for the period 2001-2010. An updated figure for 2011 and 2012 could not be provided for this reason.

- 21. Eskom Annual Integrated Report 2012: Partnering for a Sustainable Future.
- 22. Transnet Sustainability Report 2012
- 23. This figure for total South African scope 1 emissions assumes that for all companies that do not specify particular South African scope 1 emissions, that the figure provided for global scope 1 emissions is identical with South African scope 1 emissions.

"We have committed to reducing the GHG emissions intensity of all our operations by 15% by 2020 on a 2005 baseline, and to reducing our absolute GHG emissions by 20% for all new CTL plants commissioned before 2020, and by 30% for plants commissioned before 2030 (with the average 2005 CTL design as the baseline)."

#### Sasol

"Mondi will progress towards becoming a carbon-neutral company in the longer term, by increasing the proportion of renewable resources for primary energy needs against a 2010 base year and by becoming selfsufficient in electrical energy in the longer term."

Mondi

FIGURE 16 TOTAL SCOPE 1 AND 2 EMISSIONS
DISCLOSURE YEAR-ON-YEAR (TCO2E)

2012 2011

2010

#### Scope 1

132 937 118 (99% of respondents)

137 242 088 (99% of respondents)

130 147 494 (93% of respondents)

Scope 2

86 578 579 (99% of respondents)

98 408 917 (100% of respondents

103 447 411 (94% of respondents)

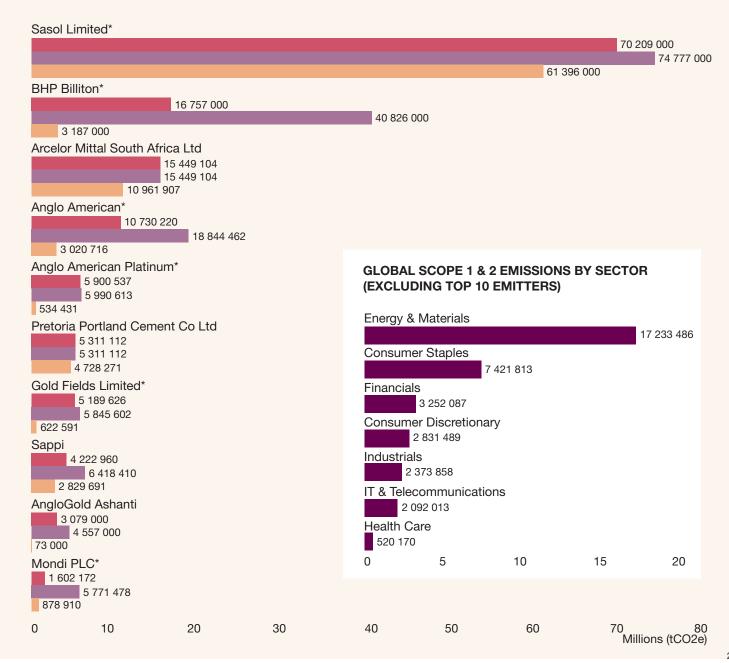
20 40 60 80 100

120 140 160 Millions (tCO2e) Figure 17 provides a breakdown of the GHG emissions of the top ten emitters (in terms of their global scope 1 and 2 emissions), noting their global scope 1 and 2 emissions, their South African scope 1 emissions and their combined South African scope 1 and 2 emissions. The companies are ranked according to their South African scope 1 and scope 2 emissions levels. The top ten emitting companies are all in the Energy & Materials and Industrials sectors.

In terms of direct local emissions, the data highlights the continuing predominant contribution of a few large emitters. Sasol continues to produce significantly higher emissions than all other companies in the JSE100, with reported annual scope 1 emissions of 61.4 million tCO2e. This is almost half the total scope 1 emissions for the entire sample. They are followed by *BHP Billiton* (3.2 million tCO2e), *Anglo American* (3 million tCO2e), and *Sappi* (2.8 million tCO2e). These emissions should be considered in the context of Eskom's publicly reported calculated emissions of carbon dioxide for the year ending March 2012 is 231.9 million tCO2e, representing 45% of South Africa's total emissions. All companies in the JSE 100 together with *Eskom* account for 64% of the country's estimated emissions.

#### FIGURE 17 TOP 10 EMITTERS (GLOBAL SCOPE 1 & 2) LISTED IN ORDER OF SA SCOPE 1 & 2 EMISSIONS

- SA Scope 1 & 2
- Global Scope 1 & 2
- SA Scope 1
- \* Verification/assurance reported and approved for scope 1 and scope 2 emissions





## CDP 2012: Voluntary respondents outside of the JSE 100 sample

This year, 13 companies outside of the JSE 100 sample voluntarily submitted responses through the CDP online response system. This number represents a significant increase from last year's two companies (of which Oceana is now part of the JSE 100 sample) and includes: Basil Read, Caxton and CTP and Publishers and Printers, Distell Group Ltd, Eskom, Evraz Highveld Steel And Vanadium Limited, Group Five Ltd, Hulamin, Industrial Development Corporation, KPMG South Africa, Mix Telematics, Raubex Group Limited, South African Post Office and Transnet. These companies represent a range of sectors to contextualise the data provided in Table 3 see the appropriate sector summary (pages 38 – 55). Data submitted by these organisations has not been included in the main analysis, and these organisations were not scored for carbon disclosure, or performance.

"Evraz Highveld's plans to devise and implement a climate change strategy will better prepare the company for potential carbon regulation thus giving them a strategic advantage over competitors in the industry."

#### Evraz

"Climate change risks and opportunities identified within the integrated management system...include risks associated with possible reduced quality of final product due to possible climate change related reduction in quality and quantity of raw material (e.g. grapes) and risks such as reduced water availability and reduced water quality due to physical climate change impacts. Reduced run-off due to reduced precipitation could impact on the quality of water especially salinity."

#### **Distell**

"It is expected that Transnet's emissions will increase over the next five years due to an aggressive growth mandate that will provide for infrastructure investment, job creation, local supplier development and increase South Africa's overall global competitiveness. The growth strategy supports a modal shift of freight from road to rail and sufficient pipeline capacity to service the inland market. The net impact will be a reduction in GHG emissions in South Africa's transport sector."

#### **Transnet**

TABLE 3 OVERVIEW OF VOLUNTARY COMPANY RESPONSES OUTSIDE THE JSE 100 SAMPLE

Company	Sector	Sub-Sector	2012 Response	Scope 1 South Africa (tCO2e)	Scope 1 Global (tCO2e)	Scope 2 Global (tCO2e)	Scope 1 & 2 Global (tCO2e)	Scope 3 (tCO2e)	Number of Scope 3 Categories Reported	Verification/ Assurance Status Reported	Targets Reported
Basil Read	Industrials	Construction & Engineering	Voluntary		62,028	4,152	66,180	156,095	1		
Caxton and CTP Publishers and Printers	Consumer Discretionary	Media	Voluntary		15,551	97,065	112,616		0		Abs
Distell Group Ltd	Consumer Staples	Beverages	Voluntary		66,382	62,582	128,964		0	VAR S1, S2	
Eskom	Energy & Materials	Uncategorised	Voluntary		231,902,967		231,902,967		0	VAR S1	
Evraz Highveld Steel And Vanadium Limited	Materials	Metals & Mining	Voluntary		2,432,193	1,555,882	3,988,075		0		Abs
Group Five Ltd	Industrials	Construction & Engineering	Voluntary	52,606	74,481	91,349	165,830	7,958,763	5	VAR S1, S2	
Hulamin	Materials	Metals & Mining	Voluntary		111,296	246,683	357,979	7,031	1	VAR S1, S2, S3	
Industrial Development Corporation	Uncategorised	Uncategorised	Voluntary (non- public)								
KPMG South Africa	Financials	Diversified Financial Services	Voluntary		171	11,862	12,033	3,132	2		Int
Mix Telematics	Consumer Discretionary	Auto Components	Voluntary	256	520	3,040	3,560	2,902	5		
Raubex Group Limited	Industrials	Construction & Engineering	Voluntary		120,487	11,332	131,819		0		
South African Post Office	Industrials	Air Freight & Logistics	Voluntary		29,670	15,677	45,347	200	1	VAF S1, S3	Abs
Transnet	Uncategorised	Uncategorised	Voluntary		571,069	3,737,993	4,309,062	6,836	1		

To be read along with the key for Table 2 on page 18 and supporting information on exclusions and qualifying remarks in Appendix 4.

TABLE 4 EMISSION REDUCTION TARGETS FOR VOLUNTARY RESPONDENTS OUTSIDE THE JSE 100 SAMPLE

Company	Sub-sector	Туре	Scope	Target Year	Base Year	Target
Consumer Discretionary						
Caxton and CTP Publishers and Printers	Media	Absolute	Scope 1+2	2011	2010	2% reduction from base year (128 962 tCO2e reported in base year). 100% of target reductions achieved.
Energy & Materials						
Evraz Highveld Steel And Vanadium Limited	Metals & Mining	Absolute	Scope 1+2	2012	2011	1% reduction from base year (4 611 082 tCO2e reported in base year). 100% of target reductions achieved.
Financials						
KPMG South Africa	Diversified Financial Services	Intensity	Scope 1+2+3	2015	2010	15% reduction in tCO2e per FTE employee from base year (14 783 tCO2e reported in base year). 100% of target reductions achieved.
Industrial						
South African Post Office	Air Freight & Logistics	Absolute	Scope 1	2012	2011	2% reduction from base year (29 670 tCO2e reported in base year). 67% of target reductions achieved.
South African Post Office	Air Freight & Logistics	Absolute	Scope 2	2012	2011	5% reduction from base year (16 522 tCO2e reported in base year). 41% of target reductions achieved.

## 2. The 2012 CDP Leaders

Each year company responses are scored for the quality of their climate change disclosure and performance. The highest scoring companies qualify for the CDP's Carbon Disclosure Leadership Index (CDLI) and Carbon Performance Leadership Index (CPLI). A description of the scoring methodology and criteria for inclusion is available on the CDP website: https://www.cdproject.net/guidance. Incite Sustainability undertook the scoring of all the JSE 100 companies, other than those South African companies that fall within the Global 500 who were scored by PwC as part of their international review<sup>24</sup>.

## The Carbon Disclosure Leadership Index (CDLI)

To be included in the CDLI, companies must provide a publicly available response using the Online Reporting System (ORS), and achieve a disclosure score within the top 10% of the reporting population.

In assessing the companies that have qualified for the CDLI it is important to note that the scoring is based solely on the information disclosed in the company's CDP response; it does not consider other carbon or wider sustainability disclosures provided by companies through their sustainability reports, annual reports, or through meetings and engagement with stakeholders and

24. The following companies fall within the Global 500 sample and were scored by PwC: Anglo American, Anglo American Platinum, AngloGold Ashanti, Aquarius Platinum, BHP Billiton, British American Tobacco, Capital Shopping Centres Group, Compagnie Financière Richemont SA, Kumba Iron Ore, Lonmin, Mondi PLC, MTN Group, Old Mutual, SABMiller, Sasol, Standard Bank Group and Vodacom Group.

policymakers. While a high CDLI score is an indication of the company's transparency and accountability, it is not a metric of a company's performance in relation to climate change management. The scoring makes no judgement over absolute levels of emissions, emission reduction achievements, or carbon intensity.

The South African 2012 CDLI is presented in Table 5.25

- The results demonstrate a continuing improvement in disclosure across the responding companies. This year the average carbon disclosure score of all publicly responding companies is 82, as compared with 76 in 2011, 74 in 2010, and 62 in 2009. The range of scores for the top 10% of companies (the CDLI) has also improved, from 87-98 in 2011 to 95-100 in 2012.
- The companies in the 2012 CDLI come from four different sectors: Energy & Materials (5), Financials (4), Consumer Staples (2) and Health Care (1).
- Exxaro Resources Ltd qualified as the overall leader with 100 normalised points, followed by Gold Fields Ltd with 99, and Harmony Gold Mining Co Ltd with 98. Gold Fields Ltd was last year's highest scorer with 98.
- Four companies have been in the CDLI for three consecutive years: Exxaro Resources Ltd, Gold Fields Ltd, First Rand and Sanlam.

25. The CDP recognises that not all questions are applicable to all companies. A normalised scoring approach was used whereby the number of points awarded to a company was divided by the number of points available depending on the route they took in answering the questionnaire. This score was multiplied by 100 to obtain a rating that is comparable across all sectors.

#### TABLE 5 THE JSE 100 CARBON DISCLOSURE LEADERSHIP INDEX (CDLI)

Rank	Company	Sector	2012 Score	Score
1	Exxaro Resources Ltd	Materials	100	94
2	Gold Fields Ltd	Materials	99	98
3	Harmony Gold Mining Co Ltd	Materials	98	91
4	FirstRand Ltd	Financials	97	88
	Mediclinic International	Health Care	97	74
	Remgro	Financials	97	80
	Sanlam	Financials	97	88
8	Anglo American Platinum	Materials	96	85
	Pick 'n Pay Holdings Ltd	Consumer Staples	96	86
10	Growthpoint Properties	Financials	95	83
	Nampak Ltd	Materials	95	82
	Oceana	Consumer Staples	95	Not in JSE 100 sample

Companies in orange were not in the JSE 100 CDLI in 2011 Companies in purple have been in the JSE 100 CDLI for three consecutive years

## The Carbon Performance Leadership Index (CPLI)

All companies that received a disclosure score of more than 50<sup>26</sup> were also rated for their climate performance. Companies' climate performance is grouped into five bands: A, B, C, D and E. These are defined on the CDP website.

To be eligible for the Carbon Performance Leadership Index, companies must:

- Provide a publicly available response using the Online Reporting System (ORS);
- Achieve a minimum disclosure score of 50% and a performance score greater than 85;
- Achieve a GHG emission reduction of at least 3% as a result of emissions reduction activities over the last year;
- Disclose gross global scope 1 and scope 2 figures; and
- Score maximum performance points on question 13.1a (absolute emissions performance) and for verification of scope 1 and scope 2.

Companies that achieve a performance score of greater than 85, but that do not meet the other CPLI requirements, are classed as Performance Band A- and are not included in the CPLI. No companies in the JSE 100 sample that fell into this category.

26. Disclosure scores of less than 50 do not necessarily indicate poor performance; rather, they indicate insufficient information to adequately evaluate performance. It is, however, reasonable to assume that companies that do not disclose well are not likely to be the best performers in terms of taking action on climate change.

The performance score provides an indication of the extent to which companies are addressing the potential opportunities and risks presented by climate change. It is important for investors to keep in mind that the carbon performance band simply recognizes evidence of action. The CPLI is not a measure of how "low carbon" a company is, nor does it provide an assessment of the extent to which a company's actions have reduced carbon intensity relative to other companies in its sector. For the most informed understanding of a company's performance it is important to consider the individual company disclosures (available on the CDP website).

