

# CDP Global 500 Report 2011

## Accelerating Low Carbon Growth

On behalf of 551 investors with assets of US\$71 trillion



Report written for  
Carbon Disclosure Project by:



Carbon Disclosure Project  
info@cdproject.net  
+44 (0) 20 7970 5660  
www.cdproject.net

# 2011 Carbon Disclosure Project Investor Members

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 [www.cdproject.net/investormembers](http://www.cdproject.net/investormembers)

ABRAPP - Associação  
Brasileira das Entidades  
Fechadas de Previdência  
Complementar

AEGON N.V.

AKBANK T.A.S.

Allianz Global Investors  
Kapitalanlagegesellschaft  
mbH

ATP Group

Aviva Investors

Bank of America Merrill  
Lynch

BlackRock

BP Investment  
Management Limited

California Public  
Employees' Retirement  
System

California State  
Teachers' Retirement  
System

Calvert Asset  
Management Company,

Inc.

Catholic Super

CCLA Investment  
Management Ltd

Ethos Foundation

Generation Investment  
Management

HSBC Holdings plc

ING

KB Kookmin Bank

KLP

Legg Mason, Inc.

London Pensions Fund  
Authority

Mitsubishi UFJ Financial  
Group (MUFG)

Morgan Stanley

National Australia Bank

NEI Investments

Neuberger Berman

Newton Investment  
Management Limited

Nordea Investment  
Management

# 2011 Carbon Disclosure Project Investor Signatories

## Carbon Disclosure Project 2011

551 financial institutions with assets of US\$71 trillion were signatories to the CDP 2011 information request dated February 1st, 2011

Aberdeen Asset Managers  
Aberdeen Immobilien KAG mbH  
ABRAPP - Associação Brasileira das Entidades Fechadas de Previdência Complementar  
Active Earth Investment Management  
Acuity Investment Management  
Addenda Capital Inc.  
Advanced Investment Partners  
Advantage Asset Managers (Pty) Ltd  
AEGON Magyarország Befektetési Alapkezelő Zrt.  
AEGON N.V.  
AEGON-INDUSTRIAL Fund Management Co., Ltd  
AFP Integra  
AIG Asset Management  
Ak Asset Management  
AKBANK T.A.S.  
Alberta Investment Management Corporation (AIMCo)  
Alberta Teachers Retirement Fund  
Alcyone Finance  
Allianz Elementar Versicherungs-AG  
Allianz Group  
Altira Group  
Amalgamated Bank  
AMP Capital Investors  
AmpegaGerling Investment GmbH  
Amundi AM  
ANBIMA - Associação Brasileira das Entidades dos Mercados Financeiro e de Capitais  
Antera Gestão de Recursos S.A.  
APG Group  
Aprionis  
Aquila Capital  
ARIA (Australian Reward Investment Alliance)  
Arisaig Partners Asia Pte Ltd  
ARK Investment Advisors Inc.  
Arma Portföy Yönetimi A.S.  
ASB Community Trust  
ASM Administradora de Recursos S.A.  
ASN Bank  
Assicurazioni Generali Spa  
ATP Group  
Australia and New Zealand Banking Group Limited  
Australian Central Credit Union incorporating Savings & Loans Credit Union  
Australian Ethical Investment Limited  
AustralianSuper  
Aviva  
Aviva Investors  
AXA Group  
Baillie Gifford & Co.  
Bakers Investment Group (Australia) Pty Ltd  
Banco Bradesco S/A  
Banco de Credito del Peru BCP  
Banco de Galicia y Buenos Aires S.A.  
Banco do Brasil S/A  
Banco Nacional de Desenvolvimento Econômico e Social - BNDES  
Banco Santander  
Banesprev - Fundo Banespa de Seguridade Social  
Banesto (Banco Español de Crédito S.A.)  
Bank of America Merrill Lynch  
Bank of Montreal  
Bank Sarasin & Cie AG  
Bank Vontobel  
Bankhaus Schelhammer & Schattera Kapitalanlagegesellschaft m.b.H.  
BANKINTER S.A.  
BankInvest  
Banque Degroof  
Barclays

Baumann and Partners S.A.  
BAWAG P.S.K. INVEST GmbH  
Bayern LB  
BayernInvest Kapitalanlagegesellschaft mbH  
BBC Pension Trust Ltd  
BBVA  
Bedfordshire Pension Fund  
Bentall Kennedy  
Beutel Goodman and Co. Ltd  
BioFinance Administração de Recursos de Terceiros Ltda  
BlackRock  
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 Columbia Investment Management Corporation (bcIMC)  
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  
Caja de Ahorros de Valencia, Castellón y Valencia, BANCAJA  
Caja Navarra  
California Public Employees' Retirement System  
California State Teachers' Retirement System  
California State Treasurer  
Calvert Asset Management Company, Inc  
Canada Pension Plan Investment Board  
Canadian Friends Service Committee (Quakers)  
Canadian Imperial Bank of Commerce (CIBC)  
CAPESESP  
Capital Innovations, LLC  
CARE Super Pty Ltd  
Carlson Investment Management  
Carmignac Gestion  
Catherine Donnelly Foundation  
Catholic Super  
Cbus Superannuation Fund  
CCLA Investment Management Ltd  
Celeste Funds Management Limited  
Central Finance Board of the Methodist Church  
Ceres  
Christian Super  
Christopher Reynolds Foundation  
Church Commissioners for England  
Church of England Pensions Board  
CI Mutual Funds' Signature Global Advisors  
Clean Yield Group, Inc.  
Cleantech Invest AG  
ClearBridge Advisors  
Climate Change Capital Group Ltd  
CM-CIC Asset Management  
Colonial First State Global Asset Management  
Comerica Incorporated  
Comite syndical national de retraite Bâtirente  
Commerzbank AG  
CommInsure  
Commonwealth Bank of Australia  
Compton Foundation, Inc.  
Concordia Versicherungsgruppe  
Connecticut Retirement Plans and Trust Funds  
Co-operative Financial Services (CFS)  
Corston-Smith Asset Management Sdn. Bhd.  
CRD Analytics  
Crédit Agricole  
Credit Suisse  
Gruppo Credito Valtellinese  
Daegu Bank  
Daiwa Securities Group Inc.

de Pury Pictet Turrettini & Cie S.A.  
DekaBank Deutsche Girozentrale  
Deutsche Asset Management Investmentgesellschaft mbH  
Deutsche Bank AG  
Deutsche Postbank Vermögensmanagement S.A.  
Development Bank of Japan Inc.  
Development Bank of the Philippines (DBP)  
Dexia Asset Management  
Dexus Property Group  
DnB NOR 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  
Erste Asset Management  
Erste Group Bank  
Essex Investment Management Company, LLC  
ESSSuper  
Ethos Foundation  
Eureko B.V.  
Eurizon Capital SGR  
Evangelical Lutheran Church in Canada Pension Plan for Clergy and Lay Workers  
Evli Bank Plc  
F&C Management Ltd  
FAELCE - Fundacao Coelce de Seguridade Social  
FAPERS- Fundação Assistencial e Previdenciária da Extensão Rural do Rio Grande do Sul  
FASERN - Fundação COSERN de Previdência Complementar  
Fédérés 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 Limited  
Five Oceans Asset Management Pty Limited  
Florida State Board of Administration (SBA)  
Folketrygfondet  
Folksam  
Fondaction CSN  
Fondation de Luxembourg  
Fondriaria-SAI  
Fonds de Réserve pour les Retraites - FRR  
Fourth Swedish National Pension Fund (AP4)  
FRANKFURT-TRUST Investment-Gesellschaft mbH  
Fukoku Capital Management Inc  
FUNCEF - Fundação dos Economizários Federais  
Fundação AMPLA de Seguridade Social - Brasileiros  
Fundação Atlântico de Seguridade Social  
Fundação Atílio Francisco Xavier Fontana  
Fundação Barrisul de Seguridade Social  
Fundação de Assistência e Previdência Social do BNDES - FAPES  
FUNDAÇÃO ELETROBRÁS DE SEGURIDADE SOCIAL - ELETROS  
Fundação Forluminas de Seguridade Social - FORLUSZ  
FUNDAÇÃO ITAUBANCO  
Fundação Itaúsa Industrial  
Fundação Promon de Previdência Social  
Fundação Vale do Rio Doce de Seguridade Social - VALIA  
Fundação Rede Ferroviária de Seguridade Social - Refer  
Fundação Sistel de Seguridade Social (Sistel)  
FUNDIÁGUA - FUNDAÇÃO DE PREVIDENCIA COMPLEMENTAR DA CAESB  
Futuregrowth Asset Management  
Gartmore Investment Management Ltd  
GEAP Fundação de Seguridade Social  
Generali Deutschland Holding AG

Generation Investment Management	Landsgörningarna i Sverige	Norfolk Pension Fund
Genus Capital Management	LBBW - Landesbank Baden-Württemberg	Norges Bank Investment Management (NBIM)
Gjensidige Forsikring ASA	LBBW Asset Management Investmentgesellschaft mbH	North Carolina Retirement System
GLS Gemeinschaftsbank eG	LD Lønmodtagernes Dyrtdidsfond	Northern Ireland Local Government Officers' Superannuation Committee (NILGOSC)
Goldman Sachs Group Inc.	Legal & General Investment Management	Northern Trust
GOOD GROWTH INSTITUT für globale Vermögensentwicklung mbH	Legg Mason, Inc.	Nykredit
Governance for Owners	LGT Capital Management Ltd.	Oddo & Cie
Government Employees Pension Fund ("GEPF"), Republic of South Africa	LIG Insurance Co., Ltd	OEKO Capital Lebensversicherung AG
Green Cay Asset Management	Light Green Advisors, LLC	Old Mutual plc
Green Century Capital Management	Living Planet Fund Management Company S.A.	OMERS Administration Corporation
Groupe Crédit Coopératif	Local Authority Pension Fund Forum	Ontario Teachers' Pension Plan
Groupe Investissement Responsable Inc.	Local Government Super	OP Fund Management Company Ltd
GROUPE OFI AM	Local Super	Oppenheim Fonds Trust GmbH
Grupo Banco Popular	Lombard Odier Darier Hentsch & Cie	Opplysningsvesenets fond (The Norwegian Church Endowment)
Grupo Santander Brasil	London Pensions Fund Authority	OPSEU Pension Trust
Gruppo Credito Valtellinese	Lothian Pension Fund	Oregon State Treasurer
Gruppo Montepaschi	Lupus alpha Asset Management GmbH	Orion Asset Management LLC
Guardian Ethical Management Inc	Macif Gestion	Parnassus Investments
Guardians of New Zealand Superannuation	Macquarie Group Limited	Pax World Funds
Guosen Securities Co., LTD.	MAMA Sustainable Incubation AG	Pensioenfonds Vervoer
Hang Seng Bank	Man	Pension Denmark
Harbourmaster Capital	Maple-Brown Abbott Limited	Pension Fund for Danish Lawyers and Economists
Harrington Investments, Inc	Marc J. Lane Investment Management, Inc.	Pension Protection Fund
Hauck & Aufhäuser Asset Management GmbH	Maryland State Treasurer	Pensionsmyndigheten
Hazel Capital LLP	Matrix Asset Management	PETROS - The Fundação Petrobras de Seguridade Social
HDFC Bank Ltd	McLean Budden	PFA Pension
Health Super Fund	MEAG MUNICH ERGO Asset Management GmbH	PGGM
Healthcare of Ontario Pension Plan (HOOPP)	Meeschaert Gestion Privée	Phillips, Hager & North Investment Management Ltd.
Henderson Global Investors	Meiji Yasuda Life Insurance Company	PhiTrust Active Investors
Hermes Fund Managers	Mendesprev Sociedade Previdenciária	Phoenix Asset Management Inc.
HESTA Super	Merck Family Fund	Pictet Asset Management SA
HSBC Global Asset Management (Deutschland) GmbH	Meritas Mutual Funds	PKA
HSBC Holdings plc	MetallRente GmbH	Pluris Sustainable Investments SA
HSBC INKA Internationale Kapitalanlagegesellschaft mbH	Metrus - Instituto de Seguridade Social	PNC Financial Services Group, Inc.
Hyundai Marine & Fire Insurance. Co., Ltd.	Metzler Investment GmbH	Pohjola Asset Management Ltd
Hyundai Securities Co., Ltd.	MFS Investment Management	Portfolio 21 Investments
Ibgeana Society of Assistance and Security SIAS / Sociedade Ibgeana de Assistência e Seguridade (SIAS)	Midas International Asset Management	Porto Seguro S.A.
IDBI Bank Ltd	Missionary Oblates of Mary Immaculate	PREVHAB PREVIDÊNCIA COMPLEMENTAR
Ilmarinen Mutual Pension Insurance Company	Mistra, Foundation for Strategic Environmental Research	PREVI Caixa de Previdência dos Funcionários do Banco do Brasil
Impax Group plc	Mitsubishi UFJ Financial Group (MUFG)	PREVIG Sociedade de Previdência Complementar
IndusInd Bank Limited	Mizuho Financial Group, Inc.	Provincial Rheinland Holding
Industrial Bank (A)	Mn Services	Prudential Investment Management
Industrial Bank of Korea	Monega Kapitalanlagegesellschaft mbH	Psagot Investment House Ltd
Industry Funds Management	Morgan Stanley	PSP Investments
Infrastructure Development Finance Company	Motor Trades Association of Australia Superannuation Fund Pty Ltd	PSS - Seguridade Social
ING	Mutual Insurance Company Pension-Fennia	Q Capital Partners Co. Ltd
Insight Investment Management (Global) Ltd	Natcan Investment Management	QBE Insurance Group
Instituto de Seguridade Social dos Correios e Telégrafos- Postais	Nathan Cummings Foundation, The	Rabobank
Instituto Infraero de Seguridade Social - INFRAPREV	National Australia Bank	Raiffeisen Schweiz
Instituto Sebrae De Seguridade Social - SEBRAEPREV	National Bank of Canada	Railpen Investments
Insurance Australia Group	National Grid Electricity Group of the Electricity Supply Pension Scheme	Rathbones / Rathbone Greenbank Investments
Investec Asset Management	National Grid UK Pension Scheme	Real Grandeza Fundação de Previdência e Assistência Social
Irish Life Investment Managers	National Pensions Reserve Fund of Ireland	Rei Super
Itau Asset Management	National Union of Public and General Employees (NUPGE)	Reliance Capital Ltd
Itaú Unibanco Holding S A	NATIXIS	Resolution
Janus Capital Group Inc.	Nedbank Limited	Resona Bank, Limited
Jarislowsky Fraser Limited	Needmor Fund	Reynders McVeigh Capital Management
JPMorgan Chase & Co.	NEI Investments	RLAM
Jubitz Family Foundation	Nelson Capital Management, LLC	Robeco
Jupiter Asset Management	Nest Sammelstiftung	Rockefeller Financial
Kaiser Ritter Partner (Schweiz) AG	Neuberger Berman	Rose Foundation for Communities and the Environment
KB asset Management	New Amsterdam Partners LLC	Royal Bank of Canada
KB Kookmin Bank	New Mexico State Treasurer	Royal Bank of Scotland Group
KBC Asset Management NV	New York City Employees Retirement System	RREEF Investment GmbH
KDB Asset Management Co., Ltd.	New York City Teachers Retirement System	SAM Group
KEPLER-FONDS Kapitalanlagegesellschaft m. b. H.	New York State Common Retirement Fund (NYSCRF)	SAMPENSION KP LIVSFORSIKRING A/S
KfW Bankengruppe	New Zealand Earthquake Commission	SAMSUNG FIRE & MARINE INSURANCE
KlimalINVEST	Newton Investment Management Limited	Samsung Securities
KLP	NGS Super	Sanlam
Korea Investment Management Co., Ltd.	NH-CA Asset Management	Santa Fé Portfolios Ltda
The Korea Teachers Pension (KTP)	Nikko Asset Management Co., Ltd.	SAS Trustee Corporation
Korea Technology Finance Corporation (KOTEC)	Nikko Cordial Securities	Sauren Finanzdienstleistungen GmbH & Co. KG
KPA Pension	Nissay Asset Management Corporation	Schroders
La Banque Postale Asset Management	NORD/LB Kapitalanlagegesellschaft AG	Scotiabank
La Financiere Responsable	Nordea Investment Management	Scottish Widows Investment Partnership
Lampe Asset Management GmbH		SEB
		SEB Asset Management AG
		Second Swedish National Pension Fund (AP2)

SEIU Master Trust
Seligson & Co Fund Management Plc
Sentinel Investments
SERPROS - Fundo Multipatrocinado
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
SMBC Friend Securities Co., LTD
Smith Pierce, LLC
SNS Asset Management
Social(k)
Sociedade de Previdencia Complementar da Dataprev - Prevdada
Solaris Investment Management Limited
Sompo Japan Insurance Inc.
Sopher Investment Management
SPF Beheer bv
Sprucegrove Investment Management Ltd
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 Banking Corporation
Sumitomo Mitsui Card Company, Limited
Sumitomo Mitsui Finance & Leasing Co., Ltd
Sumitomo Mitsui Financial Group
The Sumitomo Trust & Banking Co., Ltd.
Sun Life Financial Inc.
Superfund Asset Management GmbH
SUSI Partners AG
Sustainable Capital
Svenska Kyrkan, Church of Sweden
Swedbank AB
Swiss Re
Swisscanto Holding AG
Syntus Achmea Asset Management
T. Rowe Price
T. SINAI KALKINMA BANKAŞI A.S.
T.GARANTI BANKASI A.S.
Tata Capital Limited
TD Asset Management Inc. and TDAM USA Inc.
Teachers Insurance and Annuity Association – College Retirement Equities Fund (TIAA-CREF)
Telluride Association
Tempis Asset Management Co. Ltd
Terra Forvaltning AS
TerraVerde Capital Management LLC
The Brainerd Foundation
The Bullitt Foundation
The Central Church Fund of Finland
The Collins Foundation
The Co-operative Asset Management
The Co-operators Group Ltd
The Daly Foundation
The GPT Group
The Hartford Financial Services Group, Inc.
The Japan Research Institute, Limited
The Joseph Rowntree Charitable Trust
The Local Government Pensions Institution
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 Shiga Bank, Ltd.
The Standard Bank Group
The United Church of Canada - General Council
The University of Edinburgh Endowment Fund
The Wellcome Trust
Third Swedish National Pension Fund (AP3)
Threadneedle Asset Management
Tokio Marine & Nichido Fire Insurance Co., Ltd.

Toronto Atmospheric Fund
Trillium Asset Management Corporation
Triodos Investment Management
Tryg
UBS
UniCredit Group
Union Asset Management Holding AG
Unipension
UNISON staff pension scheme
UniSuper
Unitarian Universalist Association
United Methodist Church General Board of Pension and Health Benefits
United Nations Foundation
Universities Superannuation Scheme (USS)
Vancity Group of Companies
VCH Vermögensverwaltung AG
Veris Wealth Partners
Veritas Investment Trust GmbH
Vermont State Treasurer
Vexiom Capital, L.P.
VicSuper Pty Ltd
Victorian Funds Management Corporation
VietNam Holding Ltd.
Vision Super
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
Wells Fargo & Company
West Yorkshire Pension Fund
WestLB Mellon Asset Management (WMAM)
Westpac Banking Corporation
White Owl Capital AG
Winslow Management, A Brown Advisory Investment Group
Woori Bank
Woori Investment & Securities Co., Ltd.
YES BANK Limited
York University Pension Fund
Youville Provident Fund Inc.
Zegora Investment Management
Zevin Asset Management
Zurich Cantonal Bank

Figure 1: 2011 Signatory Investor Breakdown

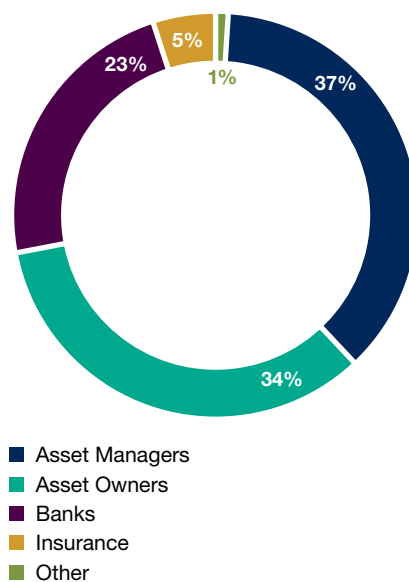
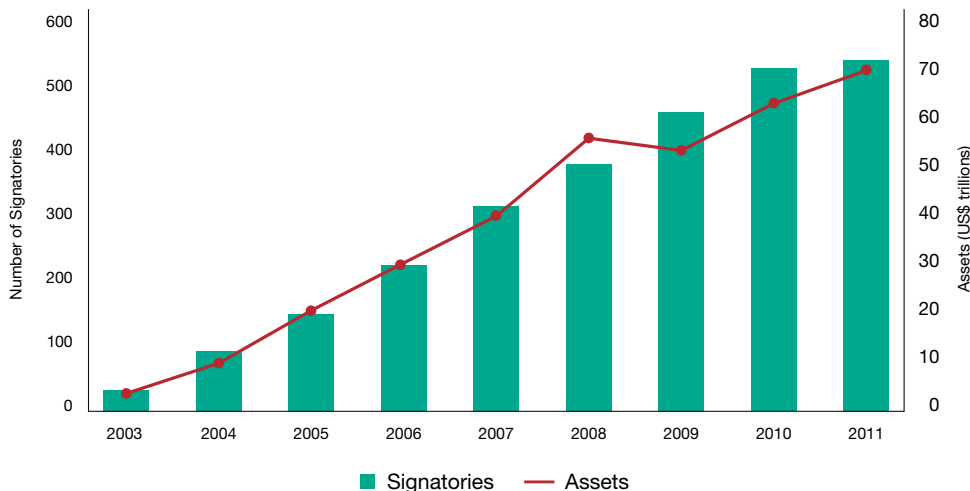


Figure 2: CDP Investor Signatories & Assets over time



## Commentary for the Carbon Disclosure Project: Douglas Flint, Group Chairman, HSBC Holdings plc

For HSBC, climate change is a cornerstone of our ongoing business strategy, and so it gives me great pleasure to introduce the 2011 Carbon Disclosure Report. The reporting framework that the CDP has pioneered over the past decade has helped us both as respondent and signatory to improve our understanding of the strategic risks and opportunities in this area.