Table 6 lists those companies that qualified for an A performance band. This year six companies qualified for the CPLI: Anglo American PLC, Barloworld, FirstRand Limited, Gold Fields Ltd, Mondi PLC and Woolworths Holdings Ltd (listed alphabetically). This compares with last year's CPLI, where only two companies qualified: British American Tobacco and Gold Fields Ltd. Details on the distribution of performance bands by sectors are provided in Chapter 3.

## Recognising leadership on carbon performance and disclosure

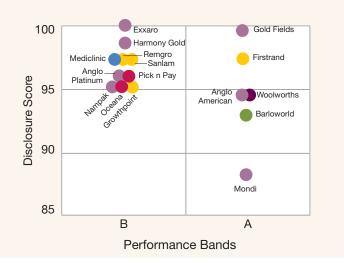
Figure 18 identifies those companies rated best in terms of disclosure and performance. Although the CDP scoring methodology does not provide a comprehensive assessment of companies' performance on climate change, the results are seen to be sufficiently robust to provide an indication of those companies leading the way.

TABLE 6 THE JSE 100 TOP PERFORMERS AND CARBON PERFORMANCE LEADERSHIP INDEX (CPLI)

Company (listed alphabetically)	Sector	2012 Performance Band	2011 Performance Band
Anglo American	Materials	_	С
Barloworld	Industrials		В
FirstRand Limited	Financials	^	В
Gold Fields Limited	Materials	- A _ (CPLI)	A
Mondi PLC	Materials	_ (/	В
Woolworths Holdings Ltd	Consumer Discretionary		A-

FIGURE 18 TOP DISCLOSURE SCORES VS. TOP
PERFORMANCE BANDS FOR THE JSE
100 SAMPLE

- Consumer Discretionary
- Consumer Staples
- Energy & Materials
- Financials
- Health Care
- Industrials
- IT & Telecommunications



## Guest Commentary



#### **Industrial Development Corporation**

South Africa has one of the most carbon-intensive economies in the world due to its heavy reliance on coal for energy generation. This makes the greening of its energy mix a national imperative.

According to the Integrated Resource Plan (IRP2010), the South African government envisages that renewable energy will contribute 42% of the total generation capacity of the country by 2030. The New Growth Path contributes to this goal by endorsing a considerable amount of clean energy infrastructural investment.

According to research conducted in 2011 by the IDC's Research and Information Department, the Development Bank of Southern Africa and research group TIPS, greening the local economy could potentially create more than 460 000 direct jobs by 2025.

#### Strategy

As South Africa transitions to a low-carbon economy, IDC has earmarked R25 billion over the five years to 2015/16 for the development of green industries within the country.

The IDC's objective is to develop, grow and invest in green industries by focusing on investments that enhance environmental protection and support the reduction of carbon emissions. Investments will further aim to establish and build a local green industry value chain.

Ensuring an enabling regulatory environment is key to meeting these objectives.

The Department of Energy's (DoE) Renewable Energy Procurement Programme (REPP) was launched in August 2011 to administer five procurement rounds which aim to see a total of 3 625 MW of generation capacity being created by 2013. The IDC has played an active role in the REPP process as a development partner and financier.

#### **Performance**

The IDC has committed R5.2 billion to REPP's first round of bidding. This represents two concentrated solar projects, four wind projects and six photovoltaic projects. In the second bidding round, seven projects with a total capacity of 380 MW and funded by the IDC were awarded preferred bidder status. This represents an additional R2.3 billion investment. In total, the IDC has committed R7.5 billion worth of investments in green industries, of which R1.5 billion goes directly to local broad-based black economic empowerment (B-BBEE) communities.

In partnership with KfW, a German development bank, the IDC launched the R500 million Green Energy Efficiency Fund (GEEF) to stimulate investments by local entrepreneurs focusing on energy efficiency of at least 20%, as well as self-use renewable energy projects.

About R96 million (19%) of the R500 million fund has been allocated, representing eight projects ranging from co-generation to waste-to-energy (bio-gas from abattoir waste), solar water heating and rooftop photovoltaic. Demand-side energy management and energy usage



concerns will be addressed by funding energy servicing companies (ESCOs) responsible for the mass roll out of energy efficiency technologies.

An impact assessment and monitoring tool will be developed to monitor the energy efficiency and carbon saving on an annual basis.

The IDC continues to chart new frontiers in the area of solar water heaters (SWH) through innovative funding structures. These combine carbon finance and rebates offered under Eskom's Integrated Demand Management (IDM) programme. As an example, the IDC provided finance to the Solar Academy of Sub-Saharan Africa (SASSA), a local solar water heater company. SASSA has since rolled out more than 80 000 Low Pressure Solar Water Heaters (LPSWH) and 2 500 High Pressure systems nationally. In total, 200 000 solar water heaters will be installed covering nine sites and creating over 800 jobs. Solar water heater roll outs of this kind, both small and large scale, have great potential as carbon trading projects either under the Clean Development Mechanism (CDM) - formulated as part of the Kyoto Protocol in 1997 - or through voluntary markets.

The CDM allows developed nations to purchase carbon credits through approved renewable energy projects in developing countries to offset their own emissions. The SASSA project will sell carbon credits on the voluntary market through Verified Emission Reductions (VER). To date, SASSA has the only registered CDM project for

Low Pressure Solar Water Heaters (LPSWH) in the world. This makes SASSA's LPSWHs eligible for an additional revenue stream from the carbon credits, thus improving the sustainability of the SASSA business model.

#### **Future focus**

The IDC continues to engage government and other key stakeholders in support of the development of a sustainable market for bio-ethanol. Following the approval of the emission and pollution mitigation strategy by IDC's Executive Committee in early 2012, the corporation will develop funding options for waste management and recycling technologies.

The IDC will continue exploring opportunities to expand South Africa's capacity in the green energy arena with projects including renewable energy capacity, fuel-based green energy, energy efficiency, waste management, waste recycling and the expansion of biofuels. Recent budgetary announcements in support of the roll-out of SWHs are a positive market signal for energy efficiency and demand-side management interventions. In evaluating future prospects, increased focus will be on the contribution to local production, B-BBEE participation and job creation.

Guest Commentary





#### **South African Post Office**

Sustainable development is defined as "development which meets the needs of the present without compromising the ability for future generations to meet their own needs." <sup>27</sup>

South African Post Office (SAPO) has in 2007 adopted triple bottom line reporting as a clear commitment towards sustainable development. SAPO takes cognisance of the challenges facing mankind as a result of climate change and its impact on the ecology, society and the economy. Climate change is arguably the biggest challenge in the 21st century facing mankind.

Climate change has the potential to affect each of the social factors of sustainable development: health, employment, incomes and livelihoods, gender exclusion, education, housing, food security and poverty. <sup>28</sup>

Not only is the South African Post Office concerned about the business risk that climate change poses to our operations as a result of floods, hail, snow and other adverse climatic conditions which disrupt our ability to deliver services to the communities we serve, but we are even more concerned about the social impacts of climate change on communities we serve and on the 18000 employees of SAPO. At SAPO we take employee wellness seriously.

27. World Commission on Environment and Development Our Common Future (1987)

28. Intergovermental Panel on Climate Change (IPCC) Fourth Assessment Report (2007)

The World Health Organisation (WHO) estimates that poor environmental quality contributes to 25% of all preventable illnesses in the world. Health is both a resource for, as well as an outcome of, sustainable development. The goals of sustainable development cannot be achieved when there is a high prevalence of debilitating illnesses and poverty. Environmental degradation, mismanagement of natural resources, and unhealthy consumption pattern and lifestyles impact on health. Ill health, in turn, hampers poverty alleviation and economic development.

We have a complex and sophisticated wellness programme which has both medical surveillance aspect which is compulsory for employees, this portion of wellness is preventative in its character where we check blood pressure, blood glucose, measure body mass index (BMI), eye testing and other medical check-up basics and voluntary counselling and testing (VCT) for HIV/AIDS management.

We also have a strong and vibrant employee voluntarism campaign and take part in the 16 days of activism against women and children through partnership with other businesses and NGOs. Yearly, through employee volunteers, we plant hundreds of trees across the country in all the provinces, primarily in schools. Trees play a major role as carbon sinks but are beneficial to communities for providing shade, and fruit trees provide both shade and fruits.



Our sustainability vision is to be among the leading companies and in particular the leading state owned company in environmental management and sustainable development. All our sustainability goals are in pursuance of the sustainability vision and people are core to our business.

We are proud to sponsor the Carbon Disclosure Project for the second year running.

#### Serame Kotsi

Group Executive: Mail Business

# 3. Sector analysis

Understanding the sectoral context in which each company operates - the risks and opportunities it faces, and the feasible mitigation and adaptation options it can adopt - enhances the assessment of company disclosure and performance, and facilitates more meaningful comparison between companies. This section reviews the CDP 2012 results in the context of the following seven 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
- 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
- Information Technology & Telecommunications - Electronic Equipment & Instruments, Wireless Telecommunication Services, Integrated Telecommunication Services.

Each of these "sector snapshots" contains:

- A brief analysis of the broad implications of climate change for that sector (this analysis reflects the iudgement of the authors of this report, and not the responses of the companies).
- · A summary of the key risks and opportunities reported by the companies (this reflects what the companies reported and is not intended to be a detailed account of the actual sectoral risks and opportunities).
- The CDP sectoral response rate over the past four
- A breakdown of the sectoral disclosure scores by questionnaire section, comparing the sector against the JSE 100 average and the CDLI.
- A graphical representation of individual company disclosure scores and performance bands
- A brief review of the scope 3 categories reported within the sector.
- A summary of the company response type, emissions data (scope 1 South Africa, scope 1 Global, scope 2 Global and emissions intensity) and information on targets and verification.

#### FIGURE 19 SECTORAL ANALYSIS OF RESPONSE RATE AND PERFORMANCE BAND

DP DScore < 50

Ε

- D C
- B A

33%

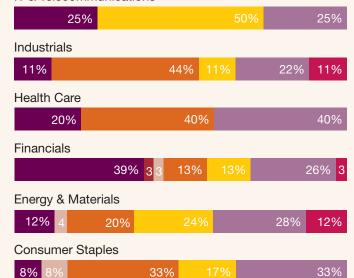
8%

100%

#### IT & Telecommunications

Consumer Discretionary

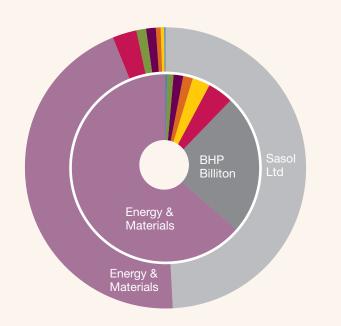
25% 8%



40 Totals in the above graph may not add up to 100% due to the rounding off of percentage values.

#### **SCOPE 1 (OUTER RING) AND SCOPE 2** FIGURE 20 REPORTED EMISSIONS BY SECTOR

- Sasol Limited
- **BHP** Billiton
- **Energy & Materials**
- **Consumer Staples**
- Industrials
- Consumer Discretionary
- IT & Telecommunications
- Financials
- Health Care



# Global 500 and JSE 100: A sectoral comparison

- In terms of disclosure and performance South Africa's JSE 100 companies compare favourably with the Global 500 across all sectors (Table 7).
- The Consumer Staples sector showed the highest response rate (92%), with only one company declining to participate. The Financials sector showed the worst response rate (62%) with 12 companies (out of 32) declining to participate, predominantly from the Real Estate sub-sector (Figure 19).
- The sector with the highest absolute emissions (Energy & Materials; Figure 20) scored best in terms of both performance and disclosure. The sector achieved an average disclosure score of 85, and it has the highest proportion of companies (12%) with performance band A (Figure 19).
- The lowest average disclosure score (78) comes from the Consumer Discretionary sector (Table 7).

"Woolworths does extensive work to assist and develop smallscale farmers through agricultural and management skill education and the provision of a market for their products. Because changing weather patterns and its impact on agriculture will continue to have an increasing impact on human and cultural resources, it creates the opportunity for Woolworths to educate and assist the most vulnerable parts of the agricultural society to adapt and be resilient to the physical impacts of climate change."

**Woolworths** 

TABLE 7 SECTORAL COMPARISON OF GLOBAL 500 AND JSE 100 RESPONSE RATES, DISCLOSURE SCORES AND PERFORMANCE BANDS

JSE 100 and Global 500 sectors		Response rate	Average Disclosure Score	Percentage of companies with performance band A
Consumer Discretionary	JSE 100	75%	78	8%
	Global 500	77%	75	8%
Consumer Staples	JSE 100	92%	79	0%
	Global 500	84%	80	11%
Energy & Materials <sup>29</sup>	JSE 100	89%	85	12%
	Global 500	75%	77	5%
Financials	JSE 100	62%	82	3%
	Global 500	70%	77	14%
Health Care	JSE 100	80%	84	0%
	Global 500	87%	74	9%
Industrials	JSE 100	89%	85	11%
	Global 500	75%	73	8%
IT & Telecoms	JSE 100	75%	79	0%
	Global 500	78%	76	8%
Utilities <sup>29</sup>	JSE 100	-	-	-
	Global 500	70%	86	14%
Total sample	JSE 100	78%	82	5%
	Global 500	81%	77	7%

<sup>29.</sup> For the CDP Global 500 sample, Energy companies and Materials companies are not included in the same sector. However, to enable comparison with the JSE 100 sample, Energy companies and Materials companies from the Global 500 sample have been grouped together. The same applies to the Global 500 IT companies and Telecoms companies. There are no Utilities companies in the JSE 100 sample.

#### **Consumer Discretionary**

# Climate change and the Consumer Discretionary sector

Most companies in this sector have relatively limited direct carbon-related impacts. Impacts are concentrated predominantly in their supply chain and logistics networks and in the consumer use of products. Due to their relative size most local companies have limited influence on international supplier behaviour. There is a small market for green products in South Africa, generally restricted to higher income customers. The primary internal focus is on optimising logistics and energy efficiency. There are various opportunities for sourcing more sustainable resources and sourcing locally.

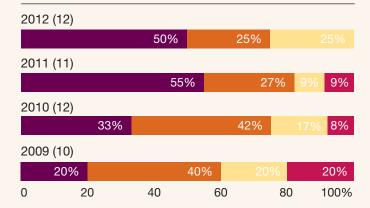
#### Reported risks and opportunities

**Risks:** The principal reported risks include increasing energy and fuel costs, risks to the supply of certain raw materials and products, and increasing insurance costs. These are largely managed with internal optimisation efforts. Future-reported risks include enforced product efficiency standards, as well as potential reduced demand for certain products in the light of technological innovation, changing consumer preferences, increasing commodity prices and new regulations.

Opportunities: Several companies report significant energy and cost savings associated with optimisation in stores, offices and distribution networks. Some companies report looking into sustainable sourcing such as Forest Stewardship Council (FSC) certified wood and paper products. Several companies identified that sourcing locally will create a business resilience going forward. Some are looking into developing green products or ranges, but these are largely limited and target niche markets.