In the past year, we have sought to support financially as well as through advocacy the huge business potential of low carbon growth. Our own research suggests that the low carbon energy market alone will triple in size by 2020 to US\$2.2 trillion. We expect the fastest growth will take place in emerging economies. To take one example: China plans to expand the share of seven strategic industries – all with a low carbon dimension – from 3 to 15% of GDP by 2020. This is perhaps the clearest statement yet of the economic growth that could flow from a determined focus on resource efficiency, technological innovation and long-term investment.

For us, “climate business” starts with our clients, and financing lies at the heart of the solution. The technologies and business models needed to deliver clean energy, cut emissions and drive down inefficient resource use can often involve higher upfront capital costs, which are then more than repaid through much lower operating costs. Project finance and equity markets have long been involved in supplying capital to the climate economy. But the full range of capital market instruments will need to be deployed, including fixed income and bonds. To enable HSBC to address this opportunity at a strategic level, a Climate Business Council has been established, which is chaired by Stuart Gulliver, Group Chief Executive, and includes the heads of all our business lines. The Council has already uncovered new ways of enabling our clients to pursue profitable growth in this arena.

But climate change is also serving to intensify the commodity constraints facing the global economy. Food yields have already been hit by warming global temperatures. And the scale and intensity of extreme weather events over the past 12 months have reminded us of the vulnerability of economies and societies to natural hazards. The scientific evidence has

also become ever clearer that climate change is increasing the probabilities of these extremes. As the world’s leading emerging markets bank, we are particularly alert to the vulnerability of Asia and Latin America to climate impacts, and our Group Risk, Operations and Sustainability teams are routinely investigating this as yet another stress that the bank needs to weather.

In an uncertain period with pressing concerns about the fate of the global economy, it would be easy – but foolish – to regard climate change as a luxury issue only to be addressed in the good times. Around the world, we are seeing encouraging signs that climate responsive business could drive an investment-led recovery. Governments are responding with new instruments to leverage private capital, such as the UK’s Green Investment Bank, which will start operations in 2012. It is at moments such as these that businesses with a long-term perspective can help shape the contours of the coming revival and thereby accelerate clean and profitable growth.

**HSBC**   
The world’s local bank

---

## CEO Foreword

Corporations, investors and governments today are faced with a choice: to compete aggressively for finite resources, or to advance towards a low carbon economy that enables sustainable, profitable growth, whilst reducing reliance on increasingly scarce materials.

Last year, global energy-related carbon dioxide emissions reached a record high. The International Energy Agency's estimates made for bleak reading but compounded the necessity to take bold and decisive action if we are to have any chance of limiting temperature increase to the 2°C level agreed by world leaders to protect against catastrophic climate change.

What's more, rising energy demands are competing for a limited supply of fossil fuels. The competition for increasingly scarce natural resources is putting pressure on commodity prices and having a growing impact both socially and economically. It is clear that today, more than ever, we must build momentum to decouple economic growth from emissions.

Managing carbon emissions and protecting the business from climate change impacts is fundamental to achieving sustainable and strong shareholder returns. Earlier this year, the investment consultancy Mercer released a report concluding that the best way for institutional investors to manage portfolio risk associated with climate change may be to shift 40% of their portfolios into climate-sensitive assets with an emphasis on those that can adapt to a low carbon environment.

An important part of an investor's strategy should be to engage with the companies in which they invest to encourage performance improvement. Carbon Action is a new initiative launched by CDP this year. It is driven by a leading group of investors to encourage their portfolio companies to reduce emissions by investing in emissions reduction activities with a satisfactory payback period. Carbon Action reflects a growing recognition that there is a huge range of carbon reduction activities that companies can undertake that have a very clear business case. It is therefore in the interests of all investors, and not just the more active owners of investments, to ensure these actions are taken.

As the management of carbon continues to move into companies' core business strategies and mainstream investment thinking, demand for primary corporate climate change information grows around the world. As well as working on behalf of 551 institutional investors to gather relevant information from large corporations around the world, CDP is also working with global businesses and governments to strengthen the resilience and sustainability of their supply chains through the CDP Supply Chain program. CDP Cities has launched to help the world's major cities reduce climate change risk and bolster economic growth, whilst CDP Water Disclosure is now in its second year of working with major global companies to improve water management. A key part of CDP's strategy is to ensure the effective use of data collected. To assist with this companies are able to obtain tools that help them to measure, report and manage carbon more effectively, through CDP Reporter Services.

It is through partnerships that CDP can achieve the largest impact. We are delighted to be working again this year with PwC, our Global Advisor, as well as with Accenture, Microsoft, SAP and Bloomberg. These and our other partners around the world are integral to the acceleration of CDP's mission.

Whilst we wait patiently for much needed global regulation, business must continue to forge ahead, innovate and seek out opportunities by doing more with less. The decisions that perpetuate a legitimate, low carbon and high growth economy will bring considerable value to those that have the foresight to make them. The information contained in this report and the companies' responses assist in illuminating that path.



Paul Simpson  
CEO  
Carbon Disclosure Project

# Contents

2011 Carbon Disclosure Project Members	02	Sector Analysis	35
2011 Carbon Disclosure Project Signatories	03	Consumer Discretionary	36
Commentary for the Carbon Disclosure Project: Douglas Flint, Group Chairman, HSBC Holdings plc	06	Consumer Staples	38
Foreword: Paul Simpson, CEO, Carbon Disclosure Project	07	Energy	40
Executive Summary	09	Financials	42
2011 Key Themes and Highlights	13	Health Care	44
PwC Commentary: Alan McGill, Partner, PwC	20	Industrials	46
2011 Leaders	21	Information Technology	48
The 2011 Carbon Disclosure Leadership Index	22	Materials	50
The 2011 Carbon Performance Leadership Index	29	Telecommunications	52
		Utilities	54
		Appendix I: Table of Emissions	56
		Appendix II: Global Key Trends	74
		Appendix III: Global 500 Companies by Country	76



# Executive Summary

## Accelerating Low Carbon Growth

Low carbon growth is now widely accepted as fundamental to generating long term shareholder value, avoiding dangerous climate change and helping the global economy recover from recent turmoil<sup>1</sup>. It is for these reasons that in 2011, the Carbon Disclosure Project (CDP) sent its annual request to the Global 500<sup>2</sup> companies on behalf of 551 investors with US\$71 trillion of assets, asking them to measure and report what climate change means for their business. This year, 81% (404) of corporations from the Global 500 responded to the CDP questionnaire.

These responses provide a valuable insight into how companies are preparing for a resource constrained world and show a shift in company strategy to prepare better for a low carbon economy and act on the business opportunities. The report<sup>3</sup> looks at how companies that are strategically focused on accelerating low carbon growth – i.e. those in the Carbon Performance Leadership Index (CPLI) – tend to perform better, not only in terms of greenhouse gas emissions management, but also in terms of financial performance.

Figure 3: Total return % (US\$)<sup>4</sup> for Global 500, CDLI & CPLI 2011

	Global 500	CDLI	CPLI
Total return % (US\$) from January 2005 to May 2011	42.71%	82.44%	85.72%

Source data: Bloomberg

## Key findings

- Companies in the 2011 Carbon Disclosure Leadership Index (CDLI) and Carbon Performance Leadership Index (CPLI) provide approximately double the average total return of the Global 500 between January 2005 and May 2011. This suggests a strong correlation between higher financial performance and good climate change disclosure and performance.
- 74% (294) of Global 500 respondents disclose absolute or intensity emission reduction targets, an increase from 65% (250) in 2010. This indicates that more and more of the world's largest companies understand the need to, and benefits of, accelerating actions to reduce emissions.
- 68% (269) of companies are integrating climate change initiatives into their overall business strategy, up from 48% (187) in 2010. The majority (93%, 368) of 2011 respondents report board or senior executive oversight for their company's climate change program, up from 85% (328) in 2010. This shows a marked rise in companies linking their climate change strategy with their overall business strategy.
- 65% (259) of respondents provide monetary incentives to staff for managing climate change issues, versus 49% (188) in 2010. This suggests more active commitment in advancing greater management of carbon.
- A total of 1,780 emissions reduction activities are reported by 97% (384) of responding companies in 2011. Energy efficiency (building fabric, building services and processes), low carbon energy installations and behavioral change are the most commonly identified activity types.
- 59% of emissions reduction activities reported by Global 500 respondents have a payback period of three years or less and 41% of initiatives have paybacks of over three years. This willingness to invest in activities with a medium to long term payback is evidence that companies regard energy and emissions reduction as an important strategic priority.

1. International bodies that recognize this include the World Economic Forum (WEF) and Organisation for Economic Co-operation and Development (OECD).  
2. The Global 500 are the largest companies by market capitalization included in the FTSE Global Equity Index Series.

3. Please see the Important Notice on the back cover of this report regarding its content and use.  
4. Total Return includes interest, capital gains, dividends and distributions realised over a given period of time.

“The BMW Group’s business strategy (Strategy Number ONE) closely integrates sustainability and climate change aspects and [...] applies across all board divisions worldwide. The primary objective is to instill sustainability in every link of the value-added chain and its underlying processes. The most important components of the short term strategy are: further develop and implement our sustainability strategy in all departments, setting up a new sub brand (BMW i) focussing on sustainable mobility.”

## BMW

- 45% (178) of respondents have made emissions reductions in some or all of their business from specific measures. This compares with 19% (75) of respondents that had reduced emissions in 2010. The leaders are clearly moving ahead in this regard with all of the CPLI (2010: 52%, 25) and 73% (38) of the CDLI (2010: 47%, 24) showing emissions reductions.
- The Energy sector is showing the lowest proportion of companies with targets (55%, 22) and is underrepresented in both the CPLI and CDLI. In view of the high emissions from the Energy sector, this points to the need for improvement. The Consumer Staples sector has the highest proportion of companies with emissions reduction targets (94%, 32).
- Utilities emerged as the sector with the best average climate change performance (band B).

The sector with the lowest average performance score was Information Technology (band C). The only sector with no companies in the CPLI was Telecommunications.

- The CDLI contains 52 disclosure leaders in 2011 and reports the highest ever scores attained, demonstrating that the quality and completeness of disclosure continues to improve.
- For the second year, CDP published a CPLI, in which there are 29 performance leaders (23 companies are on both the CDLI and CPLI) who have demonstrated their commitment to achieving low carbon growth.
- Companies in Australia, Germany, Italy, Switzerland and the UK are demonstrating strong performance leadership. Canada, Japan and the USA lag behind on performance<sup>5</sup>.

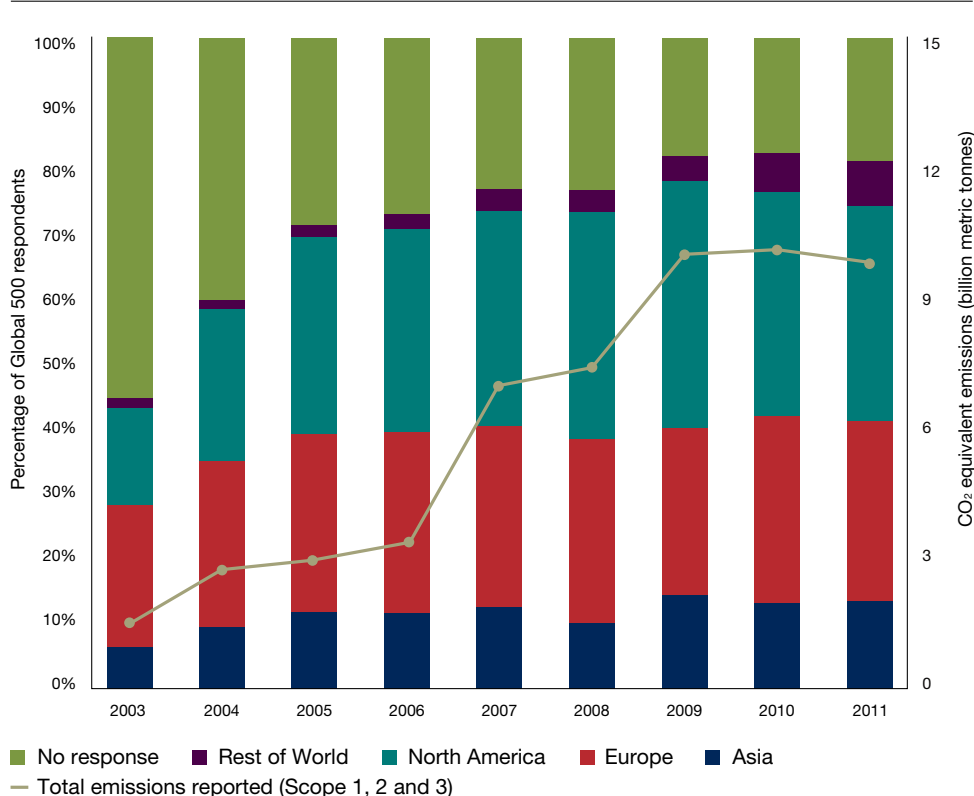
Figure 4: Top ten companies recognized on both the CDLI and the CPLI<sup>6</sup>

Sector	Company	Carbon disclosure score	Carbon performance band
Consumer Discretionary	Philips Electronics	99	A
Consumer Discretionary	BMW	96	A
Consumer Discretionary	Honda Motor Company	95	A
Consumer Staples	Tesco	97	A
Financials	Bank of America	97	A
Financials	Westpac Banking Corporation	96	A
Health Care	Bayer	99	A
Information Technology	Cisco Systems	98	A
Information Technology	SAP	96	A
Information Technology	Sony Corporation	94	A

5. See Figure 27 on page 33

6. In total, there are 23 companies recognized on both the CDLI & CPLI, see tables in the Carbon Leaders section for the full lists.

**Figure 5: Total response rates and disclosed emissions over time by geography (All Scopes)**



Despite carbon measuring and reporting becoming widespread, some companies did not report this year. Many of these

are from countries that have less mature corporate disclosure practices and/or climate change regulation.

“In 2007, we announced a \$20 billion, 10-year initiative to address climate change through innovative lending and investment, the creation of new financial products and services, philanthropy and optimizing our operations. Despite the difficult economic circumstances that continued in 2010, we made a strategic decision to continue to make significant investments and mobilize capital (\$4 billion) toward our \$20 billion business initiative to address climate change.”

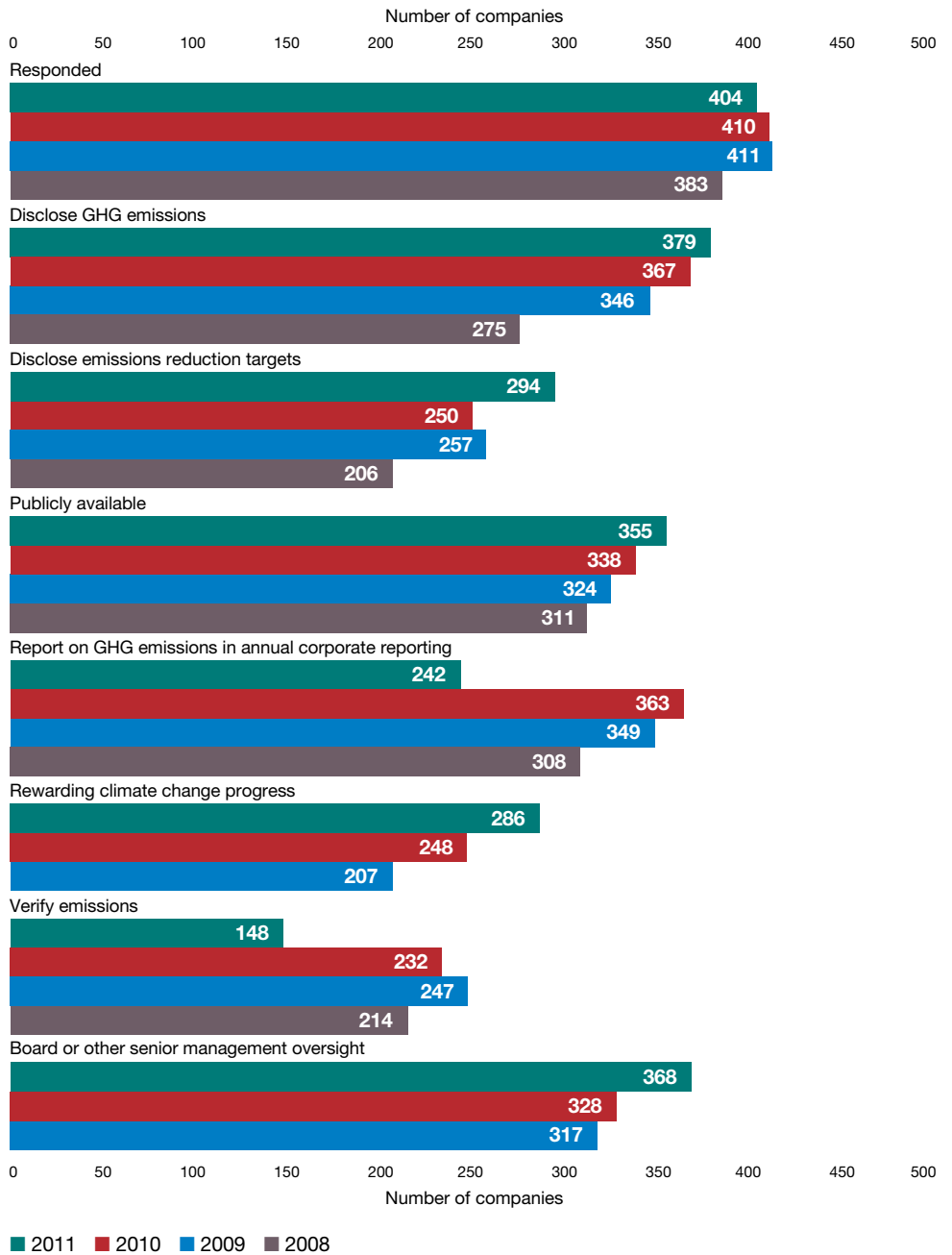
Bank of America

**Figure 6: Largest non-responders by market capitalization**

Sector	Company	Country
Consumer Discretionary	Amazon.com	USA
Energy	Rosneft	Russia
Financials	Bank of China	China
Financials	Berkshire Hathaway	USA
Financials	China Life Insurance	China
Financials	Sberbank	Russia
Industrials	Reliance Industries	India
Information Technology	Apple	USA
Telecommunications	America Movil	Mexico
Telecommunications	China Mobile	China

Company responses to CDP can be found at [www.cdproject.net](http://www.cdproject.net)

**Figure 7: Year-over-year disclosure levels<sup>7/8/9</sup>**



7. The data for response rate is based on data at time of printing. Data for other areas are based on data for those companies received by July 31, 2011. Whilst every effort has been made to ensure that comparisons between years are direct, a number of questions have changed year on year in the questionnaire which has meant that the closest possible match has been made where an exact match is not possible.
8. Verification of emissions has decreased in the year on year analysis in this report because CDP has set more stringent criteria to reflect the importance of verification. See details in the Verification section of this report.
9. 404 companies responded to CDP, of which 3 referred to a holding company's answers and 5 submitted their answers after the deadline for inclusion in analysis of the report.

# 2011 Key Themes and Highlights

## Accelerating Low Carbon Growth

Taking action towards low carbon growth is important if business is to protect itself against risks such as resource scarcity and create more sustainable business models that generate long term shareholder value. The World Economic Forum, for example, in 2009 began to examine how the growth of a low carbon economy could be accelerated – including a specific Task Force on Low Carbon Economic Prosperity. The Organization for Economic Co-operation and Development’s Environmental Action Programme Task Force marks the change from treating environmental protection as an economic burden to recognizing it as a driver for global and national economic development.

Companies in the CDLI and CPLI delivered approximately double the total return of Global 500 companies between January 2005 and May 2011. This suggests a strong correlation<sup>10</sup>

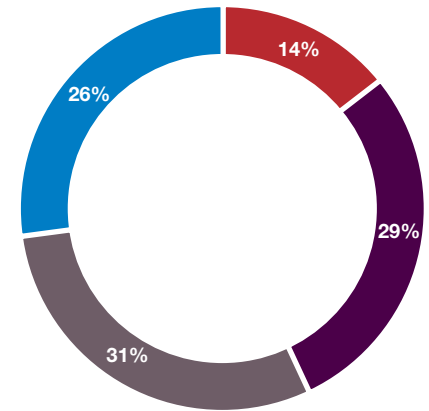
between good climate change disclosure and performance, and higher financial performance.

CDP 2011 submissions reveal that many companies are now accelerating along a model of low carbon growth. In particular, the financial outperformance of the CPLI companies demonstrates how companies that understand the need to identify, manage and optimize climate related risks and opportunities can strengthen their business and future growth prospects.

## Emissions Targets

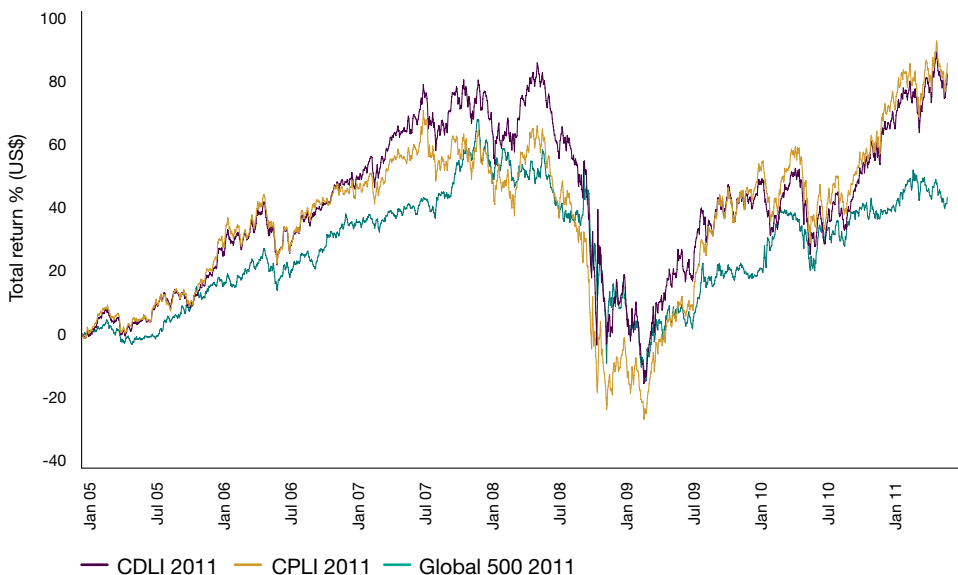
74% (294) of respondents disclose that they have an emissions reduction target. This is an increase from 65% (250) in 2010, and shows the increased engagement of companies who manage greenhouse gas (GHG) emissions. When considering the underlying data, intensity targets are marginally more common than absolute.

**Figure 9: Companies disclosing targets**



- Absolute and intensity targets
- Absolute targets
- Intensity targets
- No targets

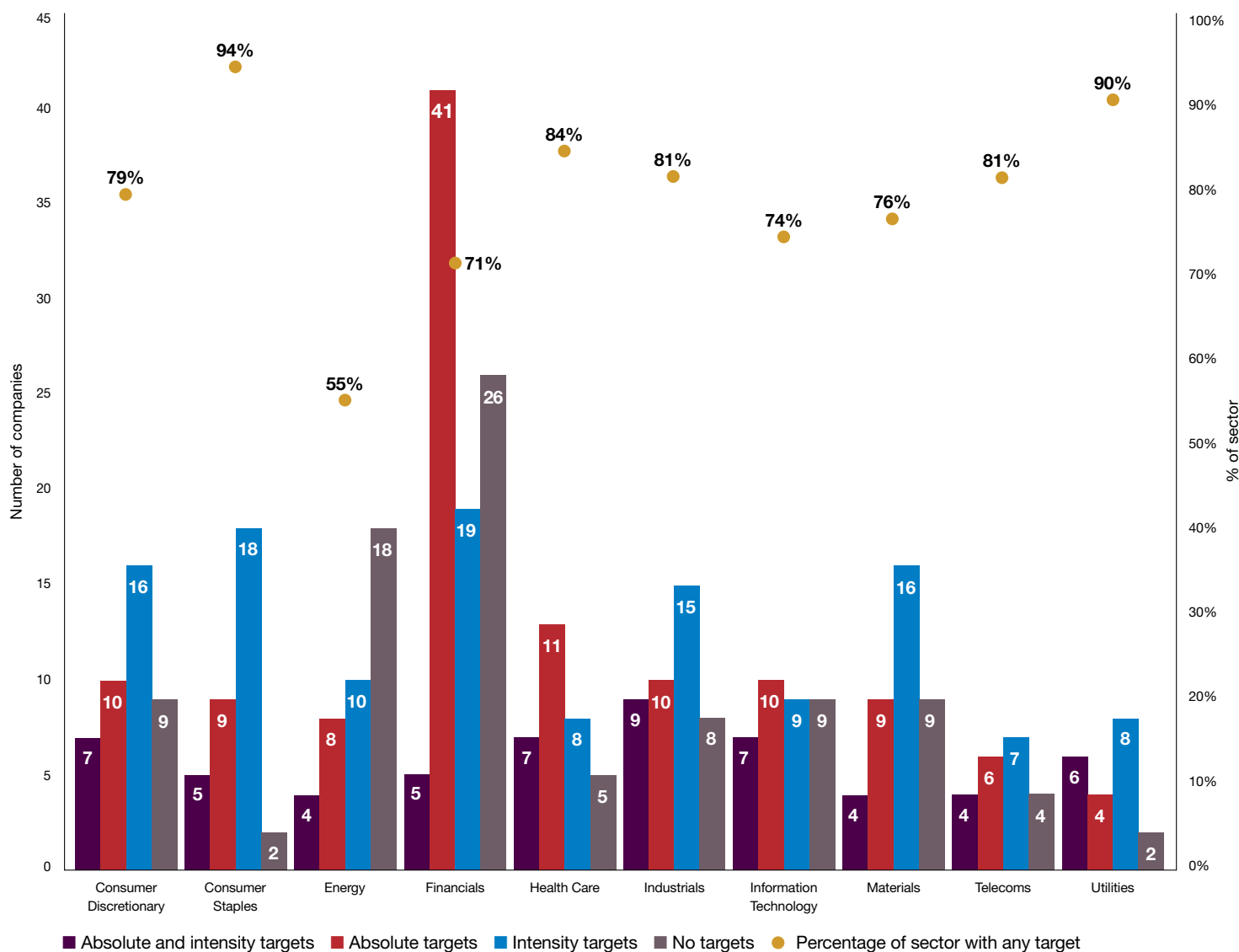
**Figure 8: Total return % (US\$)**



Source: Bloomberg

10. Statistical correlation, based on daily returns, between 2011 CDLI and the Global 500 is 0.5, and between the 2011 CPLI and Global 500 is 0.6 (from 1 January 2005 to 31 May 2011). It is likely that other factors will influence the relationship between financial performance and high carbon disclosure and performance scores. These could include the capability of the management team or the company’s broader approach to identifying and capitalizing on opportunities or managing risks.

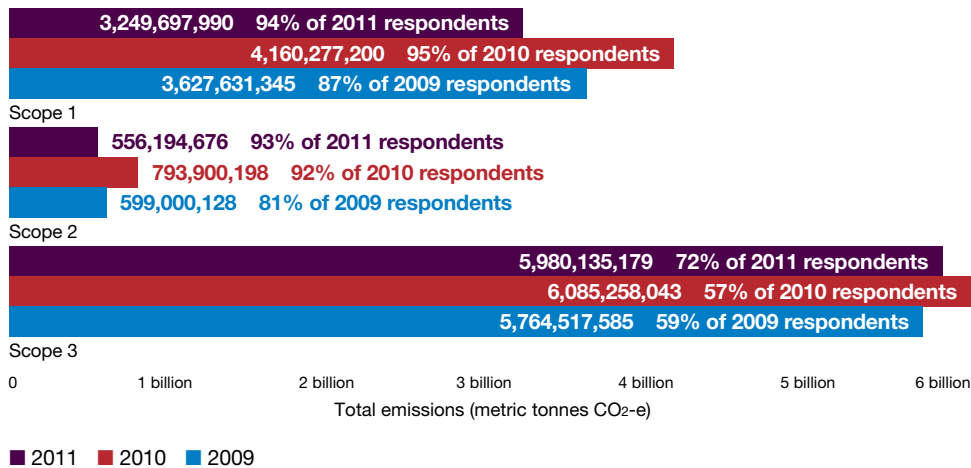
**Figure 10: Companies with targets by sector**



The target setting practice of companies varies significantly across sectors. The sector with the highest proportion of responding companies with targets is Consumer Staples at 94% (34). Energy has the lowest proportion of responding companies with targets at 55% (22), which, in view of the high emissions from this sector points to a need for significant improvement.

A large majority of companies with absolute or intensity reduction targets are on track to achieve or are outperforming their targets. The average emissions reduction already attained by the Global 500 against their targets is 60%, which has taken on average 57% of their allotted 'target time'. Overall, companies are currently outperforming 71% (338) of their

emissions reduction targets. The recent economic downturn has had an impact on companies' emissions and should also be considered alongside progress in meeting targets and in relation to reduced emissions disclosure.

**Figure 11: Global 500 total emissions disclosure year on year (t CO<sub>2</sub>-e)<sup>11</sup>**

In May 2011, the International Energy Agency (IEA) stated that emissions were at a record high. The total emissions reported by CDP respondents fell by over 1 billion tonnes CO<sub>2</sub>-e in 2011 from 2010. All three scopes show the same general trend of an increase from 2009 to 2010 and a subsequent decrease in 2011. This is a positive development and is likely to relate to the increased focus of companies on emissions reduction targets. The reductions from 2010 levels need to be repeated consistently and across a wider range of global companies if long term low carbon growth is to be achieved.

Japanese companies that did not respond in 2011 reported emissions totalling 272 million tonnes CO<sub>2</sub>-e in 2010, including Tokyo Electric Power (TEPCO) company which in 2010 reported 108 million tonnes CO<sub>2</sub>-e.

The Intergovernmental Panel on Climate Change (IPCC) has set a target for developed economies of an 80%

reduction in emissions by 2050 (2.65% per annum), based on 1990 levels. The median absolute emissions reduction reported by Global 500 companies to CDP in 2011 is 4.4% for the year. If reductions could be made annually by all companies at this rate, the IPCC target could be achieved in the long term.

#### Emissions reduction activities

To date, 97% (384) of respondents have implemented emissions reduction activities in their operations (2010: 75%, 289) and 70% (279) have developed products or services designed to reduce emissions by third parties (2010: 68%, 259).

An increasing number of companies are acting on climate and business drivers to reduce emissions. 45% (178) of respondents state that emissions reduction activities have led to decreased Scope 1 and Scope 2 emissions, with 28% (112)

“We have already successfully reformulated our products to reduce climate impact. For example, our concentrated laundry detergents save greenhouse gas emissions in the manufacture, packaging and transportation of the product. We have also formulated laundry detergents that are effective at lower wash temperatures thereby saving greenhouse gas in the consumer use of our products. If everyone used concentrated liquid detergent variants we would save over 4 million tonnes of CO<sub>2</sub> per annum.”

Unilever

11. Total emissions values between Figure 11 and Figure 7 may vary due to late responses being included in Figure 11.  
\*t CO<sub>2</sub>-e refers to metric tonnes of carbon dioxide equivalent

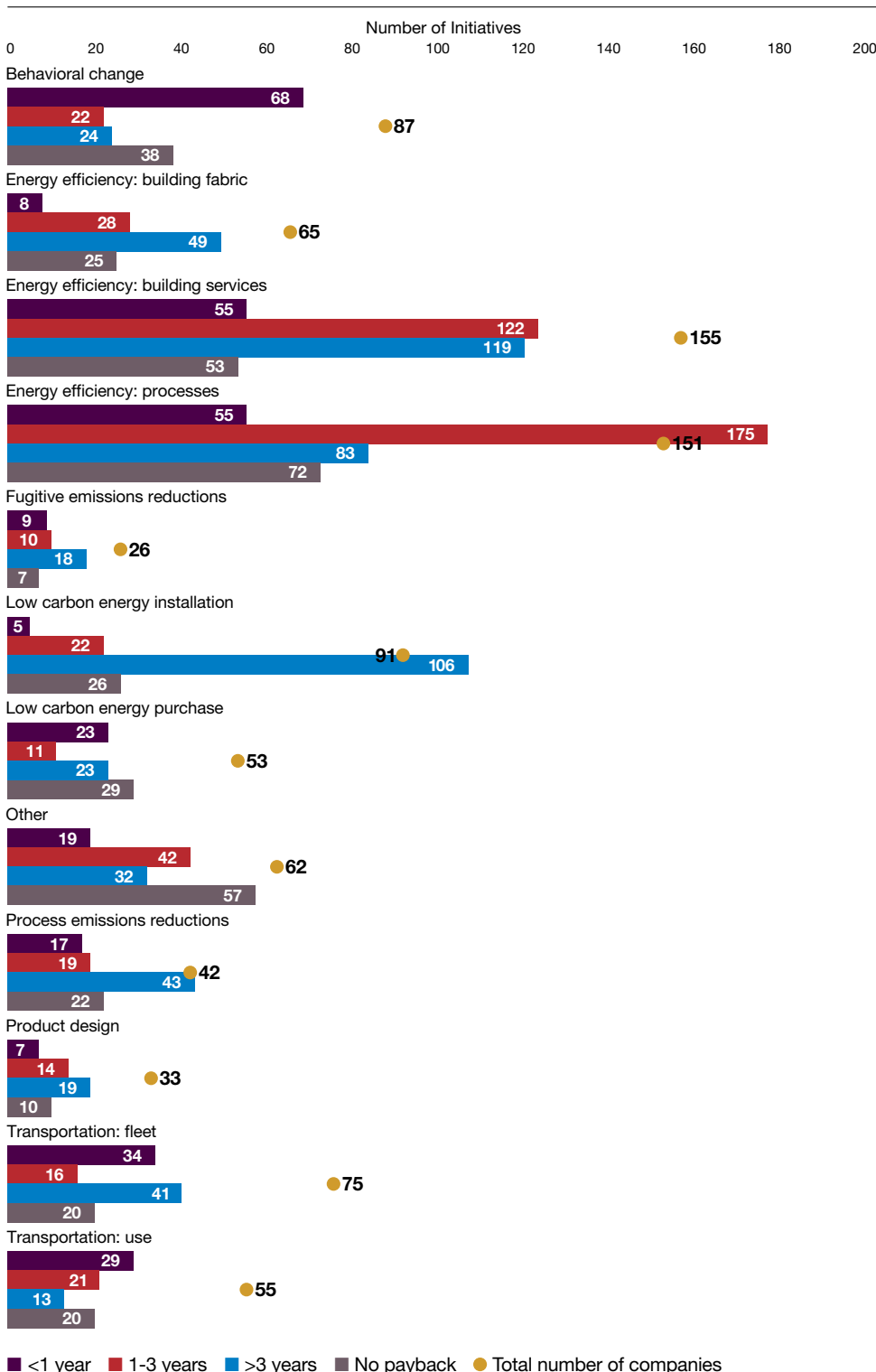
of respondents confirming that this reduction was of at least 2.65%. This is an increase since 2010 when only 19% (75) of companies with reduced Scope 1 and 2 emissions attributed them to emissions reduction activities. This may result from the application of experience and knowledge, with earlier less-effective emissions reduction activities being replaced by more cost-effective activities that have a greater impact.

The CDLI and CPLI companies have engaged in emissions reduction activities to a much greater degree than the other Global 500 companies, with a marked increase from 2010. 73% (38) of the CDLI and 100% (29) of the CPLI companies in 2011 report that they have active projects in the reporting year compared to only 45% (24) of the CDLI and 52% (25) of the CPLI in 2010.

As in 2010, energy efficiency (building services and processes), low carbon energy installation and behavioral change are the most commonly identified activity types. A total of 1,780 emissions reduction activities were reported in the CDP 2011 information request, of which 1,402 specified a payback period. These were reported by 97% (384) of respondents. This is an average of five emissions reduction activities per company. Repsol YPF reported the largest number of activities with 59, while Westfield Group reported 24 and Apache Corporation and Boeing Company each reported 20.

After energy efficiency activities (94%, 371) and low carbon energy installation activities (23%, 91), behavioral change is the third most popular type of activity being carried out by the Global 500. 22% (87) of respondents cite behavioral change as one of the methods in which they are engaging to reduce emissions. Figure 12 suggests that the popularity of these activities may relate to their short payback periods, with 60% of

**Figure 12: Payback period breakdown of reported active emissions reduction initiatives by activity type**





behavioral change activities having a payback period of less than one year. These activities include the training and education of staff in appropriate behaviors such as low carbon commuting and maximizing energy efficiency of IT stations. Through their products and interactions with clients, companies are also trying to change customers' attitudes to climate change. Labeling and direct marketing were also noted as activities to change people's behavior. The range of responses from the Global 500 provides further insight into these types of activities:

"A Green IT Hardware Purchasing Policy, which was defined in 2010 and came into force in 2011, requires all IT hardware purchasing requests for proposals to include a Green IT section. Energy Star and EPEAT have been adopted as Group-wide standards for all IT product purchases. This measure is voluntary in nature and an ongoing activity with an indefinite time horizon." Allianz

"By providing incentives, education and awareness on environmental matters to its employees and suppliers, we encourage people to make the right choices and promote sustainable behavior both at work and in their domestic situations. In 2010, UBS provided training and awareness raising to some 10,000 employees." UBS

Figure 12 also shows that companies have implemented activities across a range of timeframes. 152 companies undertook 329 initiatives with expected paybacks of less than one year; 188 companies undertook 502 initiatives with expected paybacks of between one and three years; and 193 companies undertook 570 initiatives with an expected payback of greater than three years. This willingness to invest in activities with a medium to long term

payback – such as building services (119 activities) and low carbon energy installations (106 activities) – is evidence that companies regard energy and emissions reduction as an important strategic priority.

"ReCon and Green Teams in Manufacturing Sites and Offices. This is a voluntary initiative impacting scope 1 and 2. This goal is on-going as PepsiCo is constantly striving to train, re-train, and improve our workforce on reduction of energy and climate change causing greenhouse gases. This is a long term initiative expected to last greater than 20 years." PepsiCo

"APM Terminals has embarked on a program to convert and retrofit more than 400 Rubber-Tired Gantry Cranes (RTGs) in use. The new hybrid cranes at our terminals will reduce CO<sub>2</sub> emissions up to 80% compared to ports with conventional diesel-powered cranes." A.P. Moller – Maersk

"PSE&G had invested approximately \$135 million in its EE programs by directly installing measures and/or providing grants, loans and incentives to almost 9,000 residential customers, 185 municipal entities, 19 hospitals and 532 small to medium sized businesses and achieving lifetime savings of approximately 400 GWh." Public Service Enterprise Group

Companies are also embracing 'quick win' projects which have a rapid return on investment and have reported savings of up to ten times the value of the investment. Typical activities included the refurbishment of buildings to reduce emissions and improve energy efficiency.

"Since the launch of its Energy Best Practices Program in 2004, the Company continues to challenge

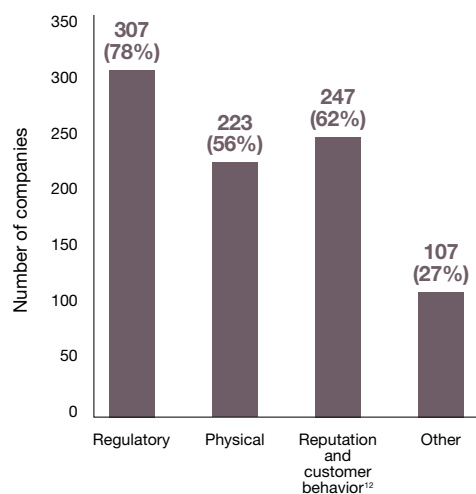
property managers to examine their operating practices and adapt best practices to trim energy costs without affecting comfort, safety or reliability. Under the Best Practices Program, substantial energy savings are generated through low cost/no cost measures, e.g. by minimizing energy use in vacant spaces or by keeping tight control over hours of operation for all lighting systems in the common area, parking lots, and back of the house areas to minimize costs without affecting comfort, safety, or reliability." Simon Property Group

### Integrating Low Carbon growth into Business Strategy

Companies have improved the linkage between their climate change strategy and their core business strategy, and the involvement of senior managers in this. This is all part of the clear drive for profitable, low carbon growth and provides a base from which companies can work to meet the emissions reduction required to avoid dangerous climate change. Indeed, the proportion of respondents with responsibility for climate change at the board or other senior management level increased to 93% (368) this year, up from 85% (328) in 2010.

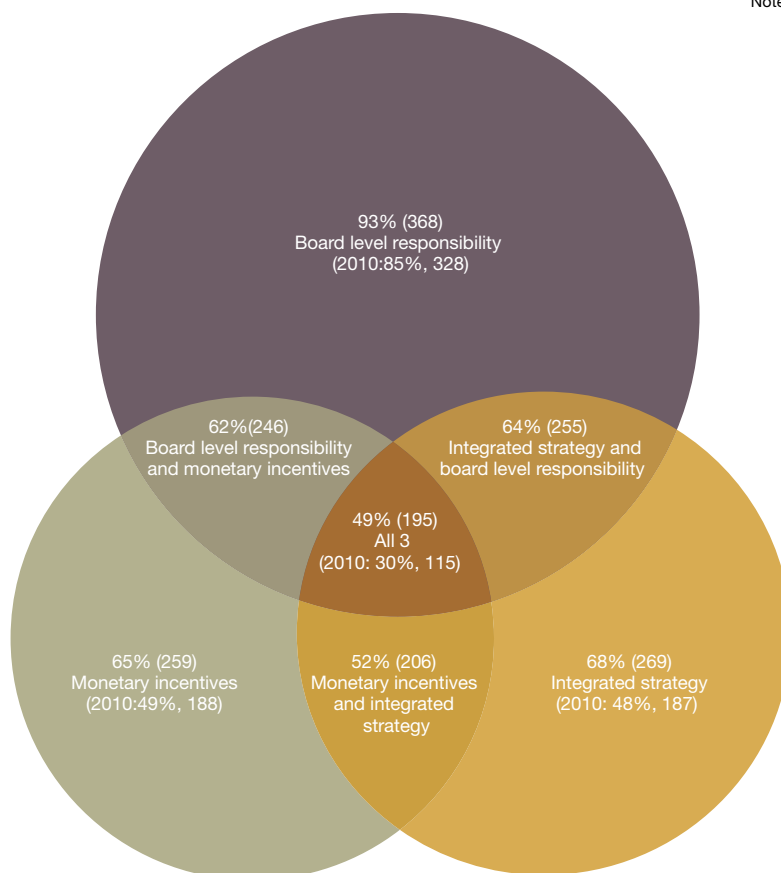
Integration of climate change into business strategy has seen an impressive 20 percentage point increase from 48% (187) of companies in 2010 to 68% (269) in 2011. This is a reflection of the growing importance placed by companies on climate change. The value of placing climate change on the agenda of business strategy is increasingly being recognized by companies, with 72% (286) of companies rewarding employees through incentives linked to climate change. 65% (259) of respondents have monetary incentives in place (2010: 49%, 188). The remaining 7%

**Figure 13: Opportunities identified by type**



**Figure 14: Integration of climate change in corporate governance**

Note: Not to scale



(27) of respondents have disclosed that they have a mixture of recognition and other non-monetary incentives. A distinguishing mark of all 29 CPLI companies is that they have one or more climate change related monetary incentives for staff.

“Our Chairman’s Award recognises individual and team excellence in climate change as well as other corporate responsibility areas such as safety, customer service, and community engagement. The Awards are open to all employees.”  
National Grid

“Energy Excellence Awards programme that rewards associates who develop energy saving or renewable energy projects.”  
Novartis

**Opportunities**

85% (337) of 2011 respondents (2010: 86%, 329) show a continued awareness of significant opportunities relating to climate change, indicating that the overwhelming majority of companies see that climate change offers them a positive means of transformation to deliver sustainable, low carbon products and services. It is this increasing

awareness of potential opportunities which will be key to the Global 500 accelerating low carbon growth. Over three-quarters of companies (78%, 307) see regulatory opportunities while 62% (247) of companies identify opportunities linked to reputation and customer behavior. Notably, companies have stressed the sizeable opportunity to seize a market leadership position by mitigating their climate change effects and communicating their actions to shareholders and customers. 200 companies (51% of respondents) noted opportunities in all three categories (regulatory, physical, reputation and customer behavior).

12. The “Reputation & Customer Behavior” group includes the following types of opportunity: reputation, changing consumer behavior, induced changes in human and cultural environments, fluctuating socio-economic conditions, increasing humanitarian demands.

## Verification

CDP is committed to increasing the level of verification of emissions disclosures in order to improve the quality of the information submitted by companies globally. In turn, this will build trust in carbon reporting and lead to an increase in the use of the data in analysis and decision making. Key drivers for verification include the increasing market demand from investors, customers, regulators, non-governmental organizations and other stakeholders for assured and reliable climate data.