#### FIGURE 21 RESPONSE RATE BY YEAR: CONSUMER DISCRETIONARY

- Answered questionnaire public (AQ)
- Answered questionnaire Not Public (AQ np)
- Declined to participate (DP)
- No response (NR)



Totals in the above graph may not add up to 100% due to the rounding off of percentage values.

#### FIGURE 22 DISCLOSURE SCORE BREAKDOWN

- Consumer Discretionary
- CDLI
- JSE 100

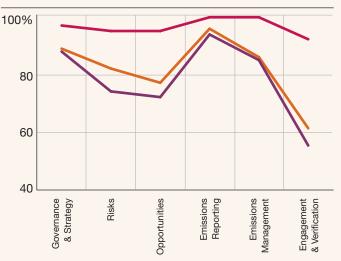


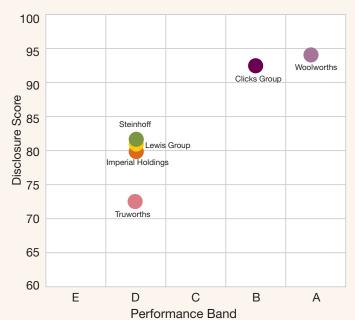
TABLE 8 CONSUMER DISCRETIONARY SECTOR SUMMARY

Company	Sub-Sector	2012 Response	Scope 1 South Africa (tCO2e)	Scope 1 Global (tCO2e)	Scope 2 Global (tCO2e)	Scope 1 & 2 Global (tCO2e)	No. of Scope 3 Categories Reported	Verification/ Assurance Status	Targets Reported	Emissions intensity (tCO2e per FTE)	Emissions intensity (other)
Clicks Group Ltd	Multiline Retail	AQ		1,945	91,555	93,500	3	VAA S1, S2, VAR S3	Abs, Int	5.72	0.21 tCO2e per square meter
Compagnie Financière Richemont SA	Textiles, Apparel & Luxury Goods	AQ np									
Foschini Group Ltd	Specialty Retail	AQ np									
Imperial Holdings	Distributors	AQ		873,154	167,126	1,040,280	0			24.06	
JD Group Ltd	Specialty Retail	DP									
Lewis Group	Specialty Retail	AQ	21,646	23,983	25,736	49,719	1	VAA S1, S2, S3		7.04	215 tCO2e per square meter
Mr Price Group Ltd	Speciality Retail	DP									
Naspers	Media	DP									
Steinhoff International Holdings	Household Durables	AQ	352,654	421,529	323,666	745,195	0			15.21	0.19 tCO2e per square meter
Sun International Ltd	Hotels, Restaurants & Leisure	AQ np									
Truworths International	Specialty Retail	AQ		412	76,240	76,652	3			10.7	0.3 tCO2e per square meter
Woolworths Holdings Ltd	Multiline Retail	AQ	1,390	1,390	294,485	295,875	5*	VAA S1, S2, S3	Int	14.48	0.41 tCO2e per square meter
Sector Summary	Companies: 12	AQ: 9		1,375,072	1,456,416	2,831,489					
JSE Summary	Companies: 100	AQ: 78		132,937,118	86,578,579	219,515,697					

For details on abbreviations and notation please refer to the key to Table 2 on page 18.

Note, the emissions data must be read with the explanatory information provided in Appendix 3.

FIGURE 23 DISCLOSURE SCORES AND PERFORMANCE BANDS:
CONSUMER DISCRETIONARY

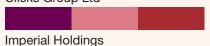


#### Reasons for exclusion of Consumer Discretionary companies from the above graph: Not rated for Company Company Answered response not declined to Questionnaire performance public participate in CDP 2012 (DP) (Disclosure via a parent score < 50) (AQ np) company (AQ sa) JD Group Ltd Compagnie none none Mr Price Group Financiere-Richemont Ltd Foschini Naspers Sun International

# FIGURE 24 SCOPE 3 DISCLOSURE (NO. OF CATEGORIES REPORTED WITH EMISSION DATA)

- Business travel
- Downstream leased assets
- Downstream transportation and distribution
- Employee commuting
- End-of-life treatment of sold products
- Fuel- and energy-related activities (not included in scopes 1 or 2)
  - Investments
- Processing of sold products
- Purchased goods & services
- Upstream leased assets
- Upstream transportation & distribution
- Use of sold products
- Waste generated in operations

Clicks Group Ltd

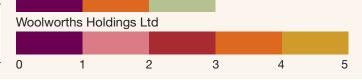


Lewis Group

Steinhoff International Holdings

0

Truworths International



#### **Consumer Staples**

# Climate change and the Consumer Staples sector

The principal area for retailers to address climate change is in their supply chain, distribution networks and stores. Primary producers, who have a greater direct impact than retailers in this sector, have scope to implement more extensive emissions and water management initiatives, and to explore opportunities for onsite power generation, particularly from bio-fuels generated from waste. This sector is vulnerable to climate-driven price fluctuation from food commodity prices. Best practice includes cooperation through industry bodies to explore adaptation initiatives such as crop innovation, as well as exploring opportunities to address food security issues through value chains. While there are potential green product development opportunities, consumers tend to associate these goods with higher prices.

#### Reported risks and opportunities

Risks: Decreased security of energy supply and increasing energy costs are reported as presenting risks in terms of lighting, temperature control and refrigeration. Increasing fuel costs and unpredictable weather present risks for distribution networks and agricultural operations. There are risks for retailers with agricultural supply chains and for primary agricultural producers associated with declining yield, changing water distribution, changing geographical distribution of arable land and increasing pests. Some companies have begun to move production to less water-stressed regions.

**Opportunities:** Many companies are pursuing opportunities for supply chain engagement and for sustainable and local sourcing. There is some industry cooperation to enable large-scale research. For primary producers, onsite electricity generation from biomass presents opportunities for cost-saving and revenue.

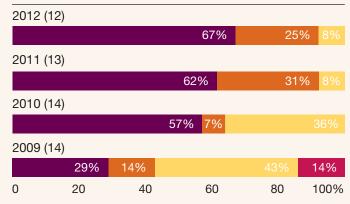
"Pick n Pay has built resilience into its supply chain by evaluating its suppliers in terms of risk and by using multiple suppliers in high risk categories. The **Ackerman Pick n Pay Fund has** a programme for coaching small scale farmers in sustainable business. Adaptation to climate change is one of the areas to be covered in this programme that already encompasses over 60 farmers. We also have a dedicated programme to assist small suppliers with their compliance, which is a substantial challenge for small businesses that includes water and soil testing, labelling, traceability journals and record keeping."

#### Pick n Pay

Energy and cost savings through the decentralisation of distribution network has been highlighted. Opportunities for green product development are being explored.

# FIGURE 25 RESPONSE RATE BY YEAR: CONSUMER STAPLES

- Answered questionnaire public (AQ)
- Answered questionnaire Not Public (AQ np)
- Declined to participate (DP)
- No response (NR)



Totals in the above graph may not add up to 100% due to the rounding off of percentage values.

#### FIGURE 26 DISCLOSURE SCORE BREAKDOWN

- Consumer Staples
- CDLI
- JSE 100

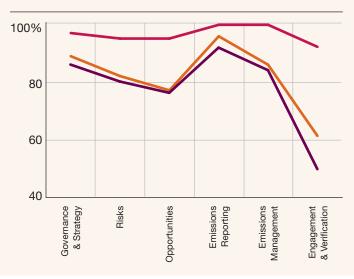


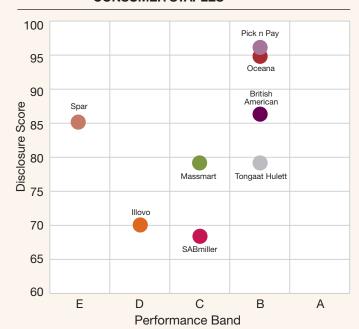
TABLE 9 CONSUMER STAPLES SECTOR SUMMARY

Company	Sub-Sector	2012 Response	Scope 1 South Africa (tCO2e)	Scope 1 Global (tCO2e)	Scope 2 Global (tCO2e)	Scope 1 & 2 Global (tCO2e)	No. of Scope 3 Categories Reported	Verification/ Assurance Status	Targets Reported	Emissions intensity (tCO2e per FTE)	Emissions intensity (other)
Avi Ltd	Food Products	DP									
British American Tobacco	Tobacco	AQ		355,410	373,680	729,090	3*	VAA S1, S2, S3	Int	12.95	0.65 tCO2e per million cigarette equivalent
Illovo Sugar Ltd	Food Products	AQ	180,086	319,024	174,429	493,453	1		Abs	16.59	0.32 tCO2e per sugar produced (amount of sugar produced not given)
Massmart Holdings Ltd	Food & Staples Retailing	AQ		25,004	278,912	303,916	5	VAA S2	Abs, Int	9.93	0.2 tCO2e per square meter
Oceana	Food Products	AQ	74,275	134,537	58,057	192,594	3*	VAA S1, S2, S3	Int	129.37	297.72 tCO2e per metric tonne of product
Pick 'n Pay Holdings Ltd	Food & Staples Retailing	AQ		79,021	528,135	607,156	2	VAA S1, S2	Abs	14.39	0.47 tCO2e per square meter
Pioneer Foods	Food Products	AQ np									
SABMiller	Beverages	AQ	344,965	1,410,135	783,073	2,193,208	1	VAR S1, S2	Int	38.55	0.01 tCO2e per hectolitre (product not provided)
Shoprite Holdings Ltd	Food & Staples Retailing	AQ np									
The Spar Group Ltd	Food & Staples Retailing	AQ		37,430	43,560	80,990	2		Int	21.2	444 tCO2e per unit of service provided
Tiger Brands	Food & Staples Retailing	AQ np									
Tongaat Hulett Ltd	Food Products	AQ	475,296	593,732	433,837	1,027,569	4		Abs, Int	25	3.14 tCO2e per metric tonne of product
Sector Summary	Companies: 12	AQ: 11		3,536,007	3,885,806	7,421,813					
JSE Summary	Companies: 100	AQ: 78		132,937,118	86,578,579	219,515,697					

For details on abbreviations and notation please refer to the key to Table 2 on page 18.  $\,$ 

Note, the emissions data must be read with the explanatory information provided in Appendix  $\bf 3.$ 

FIGURE 27 DISCLOSURE SCORES AND PERFORMANCE BANDS: CONSUMER STAPLES



Reasons for exclusion of Consumer Staples companies from the above graph: Not rated for Company response not Company declined Answered to participate in CDP 2012 performance Questionnaire via . (Disclosure public a parent company score < 50) (AQ np) (DP) (AQ sa) Pioneer Foods Avi Ltd none none Shoprite Holdings Tiger Brands

FIGURE 28 SCOPE 3 DISCLOSURE (NO. OF CATEGORIES REPORTED WITH EMISSION DATA)

See key for scope 3 catagories in Figure 24 (page 41).

British American Tobacco

Illovo

Massmart Holdings Ltd

Oceana

Pick 'n Pay Holdings Ltd

SABMiller

The Spar Group Ltd

Tongaat Hulett Ltd

2

3

4

0

1

5

#### **Energy & Materials**

# Climate change and the Energy & Materials sector

The sector has significant impacts, as well as high levels of vulnerability to the physical and policy effects of climate change. Climate change policy, including the proposed carbon tax in South Africa, poses significant risks, highlighting the need for engaging constructively with government. There is a growing expectation on companies to invest significantly in energy and water efficiency initiatives, and to explore appropriate technologies such as carbon capture and storage. There are opportunities and business benefits associated with helping neighbouring vulnerable communities with adaptation. Recent labour issues in the sector have cast further emphasis on risks and opportunities with respect to communities.

#### Reported risks and opportunities

Risks: Carbon taxes and international agreements present significant risks to companies' ability to operate, with potentially profound economic impacts, including on job creation. Increasing energy and compliance costs are driving operating costs up, and risks are reported relating to water scarcity. Reputational risks are perceived as impacting project financing, possibly leading to disinvestment. Several companies highlighted risks related to labour heat-stress due to extreme weather. More than other sectors, significant resources are directed at accurately assessing, quantifying and reporting on risks.

Opportunities: Energy efficiency and water management initiatives reportedly present the primary opportunities for cost saving and securing continuity of operations. Onsite power generation (including through renewables) provides energy security, possible savings by avoiding increasing electricity costs, as well as revenue opportunities associated with selling to the national grid. CDM projects present opportunities for revenue generation. There is an anticipated increase in demand for certain metals (such as PGMs and Uranium) as part of the move to a low carbon economy.

# FIGURE 29 RESPONSE RATE BY YEAR: ENERGY & MATERIALS

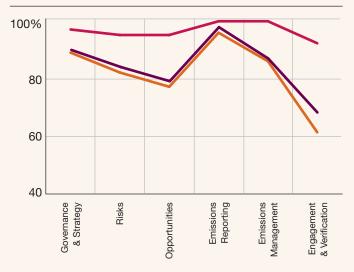
- Answered questionnaire public (AQ)
- Answered questionnaire Not Public (AQ np)
- Declined to participate (DP)
- No response (NR)



Totals in the above graph may not add up to 100% due to the rounding off of percentage values.

#### FIGURE 30 DISCLOSURE SCORE BREAKDOWN

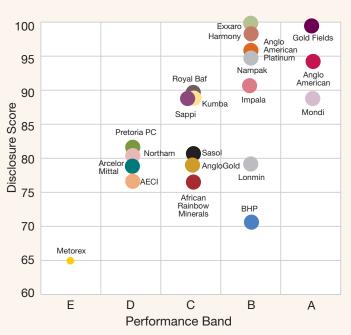
- Energy & Materials
- CDLI
- JSE 100



"Gold Fields is currently implementing a supplier water and carbon disclosure system. Suppliers will be requested to disclose the life cycle emissions of the products supplied."

#### **Gold Fields**

FIGURE 31 DISCLOSURE SCORE AND PERFORMANCE BAND: ENERGY & MATERIALS



Reasons for exclusion of Energy & Materials companies from the above graph:												
Not rated for performance (Disclosure score < 50)	Company response not public (AQ np)	Company declined to participate in CDP 2012 (DP)	Answered Questionnaire via a parent company (AQ sa)									
none	Assore Ltd	Omnia Holdings Ltd Optimum Coal Holdings Palabora Mining Co Ltd	Mondi Limited - see Mondi PLC									

FIGURE 32 SCOPE 3 DISCLOSURE (NO. OF CATEGORIES REPORTED WITH EMISSION DATA)

See key for scope 3 catagories in Figure 24 (page 41).