Improved internal management processes that can be harnessed for competitive advantage is a key benefit of verification. In order to support this drive, CDP rewards verification highly in both disclosure and performance scoring in 2011 and it is one of the criteria for entry into the CPLI.

### Verification levels in 2011:

In 2011, a number of criteria were introduced to determine what is accepted as verification within CDP's scoring methodology. It requires that a verification statement:

1. Is related to the relevant emission scope
2. Clearly states the type of verification that has been given and the standard used
3. Covers the current reporting year
4. Is undertaken by an independent third party

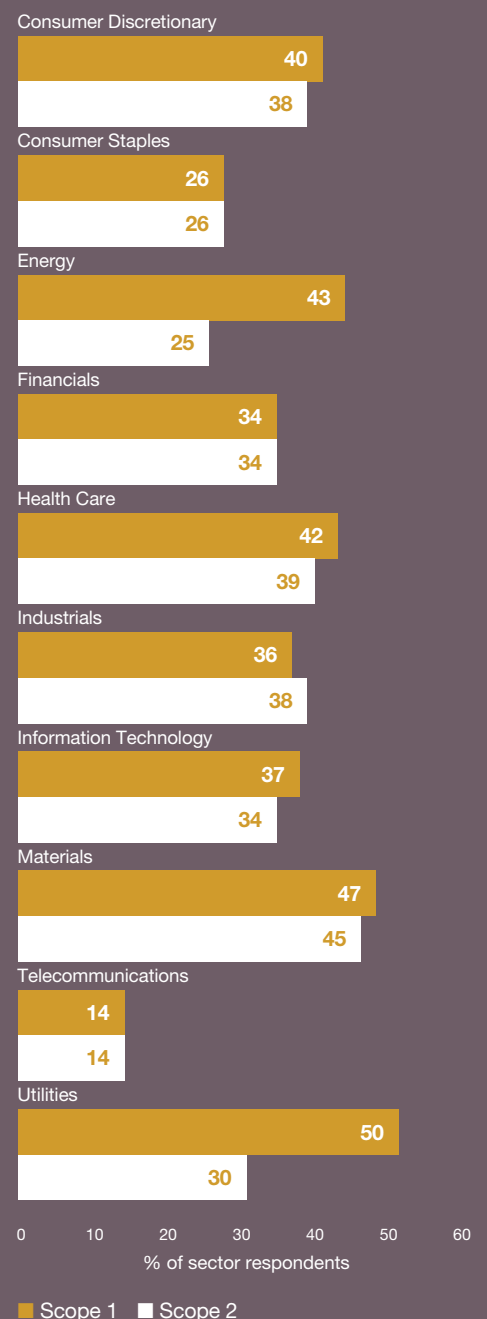
Verification of emissions has decreased in the year on year analysis in this report because CDP has strengthened its criteria to reflect the importance of verification. Whilst 69% (275) of respondents stated that they had gained or were in the process of gaining verification of Scope 1 or 2 emissions (an apparent increase of 9% compared with 2010), only 37% (148) met all criteria noted above for Scope 1 or 2 emissions, resulting in an overall decrease of 23%. CDP sees this higher standard as a key strategic priority to enhance the quality and reliability of the data reported by companies for the use of investors and consumers, both now and in the future. The sector breakdown of companies verifying their Scope 1 and Scope 2 emissions is shown in Figure 15.

The number of companies obtaining verification is similar for both Scope 1 and Scope 2 emissions for the majority of sectors. Energy and Utilities sectors, having significant scope 1 emissions have more companies obtaining verification of Scope 1 than Scope 2.

### What is CDP doing to support reporting companies?

For 2012, CDP is providing further clarity on what constitutes an acceptable verification process, which will be communicated as part of the questionnaire consultation process in September 2011. Looking further ahead, 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.

**Figure 15: Percentage of companies in each sector with verification complete for at least a proportion of their emissions**



“To face these challenges, the Carbon Strategy unit has been created in 2010. The components of the long term strategy that have been influenced by climate change are: the investment portfolio strategy (e.g. investments in renewable energy sources and energy efficiency); and the research & development strategy (Enel focuses on low carbon technologies and emission reductions from existing technologies e.g. CCS, smart metering, smart grids, electric cars).”

Enel

## PwC commentary: Non-Financial Reporting

Alan McGill, Partner, PwC

The 2011 responses to the CDP Global 500 Investor questionnaire clearly show that organizations are incorporating sustainability concepts into their business strategies. Corporations are acknowledging the business opportunities presented by a low carbon and sustainable growth environment, and are reporting on a broad range of initiatives to inform investors of their low carbon objectives.

Currently, profit remains the dominant measure of success in our economic system. Increasingly though, there is recognition that historic financial performance is unlikely to be sufficient for an assessment of the long term prospects of a business where the dynamic of wealth creation is changing. In response to this, the business community is disclosing significantly more non-financial information which underpins how value is and will be created. Disclosures include detailed plans for low carbon products and services, and employee incentives to reduce greenhouse gas emissions. This type of additional information gives a broader perspective on a company’s strategy and positioning and reflects a growing recognition that this type of information is important to stakeholders and the ability of a business to retain its long term license to operate.

This shift in thinking is occurring at a time when global reporting frameworks continue to place heavy emphasis on financial disclosure and performance. While financial systems were not

designed to capture all of the non-financial inputs needed to reflect the contribution of business to society, there is a growing realization that a more progressive reporting model is needed. A few leading companies are beginning to experiment and challenge established boundaries of how performance is measured and reported.

These leading corporations are going so far as to rethink their business and reporting models, how they manage and drive sustainable, profitable growth and how they measure critical non-financial information. In turn, this shift in mindset appears to help corporations envision the future and build competitive advantage – enhancing their brand, influencing consumer behavior and supporting new product development. This is all being achieved in a manner which also helps redefine the business’ overall contribution to society. The examples in this report show how companies are forging ahead in these areas.

These innovations in business cry out for a new reporting model, one that recognizes the importance of non-financial issues such as carbon emissions and climate change. By its nature, regulatory reporting is slow to change but the speed of innovation inside many progressive companies suggests that the regulatory model will adapt more quickly than many believe. The opportunity for most companies is not to wait for regulation but to ensure that their internal reporting is moving forward and remaining ahead of the curve.

# 2011 Leaders

## Introduction to the Carbon Disclosure Leadership Index (CDLI) and the Carbon Performance Leadership Index (CPLI)

Each year, company responses are reviewed, analyzed and scored for the quality of disclosure and performance on actions taken to mitigate climate change. This results in a disclosure score and, where sufficient disclosure exists, a performance band.

### Disclosure scores

- Disclosure scores are an assessment of the quality and completeness of a company's response; they are not a measure of a company's performance in relation to climate change management
- Scores are plotted over a 100-point normalized scale
- Companies are assessed based on their level of disclosure of carbon emissions measurement techniques and subsequent public disclosure
- Companies with the highest disclosure scores are listed in the CDLI

### Performance bands

- Where a company's disclosure score is 50 or more, its performance in contributing to climate change mitigation, adaptation and transparency is assessed and ranked in a performance band
- In 2011 there are six performance bands (there were four bands in 2010)
- Companies with the highest performance bands that meet additional CPLI criteria are listed in the CPLI

Analysis of the CDLI and CPLI provides insights into the characteristics and common trends among the leading companies on carbon disclosure, and highlights good practices in reporting, governance, risk management, emissions reductions and other areas. Interrelations between the CDLI and CPLI companies are analyzed to determine if those companies with better data use it within the business to drive value adding activities. The financial performance of CDLI and CPLI companies is examined and compared against the benchmark index of the Global 500.

"Fiat is one of the automotive groups most strongly committed to reducing the environmental impacts of transportation: between 2000 and 2010, average CO<sub>2</sub> emissions for vehicles sold by Fiat Group Automobiles (FGA) in Europe fell 20%."

Fiat

# The 2011 Carbon Disclosure Leadership Index (CDLI)

## What does a CDP carbon disclosure score represent?

Generally, companies scoring within a particular range suggest levels of commitment to, and experience of, carbon disclosure. The indicative description of each level is provided below for guidance only; investors should read individual company responses to understand the context for each business.

Figure 16: Carbon disclosure score

Low (<50)	Midrange (50-70)	High (>70)
Limited or restricted ability to measure and disclose climate related risks, opportunities and overall carbon emissions	Increased understanding and measurement of company-specific risks and opportunities related to climate change	Senior management understand the business issues related to climate change and are building climate related risks and opportunities into core business

Disclosure score (Max. 100)



## The journey to leadership

Compliance → Managing for value → Strategic advantage

### How is the disclosure score determined?

In determining the disclosure score for each company, we assess the following:

- The level of understanding and disclosure of company-specific exposure to climate-related risks and opportunities
- The level of strategic focus and commitment to understanding the business issues related to climate change, emanating from the top of the organization

- The extent to which a company has measured its carbon emissions
- The extent of the internal data management practices for understanding GHG emissions, including energy use
- The frequency and relevance of disclosure to key corporate stakeholders
- Whether the company uses third party for external verification of emissions data to promote greater confidence and usage of the data

### Eligibility for the CDLI

In order to be included in the CDLI companies must:

- Respond using the Online Reporting System (ORS) prior to the deadline
- Provide a public response
- Score within the top 10% of the reporting population: a total of 52<sup>13</sup> companies are included in the 2011 Global 500 CDLI

More information on the CDLI can be found in the information request, supporting methodology and guidance documents at [www.cdproject.net](http://www.cdproject.net)

13. In 2011, 7 companies scored 90 (the 46th highest score) which took the total number of companies in the CDLI to 52.

Figure 17: The Global 500 CDLI 2011

Sector	Company	Disclosure score
Consumer Discretionary	Philips Electronics	99
	BMW	96
	Honda Motor Company	95
	News Corporation	93
	Panasonic	93
	Fiat	93
	Volkswagen	91
	Metro	90
	British Sky Broadcasting	90
Consumer Staples	Tesco	97
	Nestle	91
	British American Tobacco	91
	PepsiCo	90
Energy	Suncor Energy	92
	Hess	91
	Royal Dutch Shell	90
Financials	Bank of America	97
	Westpac Banking	96
	Simon Property	96
	HSBC Holdings	95
	AXA Group	92
	Allianz	92
	Swiss Re	91
	UBS	91
	Royal Bank of Scotland Group	91
	National Australia Bank	91
Health Care	Bayer	99
	Gilead Sciences	95
	Novartis	94
	GlaxoSmithKline	93
Industrials	Deutsche Post	99
	UPS	99
	Siemens	97
	Saint-Gobain	94
	Boeing	92
	Schneider Electric	91
	Lockheed Martin	90
Information Technology	Cisco Systems	98
	Accenture	93
	SAP	96

Continued overleaf.

“Package Flow Technology (routing) initiatives are the hardware, software, and procedures that enable UPS to optimize delivery routes and times. The results include fewer turns, less waiting at lights, and less distance travelled to get the job done. In 2010, routing technology provided savings of 63.5 million miles or 6,300,000 gallons of fuel.”

UPS

## Key:

Companies highlighted in green are those that have been in the Global 500 CDLI for three consecutive years (2009-2011)

Companies highlighted in orange have moved into the Global 500 CDLI index this year

“Since 2010, it was established that its energy managers should include energy efficiency targets in their performance bonus. They will receive 100% of their annual bonus if they have achieved and justified the targets.”

## Telefonica

Sector	Company	Disclosure score
	Sony Corporation	94
	Samsung Electronics	94
Materials	Lafarge	96
	Dow Chemical	95
	VALE	93
	Praxair	93
	BASF	93
	Air Products & Chemicals	92
	Israel Chemicals	90
	Telecommunications	Telefonica
Utilities	Fortum Oyj	97
	Centrica	96
	PG&E	92

The highest disclosure score in 2011 is 99; four companies have achieved this impressive result (Philips Electronics, Bayer, Deutsche Post and UPS). Cisco Systems scored 98, and Siemens, Tesco, Fortum Oyj and Bank of America all scored 97. In 2010 the highest disclosure score of 98 was achieved by Siemens.

The average score of the CDLI companies in 2011 is 94, up from 91 in 2010; this is significantly higher than the overall Global 500 average of 69 in 2011 and 65 in 2010. The lowest CDLI score in 2011 is 90, compared to 86 in 2010. This indicates that the quality and depth of responses continues to improve, despite the increasing stringency of the scoring mechanism year on year. All ten sectors are represented in the CDLI again, confirming the view that high quality disclosure is possible regardless of sector.

Numerous companies have reached the Carbon Disclosure Leadership Index on more than one occasion; however, there are 13 companies that are disclosure leaders for the third consecutive year, thereby demonstrating a long term commitment to measuring and reporting on climate change. The sectors with the largest number of companies in the CDLI are Financials (10) and Consumer Discretionary (9) which is a change from 2010 when Materials and Consumer Staples led with eight each. In 2009 and 2008, the Financials sector had the largest number of companies in the CDLI.

31% (123) of the companies in the Global 500 are in the Financials sector and 76% (93) of these companies responded, meaning they represent 23% of responding companies. On a percentage basis, the Financials sector is underrepresented in the



CDLI (at 19%) showing that, whilst there is some strong leadership in the sector, improvement is possible. The Consumer Discretionary sector may have moved into a stronger position in the CDLI (17%) because consumers are becoming increasingly carbon conscious in their spending habits. This requires companies in the sector to understand and disclose more as they seek to retain and win market share.

**CDLI companies show consistent leadership across all areas of disclosure**

The Global 500 respondents show a strong overall improvement in disclosure. In 2011, 33% (129) of total respondents score 80 or more compared to 24% (90) in 2010. As the overall quality of emissions disclosure has improved in 2011, the leaders (CDLI) have reported a much stronger understanding of the impact of climate change on their business, and as a result may derive a strategic advantage.

The graph in Figure 18 compares the responses of the CDLI with the average Global 500 across six key areas of

disclosure: emissions management, reporting, governance, opportunities, risks and stakeholder engagement. The average CDLI disclosure scores have increased in 2011, ranging from 87 to 98 across six areas (compared to a range of 85 to 95 in 2010).

Generally, all companies score well on emissions management, emissions reporting and governance (average scores in these areas all exceed 75 in 2011). Measurement and governance may be regarded as the early stages of a company’s approach to addressing the challenges presented by climate change. Subsequently, companies may identify that climate change could provide new markets for investments, business opportunities and potential partnerships.

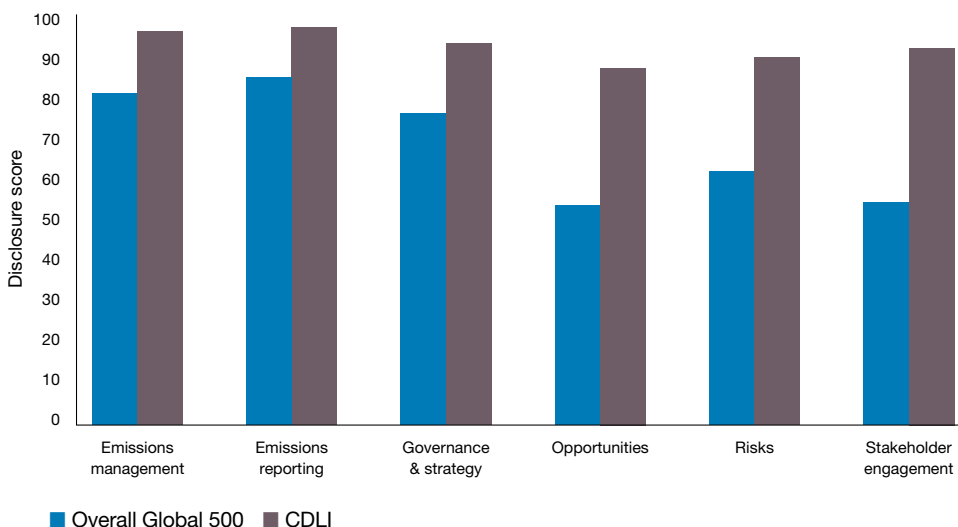
Lockheed Martin is “developing products and services to aid our customers in meeting product efficiency regulations and standards. Lockheed Martin recognizes expanding and evolving markets across its global value chain that has resulted in the development of a number of new offering[s].”

CDLI companies distinguish themselves by outperforming the overall population by a wider margin in the areas of risks, opportunities and stakeholder engagement. CDLI companies are demonstrating their ability to identify new commercial opportunities based on their deeper understanding of climate change issues and how these will impact their businesses by scoring, on average, 93 (overall Global 500 companies scored 54).

**Emissions management**

A notable area of difference between the CDLI and non-CDLI companies is the practice of setting emissions reduction targets and the emphasis that companies place on this. In 2011, 96% (50) of the CDLI stated that they have emissions reduction targets versus 70% (242) of non-CDLI respondents. As noted in the Key Themes section of this report, more companies are adopting emissions reduction targets as part of their climate change strategy.

**Figure 18: Average disclosure score breakdown for the Global 500 overall versus CDLI<sup>14</sup>**



14. The areas of disclosure reproduced in the chart above have been reduced from ten categories in 2010 to six in 2011.

“One of the company’s strategic goals is to minimize its own contribution to global warming. This goal was implemented in 2003 when our CEO committed the company to going carbon neutral over a ten year period and set KPIs. The original target was to reduce our own carbon emissions by 15% per FTE and to compensate the remainder through the retirement of high quality emissions reduction certificates. The reduction target has been increased twice since 2003 to the current level of -45% per FTE basis. In 2010 the goal was exceeded as CO2 per FTE had been reduced by 50.6%. Although our carbon neutrality goal was achieved in 2007 the programme is still in force.”  
Swiss Re

#### Emissions reporting

The CDLI companies showed consistent leadership in emissions reporting by gaining an average score of 98 (2010: 97), thereby showing the value that these companies place on measuring and monitoring their emissions.

In 2011, particular emphasis has been placed on verification of emissions by companies. 100% (52) of the CDLI have their Scope 1 and Scope 2 emissions verified (complete or underway) in the reporting year (90% of these companies have been awarded the full marks available by attaching the appropriate third party opinion for the appropriate year and standard). The fact that these companies undertook the verification of their emissions is a strong contributing factor to their inclusion in the CDLI.

#### Governance & strategy

Governance continues to be a strong area for disclosure for both CDLI and non-CDLI companies in 2011 and forms a significant part of their corporate strategy. 100% of CDLI respondents

stated that the Board or senior management has responsibility for climate change in the company (96% in 2010). 94% (371) of the overall Global 500 respondents stated that they had this level of governance (89% in 2010).

#### Opportunities

The CDLI significantly outperform the Global 500 population in terms of identifying and disclosing climate change opportunities. The average score for the CDLI in this area is 88 compared to 54 across all respondents. Companies that dedicate resources and time to the identification of opportunities may be better placed to capitalize on the opportunities that arise from a low carbon economy. The following examples highlight how companies are responding to and driving opportunities by considering stakeholder opinion, customer base and supply chain as part of their risk assessment process.

“In January 2011, we published a report with Barclays Capital focusing on opportunities for the financial sector to finance low carbon technologies. The most important components of our long-term strategy influenced by climate change are driving new business practices for a carbon-constrained economy. We aim to reduce Accenture’s carbon emissions and support our clients to reduce theirs.”  
Accenture

“Current and future regulatory requirements related to climate change are connected with business opportunities for BASF as they increase the demand for existing climate protection products, open up new markets and boost access to market shares. The market for these technologies is expected to grow at an above average rate due to regulatory influences.”  
BASF

“Employees are increasingly choosing to work for companies that reflect their values and hence, our response to climate change has potential to impact on our ability to attract and retain employees.”

National Australia Bank

#### Risks

85% (338) of respondents reported risk from climate change in 2011 (2010: 78%, 301).

Undertaking work on risk identification and then disclosing risks could be an area of greater focus for the Global 500 in the future given the comparatively low average overall disclosure score of 62 for this area, although the CDLI companies are further ahead with a disclosure score of 91. The following examples highlight how some companies are identifying and responding to regulatory, physical and other risks brought about by climate change.

“Although the EU has committed itself to emissions reduction also beyond 2012 and to the continuation of the emissions trading system (ETS), the uncertainty related to the post-2012 global policy is the main regulatory risk for the future investments of the energy industry. This might result in wrong investment decisions (technology, fuels, location).”  
Fortum Oyj

“Consumers’ behaviors are affected by regional conditions from where they belong. Demands on micro plants for electricity generation with renewable energy sources will be increased in areas where centralized energy supply infrastructures are in short supply. However, in general, demands on high energy efficient and low carbon products will continuously grow in global setting due to increase of energy price and limitation on GHG/ carbon emissions.”  
Samsung Electronics

“Executives and managers of 3M regularly speak at conferences, customer meetings and with regulators on many topics relating to climate change. These meetings help 3M build understanding among our stakeholders of 3M’s commitment to be a global sustainability leader. We also gain valuable information to further improve our sustainability programs and policies, including issues for manufacturing companies and the potential mechanisms to reduce greenhouse gases.”  
3M

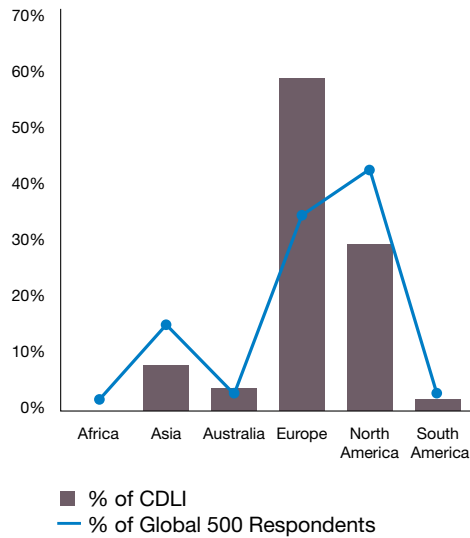
### Geographical Representation of the CDLI

From a regional perspective, for the second consecutive year, Europe is the region with the highest proportion of companies in the CDLI (58%, 2010: 49%) despite only representing 34% of the total Global 500 respondents. This can be seen as a reflection of Europe’s advanced regulation and high level of consumer awareness on climate change.

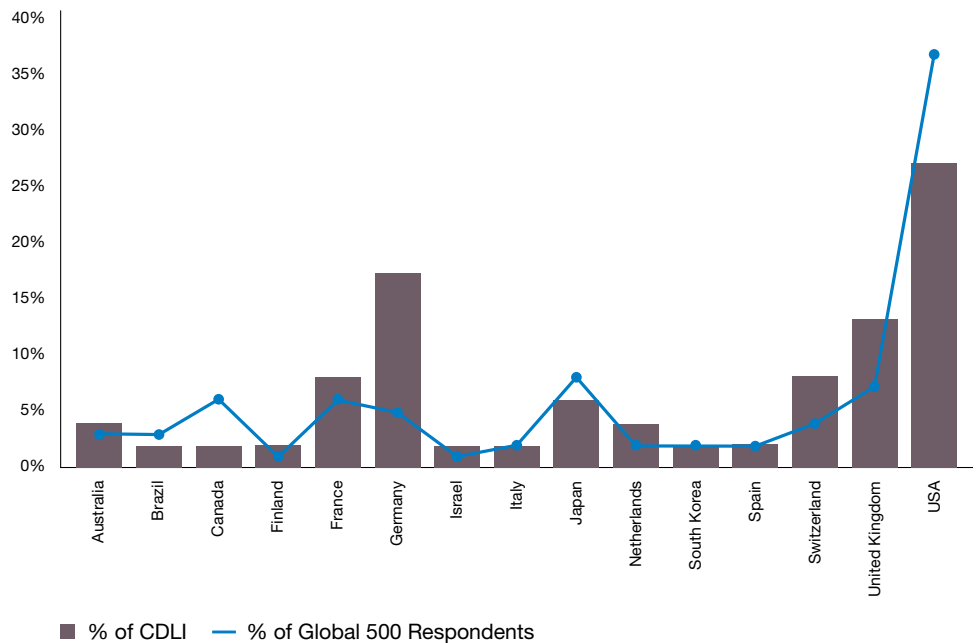
North America (USA & Canada) and Asia both have a low proportion of companies in the CDLI relative to their percentage of the total Global 500 respondents. Despite making up 42% of the Global 500 responding population, only 29% of North American companies make the CDLI. Similarly, Asia represents 15% of the total responses but only 8% of the CDLI. These trends are similar to 2010. 100% of African companies responded, but no African companies made the CDLI (2010: 1 company).

When analysing on a country level, the USA is the country with the highest proportion of companies in the CDLI (26%). However, this shows relatively lower leadership than average as 36% of the Global 500 responding population were from the USA. Germany shows strong leadership, with the highest ratio

**Figure 19: Percentage of companies in the CDLI by region**



**Figure 20: Percentage of companies in the CDLI by country<sup>15</sup>**



15. Figure 20 showing % of CDLI by country does not include the countries with no companies in the CDLI.

of responding companies in the CDLI as it only represents 5% of the responding population but 17% of the CDLI. The UK and Switzerland are also high performing countries. Sixteen countries had companies in the CDLI this year which is the same as in 2010. Notable absentees in 2011 include China, India and Russia.

### CDLI and Shareholder Value

The Global 500 companies reported that climate change may have a range of financial impacts on them and consequently on investors. The main drivers reported for such impacts are varied but include:

- Regulation e.g. carbon prices set through emissions trading schemes (ETS) as seen in Europe, or through a tax as is currently proposed in Australia
- The potential impact of climate change on supply chains

- Changing consumer preferences
- The potential for an increase in the frequency of extreme weather events

Investors value the CDP responses because they clearly disclose the potential investment implications climate change may have on any given business.

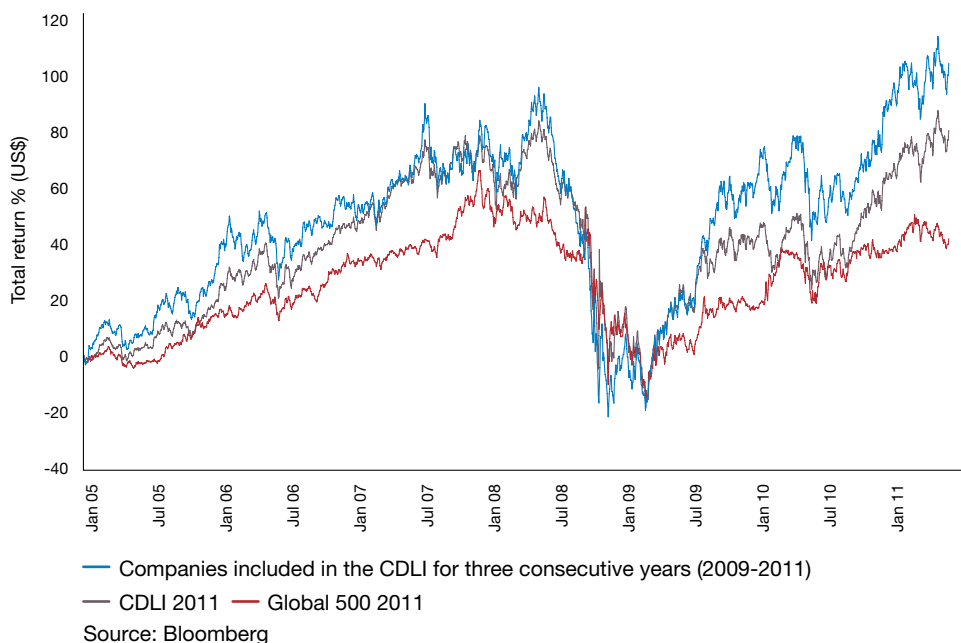
Companies included in the CDLI in 2011 have a higher total return from January 2005 to May 2011 than Global 500 companies, outperforming them by a total of 40 percentage points over the six year period.

When analyzing companies included in the CDLI for the last three consecutive years, an even stronger result is revealed: they outperformed the Global 500 by over 60 percentage points over the same period. This indicates that companies which are consistently successful at measuring, managing and reporting on climate change demonstrate higher financial performance.

It is noted that the relationship between strong carbon disclosure scores and total return has not been fully explored. The relationship between total return and carbon disclosure does not necessarily indicate that one causes the other; both will be influenced by a range of factors. These may include the quality of the companies' management or the companies' broader approach to identifying and capitalizing on opportunities or managing risks. These findings would benefit from further analysis by the investment community.

It is notable that the period when CDLI companies' total return falls below Global 500 companies' total return is in late 2008, during the economic downturn. Although total return fell in all sectors, the downturn particularly affected the Financials sector which makes up the highest proportion of the CDLI.

**Figure 21: Total return % (US\$)**



# The 2011 Carbon Performance Leadership Index (CPLI)

This year, for the second time, all companies with a sufficiently high disclosure score received a performance band; the qualifying threshold to receive a performance band was a disclosure score of 50. Disclosure scores of less than 50 do not necessarily indicate poor performance; rather, they indicate insufficient information to evaluate performance. However, it can be assumed that companies which do not disclose are inactive on climate change.

Performance is grouped into six bands: A, A-, B, C, D and E (see Figure 22).

The Carbon Performance Leadership Index (CPLI) includes the companies in the highest performance band (A) and provides a valuable perspective on the range and quality of activities being performed by the Global 500 in response to climate change.

## Eligibility for the CPLI (Band A)

- Attain a disclosure score of 50 or above
- Attain a performance score greater than 70
- Score maximum performance points on question 13.1a (absolute emissions performance); at least a 2.65%<sup>16</sup> reduction in carbon emissions must have been achieved as a result of emissions reduction activities over the last year
- Disclose gross global Scope 1 and Scope 2 figures
- Score maximum performance points for verification of Scope 1 and Scope 2

## Notes:

- Band A- (A minus) companies are not in the CPLI. They are strong performers, with a performance score high enough to warrant inclusion in the CPLI but they do not meet all other CPLI requirements
- CDP reserves the right to exclude a company from the CPLI if there is anything in its response that calls into question its suitability for inclusion

Performance scoring is an instructive exercise for all stakeholders. The score provides an indication of the extent to which companies are addressing the potential opportunities and risks presented by climate change. CDP recognizes that this is a process that will evolve over time. It is important for investors to keep in mind that the carbon performance band is not:

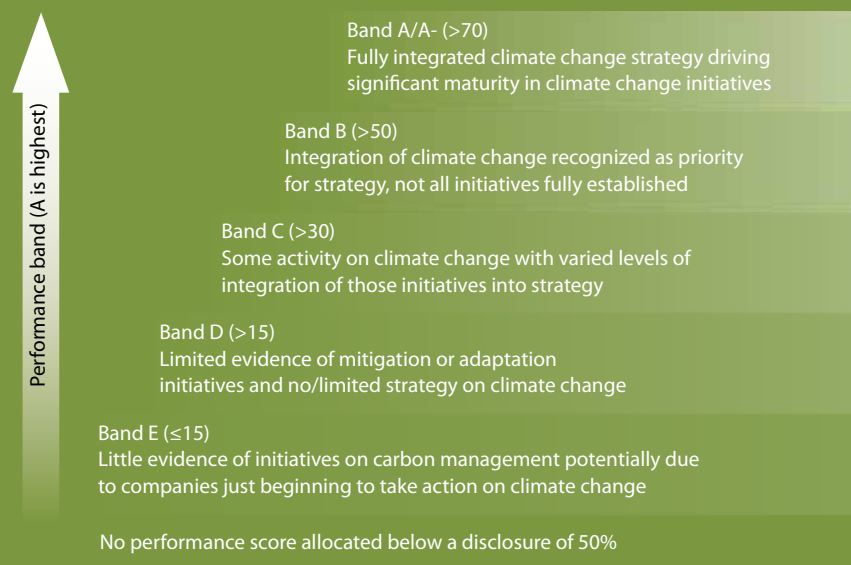
- A measure of how low carbon a company is

- An assessment of the extent to which a company's actions have reduced carbon intensity relative to other companies in its sector
- An assessment of how material a company's actions are relative to the business; the score simply recognizes evidence of action

It is possible to review individual company disclosures in addition to performance rankings in order to gain the most comprehensive understanding of company performance. A listing of companies and their bands is included in Appendix I. Companies that did not qualify for a performance band appear in Appendix I with a dash (-) in the performance band column.

More information can be found in the information request, supporting methodology and guidance documents, as well as within individual company responses at [www.cdproject.net](http://www.cdproject.net).

Figure 22: Carbon performance elements



16. The Intergovernmental Panel on Climate Change (IPCC) has set a target of 80% reduction in emissions by 2050, based on 1990 levels. This equates to a 2.65% annual reduction.

In 2011, 404 Global 500 companies responded to CDP; 29 of these attained Global 500 performance leader status, as identified below. These companies represent nine of the ten sectors.

The companies highlighted in orange are those that have moved into the Global 500 CPLI this year.

Figure 23: The Global 500 CPLI 2011

Sector	Company	Disclosure score
Consumer Discretionary (4 Companies, 9% of sector submissions)	BMW	96
	Fiat	93
	Honda Motor Company	95
	Philips Electronics	99
Consumer Staples (2 Companies, 6% of sector submissions)	British American Tobacco	91
	Tesco	97
Energy (1 Company, 3% of sector submissions)	BG Group	85
Financials (9 Companies, 10% of sector submissions)	AXA Group	92
	Bank of America	97
	Bank of Montreal	88
	Commonwealth Bank of Australia	89
	Morgan Stanley	87
	National Australia Bank	91
	Swiss Re	91
	UBS	91
	Westpac Banking	96
Health Care (3 Companies, 10% of sector submissions)	Bayer	99
	GlaxoSmithKline	93
	Novartis	94
Industrials (3 Companies, 7% of sector submissions)	CSX	85
	Lockheed Martin	90
	Schneider Electric	91
Information Technology (4 Companies, 11% of sector submissions)	Cisco Systems	98
	Samsung Electronics	94
	SAP	96
	Sony Corporation	94
Materials (2 Companies, 5% of sector submissions)	Air Products & Chemicals	92
	BASF	93
Telecommunications (0 Companies, 0% of sector submissions)	No Companies	
Utilities (1 Company, 5% of sector submissions)	ENEL	89

In 2011, CDP has raised the bar by enhancing the scoring methodology for both disclosure and performance questions to make the scoring results more relevant to investors and other stakeholders.

The average performance score for 2011 is 4 points lower than in 2010. This is primarily the result of a change in focus of the performance scoring rather than a change in corporate performance. In 2010, the focus was to measure the extent to which a company had a framework in place to address carbon management. This year, performance focuses more on measuring the ambition and success of a company's short and long term actions to mitigate climate change.

Overall, 338 Global 500 companies (85%) received a performance band compared to 310 companies in 2010 (76%). However, as a consequence of more stringent CPLI entrance criteria on emissions reductions and verification, the number of companies included in the CPLI dropped from 48 to 29. A lower percentage (36%) of companies achieved a high performance band (A, A- or B) in 2011 than 2010 (52%). This is, again, largely due to the qualifying criteria being more stringent.

79% (23) of the CPLI companies were also in the CDLI – this is an improvement on 2010 (69%, 33) and indicates that senior executives in an increasing number of companies are not only aiming to be transparent about their emissions but are also actively striving to reduce their emissions. Many companies with a high disclosure score, combined with a high performance band, note the strategic benefits that taking a leadership position in carbon adaptation and mitigation offers.

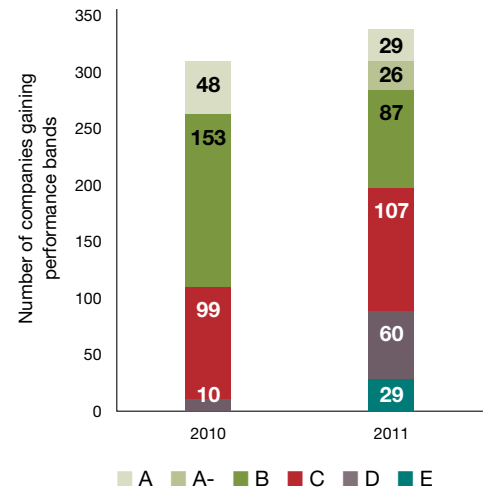
It is important to note that performance improvements take longer to implement and often lag behind improvements in disclosure. As companies measure, they can manage and then begin to perform and optimize results. True performance enhancements take longer to achieve and the expectation is that companies' performance will continue to improve over the coming years.

For the second consecutive year, the Financials sector has the most companies in the CPLI (9 companies – 31% of the total CPLI). This is partly because Financials is highly represented in the Global 500, but it also clearly shows that some financial services companies have prioritized action on climate change. The only sector with no companies in the CPLI is Telecommunications. This is surprising given that the Telecommunications sector is increasingly seen as providing technology that can support emissions reduction activities.

Utilities is the best performing sector with an average performance band 'B'. This may be a reflection of the impact of regulations on the Utilities sector and shows that these companies are taking a range of actions on climate change.

The sector with the lowest average performance band was Information Technology (band C). This reflects their lower than average number of emissions reductions activities as well as less frequent verification. As with the Telecommunications sector, this result is surprising given the expectation that Information Technology has the potential to support a wide range of emissions reduction activities.

**Figure 24: Comparison of performance bands between 2010 and 2011**



The graph in Figure 25 compares the key indicators achieved by CPLI companies with the average Global 500 across four key areas: strategy, governance, stakeholder communications and achievements. All responding companies (CPLI and non-CPLI) performed well in the implementation of emissions reduction targets (strategy) and Board or executive-level oversight indicators (governance); these appear to be the core 'early-stage' areas of addressing climate change which have been met by the majority of respondents.

Analysis of the most significant areas of outperformance of the overall Global 500 by the CPLI provides insights into the characteristics of carbon performance leadership:

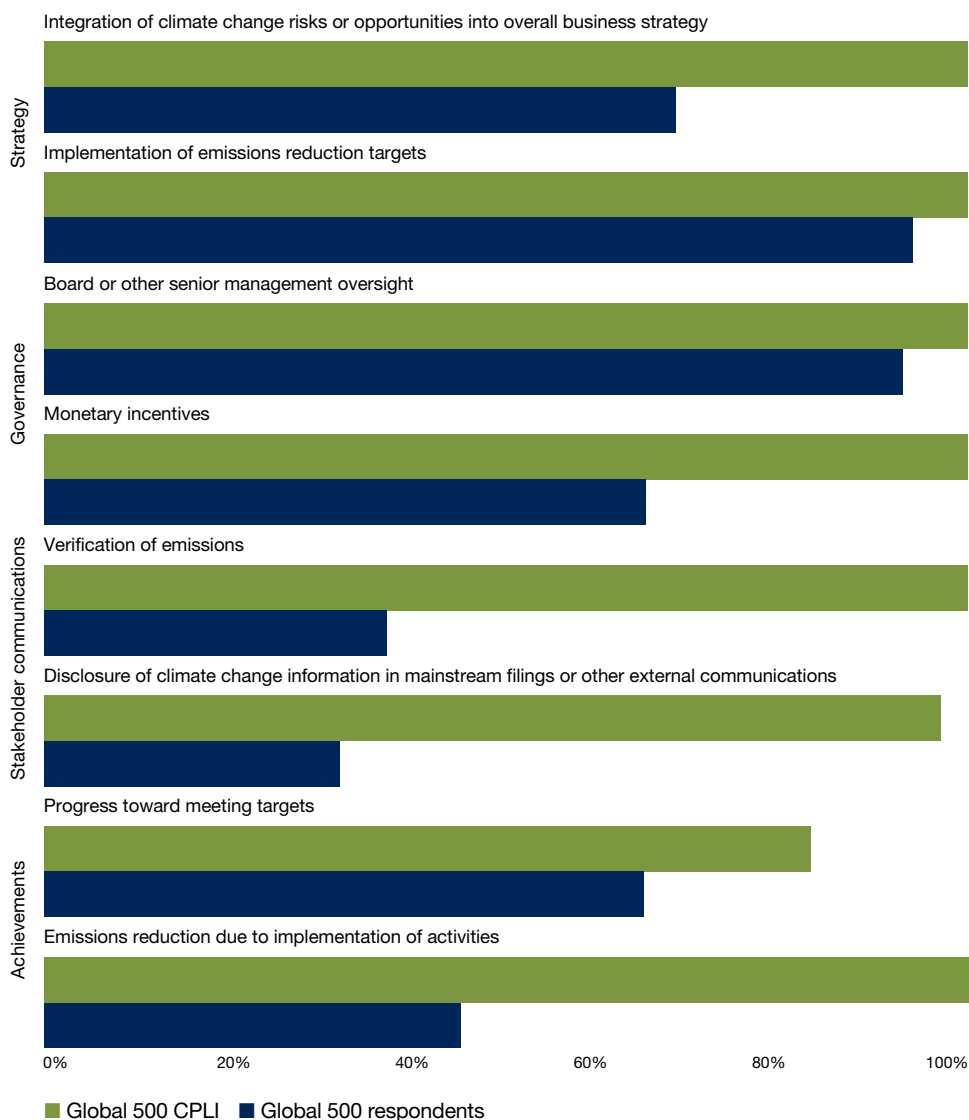
**Strategy**

The CPLI companies distinguish themselves through demonstrated integration of their climate-related risks and opportunities into their overall business strategy. 100% (29) of CPLI companies achieved this key indicator in 2011 compared to 68% (269) of the overall Global 500.

**Governance**

The use of monetary incentives is a significant area of outperformance by CPLI companies compared to the overall Global 500. 100% (29) of CPLI companies use monetary incentives compared to 65% (259) of the Global 500. Linking employee incentives to climate change strategy demonstrates a clear drive towards low carbon growth.

**Figure 25: Key indicators of performance leaders compared to all respondents**





Stakeholder communications

Companies are required to score maximum points for verification of Scope 1 and Scope 2 to be eligible for inclusion in the CPLI. In contrast, only 37% (148) of the overall Global 500 (versus 100% of CPLI companies) meet all of CDP's verification criteria in 2011. Companies' strategies to reduce emissions require analysis and decision-making based on reliable emissions data.

Achievements

In support of their commitment to reduce emissions, 100% (29) of CPLI companies reported significant emissions reduction in the past year compared to 45% (178) of the overall Global 500. The success in achieving reductions may be due to more mature climate change initiatives from CPLI companies that are already realizing results in emissions reduction.

Geographical Representation of the CPLI

Europe and Australia are the strongest performing regions in 2011. Europe has the most companies in the CPLI (16, 55% of CPLI) despite only representing 34% of the responding population. This is similar to 2010 when it represented 60% of the CPLI with 29 companies. Australia makes up 10% of the CPLI despite only representing 3% of the Global 500 responding population. North American (USA and Canada) companies make up 24% of the CPLI despite only representing 42% of the Global 500 responders.

The best performing country was Germany which made up 14% of the CPLI with only 5% of respondents.

Figure 26: Percentage of companies in the CPLI by region

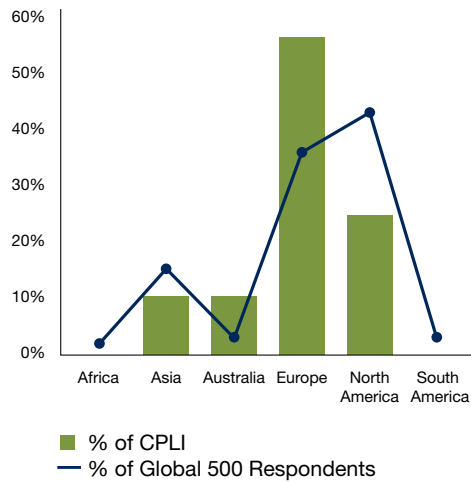
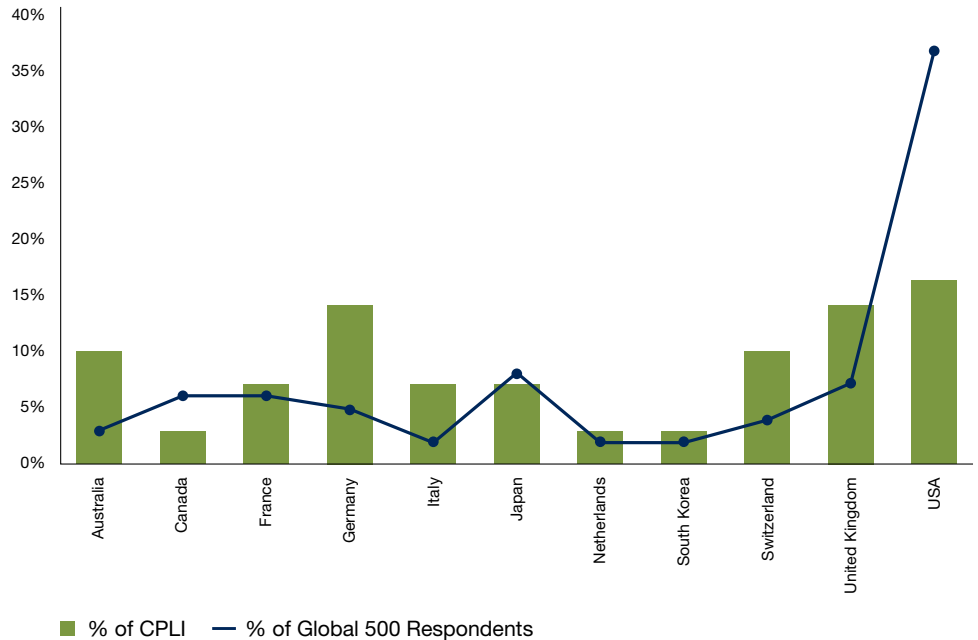


Figure 27: Percentage of companies in the CPLI by country<sup>17</sup>



17. Figure 27 showing % of CPLI by country does not include the countries with no companies in the CPLI.

Australia, Italy, Switzerland and the UK are also performing relatively well. The USA had the most companies in the CPLI for the second year running with 6 – however, this only represented 21% of the CPLI while the USA represented 36% of respondents. Likewise, Japan and Canada CPLI representation was lower than their proportional number of responses. Notable absentees from the CPLI in 2011 include Brazil, China, Russia, South Africa and Spain.