AECI Ltd Ord

0

African Rainbow Minerals

Anglo American

Anglo American Platinum

AngloGold Ashanti

Arcelor Mittal South Africa Ltd

BHP Billiton

Exxaro Resources Ltd

Gold Fields Limited

Harmony Gold Mining Co Ltd

Impala Platinum Holdings

Kumba Iron Ore

Lonmin

Metorex Ltd

Mondi PLC

Nampak Ltd

Northam Platinum Ltd

Pretoria Portland Cement Co Ltd

U

Royal Bafokeng Platinum Ltd

Sappi

Sasol Limited

10

TABLE 10 ENERGY & MATERIALS SECTOR SUMMARY

		nse	uth 2e)	obal	obal	2 Global	e s	/ Status	oorted	ntensity FTE)	ntensity
Company	Sub-Sector	2012 Response	Scope 1 South Africa (tCO2e)	Scope 1 Global (tCO2e)	Scope 2 Global (tCO2e)	Scope 1 & 2 (tCO2e)	No. of Scope 3 Categories Reported	Verification/ Assurance Status	Targets Reported	Emissions intensity (tCO2e per FTE)	Emissions intensity (other)
AECI Ltd Ord	Chemicals	AQ	296,582	329,909	247,569	577,478	0	VAA S1, S2		81	2.74 tCO2e per megawatt hour (MWh)
African Rainbow Minerals	Metals & Mining	AQ		386,232	1,200,816	1,587,048	2			271.06	2.2 tCO2e per unit of production (*average across nine operations)
Anglo American	Metals & Mining	AQ	3,020,716	9,361,858	9,482,604	18,844,462	5	VAA S1, S2	Abs	196	0.05 tCO2e per unit hour worked
Anglo American Platinum	Metals & Mining	AQ	534,431	540,537	5,450,076	5,990,613	10	VAA S1, S2, S3	Int	114.87	0.06 tCO2e per tonne of ore mined
AngloGold Ashanti	Metals & Mining	AQ	73,000	1,235,000	3,322,000	4,557,000	3	VAR S1, S2	Int	74	0.99 tCO2e per ounce of gold
Arcelor Mittal South Africa Ltd	Metals & Mining	AQ		10,961,907	4,487,197	15,449,104	2			1386.21	2.77 tCO2e per tonne of steel
Assore Ltd	Metals & Mining	AQ np									
BHP Billiton	Metals & Mining	AQ	3,187,000	19,863,000	20,963,000	40,826,000	2	VAA S1, S2, S3	Int	1006	0.82 tCO2e per unit of production
Exxaro Resources Ltd	Metals & Mining	AQ	436,681	443,037	2,041,095	2,484,132	6	VAA S1, S2, S3	Abs	237	18.7 tCO2e per kilotonnes coal produced
Gold Fields Limited	Metals & Mining	AQ	622,591	1,009,662	4,835,940	5,845,602	8*	VAA S1, S2, S3	Abs, Int	114.23	0.96 tCO2e per ounce of gold
Harmony Gold Mining Co Ltd	Metals & Mining	AQ	32,851	67,166	3,249,167	3,316,333	3	VAA S1, S2, VAR S3	Int	93	0.15 tCO2e per tonne of ore processed
Impala Platinum Holdings	Metals & Mining	AQ	477,062	527,579	3,208,182	3,735,761	3*	VAA S1, S2	Abs	65.39	2.03 tCO2e per ounce of platinum
Kumba Iron Ore	Metals & Mining	AQ		387,813	519,329	907,142	6	VAR S1, S2	Abs	143.92	0.002 tCO2e per tonne of rock removed
Lonmin	Metals & Mining	AQ		101,248	1,541,747	1,642,995	1	VAA S1, S2, S3	Int	59.1	1.14 tCO2e per ounce of Platinum Group Metals (PGM) produced
Metorex Ltd	Metals & Mining	AQ	0	25,570	1,186	26,756	2			33.81	
Mondi Limited - see Mondi PLC	Paper & Forest Products	AQ sa									
Mondi PLC	Paper & Forest Products	AQ	878,910	4,546,577	1,224,901	5,771,478	5	VAA S1, S2, S3	Int	246	0.87 tCO2e per unit of production
Nampak Ltd	Containers & Packaging	AQ		160,738	633,116	793,854	3*	VAA S1, S2, S3	Abs	84.26	0.63 tCO2e per square meter
Northam Platinum Ltd	Metals & Mining	AQ		15,234	615,078	630,312	1	VAR S1, S2		107	0.26 tCO2e per tonne milled
Omnia Holdings Ltd	Chemicals	DP									
Optimum Coal Holdings	Metals & Mining	DP									
Palabora Mining Co Ltd	Metals & Mining	DP									
Pretoria Portland Cement Co Ltd	Construction Materials	AQ		4,728,271	582,841	5,311,112	*	VAR S1, S2	Int	1720	1002 tCO2e per metric tonne of product
Royal Bafokeng Platinum Ltd	Metals & Mining	AQ		2,262	293,577	295,839	1*	VAA S1, S2		100	1.57 tCO2e per ounce of platinum in concentrate
Sappi	Paper & Forest Products	AQ	2,829,691	4,632,448	1,785,962	6,418,410	4	VAR S1, S2, VAA S3	Int	446	0.89 tCO2e per metric tonne of product
Sasol Limited	Oil, Gas & Consumable Fuels	AQ	61,396,000	65,469,000	9,308,000	74,777,000	3	VAA S1, S2	Abs, Int	2218	2.99 tCO2e per metric tonne of product
Sector Summary	Companies: 26	AQ: 23		125,145,714	75,878,553	201,024,267					
JSE Summary	Companies: 100	AQ: 78		132,937,118	86,578,579	219,515,697					

For details on abbreviations and notation please refer to the key to Table 2 on page 18. Note, the emissions data must be read with the explanatory information provided in Appendix 3.

#### **Financials**

#### Climate change and the Financials sector

The financial sector is a key enabler of a low carbon economy through its capacity to fund and incentivise new technologies, solutions and infrastructure that can reduce emissions and promote adaptation. Increasing opportunities for new products will emerge in areas such as carbon trading, mobile banking products, environmental liability insurance products and 'green' property developments. The development of accurate risk-pricing models is a significant challenge. The sector is affected by the overall economy and the wellbeing of its clients, both of which may be adversely affected by tightening regulations and mitigation policies, and by increasing energy and materials costs. Although current regulatory uncertainty has kept the sector cautious in its investment support, a major expectation will be that it takes up this role as regulatory frameworks are established.

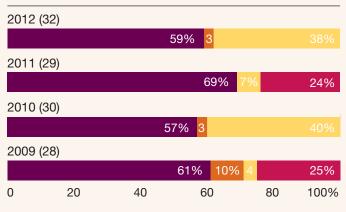
#### Reported risks and opportunities

Risks: Banks and other investment companies face risks associated with security or exposure of investments. Investments in agricultural business are identified as being particularly vulnerable. Insurance companies face increasing risks associated with their products. Companies serving lower income groups identified decreasing demand for products, as increasing energy and food prices reduce disposable income. Several companies identified urban migration as a risk to certain operations in the future. Uncertainty surrounding market signals for new sustainable industries were highlighted. While most companies in the sector take a proactive approach to managing risks, there are some that minimise risk only by diversifying investments.

**Opportunities:** Most highlight cost savings from energy efficiency. Some identify the more significant opportunities in developing the carbon market, financing green projects and managing socially responsible funds and green product innovation and rollout. Examples include solar heating finance and CDM; these opportunities were stated to have substantial potential financial gains. Opportunities exist for new insurance product development, but these still require rigorous risk analysis and quantification.

# FIGURE 33 RESPONSE RATE BY YEAR: FINANCIALS

- Answered questionnaire public (AQ)
- Answered questionnaire Not Public (AQ np)
- Declined to participate (DP)
- No response (NR)



Totals in the above graph may not add up to 100% due to the rounding off of percentage values.

"Both Tsb Sugar and Rainbow are investigating generating electricity from bagasse and chicken litter respectively and to register the projects for carbon credits. Not only will the carbon credits be additional income streams, but the underlying projects will have consumed sugar cane residue and chicken litter and will reduce the coal based energy purchased as well as reduce operational costs."

#### Remgro

#### FIGURE 34 DISCLOSURE SCORE BREAKDOWN

- Financials
- CDLI
- JSE 100

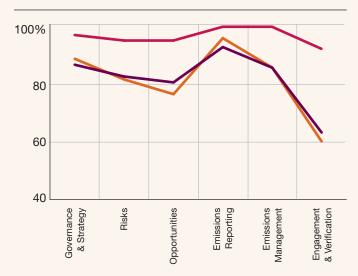
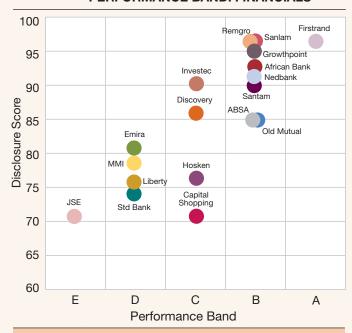


FIGURE 35 **DISCLOSURE SCORE AND**PERFORMANCE BAND: FINANCIALS



Reasons for ex	clusion of Financ	ials companies from the	above graph:
Not rated for performance (Disclosure score < 50)	Company response not public (AQ np)	Company declined to participate in CDP 2012 (DP)	Answered Questionnaire via a parent company (AQ sa)
none	Capitec Bank Holdings Ltd	Acucap Brait SE Capital Property Fund Coronation Fund Managers Ltd Fountainhead Property Trust Hyprop Investments Ltd PSG Group Redefine Properties Ltd Reinet Investments Resilient Prop Inc RMI Holdings SA Corporate Real Estate Fund	Rmb Holdings Ltd - see FirstRand

"Through the partnership with the WWF on the Living Waters project, Sanlam now understands the looming global sustainability issues associated with a compromised freshwater supply and the links to climate change and its own business."

#### Sanlam

FIGURE 36 SCOPE 3 DISCLOSURE (NO. OF CATEGORIES REPORTED WITH EMISSION DATA)

See key for scope 3 catagories in Figure 24 (page 41).

Absa Group

African Bank Investments Ltd

Capital Shopping Centres Group PLC

Discovery Holdings Ltd

Emira Property Fund

Firstrand Ltd

**Growthpoint Properties** 

Hosken Consolidated Investments

JSE Ltd

Investec Ltd

Liberty Holdings Ltd

MMI Holdings Ltd

Nedbank Ltd

Old Mutual plc

Remgro

Sanlam

Santam Ltd

Standard Bank Group

0 1 2 3

#### TABLE 11 FINANCIALS SECTOR SUMMARY

Company	Sub-Sector	2012 Response	Scope 1 South Africa (tCO2e)	Scope 1 Global (tCO2e)	Scope 2 Global (tCO2e)	Scope 1 & 2 Global (tCO2e)	No. of Scope 3 Categories Reported	Verification/ Assurance Status	Targets Reported	Emissions intensity (tCO2e per FTE)	Emissions intensity (other)
Absa Group	Commercial Banks	AQ		19,821	324,290	344,111	1	VAA S1, S2, S3	Abs	9.2	0.24 tCO2e per square meter
Acucap	Real Estate Management & Development	DP									
African Bank Investments Limited	Diversified Financial Services	AQ		20,468	39,044	59,512	4	VAA S1, S2, S3	Abs	3.75	19.8 tCO2e per branch
Brait SE Capital Property Fund	Diversified Financial Services Real Estate Investment Trusts	DP DP									
Capital Shopping Centres Group PLC	Real Estate Investment Trusts (REITs)	AQ		5,220	46,710	51,930	0	VAR S1, S2	Abs	88.69	0.04 tCO2e per square meter
Capitec Bank Holdings Ltd	Commercial Banks	AQ np									
Coronation Fund Managers Ltd	Diversified Financial Services	DP									
Discovery Holdings Ltd	Insurance	AQ		4,170	29,719	33,889	5		Int	5.78	0.41 tCO2e per square meter
Emira Property Fund	Real Estate Investment Trusts (REITs)	AQ		1,182	221,691	222,873	3*				0.19 tCO2e per square meter
Firstrand Limited	Diversified Financial Services	AQ		12,255	249,207	261,462	2	VAA S1, S2	Abs	8.54	0.24 tCO2e per square meter
Fountainhead Property Trust	Real Estate Investment Trusts	DP									
Growthpoint Properties	Real Estate Management & Development	AQ		23	1,899	1,922	5	VAA S1, S2	Abs	4.18	0.19 tCO2e per square meter
Hosken Consolidated Investments	Diversified Financial Services	AQ	126,231	135,418	306,350	441,768	4	,		17.4	
Hyprop Investments Ltd	Real Estate Management & Development	DP									
Investec Limited	Capital Markets	AQ	740	2,057	41,789	43,846	4*	VAF S1, S2	Abs	6.08	0.35 tCO2e per square meter
JSE Ltd	Diversified Financial Services	AQ		24	10,288	10,312	1	,		20.46	0.62 tCO2e per square meter
Liberty Holdings Ltd (incorporating Liberty Life Group Ltd)	Insurance	AQ		2,650	44,773	47,423	2	VAA S1, S2, S3		6.2	0.2 tCO2e per square meter
MMI Holdings Ltd	Insurance	AQ		1,035	61,421	62,456	1*	VAA S1, S2, S3		3.94	0.27 tCO2e per square meter
Nedbank Limited	Commercial Banks	AQ		777	162,742	163,519	3	VAR S1, S2, S3	Int	5.81	0.35 tCO2e per square meter
Old Mutual plc	Insurance	AQ	10,085	12,068	555,726	567,794	3	VAA S1, S2, VAR S3	Int	2.33	0.21 tCO2e per square meter
PSG Group	Diversified Financial Services	DP									
Redefine Properties Ltd	Real Estate Management & Development	DP					.,				,
Reinet Investments Remgro	Diversified Financial Services  Diversified Financial Services	DP AQ		366,625	364,897	731,522	3*	VAA	Abs	77.92	0.01 tCO2e per
Remgro	Diversilled Financial Services	AQ		300,025	304,697	731,522	ა	S1, S2, S3	ADS	77.92	square meter
Resilient Prop Inc	Real Estate Management & Development	DP									
Rmb Holdings Ltd - see Firstrand	Diversified Financial Services	AQ sa									
RMI Holdings SA Corporate Real	Insurance Real Estate Investment	DP DP									
Estate Fund Sanlam	Trusts Insurance	AQ		101	39,489	39,590	4*	VAA	Int	8.02	0.37 tCO2e per
Santam Ltd	Insurance	AQ		159	7,807	7,966	4	S1, S2 VAA	Int	4.22	square meter 0.06 tCO2e per
					-			S1, S2. VAR S3			square meter
Standard Bank Group	Commercial Banks	AQ		9,154	151,036	160,190	2	VAR S1, S2, S3		5.64	
Sector Summary	Companies: 32	AQ: 20		593,208	2,658,879	3,252,087					
JSE Summary	Companies: 100	AQ: 78		132,937,118	86,578,579	219,515,697					

#### **Health Care**

#### **Climate change and the Health Care sector**

The sector does not produce extensive direct emissions, and has comparatively limited exposure to increasing operating and energy costs. Reduced access to raw materials due to climate impacts on agriculture pose a potential risk to pharmaceutical drug production, potentially leading to increased costs and fluctuating supply. Opportunities for health care providers include increased demand for emergency medical care due to extreme weather related injuries. Changes in weather patterns are also likely to change bacterial and viral distributions, leading to increased disease loads and the resultant demand for medical care and treatment drugs. As suppliers of drugs, ensuring continued access and affordability to the more vulnerable population groups is a key expectation.