### CPLI and Shareholder Value

Companies included in the CPLI in 2011 have a higher total return<sup>18</sup> from January 2005 to May 2011 than Global 500 companies, outperforming them by a total of 40 percentage points over the six year period.

When analyzing companies included in

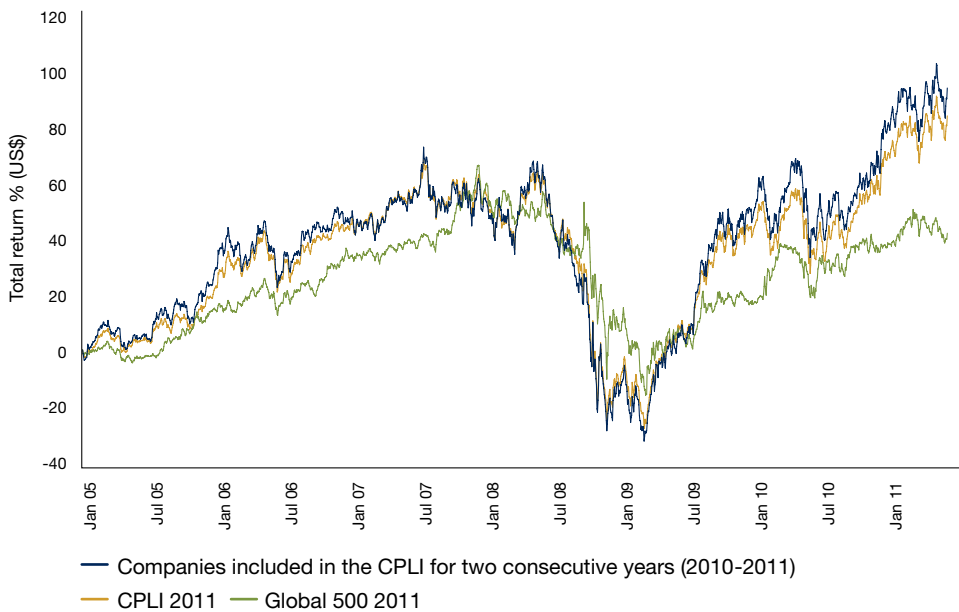
the CPLI for the last two<sup>19</sup> consecutive years, an even stronger result is revealed: they outperformed the Global 500 by over 50 percentage points over the same period. This indicates that companies which have an integrated climate change strategy and are successfully managing their emissions demonstrate higher financial performance.

It is noted that the relationship between strong carbon performance and total return has not been fully explored. The relationship between total return and carbon performance does not necessarily indicate that one causes the other; both will be influenced by a range of factors. These may include the quality of the company's management or the company's broader approach to identifying and capitalizing on

opportunities or managing risks. These findings would benefit from further analysis by the investment community.

It is notable that the period when CPLI companies' total return falls below Global 500 companies' total return is in late 2008, during the economic downturn. Although total return fell across all sectors, the downturn particularly affected the Financials sector which makes up the highest proportion of companies in the CPLI.

**Figure 28: Total return % (US\$)**



18. Total Return includes interest, capital gains, dividends and distributions realized over a given period of time.  
 19. CPLI was launched in 2010 and is now in its second year.

Source: Bloomberg

# Sector Analysis

## Industry Perspectives: Sector Snapshots

Clear industry trends are present when the data is analyzed on a sector level and this is shown through a series of snapshots. All responding companies are scored on the same basis. Sector analysis provides insights into the key risks and opportunities facing each sector, as well as common or contrasting initiatives that are being adopted.

There are vast differences in performance bands between sectors as illustrated by Figure 29 with Telecommunications not having any companies within band 'A' compared to Financials (9). There are however, far more Financials respondents (93) compared to the Telecommunications (21). Changes in the CPLI criteria and the increase in maturity of the performance methodology has meant

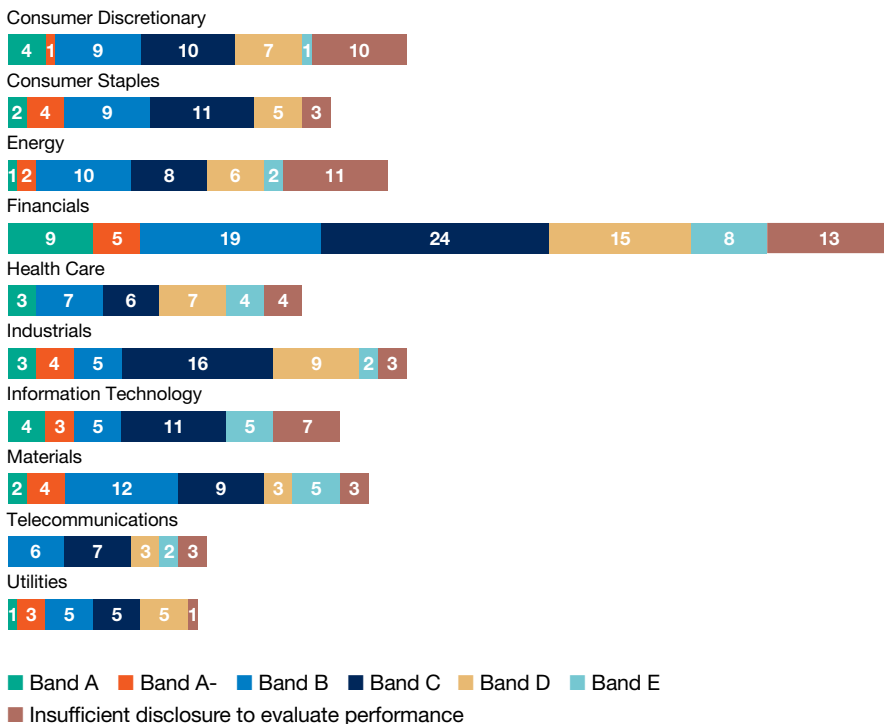
that direct comparison of the band structure year on year is not possible.

The snapshots contain general sector graphs and tables such as emissions reduction targets and Scope 1, 2 and 3 emissions disclosures. More specific analysis highlights the key themes and challenges in each sector, with comparison to the CDLI and CPLI. Each sector's risks and opportunities has been analyzed and disclosed to identify underlying trends in the company responses.

The risks and opportunities vary between sectors, however, the uncertainty with regulations especially in emerging markets remains a key risk across all sectors. Consumer trends and reputational risks have increased in frequency in the responses and are present across all sectors.

Company responses to CDP can be found at [www.cdproject.net](http://www.cdproject.net)

**Figure 29: Number of companies in each performance band (Global 500)**

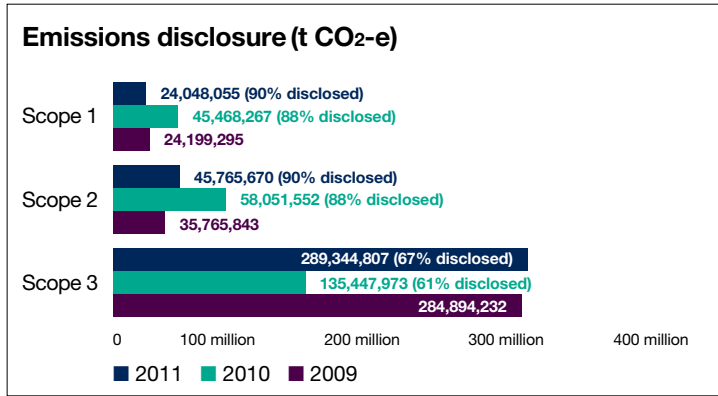
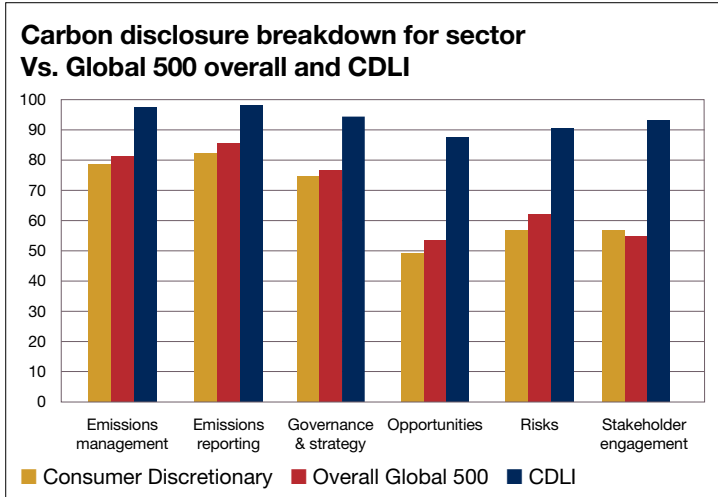
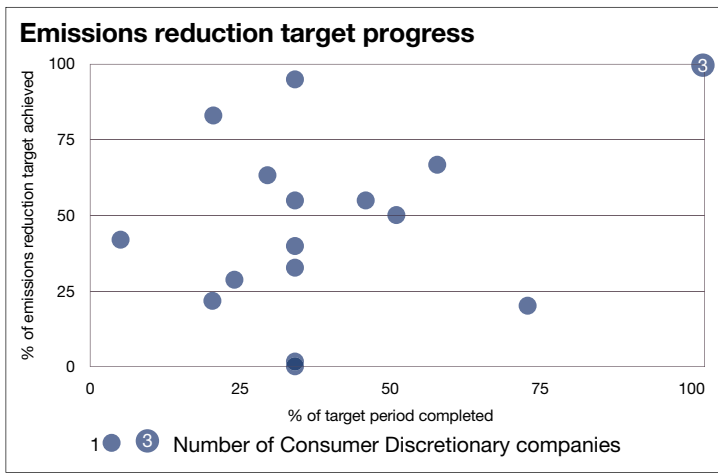
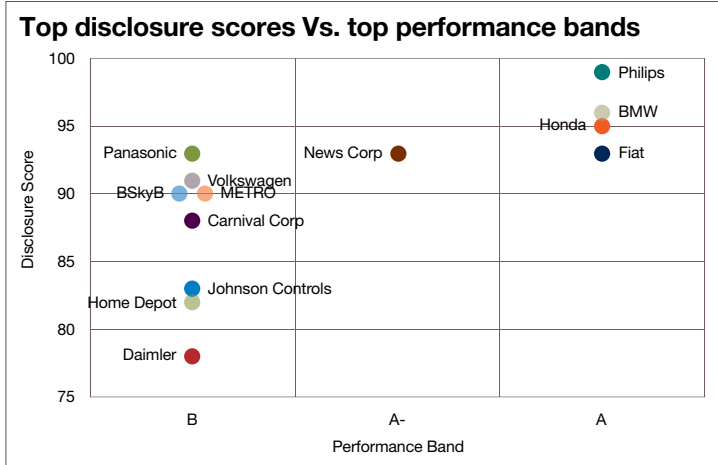


# Consumer Discretionary

Global 500 response rate:  
 Consumer Discretionary Overall: 82% (45 of 55)

Key Industries within the sector:  
 Media (8 of 11); Automobiles (10 of 11); Speciality Retail (8 of 8);  
 Hotels, Restaurants & Leisure (4 of 5); Autocomponents (4 of 5);  
 Household Durables (4 of 4); Internet & Catalog Retail (1 of 2);  
 Multiline Retail (3 of 4); Textiles, Apparels & Luxury Goods (3 of 5).

Largest non-respondents include:  
 Amazon.com, DIRECTV Group, Comcast

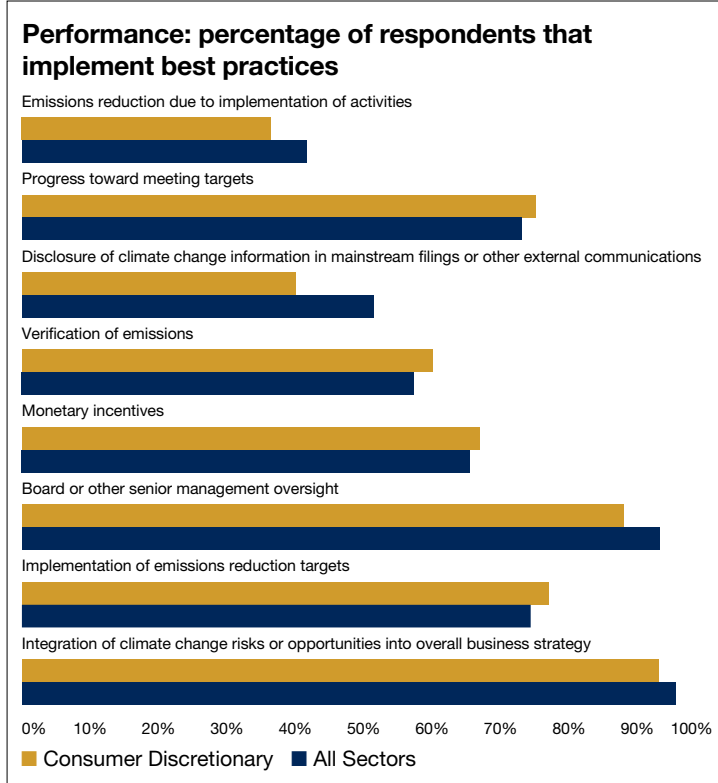


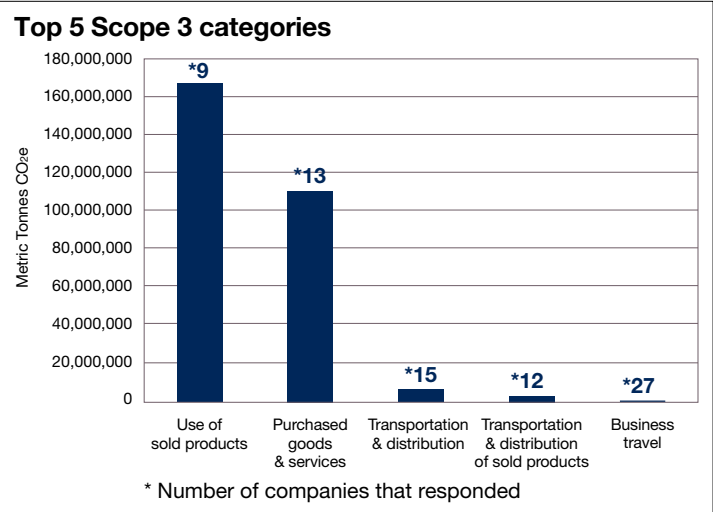
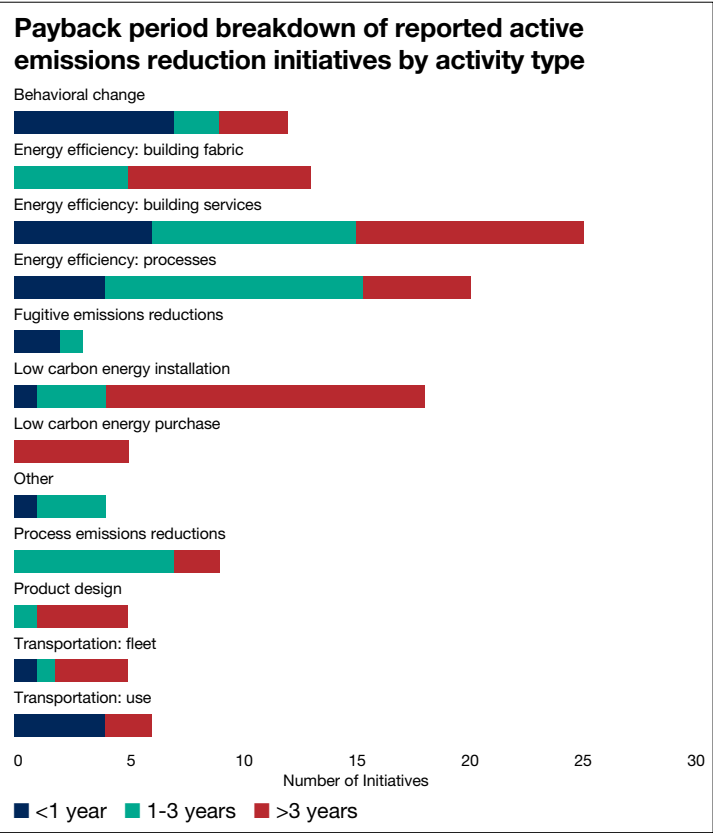
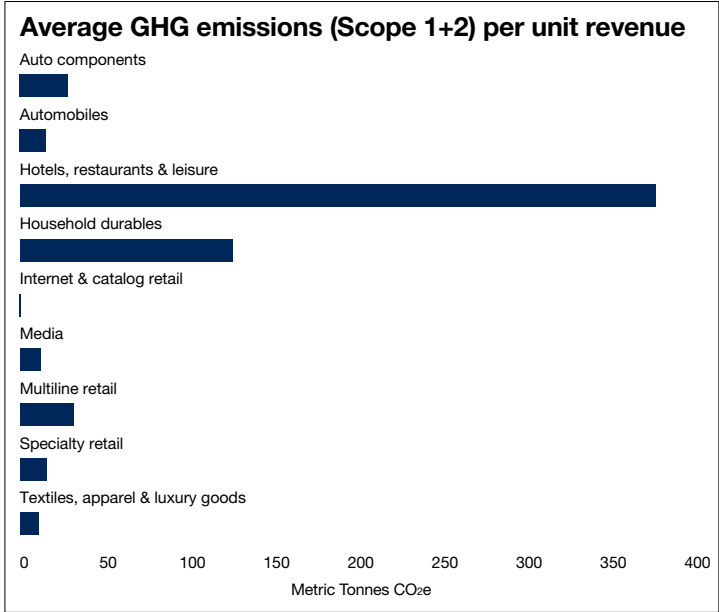
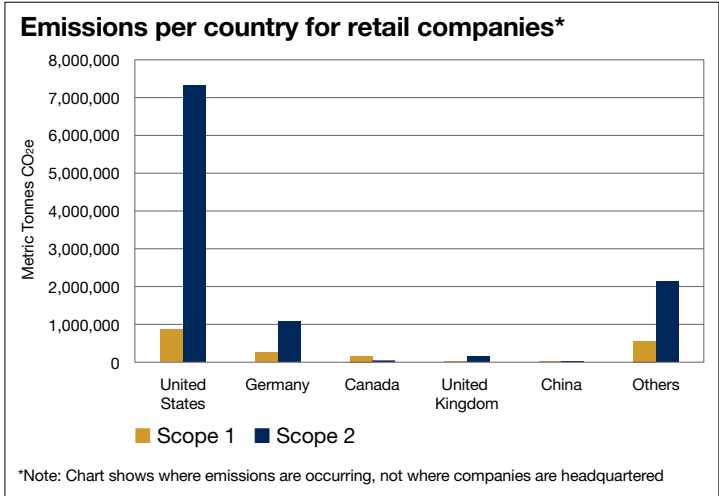
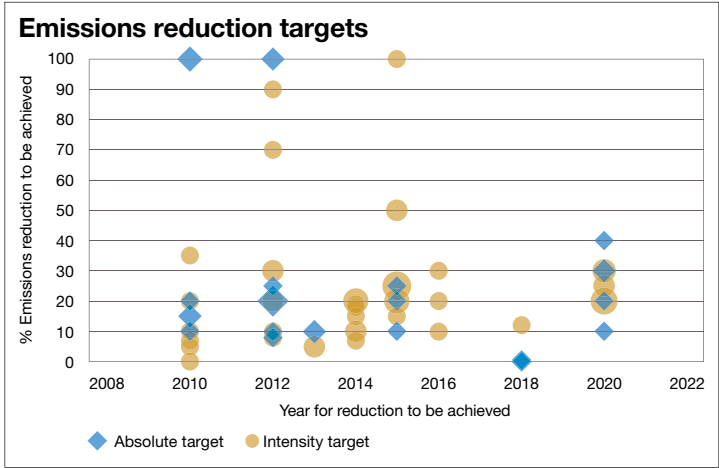
### Opportunities reported

- Diversifying and developing their product base to ensure lower GHG emissions products are available to meet consumption trends and comply with regulations
- Investment in research for greener technologies in the Automobile sector (e.g. electric cars, hybrid cars)

### Risks reported

- Changing consumer behavior as more cities are implementing congestion charges which makes the car less attractive
- Changing fuel regulations and carbon taxes may lead to financial penalties and loss of demand for products
- New regulations for product labelling could increase the costs associated with producing consumer goods. Increased costs would result in lower margins on the product or the need to raise the retail price to match the cost increase. This may lead to reduced demand for these products
- Extreme weather patterns may damage supply chains and manufacturing plants. In addition, sourcing materials may become more difficult which may result in price rises and resource constraints





“Disney provides financial incentives to employees who bike, walk, carpool, vanpool, take the train/subway, or take the bus to work. This program reduces Disney’s Average Vehicle Ridership (AVR) and reduces emissions caused by employee commuting.”  
Walt Disney Company