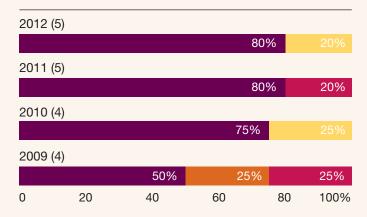
#### Reported risks and opportunities

Risks: Some cite concerns with increased operational costs associated with rising energy and compliance costs. Decreased security of energy supply presents risks for health care providers, requiring investment in back-up generators. Hospitals and particularly pharmaceutical companies have strict regulated temperature requirements that may require increased energy consumption. Pharmaceutical companies face risks associated with access to and increasing costs of raw materials in the supply chain over the longer term.

**Opportunities:** Principal opportunities relate to cost savings from efficiency initiatives, and product efficiency for pharmaceutical companies. Increasing demand for health care services associated with changing disease vectors and increased extreme weather events has been identified. Opportunities exist for energy savings in refrigeration of medicines as well as redesigning waste management processes.

# FIGURE 37 RESPONSE RATE BY YEAR: HEALTH CARE

- Answered questionnaire public (AQ)
- Answered questionnaire Not Public (AQ np)
- Declined to participate (DP)
- No response (NR)



Totals in the above graph may not add up to 100% due to the rounding off of percentage values.

#### FIGURE 38 DISCLOSURE SCORE BREAKDOWN

- Health Care
- CDLI
- JSE 100

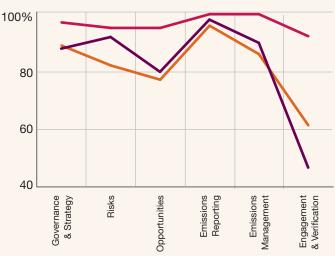


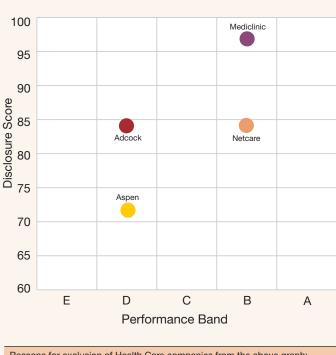
TABLE 12 HEALTH CARE SECTOR SUMMARY

Company	Sub-Sector	2012 Response	Scope 1 South Africa (tCO2e)	Scope 1 Global (tCO2e)	Scope 2 Global (tCO2e)	Scope 1 & 2 Global (tCO2e)	No. of Scope 3 Categories Reported	Verification/ Assurance Status	Targets Reported Emissions intensity (tCO2e per		Emissions intensity (other)
Adcock Ingram	Pharmaceuticals	AQ	16,024	17,077	32,456	49,533	6			28.37	0.3 tCO2e per square meter
Aspen Pharmacare Holdings	Pharmaceuticals	AQ		11,545	95,492	107,037	3			56	
Life Healthcare Group Holdings Ltd	Health Care Providers & Services	DP									
Mediclinic International	Health Care Providers & Services	AQ		19,826	152,858	172,684	3*	VAA S1, S2, S3	Int	12.47	0.1 tCO2e per bed day sold
Netcare Limited	Health Care Providers & Services	AQ	0	34,157	156,758	190,915	1*	VAR S1, S2, S3	Int	9.85	0.09 tCO2e per patient day
Sector Summary	Companies: 5	AQ: 4		82,605	437,564	520,170					
JSE Summary	Companies: 100	AQ: 78		132,937,118	86,578,579	219,515,697					

For details on abbreviations and notation please refer to the key to Table 2 on page 18.

Note, the emissions data must be read with the explanatory information provided in Appendix 3.

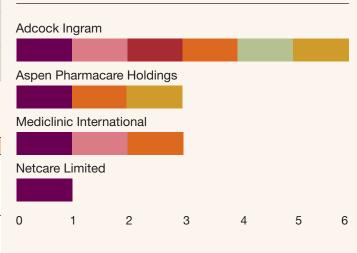
FIGURE 39 DISCLOSURE SCORE AND
PERFORMANCE BAND: HEALTH CARE



Reasons for exclusion of Health Care companies from the above graph:											
Not rated for performance (Disclosure score < 50)	Company response not public (AQ np)	Company declined to participate in CDP 2012 (DP)	Answered Questionnaire via a parent company (AQ sa)								
none	none	Life Healthcare Group Holdings Ltd	none								

FIGURE 40 SCOPE 3 DISCLOSURE (NO. OF CATEGORIES REPORTED WITH EMISSION DATA)

- Business travel
- Downstream leased assets
- Downstream transportation and distribution
- Employee commuting
- End-of-life treatment of sold products
- Fuel- and energy-related activities (not included in scopes 1 or 2)
- Investments
- Processing of sold products
- Purchased goods & services
- Upstream leased assets
- Upstream transportation & distribution
- Use of sold products
- Waste generated in operations



#### **Industrials**

#### Climate change and the Industrials sector

The Industrials sector will be exposed to significant new costs in its value chain, including: increased input costs for carbon-intensive materials (such as cement and steel), water, fuels and electricity; increased taxes on direct emissions from its manufacturing processes; and increased transport and logistics costs due to climate-related policy measures. The sector is vulnerable to extreme weather events leading to business disruptions and damage to assets. The major opportunity is for investments in new technologies, skills development and product diversification, to meet growing customer demand for climate change mitigation and adaptation products and infrastructure.

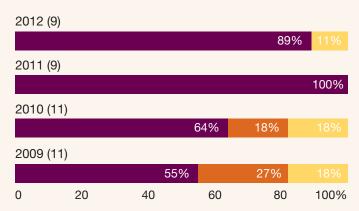
#### Reported risks and opportunities

**Risks:** This sector faces high direct impacts associated with its energy and resource consumption, and its greater exposure to carbon taxes. Increasing energy costs, decreased security of energy supply and the physical impacts of climate change (such as increased extreme weather events and changing precipitation patterns) are reported as contributing to unavoidable project delays, particularly for construction companies. Uncertainty in the regulatory environment remains a major concern.

Opportunities: There are significant opportunities in energy efficiency. Companies are exploring opportunities for developing CDM projects, investing in renewables, and developing carbon-neutral products and services. Several companies report having significant R&D budgets, of which many include a focus on exploring green business opportunities. There are opportunities to diversify their energy mix to include low-carbon and renewable technologies. Companies see opportunities to contribute to 'green economy' infrastructure, including green building technologies in the future.

### FIGURE 41 RESPONSE RATE BY YEAR: INDUSTRIALS

- Answered questionnaire public (AQ)
- Answered guestionnaire Not Public (AQ np)
- Declined to participate (DP)
- No response (NR)



Totals in the above graph may not add up to 100% due to the rounding off of percentage values.

#### FIGURE 42 DISCLOSURE SCORE BREAKDOWN

- Industrials
- CDLI
- JSE 100

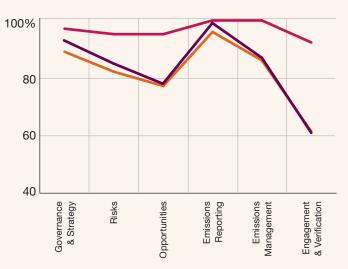


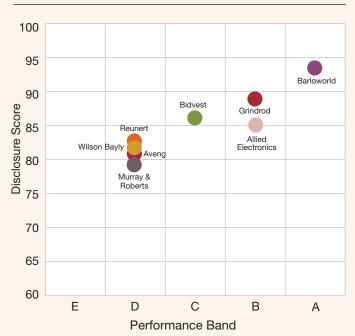
TABLE 13 INDUSTRIALS SECTOR SUMMARY

Company	Sub-Sector	2012 Response	Scope 1 South Africa (tCO2e)	Scope 1 Global (tCO2e)	Scope 2 Global (tCO2e)	Scope 1 & 2 Global (tCO2e)	No. of Scope 3 Categories Reported	Verification/ Assurance Status	Targets Reported	Emissions intensity (tCO2e per FTE)	Emissions intensity (other)
Allied Electronics Corporation Ltd (Altron)	Industrial Conglomerates	AQ	12,432	14,900	134,223	149,123	2	VAA S1, S2, S3		12.27	
Aveng Ltd	Construction & Engineering	AQ	367,987	392,405	42,650	435,055	1	VAA S1		14.7	0.52 tCO2e per square meter
Barloworld	Trading Companies & Distributors	AQ	79,123	109,305	79,738	189,043	2	VAA S1, S2	Int	10.1	
Bidvest Group Ltd	Industrial Conglomerates	AQ	144,290	375,234	303,291	678,525	1*	VAA S1, S2	Abs, Int	6.6	
Grindrod Ltd	Marine	AQ		340,438	24,326	364,764	3	VAA S1, S2	Abs, Int	60.5	0.0000908 tCO2e average per ship per tonne (converted from gCO2e to tCO2e)
Murray & Roberts Holdings Limited	Construction & Engineering	AQ	254,068	303,137	157,045	460,182	1			10.85	48.7 tCO2e per value created
Reunert	Industrial Conglomerates	AQ		7,957	56,000	63,957	2*			11.23	0.19 tCO2e per square meter
Trencor	Marine	DP									
Wilson Bayly Holmes- Ovcon Ltd	Construction & Engineering	AQ		26,833	6,376	33,209	1			5.59	
Sector Summary	Companies: 9	AQ: 8		1,570,209	803,649	2,373,858					
JSE Summary	Companies: 100	AQ: 78		132,937,118	86,578,579	219,515,697					

For details on abbreviations and notation please refer to the key to Table 2 on page 18.

Note, the emissions data must be read with the explanatory information provided in Appendix  $\bf 3$ .

FIGURE 43 DISCLOSURE SCORE AND PERFORMANCE BAND: INDUSTRIALS



Reasons for exclusion of Industrials companies from the above graph: Not rated for Company Company Answered performance response not declined to Questionnaire (Dscore < 50) public participate in via a parent CDP 2012 (AQ np) company (DP) (AQ sa) Trencor none none none

FIGURE 44 SCOPE 3 DISCLOSURE (NO. OF CATEGORIES REPORTED WITH EMISSION DATA)

See key for scope 3 catagories in Figure 40 (page 51).



Wilson Bayly Holmes-Ovcon Ltd

0 1 2 3

#### IT and Telecoms

# Climate change and the IT & Telecoms sector

This sector has the potential to enable significant carbon savings across many sectors. It has been estimated that in Europe the sector could contribute to a 15% reduction in GHG emissions against business-as-usual by 2020<sup>30</sup>. Leverage is in 'smart' product and service offerings that reduce energy, fuel and paper consumption, and associated emissions for customers in the public and private sectors. There are also opportunities to develop solutions to climate-related social challenges such as increasing natural disasters and food insecurity. A significant challenge remains regarding the required changes in consumer behaviour.

#### Reported risks and opportunities

**Risks:** Principal reported risks include increasing compliance and reporting costs, and greater energy costs, particularly in terms of network infrastructure. Physical climate change impacts can damage infrastructure, lead to potential interruptions of service and increase demand for cooling at base station sites and data centres.

30. The Climate Group's SMART2020 report (2008): http://www.theclimategroup.org/publications/2008/6/19/smart2020-enabling-the-low-carbon-economy-in-the-information-age/

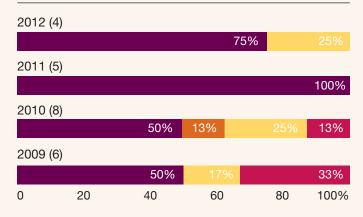
"Vodacom believes that strategic advantage can be obtained through providing technological innovative solutions that can reduce operating costs from fuel and electricity consumption, thereby reducing carbon emissions and Vodacom's impact on the environment while providing products and services that help customers to live and work more efficiently and flexibly."

#### Vodacom

**Opportunities:** Opportunities identified in this sector include continued cost and carbon savings from energy efficiency as well as offering communications technologies such as video conferencing and remote data access to enable decreased travel by customers. Opportunities for alternative energy use and CDM development have also been taken up. Further opportunities have been identified in innovative product offerings meeting adaptation requirements of communities throughout Africa.

## FIGURE 45 RESPONSE RATE BY YEAR: IT & TELECOMMUNICATIONS

- Answered questionnaire public (AQ)
- Answered questionnaire Not Public (AQ np)
- Declined to participate (DP)
- No response (NR)



Totals in the above graph may not add up to 100% due to the rounding off of percentage values.

#### FIGURE 46 DISCLOSURE SCORE BREAKDOWN

- IT & Telecommunications
- CDLI
- JSE 100

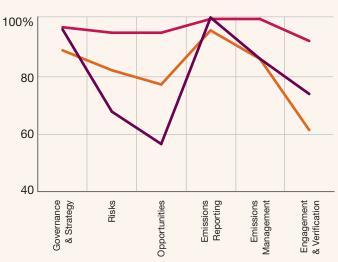


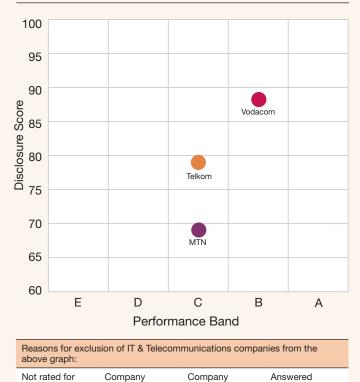
TABLE 14 IT & TELECOMMUNICATIONS SECTOR SUMMARY

Сотрапу	Sub-Sector	2012 Response	Scope 1 South Africa (tCO2e)	Scope 1 Global (tCO2e)	Scope 2 Global (tCO2e)	Scope 1 & 2 Global (tCO2e)	No. of Scope 3 Categories Reported	Verification/ Assurance Status	Targets Reported	Emissions intensity (tCO2e per FTE)	Emissions intensity (other)
Datatec	Software & Services	DP									
MTN Group	Wireless Telecommunication Services	AQ	12,241	536,541	407,492	944,033	1			43	0.006 tCO2e per number of subscribers (number of subscribers not given)
Telkom SA Limited	Diversified Telecommunication Services	AQ		51,081	665,927	717,008	4	VAA S1, S2, S3		34.24	
Vodacom Group	Wireless Telecommunication Services	AQ	13,415	46,680	384,292	430,972	4*	VAA S1, S2, S3	Int	73.99	1.63 tCO2e per square meter
Sector Summary	Companies: 4	AQ: 3		634,302	1,457,711	2,092,013					
JSE Summary	Companies: 100	AQ: 78		132,937,118	86,578,579	219,515,697					

For details on abbreviations and notation please refer to the key to Table 2 on page 18.