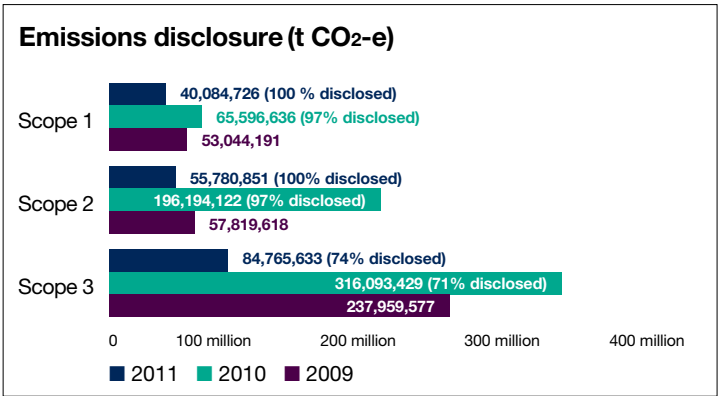
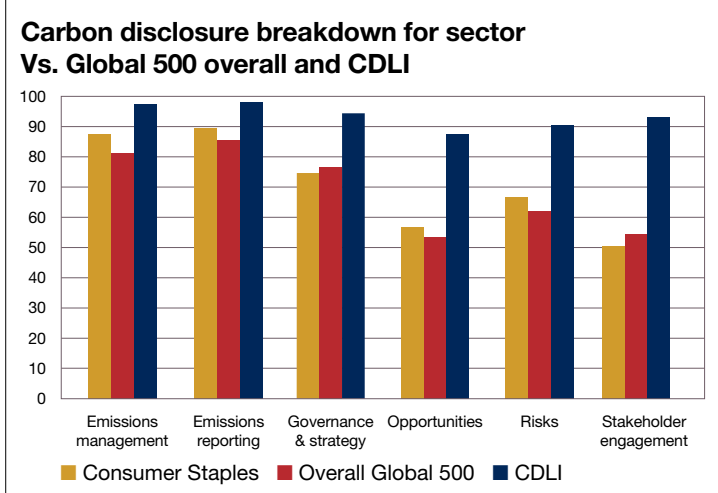
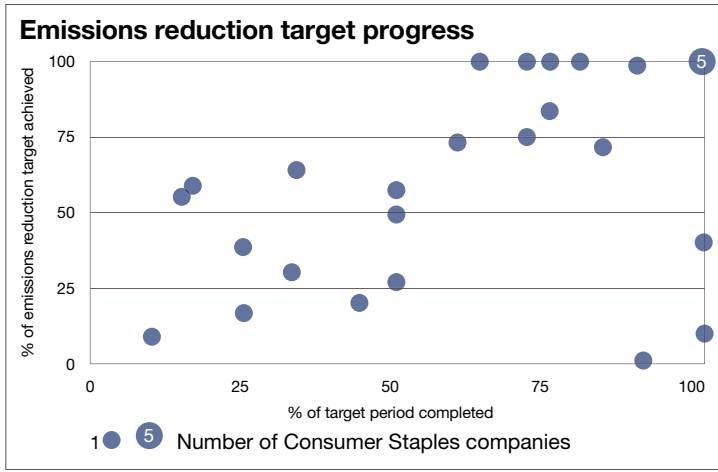
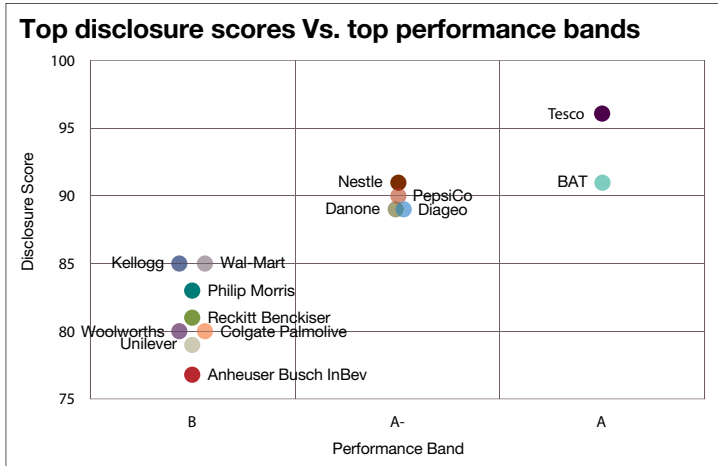
“Fiat is one of the automotive groups most strongly committed to reducing the environmental impacts of transportation: between 2000 and 2010, average CO<sub>2</sub> emissions for vehicles sold by Fiat Group Automobiles (FGA) in Europe fell 20%.”  
Fiat

# Consumer Staples

Global 500 response rate:  
 Consumer Staples Overall: 92% (34 of 37)

Key Industries within the sector:  
 Food & Staples Retailing (9 of 10); Food Products (6 of 8);  
 Beverages (8 of 8); Personal Products (4 of 4); Tobacco (6 of 6);  
 Household Products (1 of 1).

Largest non-respondents include:  
 Wilmar International, Archer Daniel Midland, SYSCO

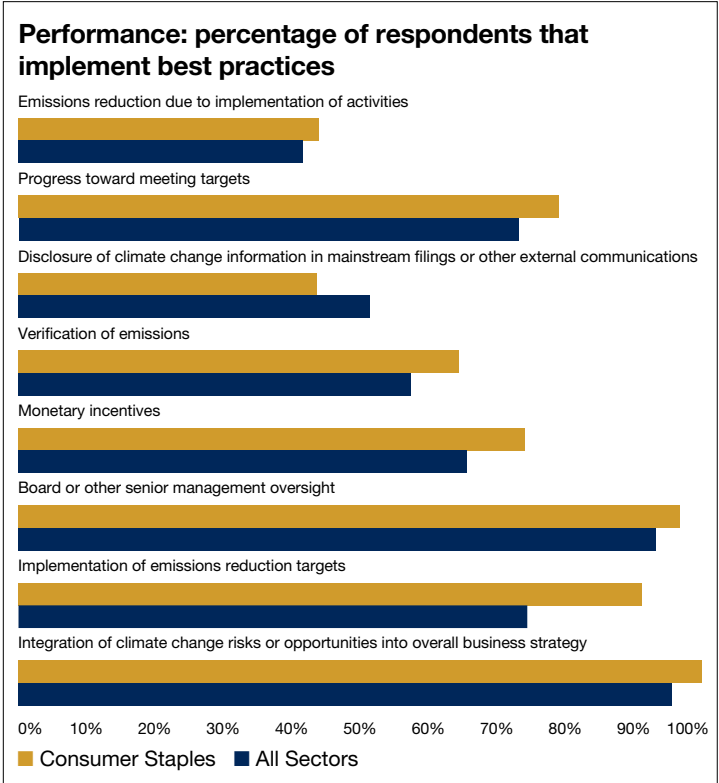


#### Opportunities reported

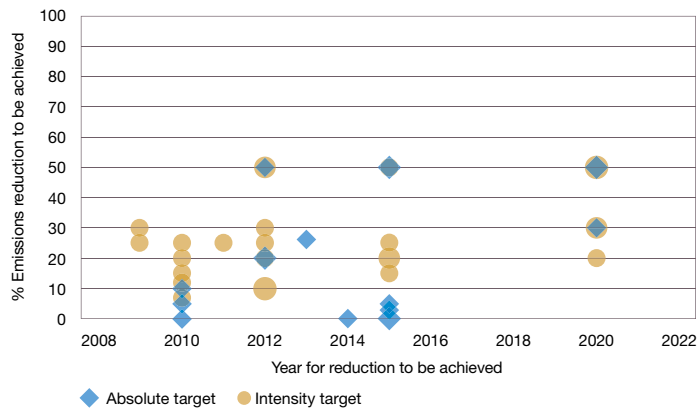
- Transition towards a growing market for sustainable products with locally-sourced, low-carbon, products and sustainable packaging. Following the growing scarcity of natural resources, companies now support suppliers to adopt environmentally responsible practices
- Costs savings through improved energy efficiency of operations, reduced emissions and technological innovations

#### Risks reported

- Increased risk of disruption to facilities, business operations and supply chain due to extreme weather patterns and natural disasters
- Uncertainty surrounding future regulatory requirements which might result in increased compliance costs
- Reputational risk for the Food Retailing sector. Their visibility in the market and the increasing transparency of their operations, combined with NGO power, drives companies to source more sustainable materials

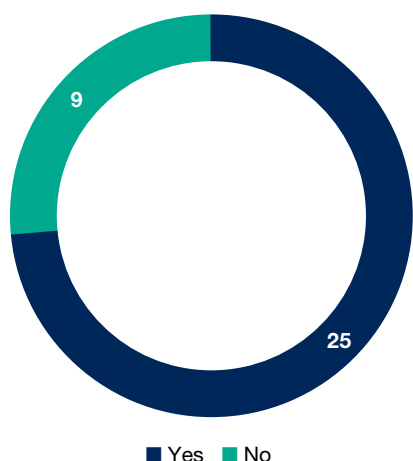


### Emissions reduction targets



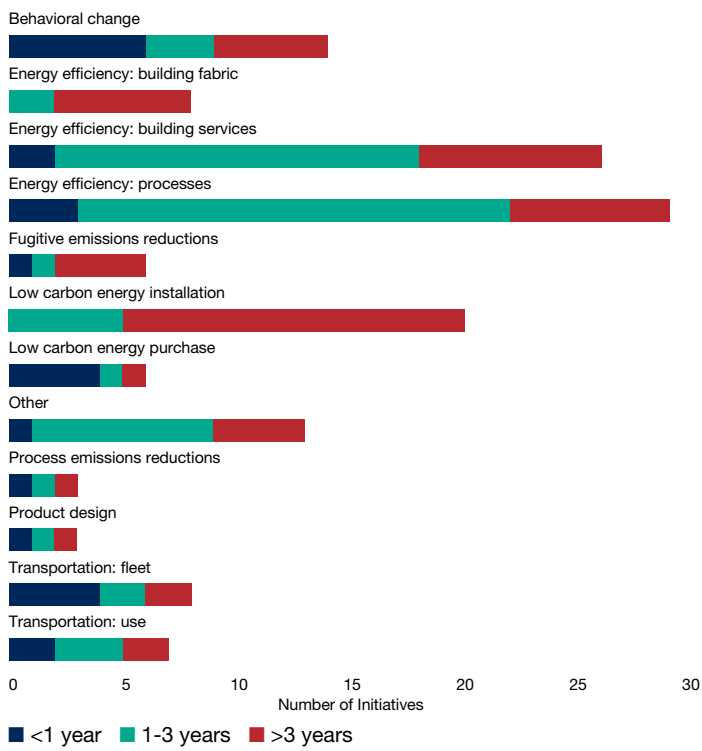
Company	Low carbon solutions
Coca-Cola	"We are expanding our use of heat recovery. This works by reusing heat energy from boilers used for other production processes, so we can reduce our use of natural gas."
Colgate Palmolive	"Colgate has three on-site cogeneration units located in Italy, Mexico and the United States."
Pernod-Ricard	"In Mexico, energy consumption by distilleries has been reduced by 7% by reducing the time required to start boilers, optimising their performance and preheating water using hot combustion gases from the distillation chimneys."
Walgreens	"Walgreens opened the first drugstore nationwide to meet top environmental requirements of the US Green Building Council for efficiency and design. Four new LEED registered store construction projects were initiated in 2010."
Woolworths	"Supermarkets energy efficiency projects for refrigeration, air conditioning and lighting."

### Number of companies reporting some Scope 3 emissions from their supply chain

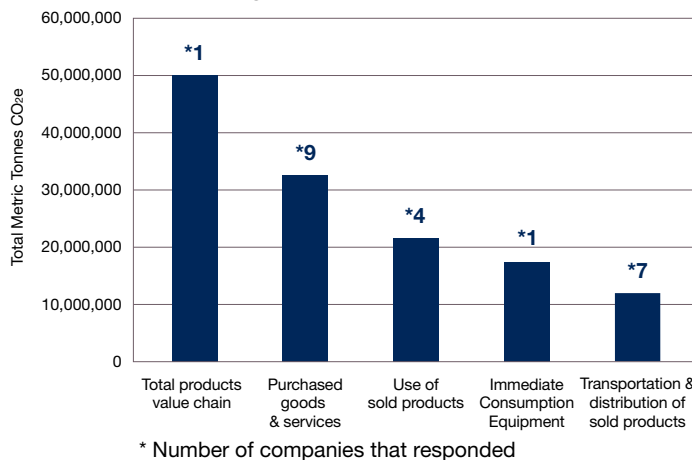


"On average it costs us approximately £1000 to produce a carbon footprint for one product to a new methodology, with additional costs for certification and labelling on top of this. As a global company selling tens of thousands of products, [...] which increasingly sources on an international basis, we would incur significant additional costs if we needed to comply with a number of different national labelling standards."  
Tesco

### Payback period breakdown of reported active emissions reduction initiatives by activity type



### Top 5 Scope 3 categories

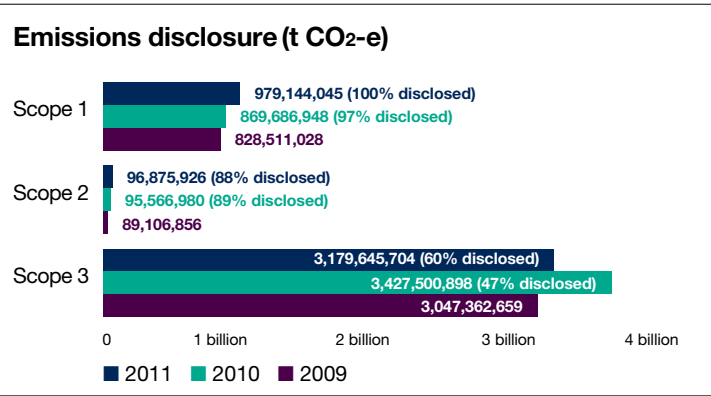
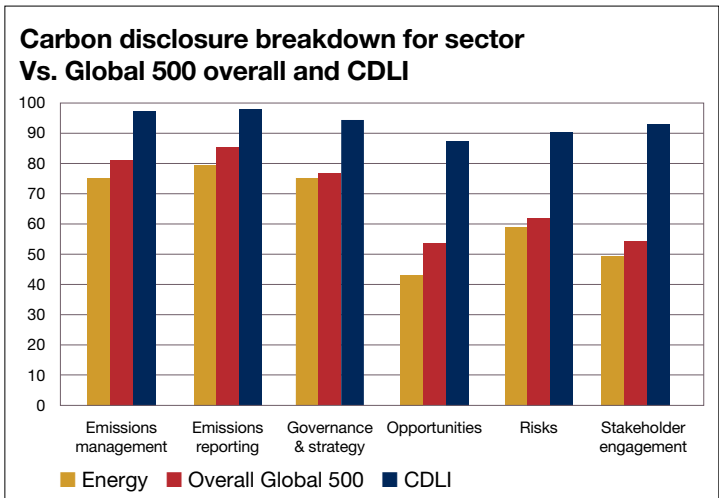
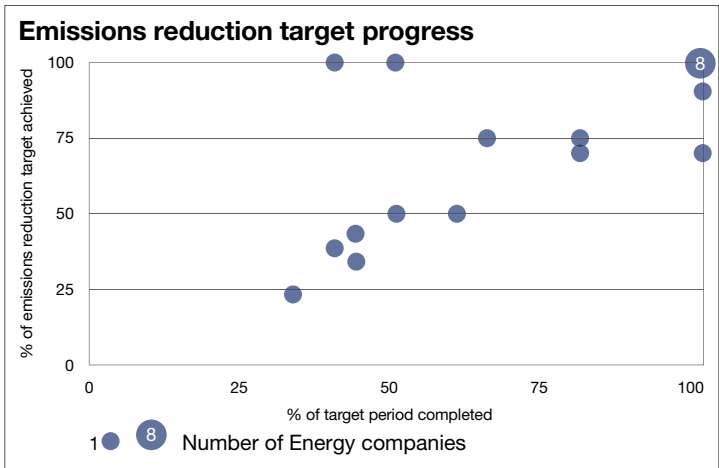
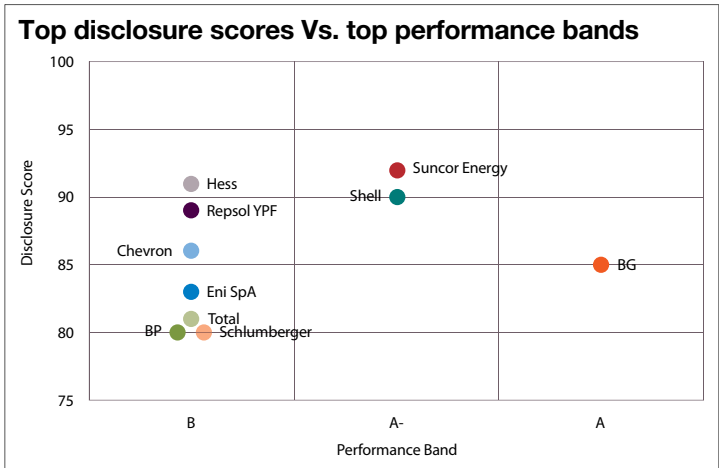


"Competitor and retailer actions to bring carbon neutral products to market may favour these products over Nestlé products in the eye of the consumers. Perceived climate change performance could have a significant impact on brand value and consumer confidence."  
Nestlé

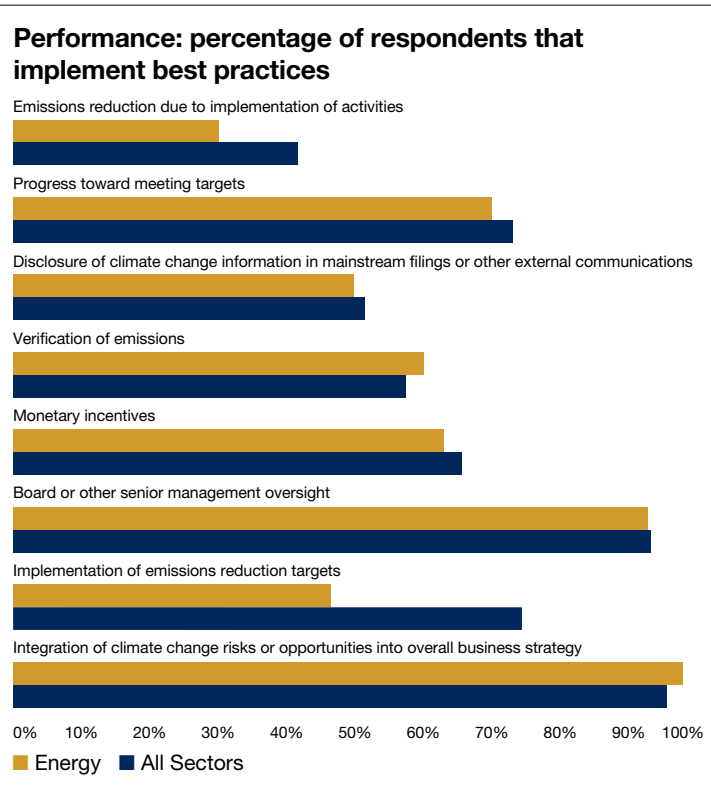
"We have already successfully reformulated our products to reduce climate impact. For example, our concentrated laundry detergents save greenhouse gas emissions in the manufacture, packaging and transportation of the product. [...] If everyone used concentrated liquid detergent variants we would save over 4 million tonnes of CO2 per annum."  
Unilever

# Energy

Global 500 response rate:  
 Energy Overall: **75%** (40 of 53)  
 Key Industries within the sector:  
 Oil, Gas & Consumable Fuels (35 of 46);  
 Energy Equipment & Services (5 of 7).  
 Largest non-respondents include:  
 Rosneft, Surgutneftegas, Lukoil

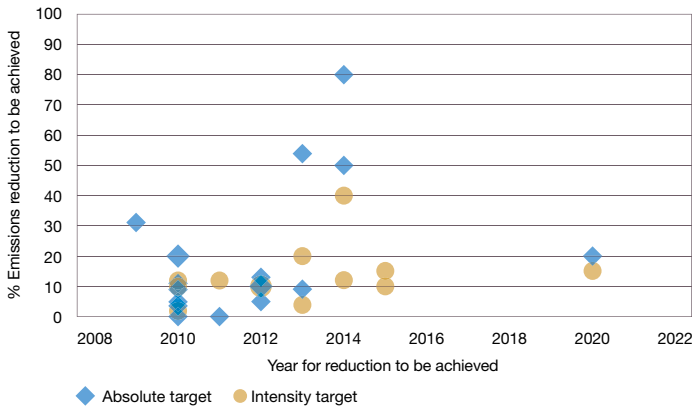


- #### Opportunities reported
- International market-based trading mechanism provides an opportunity to invest in renewable energy and energy efficiency projects
  - Energy sector companies could generate additional revenue if they are able to reduce emissions at a marginal cost that would be below the cost of allowances
  - Fuel and energy taxes and regulations may stimulate the demand for bio fuels and renewable energy
- #### Risks reported
- Uncertainty surrounding future changes in post-Kyoto regulation, including increased costs due to the introduction of carbon taxes
  - Optimistic emissions reduction commitment by EU ETS phase III may result in significant cost implications for all the Energy sector companies. Similarly, introduction of Cap and Trade schemes may impose cost burden if emissions exceed the permissible limit
  - Increased frequency of extreme events: ice conditions in the North Sea, wave conditions and cyclones in tropical areas, force companies to focus on climate change adaptation of new projects