Note, the emissions data must be read with the explanatory information provided in Appendix 3.

FIGURE 47 **DISCLOSURE SCORE AND PERFORMANCE BAND: IT & TELECOMMUNICATIONS** 



declined to

CDP 2012

(DP)

Datatec

participate in

Questionnaire

via a parent

company

(AQ sa)

none

performance

(Dscore < 50)

none

response not

public

none

(AQ np)

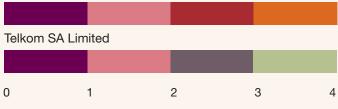
FIGURE 48 SCOPE 3 DISCLOSURE (NO. OF CATEGORIES REPORTED WITH EMISSION DATA)

- Business travel
- Downstream leased assets
- Downstream transportation and distribution
- Employee commuting
- End-of-life treatment of sold products
- Fuel- and energy-related activities (not included in scopes 1 or 2)
- Investments
- Processing of sold products
- Purchased goods & services
- Upstream leased assets
- Upstream transportation & distribution
- Use of sold products
- Waste generated in operations

MTN Group



Vodacom Group



55

# **Closing Commentary**



# Climate change: Is business rising to the challenge?

This has been another fascinating year in the global greenhouse. It was a year that saw record levels of Arctic ice loss, the largest hurricane in Atlantic history, the heaviest rain in Beijing since records began, and maize and soybean prices reaching all-time peaks following an unprecedented season of droughts and high temperatures in both the United States and Eastern Europe<sup>31</sup>. According to a recently released report, climate change has already contributed to 400,000 deaths per year and over \$699 billion (or 0.9% annually) in loss to GDP<sup>32</sup>.

Yet despite these impacts, this has been a year characterized by painfully slow progress in the UNFCCC negotiations, a moribund global carbon market, and a US presidential election in which neither candidate (nor most of the mainstream media) engaged in meaningful

31. These statements are informed by: National Snow and Ice Data Center http://nsidc.org/news/press/2012\_seaiceminimum.html (NSIDC; September 2012); National Hurricane Centre (http://www.nhc.noaa.gov); Beijing Meteorological Bureau (quoted in http://www.fmcoprc.gov.hk/eng/xwdt/jzzh/t954189.htm); and World Bank Food Price Watch (http://bit.ly/SX8lkW; August 2012).

32. Climate Vulnerability Monitor: A Guide to the Cold Calculus of a Hot Planet (2nd Edition). This report written by "more than 50 scientists, economists and policy experts, and commissioned by 20 governments" calculates and compares the vulnerability of 184 countries in terms of environmental disasters, habitat change, health impact and industry stress. It estimates that in less than 20 years China will incur losses of over \$1.2 trillion, while the US and Indian economies will lose 2% and 5% in GDP respectively.

discussion on the strategic implications of climate change. It was a year in which political leaders gathered in Rio for what one seasoned commentator has described as "yet another UN mega-conference that ended in disappointment, the low expectations fully justified"<sup>33</sup>.

Given this combination of increasing volatility and persistent uncertainty at a global policy level, it is heartening to see the continuing positive response by South African business to the annual CDP engagement. For two successive years the JSE100 has had the second highest response rate globally by geographic region. South African respondents have once again demonstrated valuable improvements in both their disclosure and performance, as evidenced by the marked increase in average carbon disclosure scores and performance bands across all sectors. Building on the positive results of previous years, CDP 2012 has shown a further increase in the number of companies that are monitoring, reporting and verifying their direct and indirect greenhouse gas emissions, as well as an increase in companies that are voluntarily committing themselves to emissions reduction targets. This year 43 companies reported targets, up from eight companies when the CDP was launched in South Africa in 2007 (JSE40).

It is particularly encouraging (as the title of this report suggests) to see the possible beginnings of a shift in focus from disclosure to performance. This shift is arguably

33. Halle, M. Life After Rio International Institute for Sustainable Development (IISD; June 2012) www.iisd.org/pdf/2012/com\_life\_after\_rio.pdf

reflected by the reported adoption of more ambitious mitigation initiatives – both within companies' direct operations and throughout their sphere of influence – as well as by the suggested increase in integrating climate-related issues within internal governance mechanisms. Seventy-three JSE100 companies report having a board committee or executive body with responsibility for climate change, while 47 companies reportedly have monetary incentives for management delivery on climate change objectives.

Notwithstanding these encouraging developments, and the comparative leadership being shown by South African business, a significant step change is still required in the nature of the business response.

Reflecting on the implications of the global ambition of meeting the 2°C warming target, a recent study has suggested that "to give ourselves a more than 50% chance of avoiding 2 degrees will require a six-fold improvement in our rate of decarbonisation"<sup>34</sup>. Noting that carbon intensity decreased by just 0.7% in 2011, the study argues that the global economy will need to cut carbon intensity by 5.1% every year from now to 2050, "a rate that has not been achieved once since World War II." A similar separate study maintains that if the 2°C target was to be rigorously applied, "then an estimated 80% of declared reserves owned by the world's largest listed coal, oil and gas companies and their investors would be subject to impairment as these assets become stranded"<sup>35</sup>.

These and related studies highlight the extent of the challenges that lie ahead, and provide an important lens through which investors and others should consider and engage with the CDP responses.

- Recognising the expectation that South African companies make a fair and equitable contribution to the achievement of the 2°C target, and given the scale of the mitigation challenge, we may expect tougher questions being asked of companies' stated performance activities and their reported GHG reduction targets. While we should welcome the proactive nature of these commitments taken in advance of regulatory requirements, some might challenge the declared level of ambition of many of the targets, the robustness of the baseline assessments, or the rate of progress in meeting these commitments.
- While we should not give up on global governments' stated ambition of limiting warming to 2°C, meeting this goal increasingly appears "highly unrealistic".
   It is thus anticipated that businesses, communities and governments will need to focus more explicitly on preparing for a warmer world. Fostering a greater appreciation of companies' adaptation measures will

"The increased awareness and data that is being generated through the CDP process is providing an important basis for the fundamental shift in response that is required from us all."

become increasingly material to investor decisions, and is an area in which we can expect improved disclosure as part of future CDP processes.

- For companies to respond meaningfully to mitigation and adaptation, they will need to demonstrate a willingness (where necessary) to interrogate their core business strategy. Unfortunately, a well-answered CDP questionnaire is not of itself sufficient to enable an informed assessment of a company's strategic engagement on climate change. While South African companies are generally the most effusive in reporting climate-related risks and opportunities, and in claiming that these have been integrated into their risk management procedures, the specific detail on the assessment and management of climate risks and opportunities is often lacking, and at times this appears in conflict with their stated positions on government policy.
- Preparing for a possible 'carbon bubble' which has
  the potential for considerable value destruction has
  profound implications for corporate reporting practice,
  company valuation processes, and the decisions and
  activities of asset owners and capital market regulators.
  The CDP, in partnership with its signatory investors,
  has an instrumental role to play in continuing to prompt
  a more integrated and forward-looking approach
  to corporate disclosure. As part of this improved
  disclosure we should, for example, see extractive
  companies moving beyond the simple reporting of
  historic emissions levels, towards a more detailed
  review and analysis of the future (scope 3) emissions
  embedded in their reserves.

The title of this report suggests that South African business is shifting its focus to performance. While we can question whether this performance is sufficiently ambitious or widespread, it is important to acknowledge and support the proactive response that South Africa business has begun to demonstrate. The increased awareness and data that is being generated through the CDP process is providing an important basis for the fundamental shift in response that is required from us all. It is hoped that this data will be actively used to assist the decisions of investors, policy-makers, businesses and other stakeholders.

#### Jonathon Hanks

**Director Incite Sustainability** 

35. Carbon Tracker Initiative; *Unburnable Carbon: Are the world's financial markets carrying a carbon bubble* http://www.carbontracker.org/carbonbubble (March 2012)

<sup>34.</sup> PWC; Two late for two degrees? Low carbon economy index 2012 (PWC; November 2012) www.pwc.co.uk

# Appendix 1 – Key trends across CDP data sets

This table outlines some of the key findings from CDP 2012 by geography or industry data-set<sup>36</sup>.

Key Trends Indicators	Statistic	Asia ex-Japan	Australia	Benelux	Brazil	Canada	Central & Eastern Europe	China	Emerging Markets	Electric Utilities (Global)	Europe	FTSE All-World
	Number of companies in sample	400	200	150	80	200	100	100	800	250	300	800
	Number of companies answering CDP 2012 <sup>37</sup>	129	99	57	52	107	23	23	291	101	275	625
	% sample answering CDP 2012 <sup>37</sup>	32	50	38	65	54	23	23	36	40	92	78
ance	% of responders reporting Board or other senior management responsibility for climate change	90	96	98	91	87	100	70	90	96	99	95
Governance	% responders reporting incentives for the management of climate change issues	65	63	65	51	51	75	30	66	64	77	77
- Age	% of responders reporting climate change as being integrated into their business strategy	90	89	96	81	77	100	78	86	94	91	92
Strategy	% of responders reporting engagement with policymakers on climate issues to encourage mitigation or adaptation	75	72	81	77	69	25	48	77	90	85	83
Se	% of responders reporting emission reduction targets <sup>38</sup>	64	52	72	36	43	75	30	63	64	82	80
Targets & Initiatives	% of responders reporting absolute emission reduction targets <sup>38</sup>	34	28	43	26	21	50	17	37	38	44	46
əts & Ir	% of responders reporting active emissions reduction initiatives in the reporting year	32	84	98	81	81	75	83	86	89	97	96
Targo	% of responders indicating that their products and services directly enable third parties to avoid GHG emissions	26	60	76	74	60	75	61	62	85	70	72
s & unities	% of responders seeing regulatory risks	80	84	81	81	75	75	52	87	93	84	81
Risks & Opportunities	% of responders seeing regulatory opportunities	76	68	87	79	65	50	48	78	87	83	78
ata	% of responders whose absolute emissions (Scope 1 and 2) have decreased compared to last year due to emission reduction activities	32	29	48	15	20	25	4	35	27	59	54
Emissions Data	% of responders reporting any portion of Scope 1 emissions data as independently verified <sup>39</sup>	50	61	74	53	37	50	4	57	64	81	70
Emissi	% of responders reporting any portion of Scope 2 emissions data as independently verified <sup>39</sup>	50	59	72	55	24	50	4	55	42	75	66
	% of responders reporting emissions data for 2 or more named Scope 3 categories <sup>40</sup>	26	36	46	74	25	25	4	39	39	55	45

<sup>36.</sup> Slight discrepancies exist between certain South African values represented in the above table and the values represented for similar statistics elsewhere in the report. This is primarily due to a deviation in the 'responding companies' sample size analysed by the CDP global team. Please note that for certain key trend statistics represented above, the 2012 values are not one hundred percent comparable to the 2011 values due to a change in calculation methodology between 2011 and 2012.

<sup>37.</sup> This statistic includes those companies that respond by referencing a parent or holding company's response. However the remaining statistics presented do not include these responses.

<sup>38.</sup> Companies may report multiple targets. However, in these statistics a company will only be counted once.

<sup>39.</sup> This takes into account companies reporting that verification is complete or underway, but does not include any evaluation of the verification statement provided.

France	DACH (DE, AU, CH)	Global 500	Iberia	India	Ireland	Italy	Japan	Korea	Latin America	New Zealand	Nordic	Russia	South Africa	Turkey	Transport (Global)	United Kingdom FTSE 600	United States S&P 500	Overall <sup>41</sup>
250	350	500	125	200	40	100	500	250	50	50	260	50	100	100	100	615	500	NA
81	193	405	50	52	17	46	227	99	32	21	148	4	78	17	54	329	343	2418
32	55	81	40	26	43	46	45	40	64	42	57	8	78	17	54	53	69	NA
95	83	96	98	90	100	95	97	87	100	90	92	67	96	93	93	96	92	91
70	44	82	71	64	59	53	76	65	50	48	58	33	65	87	80	65	69	61
88	73	95	94	86	65	79	92	86	79	86	90	33	81	80	91	84	83	84
78	64	87	85	79	59	65	78	70	82	57	74	33	84	73	83	73	70	71
71	57	82	75	60	65	58	96	72	39	43	71	67	59	47	72	68	70	65
33	31	49	46	12	41	40	71	44	21	29	32	67	28	33	30	35	39	37
91	83	98	94	88	76	81	99	74	86	67	72	67	96	80	93	88	92	87
75	66	74	83	55	41	65	79	61	71	48	88	67	56	67	74	58	62	64
69	58	91	90	86	76	72	94	85	86	62	83	33	99	93	78	82	69	78
83	67	79	94	86	59	74	84	76	79	57	77	33	92	73	70	72	64	73
40	36	59	58	19	35	28	56	45	18	14	47	33	57	27	39	48	49	44
71	47	77	83	52	71	67	42	73	61	33	49	33	64	33	69	54	53	52
65	40	72	77	48	59	60	42	72	54	33	45	0	63	33	59	51	48	47
53	37	50	63	38	35	35	34	20	50	29	48	0	68	20	26	36	33	37

<sup>40.</sup> Only companies reporting Scope 3 emissions using the Greenhouse Gas Protocol Scope 3 Standard named categories have been included below. Whilst in some cases "Other upstream" or "Other downstream" are legitimate selections, in most circumstances the data contained in these categories should be allocated to one of the named categories. In addition, only those categories for which emissions figures have been provided have been included.

<sup>41.</sup> Includes responses across all samples as well as responses submitted by companies not included in specific geographic or industry samples in 2012.

# **Appendix 2 – Emission reduction targets**

Company	Sub-sector	Туре	Scope	Target Year	Base Year	Target
Consumer Discretion	onary					
Clicks Group Ltd	Multiline Retail	Absolute	Scope 2	2017	2010	5% reduction from base year. (91098 tCO2e reported in base year). 0% of target emissions reductions achieved.
			Scope 3 (downstream transportation & distribution)	2015	2008	10% reduction from base year. (13941 tCO2e reported in base year). 100% of target emissions reductions achieved.
		Intensity	Scope 2	2015	2008	10% reduction in tCO2e per square meter. (0.29 tCO2e reported in base year). 100% of target emissions reductions achieved.
			Scope 1+2	2015	2008	5% reduction in tCO2e per 1000 man hours worked. (6.2 tCO2e reported in base year). 100% of target emissions reductions achieved.
Woolworths Holdings Ltd	Multiline Retail	Intensity	Scope 1+2+3	2012	2007	30% reduction in tCO2e per square meter. (0.81 tCO2e reported in base year). 100% of target emissions reductions achieved.
Consumer Staples						
British American Tobacco	Tobacco	Intensity	Scope 1+2+3	2030	2000	50% reduction in tCO2e per million cigarettes equivalent. (1.38 tCO2e reported in base year). 81.2% of target emissions reductions achieved.
				2050	2000	80% reduction in tCO2e per million cigarettes equivalent. (1.38 tCO2e reported in base year). 0% of target emissions reductions achieved.
Illovo Sugar Ltd	Food Products	Absolute	Scope 1	2017	2009	25% reduction from base year. (109171 tCO2e reported in base year). 0% of target emissions reductions achieved.
Massmart Holdings Ltd	Food & Staples Retailing	Absolute	Scope 2	2011	2008	12% reduction from base year. (249716 tCO2e reported in base year). 0% of target emissions reductions achieved.
		Intensity	Scope 2	2012	2008	12% reduction in tCO2e per square meter. (0.163 tCO2e reported in base year). This intensity target applies specifically to the Builders Warehouse stores within the Massbuild division. 79% of target emissions reductions achieved.
				2011	2008	3% reduction in tCO2e per square meter. (0.125 tCO2e reported in base year). This intensity target applies specifically to the Builders Express stores within the Massbuild division. 109% of target emissions reductions achieved.
				2012	2008	7% reduction in tCO2e per square meter. (0.255 tCO2e reported in base year). This intensity target applies specifically to the Game stores within the Massdiscounters division. 63% of target emissions reductions achieved.
Oceana	Food Products	Intensity	Scope 1+2	2013	2009	2.5% reduction in tCO2e per metric tonne of product. (334.14 tCO2e reported in base year). This intensity target applies to all Oceana operations. 100% of target emissions reductions achieved.
				2012	2009	2.5% reduction in tCO2e per metric tonne of product. (1545.82 tCO2e reported in base year). This intensity target applies specifically to Oceana Brands. 0% of target emissions reductions achieved.
				2012	2009	2.5% reduction in tCO2e per metric tonne of product. (82.72 tCO2e reported in base year). This intensity target applies specifically to Commercial Cold Storage. 100% of target emissions reductions achieved.

Company	Sub-sector	Туре	Scope	Target Year	Base Year	Target
Oceana	Food Products	Intensity	Scope 1+2	2012	2009	2.5% reduction in tCO2e per metric tonne of product. (1158.55 tCO2e reported in base year). This intensity target applies specifically to Blue Continent Products. 100% of target emissions reductions achieved.
					2009	2.5% reduction in tCO2e per metric tonne of product. (1179.81 tCO2e reported in base year). This intensity applies specifically to OLSF. 0% of target emissions reductions achieved.
					2010	2.5% reduction in tCO2e per metric tonne of product. (1152.61 tCO2e reported in base year). This intensity target applies specifically to Etosha. 100% of target emissions reductions achieved.
Pick 'n Pay Holdings Ltd	Food & Staples Retailing	Absolute	Scope 1+2+3	2015	2010	15% reduction from base year. (672553.95 tCO2e reported in base year). 23% of target emissions reductions achieved.
SABMiller	Beverages	Intensity	Scope 1+2	2020	2008	50% reduction in kgCO2e per hectolitre of beer. (15 kgCO2e reported in base year). This intensity target applies to on-site fossil fuel emissions. 17% of target emissions reductions achieved.
The Spar Group Ltd	Food & Staples Retailing	Intensity	Scope 1	2011	2009	3% reduction in gCO2e per case distributed. (176 gCO2e reported in base year). This intensity target applies to diesel usage by the SPAR distribution fleet and excludes diesel use in generators and fugitive emissions. 0% of target emissions reductions achieved.
			Scope 1	2011	2009	2% reduction in gCO2e per case distributed. (234 gCO2e reported in base year). This intensity target applies to electricity consumed by all SPAR facilities. 0% of target emissions reductions achieved.
			Scope 3 (business travel)	2011	2009	33% reduction in gCO2e per case distributed. (6.4 gCO2e reported in base year). This intensity target applies to emissions resulting from business air travel. 100% of target emissions reductions achieved.
Tongaat Hulett Ltd	Food Products	Absolute	Scope 1+2	2020	2011	20% reduction from base year. (1119826 tCO2e reported in base year).
		Absolute	Scope 3 (business travel)	2012	2011	5% reduction from base year. (808 tCO2e reported in base year). 51% of target emissions reductions achieved.
		Intensity	Scope 1+2	2020	2011	20% reduction in tCO2e per FTE employee. (28.5 tCO2e reported in base year).
Energy & Materials						
Anglo American	Metals & Mining	Absolute	Scope 1+2	2014	2004	10% reduction from base year. (32692000 tCO2e reported in base year). 100% of target emissions reductions achieved.
Anglo American Platinum	Metals & Mining	Intensity	Scope 1+2	2014	2004	10% reduction in tCO2e per unit of production. (5634910 tCO2e reported in base year). 44% of target emissions reductions achieved.
AngloGold Ashanti	Metals & Mining	Intensity	Scope 1+2	2022	2007	30% reduction in tCO2e per ounce of gold. (0.77 tCO2e reported in base year). 0% of target emissions reductions achieved.
Arcelor Mittal South Africa Ltd	Metals & Mining	Intensity	Scope 1+2	2020	2007	8% reduction in tCO2e per metric ton of product. 4.5% of target emissions reductions achieved.
BHP Billiton	Metals & Mining	Intensity	Scope 1+2	2012	2006	6% reduction in tCO2e per unit of production. (47200000 tCO2e reported in base year). 100% of target emissions reductions achieved.

Company	Sub-sector	Туре	Scope	Target Year	Base Year	Target
Exxaro Resources Ltd	Metals & Mining	Absolute	Scope 1+2	2012	2009	10% reduction from base year. (2768111 tCO26 reported in base year). 100% of target emission reductions achieved.
Gold Fields Limited	Metals & Mining	Absolute	Scope 1	2012	2009	10% reduction from base year. (108797 tCO2e reported in base year).
			Scope 2	2015	2009	5% reduction from base year. (132998 tCO2e reported in base year).
		Intensity	Scope 1+2	2015	2009	14.3% reduction in tCO2e per ounce of gold. (2 tCO2e reported in base year). This intensity targapplies to the South African Beatrix operation, i corrected for ore grade and depth, and exclude fugitive mine methane emissions. 100% of targe emissions reductions achieved.
				2015	2009	15% reduction in tCO2e per ounce of gold. (2.0 tCO2e reported in base year). This intensity targ applies to the South African KDC-West mine (previously called Driefontein), and is corrected for ore grad and depth. 100% of target emission reductions achieved.
				2015	2009	15% reduction in tCO2e per ounce of gold. (2.8 tCO2e reported in base year). This intensity targ applies to the South African KDC-East (previous called Kloof) mine, and is corrected for ore grad and depth. 100% of target emissions reductions achieved.
				2015	2009	15% reduction in tCO2e per ounce of gold. (2.0 tCO2e reported in base year). This intensity targ applies to the South African South Deep mine, and is corrected for ore grade and depth. 100% target emissions reductions achieved.
				2012	2009	4.9% reduction in tCO2e per ounce of gold. (0.3 tCO2e reported in base year). This intensity targ applies to the Ghanaian Tarkwa mine, and is corrected for ore grade and depth. 0% of target emissions reductions achieved.
				2012	2009	4.7% reduction in tCO2e per ounce of gold. (0.2 tCO2e reported in base year). This intensity targ applies to the Ghanaian Damang mine, and is corrected for ore grade and depth. 0% of target emissions reductions achieved.
Harmony Gold Mining Co Ltd	Metals & Mining	Intensity	Scope 1	2013	2008	15% reduction in tCO2e per tonne of ore processed. (0.001989 tCO2e reported in base year). This intensity target applies to Harmony's South African operations as well as Harmony's 50% share in the Morobe Mining Joint Venture (MMJV) operations in Papua New Guinea. 57% target emissions reductions achieved.
			Scope 2	2013	2005	15% reduction in tCO2e per tonne of ore processed. (0.3646 tCO2e reported in base yea This intensity target applies to Harmony's South African operations as well as Harmony's 50% sin the Morobe Mining Joint Venture operations in Papua New Guinea. 100% of target emission reductions achieved.
			Scope 1+2	2013	2008	15% reduction in tCO2e per tonne of ore processed. (0.2485 tCO2e reported in base yea This intensity target applies to Harmony's South African operations as well as Harmony's 50% sl in the Morobe Mining Joint Venture operations in Papua New Guinea. 100% of target emission reductions achieved.
Impala Platinum Holdings	Metals & Mining	Absolute	Scope 2	2020	2000	5% reduction from base year. (2256000 tCO2e reported in base year). 3.1% of target emissions reductions achieved.

Company	Sub-sector	Туре	Scope	Target Year	Base Year	Target
Kumba Iron Ore	Metals & Mining	Absolute	Scope 1+2	2011	2011	2.1% reduction from base year. (921805 tCO2e reported in base year). 74% of target emissions reductions achieved.
Lonmin	Metals & Mining	Intensity	Scope 1+2	2012	2007	5% reduction in tCO2e per ounce of Platinum Group Metal. (1673274 tCO2e reported in base year). 13% of target emissions reductions achieved.
Mondi PLC	Paper & Forest Products	Intensity	Scope 1+2	2014	2004	15% reduction in tCO2e per metric tonne of product. (6962455 tCO2e reported in base year). 139% of target emissions reductions achieved.
Nampak Ltd	Containers & Packaging	Absolute	Scope 2	2013	2008	10% reduction from base year. (714815 tCO2e reported in base year). 100% of target emissions reductions achieved.
Pretoria Portland Cement Co Ltd	Construction Materials	Intensity	Scope 1+2	2017	2011	5% reduction in tCO2e per unit of production. (5311112 tCO2e reported in base year). 0% of target emissions reductions achieved.
			Scope 2	2017	2011	10% reduction in % kWh per 15 years. (582841 reported in base year). 0% of target emissions reductions achieved.
Sappi	Paper & Forest Products	Intensity	Scope 1+2	2012	2008	40% reduction in tCO2e per metric tonne of product. (1.34 tCO2e reported in base year). This intensity target applies to North American operations. 139% of target emissions reductions achieved.
				2011	2010	1% reduction in tCO2e per metric tonne of product. (0.52 tCO2e reported in base year). This intensity target applies to European operations. 0% of target emissions reductions achieved.
				2015	2000	15% reduction in tCO2e per metric tonne of product. (2.34 tCO2e reported in base year). This intensity target applies to South African operations. 13% of target emissions reductions achieved.
Sasol Limited	Oil, Gas & Consumable Fuels	Absolute	Scope 1+2	2020	2005	20% reduction from base year. (30000000 tCO2e reported in base year). This absolute target applies to new CTL plants commissioned before 2020.
				2030	2005	30% reduction from base year. (30000000 tCO2e reported in base year). This absolute target applies to new CTL plants commissioned before 2020.
		Intensity	Scope 1+2	2005	2020	15% reduction in tCO2e per metric ton of product. 36% of target emissions reductions achieved.
			Scope 1	2000	2015	15% reduction in tCO2e per unit of production.
Financials						
Absa Group	Commercial Banks	Absolute	Scope 1	2013	2010	12.5% reduction from base year. (409444 tCO2e reported in base year). This absolute target applies to Group energy consumption. 90% of target emissions reductions achieved.
African Bank Investments Limited	Diversified Financial Services	Absolute	Scope 1+2	2014	2010	10% reduction from base year. (61303 tCO2e reported in base year). 100% of target emissions reductions achieved.
Capital Shopping Centres Group PLC	Real Estate Investment Trusts (REITs)	Absolute	Scope 1+2	2011	2010	10% reduction from base year. (44551 tCO2e reported in base year).
Discovery Holdings Ltd	Insurance	Intensity	Scope 2	2011	2009	5% reduction in tCO2e per FTE employee. (6.17 tCO2e reported in base year). 100% of target emissions reductions achieved.
FirstRand Limited	Diversified Financial Services	Absolute	Scope 2	2012	2006	11% reduction from base year. (316753 tCO2e reported in base year). 100% of target emissions reductions achieved.

Company	Sub-sector	Туре	Scope	Target Year	Base Year	Target
Growthpoint Properties	Real Estate Management & Development	Absolute	Scope 1	2016	2011	10% reduction from base year. (22.69 tCO2e reported in base year).
	Development		Scope 2	2016	2011	10% reduction from base year. (1899.37 tCO2e reported in base year).
			Scope 1+2	2016	2011	10% reduction from base year. (1922.06 tCO2e reported in base year).
Investec Limited	Capital Markets	Absolute	Scope 2	2012	2010	10% reduction from base year. (5082 tCO2e reported in base year). This absolute target applies to the London Office. 100% of target emissions reductions achieved.
Nedbank Limited	Commercial Banks	Intensity	Scope 1+2+3	2015	2007	12% reduction in tCO2e per FTE employee. (9.15 tCO2e reported in base year). 82.3% of target emissions reductions achieved.
Old Mutual plc	Insurance	Intensity	Scope 1+2	2020	2010	6% reduction in tCO2e per FTE employee. (2.47 tCO2e reported in base year). This intensity target includes all Old Mutual properties and operations occupied by employees. 30% of target emissions reductions achieved.
		Intensity	Scope 1+2	2020	2010	10% reduction in tCO2e per square meter. (0.23 tCO2e reported in base year). This intensity target applies to the investment property portfolio. 50% of target emissions reductions achieved.
Remgro	Diversified Financial Services	Absolute	Scope 2	2011	2010	5% reduction from base year. (236625 tCO2e reported in base year). 83% of target emissions reductions achieved.
Sanlam	Insurance	Intensity	Scope 1+2+3	2015	2010	15% reduction in tCO2e per FTE employee. (11.77 tCO2e reported in base year). 83.51% of target emissions reductions achieved.
		Intensity	Scope 2	2015	2010	20% reduction in tCO2e per square meter. (0.37 tCO2e reported in base year). 0.03% of target emissions reductions achieved.
		Intensity	Scope 3 (business travel)	2015	2010	5% reduction in tCO2e per FTE employee. (0.77 tCO2e reported in base year). 100% of target emissions reductions achieved.
Santam Ltd	Insurance	Intensity	Scope 1+2+3	2015	2010	15% reduction in tCO2e per FTE employee. (6.32 tCO2e reported in base year). This intensity target applies to Santam Head Office (Western Cape), Auckland Park, Illovo, Bruma, Bedfordview and Garsfontein (all Gauteng). 0% of target emissions reductions achieved.
Health Care						
Mediclinic International	Health Care Providers & Services	Intensity	Scope 2	2012	2011	3.09% reduction in tCO2e per bed day sold. (0.091794 tCO2e reported in base year). This intensity target applies to the 52 hospitals of Mediclinic Southern Africa only. Administration offices and other buildings are excluded. 100% of target emissions reductions achieved.
Netcare Limited	Health Care Providers & Services	Intensity	Scope 1+2+3	2011	2008	46% reduction in tCO2e per unit revenue. (0.000027 tCO2e reported in base year). 100% of target emissions reductions achieved.
		Intensity	Scope 1+2+3	2011	2008	36% reduction in tCO2e per number of patient days. (0.147 tCO2e reported in base year). 100% of target emissions reductions achieved.
Industrials						
Allied Electronics Corporation Ltd (Altron)	Industrial Conglomerates	Absolute	Scope 1	2012	2009	1.85% reduction from base year. 44% of target emissions reductions achieved.
/		Absolute	Scope 2	2012	2009	0.84% reduction from base year. 66% of target emissions reductions achieved.
		Absolute	Scope 3 (business travel & paper)	2012	2009	1.96% reduction from base year. 17% of target emissions reductions achieved.

Company	Sub-sector	Туре	Scope	Target Year	Base Year	Target
Barloworld	Trading Companies & Distributors	Intensity	Scope 1+2	2014	2009	12% reduction in tCO2e per unit revenue. (4.4 tCO2e reported in base year). 113% of target emissions reductions achieved.
Bidvest Group Ltd	Industrial Conglomerates	Absolute	Scope 1+2+3	2050	2006	67% reduction from base year. (107360 tCO2e reported in base year). This absolute target applies to 3663, which accounts for 17% the Bidvest Group's turnover (2011/3). The target excludes refrigeration gas.
			Scope 2	2012	2011	10% reduction from base year.
			Scope 1+2	2015	2008	20% reduction from base year. (26280 tCO2e reported in base year).
		Intensity	Scope 1+2	2015	2008	20% reduction in tCO2e per metric tonne of product. (115.4 tCO2e reported in base year). This intensity target applies specifically to Deli XL. 45% of target emissions reductions achieved.
Grindrod Ltd	Marine	Absolute	Scope 2	2020	2010	10% reduction from base year. (19170 tCO2e reported in base year). 10% of target emissions reductions achieved.
			Scope 3 (waste generated in operations)	2020	2010	10% reduction from base year. (6375 tCO2e reported in base year). 10% of target emissions reductions achieved.
		Intensity	Scope 3 (waste generated in operations)	2020	2010	10% reduction in % solid waste recycled. (15.7 reported in base year). This intensity target is used as a proxy for absolute emissions from solid waste to landfill. 0% of target emissions reductions achieved.
			Scope 1+2	2015	2010	10% reduction in gCO2-e per unit revenue. (9.75 gCO2e reported in base year). 0% of target emissions reductions achieved.
			Scope 1	2015	2010	5% reduction in average gCO2e per tonne-NM. (10.44 gCO2e reported in base year). 100% of target emissions reductions achieved.
			Scope 1	2015	2010	5% reduction in kgCO2-e per km. (1.45 kgCO2e reported in base year). This intensity target applies specifically to diesel trucks. 0% of target emissions reductions achieved.
			Scope 1	2015	2010	5% reduction in kgCO2-e per km. (0.22 kgCO2e reported in base year). This intensity target applies specifically to petrol cars. 0% of target emissions reductions achieved.
			Scope 2	2020	2010	10% reduction in kWh per man-hour. (2.7 reported in base year). 100% of target emissions reductions achieved.
IT & Telecommunic	cations					
Vodacom Group	Wireless Telecom- munication Services	Intensity	Scope 1+2	2014	2009	25% reduction in tCO2e per base station. (33.03 tCO2e reported in base year). This intensity target applies to fuel and electricity consumption per base station taking growth into account. 100% of target emissions reductions achieved.

# Appendix 3 – Exclusions and qualifying remarks

This table identifies what was not included within the scope 1 and/or scope 2 emissions provided in Table 1 and the Sector Summary tables.

ables.							
Company	Sub-sector	Exclusions and qualifying remarks					
<b>Consumer Discretionary</b>							
Steinhoff International Holdings	Household Durables	Scope 1 and 2: Excludes emissions from office in China.					
Woolworths Holdings Ltd	Multiline Retail	Scope 1 and 2: Excludes emissions from Country Road.					
Consumer Staples							
British American Tobacco Tobacco		Scope 1 and 2: Excludes emissions from new acquisition Bentoel Internasional Ivestama Tbk, Indonesia. Scope 1 and 2: Excludes emissions from Productora Tabacalerade de Columbia SAS (Protobaco).					
Illovo Sugar Ltd	Food Products	Scope 1: Excludes emissions from drainage & tillage of soil, land use change, onsite solid-waste disposal, onsite effluent treatment & disposal, refrigerants, agriproduct applications to fields.					
Massmart Holdings Ltd	Food & Staples Retailing	Scope 2: Excludes emissions from non-SA facilities.					
Pick 'n Pay Holdings Ltd	Food & Staples Retailing	Scope 1 and 2: Excludes emissions from Boxer and Franklin branded stores, franchise stores, and stores outside South Africa.					
SABMiller	Beverages	Scope 1 and 2: Excludes emissions from non-brewing facilities.					
The Spar Group Ltd	Food & Staples Retailing	Scope 1 and 2: Excludes emissions from owned stores.					
Energy & Materials							
Anglo American	Metals & Mining	Scope 1: Excludes emissions from F-gases and N2O.					
Anglo American Platinum	Metals & Mining	Scope 2: Excludes emissions from head office.					
AngloGold Ashanti	Metals & Mining	Scope 1: Excludes emissions from land clearance, explosives, and process emissions.					
Exxaro Resources Ltd	Metals & Mining	Scope 1: Excludes emissions from coal discard dumps.					
Gold Fields Limited	Metals & Mining	Scope 1: Excludes emissions from mine methane (all operations except Beatrix).					
Harmony Gold Mining Metals & Mining Co Ltd		Scope 1: Excludes emissions from fugitive methane emissions and liquefied petroleum gas (LPG). Scope 2: Excludes emissions from electricity usage at head office.					
Impala Platinum Holdings	Metals & Mining	Scope 1: Excludes emissions from refrigerant gas loss. Scope 1 and 2: Excludes emissions from Two Rivers Platinum.					
Kumba Iron Ore	Metals & Mining	Scope 1 and 2: Excludes emissions from head office. Scope 1: Excludes emissions from jet fuel for Kumba owned jets.					
Lonmin	Metals & Mining	Scope 1 and 2: Excludes emissions from Lonmin Johannesburg and London, ar emissions from the exploration portfolio.					
Nampak Ltd	Containers & Packaging	Scope 1 and 2: Excludes emissions from Europe (other than the UK) and the res Africa.					
Northam Platinum Ltd	Metals & Mining	Scope 1 and 2: Excludes emissions from corporate office in Johannesburg.					
Pretoria Portland Cement Co Ltd	Construction Materials	Scope 1 and 2: Excludes emissions from Zimbabwe, Botswana, and from PPC aggregates.					
Royal Bafokeng Platinum Ltd	Metals & Mining	Scope 1: Excludes emissions from BRPM and Styldrift Merensky Phase I Project.					
Sappi	Paper & Forest Products	Scope 2: Excludes emissions from Sappi Fine Paper Europe head office and Sappi Fine Paper North America head office. Scope 1 and 2: Excludes emissions from Sappi SA forests contractors and Sappi SA forests regional offices.					
Financials							
Absa Group	Commercial Banks	Scope 1 and 2: Excludes emissions from refrigerants, and Absa Botswana, Mozambique, Tanzania.					
African Bank Investments Limited	Diversified Financial Services	Scope 1 and 2: Excludes emissions from non-South African operations.					
Discovery Holdings Ltd	Insurance	Scope 1 and 2: Excludes emissions from Discovery Consulting Services.					
Emira Property Fund	Real Estate Investment Trusts (REITs)	Scope 1: Excludes emissions from stationary fuels used in generators.					
FirstRand Limited	Diversified Financial Services	Scope 1 and 2: Excludes emissions from FirstRand EMA Holdings Limited (non-South African Operations of FirstRand Bank Limited).					
Growthpoint Properties	Real Estate Management & Development	Scope 1 and 2: Excludes emissions from Australia and from the V&A Waterfront in Cape Town, South Africa.					
Hosken Consolidated Investments	Diversified Financial Services	Scope 1: Excludes emissions from GHG emission from air-conditioning. Scope 1 and 2: Excludes emissions from associate KWV and new acquisitions.					

Company	Sub-sector	Exclusions and qualifying remarks			
Investec Limited	Capital Markets	Scope 1: Excludes emissions from Australia and Mauritius.			
JSE Ltd	Diversified Financial Services	Scope 1 and 2: Excludes emissions from offsite disaster recovery site.			
(incorporating Liberty Life Group Ltd)		Scope 1: Excludes emissions from air conditioning and refrigeration gas refills. Scope 2: Excludes emissions from all sources of direct emissions in Liberty leased branches. Scope 1 and 2: Excludes emissions from all sources of direct and indirect emissions from Liberty's operations in other African countries outside South Africa.			
MMI Holdings Ltd	Insurance	Scope 1: Excludes emissions from diesel in generators and refrigerant gas.			
Nedbank Limited	Commercial Banks	Scope 2: Excludes emissions from Bancassurance and Wealth Financial Advisors, Pick-n-Pay in store Nedbank outlets, and selected electronic banking service devices like: ATM, SST and POS.			
Old Mutual plc	Insurance	Scope 1 and 2: Excludes emissions from South Africa and Kenya branches, and property portfolios. Scope 2: Excludes emissions from Nedbank's Bancassurance and Wealth Financial Advisors, Pick-n-Pay in store Nedbank outlets, and selected Nedbank electronic banking service devices like: ATM, SST and POS.			
Remgro	Diversified Financial Services	Scope 1: Excludes emissions from refrigerants and/or air conditioning gases. Scope 2: Excludes emissions from electricity generation at Tsb Sugar from burning bagasse waste for its own use during the crushing season. Scope 1 and 2: Excludes emissions from Remgro International (Jersey).			
Sanlam	Insurance	Scope 1: Excludes emissions from the Sanlam vehicle fleet. Scope 1 and 2: Excludes emissions from subsidiary, Santam. Excludes emissions from the rest of Africa, India, Australia, United States of America (USA), United Kingdom (UK) excluded from carbon footprint. Only 68% of South African staff were included in the carbon footprint.			
Santam Ltd	Insurance	Scope 1 and 2: Excludes emissions from Santam Namibian operations and from all facilities other than the Santam Head Office Campus, Tyger Valley; Auckland Park; Bedfordview; Bruma; Illovo and Menlyn Piazza.			
Standard Bank Group	Commercial Banks	Scope 1 and 2: Excludes emissions from outside South Africa.			
Health Care					
Adcock Ingram	Pharmaceuticals	Scope 1: Excludes emissions from mobile machinery fuels, stationary fuels, and refrigerant gases. Scope 1 and 2: Excludes emissions from Nutrilida (Pty) Ltd, Kenya branch office and Zimbabwe facility.			
Aspen Pharmacare Holdings	Pharmaceuticals	Scope 1 and 2: Excludes emissions from Woodmead and Durban office parks, and from the Fine Chemicals Cooperation.			
Mediclinic International	Health Care Providers & Services	Scope 1 and 2: Excludes emissions from hospitals belonging to MediClinic International that are located outside of South Africa and Namibia i.e. Middle East and Switzerland.			
Industrials					
Allied Electronics Corporation Ltd (Altron)	Industrial Conglomerates	Scope 1 and 2: Excludes emissions from facilities under control of the parent.			
Aveng Ltd	Construction & Engineering	Scope 1: Excludes emissions from various scope 1 fuel sources. Scope 1 and 2: Excludes emissions from Facility: Dynamic Fluid Control.			
Bidvest Group Ltd	Industrial Conglomerates	Scope 1: Excludes emissions from greenhouse gas refills of air conditioning and refrigeration equipment owned or operated by Bidvest, and from Bidvest Car Rental operations generated by customer usage of vehicles.			
Reunert	Industrial Conglomerates	Scope 1: Excludes emissions from fugitive emissions. Scope 1 and 2: Excludes emissions from Australian operation.			
Wilson Bayly Holmes- Ovcon Ltd	Construction & Engineering	Scope 1 and 2: Excludes emissions from African (other than South Africa) and Australian operations.			
IT & Telecommunications					
MTN Group	Wireless Telecommunication Services	Scope 1 and 2: Excludes emissions from certain OPCO's.			
Telkom SA Limited	Diversified Telecommunication Services	Scope 1 and 2: Excludes emissions from I-Way Africa.			
Vodacom Group	Wireless Telecommunication Services	Scope 1: Excludes emissions from air-conditioning and refrigeration gases from the Lesotho & DRC operations.			

# Appendix 4 - Exclusions and qualifying remarks for voluntary respondents outside the JSE 100 sample

Company	Sub-Sector	Exclusions and qualifying remarks			
Consumer Discretionary					
Mix Telematics	Auto Components	Scope 1 and 2: Excludes emissions from the following office facilities within the SDI division: Abu Dhabi, Qatar, Yemen, and Oman JMC.			
Consumer Staples					
Distell Group Ltd	Beverages	Scope 1: Excludes emissions from Nederburg Wine Farm Ltd and Papkuilsfontein Vineyards (PTY) Ltd.			
		Scope 1 and 2: Excludes emissions from non-SA based facilities, including Bisquit Dubouche et Cie (France), Distell Botswana (PTY) Ltd, Distell Namibia Ltd, Distell Swaziland Ltd, Distell Wine Masters Ltd (Kenya) and the joint ventures Grays Inc Ltd (Mauritius), Tanzania Distilleries Ltd (Tanzania), Afdis Holdings Ltd (Zimbabwe).			
Energy & Materials					
Eskom	Uncategorised	Scope 1: Excludes emissions from company owned vehicles, coal methane, waste management facilities, grids, refrigeration and air condition assets.			
Evraz Highveld Steel And Vanadium Limited	Metals & Mining	Scope 1 and 2: Excludes emissions from certain geographies and the Steelworks sewage plant.			
		Scope 1 and 2: Excludes Methane and Nitrous Oxide emissions.			
		Scope 1: Excludes emissions from carbon contained in our products, by products or slag.			
Hulamin	Metals & Mining	Scope 1 and 2: Excludes emissions from two minor manufacturing facilities under operational control.			
Industrials					
Basil Read	Construction & Engineering	Scope 1 and 2: Excludes emissions from temporary sites.			
Group Five Ltd	Construction & Engineering	Scope 1 and 2: Excludes emissions from the Construction Materials Office.			
South African Post Office	Air Freight & Logistics	Scope 1: Excludes emissions from SAPO subsidiaries.			
		Scope 2: Excludes emissions from SAPO retail outlets, data centres and depots.			
Other (uncategorised)					
Transnet	Uncategorised	Scope 1: Leakages in fuel storage and transportation.			

Lead Partner



Advisor and Report-Writer



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