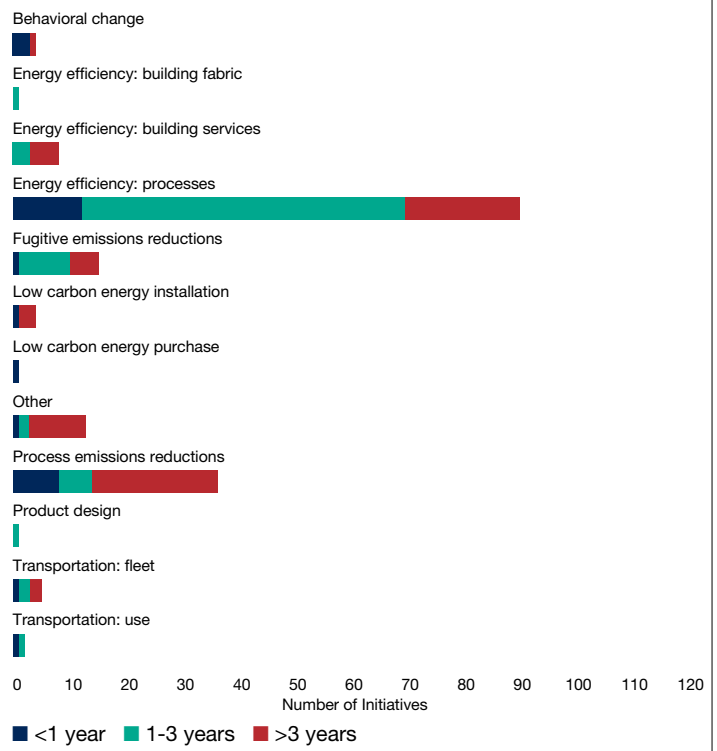




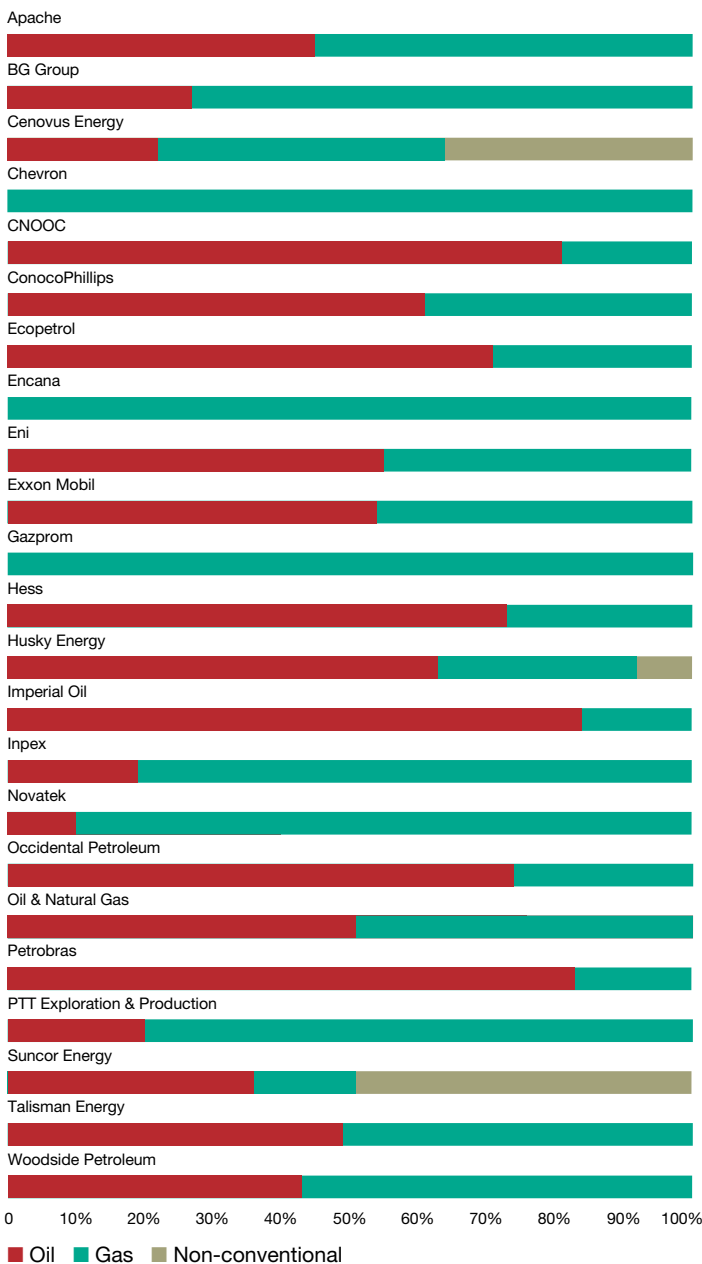
### Emissions reduction targets



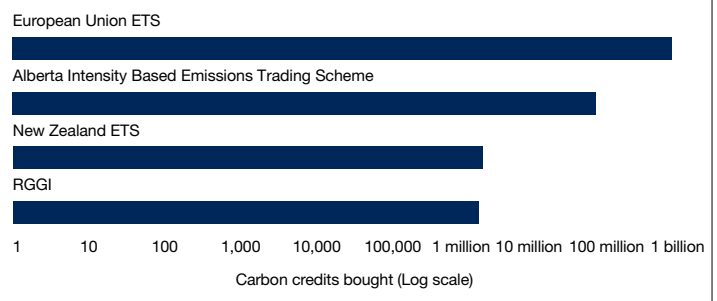
### Payback period breakdown of reported active emissions reduction initiatives by activity type



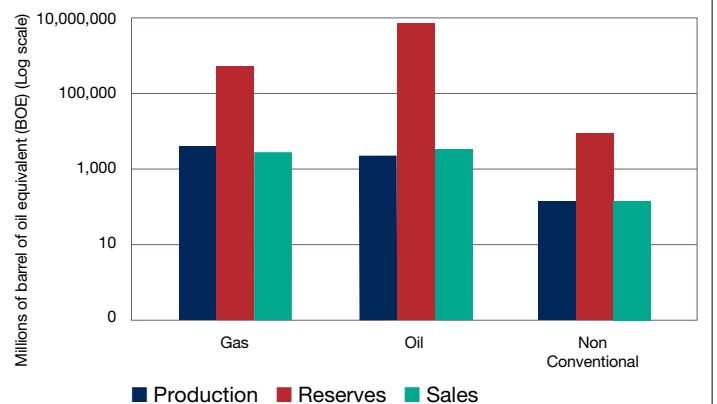
### Upstream energy mix of oil & gas companies in the reporting year



### Number of carbon credits purchased in the reporting year



### Annual production, sales, and proven reserves of hydrocarbon types

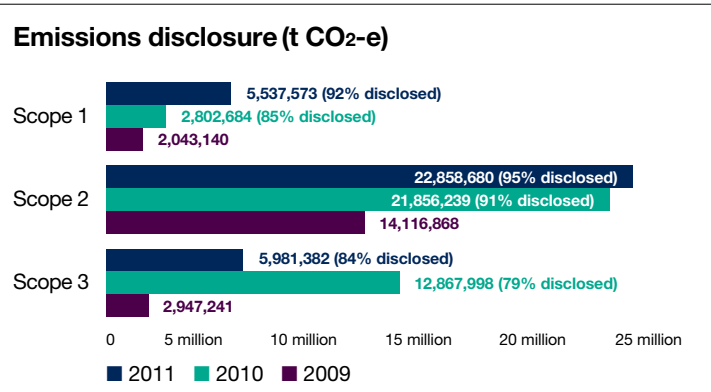
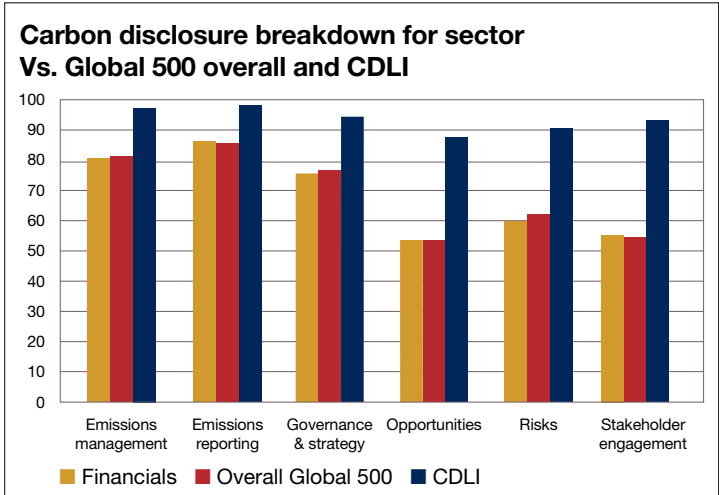
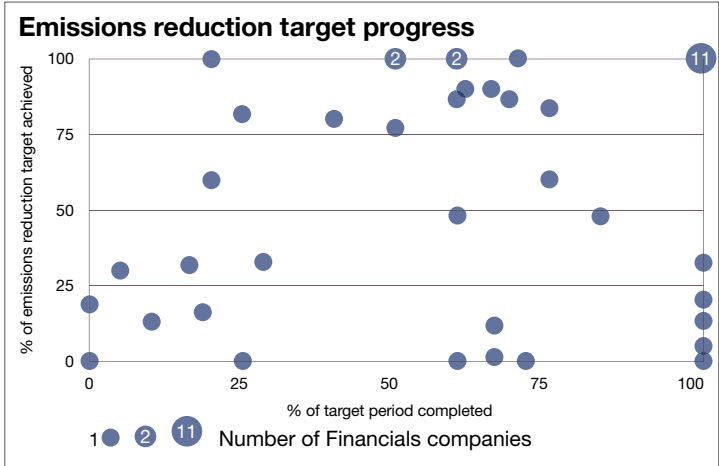
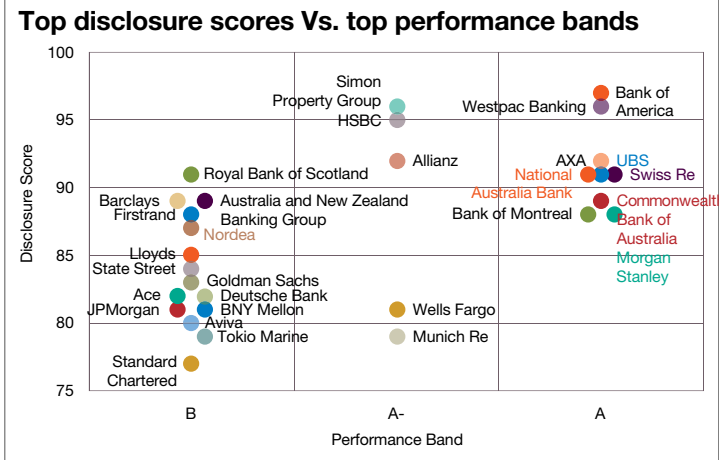


# Financials

Global 500 response rate:  
 Financials Overall: **77%** (95 of 123)

Key Industries within the sector:  
 Commercial Banks (50 of 62); Diversified Financial Services (9 of 13); Insurance (19 of 24); Capital Markets (10 of 11); Real Estate Investment Trusts (3 of 5); Real Estate Management & Development (1 of 4); Thrifts & Mortgage Finance (0 of 1); Consumer Finance (3 of 3).

Largest non-respondents include:  
 Berkshire Hathaway, Bank of China, Sberbank

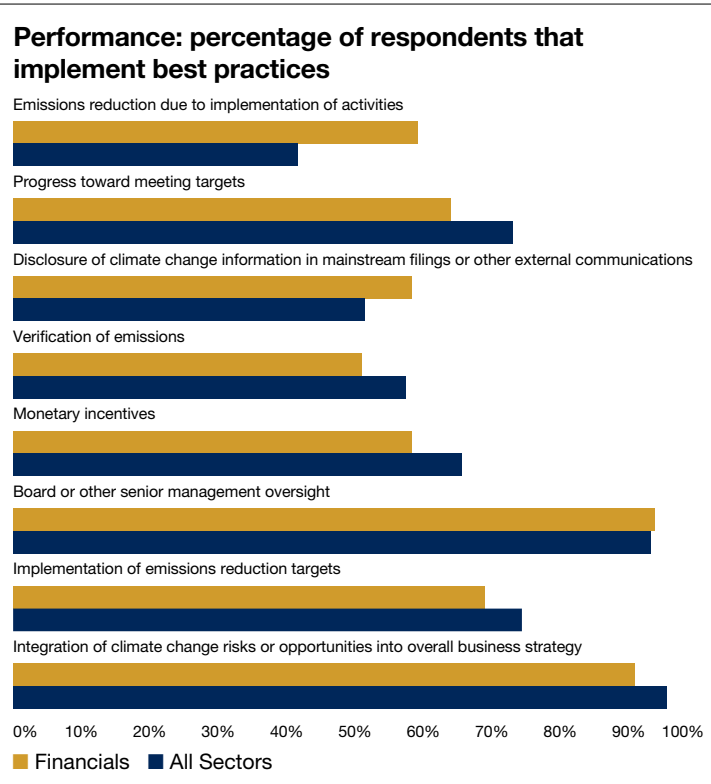


### Opportunities reported

- Increased investments in renewable energy projects (e.g. wind, solar plants, biomass)
- New markets for green funds, social responsible investments and ESG-related investments
- Tax incentives and opportunities for innovative financial products (e.g. leasing structure for clean technologies and mortgages for green buildings)

### Risks reported

- Reputational risks resulting from inadequate management of ESG-related risks. NGOs currently campaign against financial institutions for financing carbon intensive projects (e.g. coal-fired power generation, tar sands)
- Uncertainty surrounding new regulations (e.g. emissions trading schemes, subsidies and feed-in-tariffs)
- Insurance companies are concerned with extreme weather conditions as these could lead to a rise in insurance claims

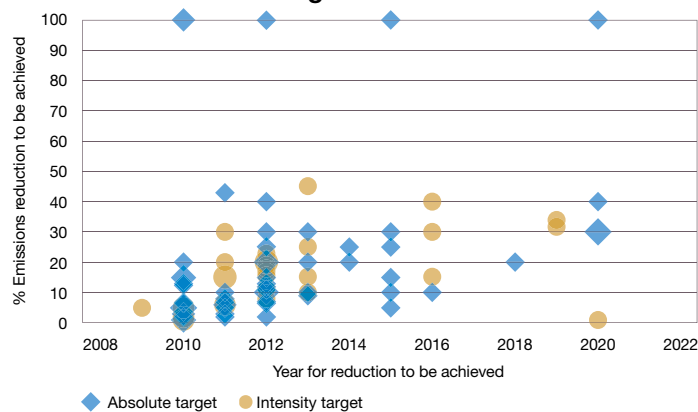


Company	Opportunities
Assicurazioni Generali	"In France, Generali Investments has elaborated in-house SRI methodology to assess the different extra-financial risks (e.g.: reputation risks and damage to the brand image, legislative pressure, competitive advantage, immaterial capital, carbon impact)."
BNY Mellon	"Two of BNY Mellon's investment management boutiques, focus on environmental, social and governance/socially responsible investing (ESG/SRI) within their businesses to advocate and promote responsible investing."
Goldman Sachs	"GS SUSTAIN research team incorporates ESG criteria in analyzing more than 750 large global companies in 22 industries and identifying companies with the potential for sustainable corporate out-performance. Goldman Sachs Asset Management has established a team of people with representatives across all asset classes to further its focus on Environmental, Social and Governance (ESG) research and sustainability analysis implementation."
Hong Kong Exchanges & Clearing	"Recognizing that it is our role as a market regulator to promote ESG practices and reporting among issuers for their own benefit and also for the benefit of investors, we are developing an ESG Guide for listed companies in Hong Kong based on the feedback to a soft consultation with listed issuers and professional associations completed in September 2010."
Morgan Stanley	"Initiatives such as the Global Impact Investing Network signal a growing market for funds and other financial products that use investment approaches to generate strong social and environmental returns – such as the mitigation of climate change – alongside commercial returns. This will become a significant opportunity as the clients expand their interest in SRI."
Nordea Bank	"We are integrating ESG issues in all our mainstream investments given their material impact on our investments in the short/long term. We are planning to develop several investments products with clear clean tech/low carbon impact focus."
UBS	"Regulation related to climate change as well as certain components of current economic stimulus have created new opportunities for our clients in the context of SRI, renewable energy financing, and emission trading."

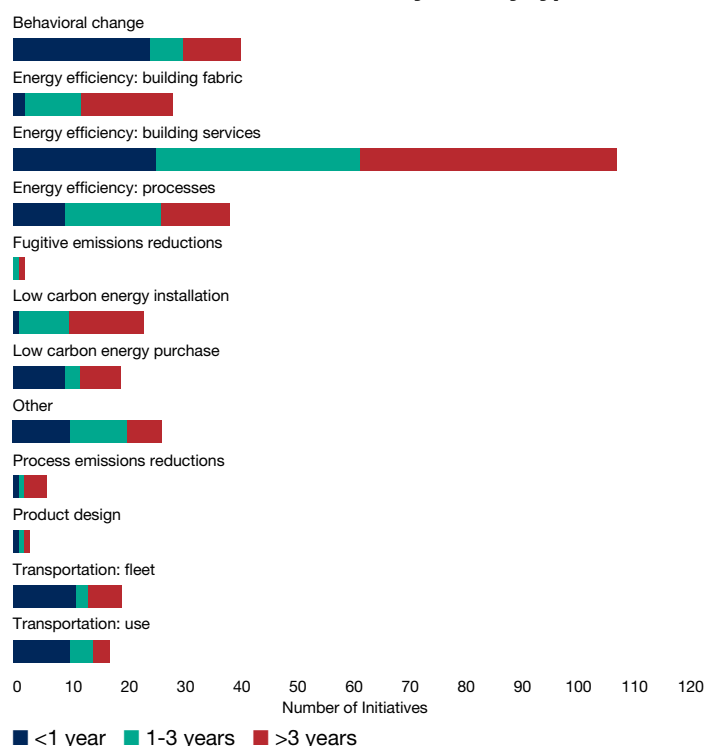
### Contrasting views

Company	Relevance of climate change to business model
JPMorgan Chase	"While climate change ultimately may have an effect on all individuals and businesses, for example by leading to constraints on emissions and resulting effects on energy prices, or by exacerbating regional water scarcity, or impacting food production, it currently does not add up to a key driver of top-line growth or competitive differentiation broadly across the various different segments of the financial services industry in which JP Morgan Chase operates."
Allianz	"Global warming poses a serious risk to our industry. Allianz has a group-wide strategy covering related risks and opportunities. We have a two-fold responsibility: 1. preparing Allianz for the effects climate change may have on our business and our customers, 2. providing appropriate products and services to help mitigating the economic risks and enter the low-carbon economy."

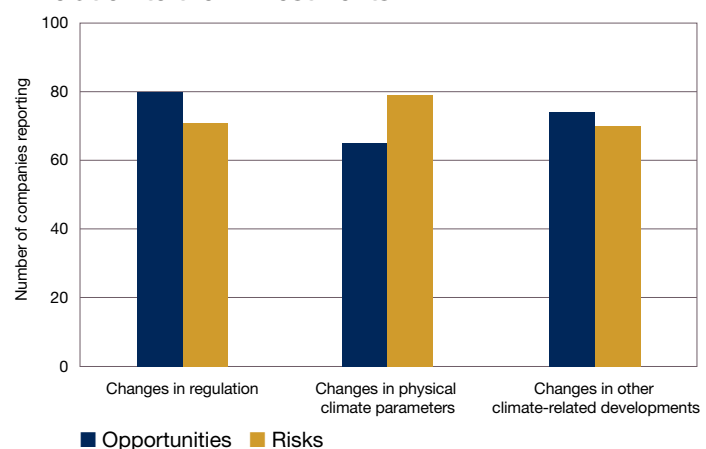
### Emissions reduction targets



### Payback period breakdown of reported active emissions reduction initiatives by activity type



### Number of companies reporting on risks/opportunities in relation to their investments

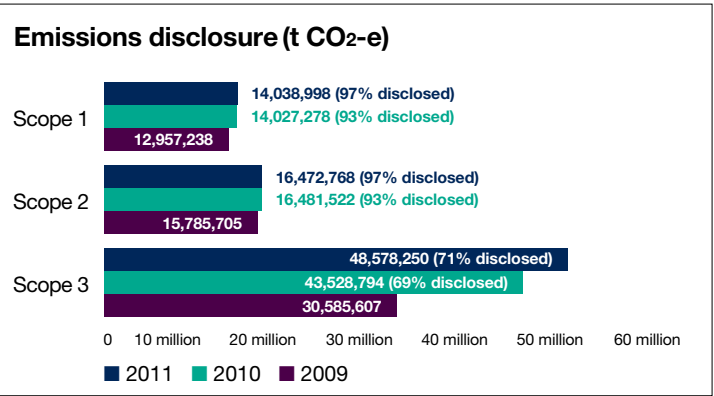
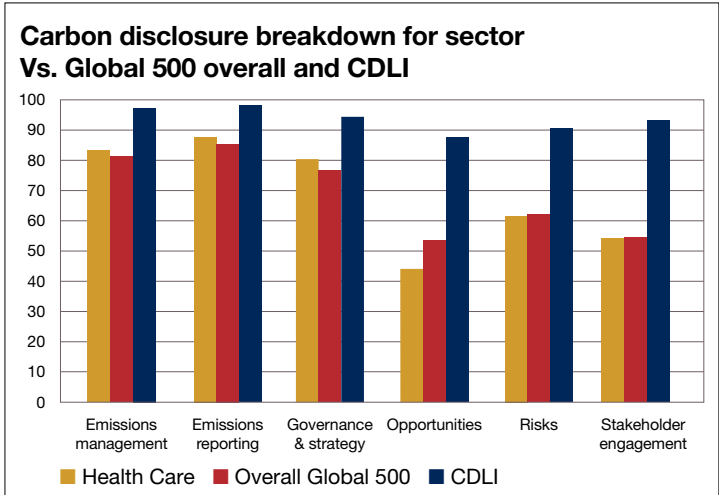
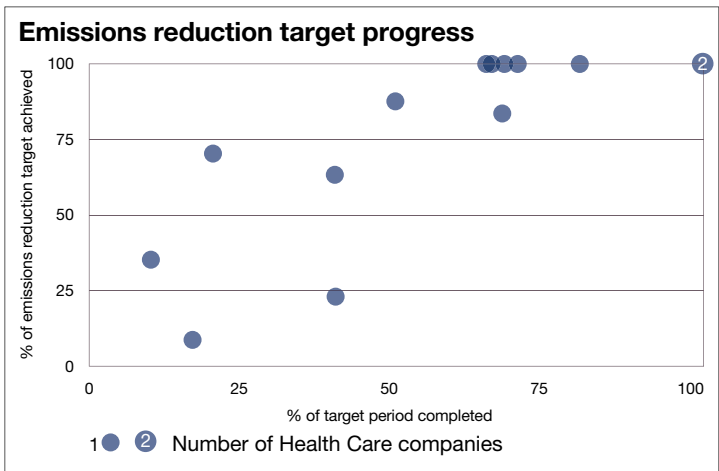
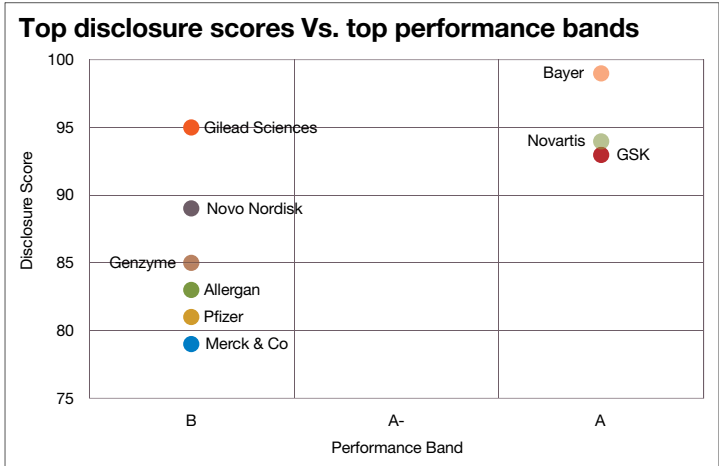


# Health Care

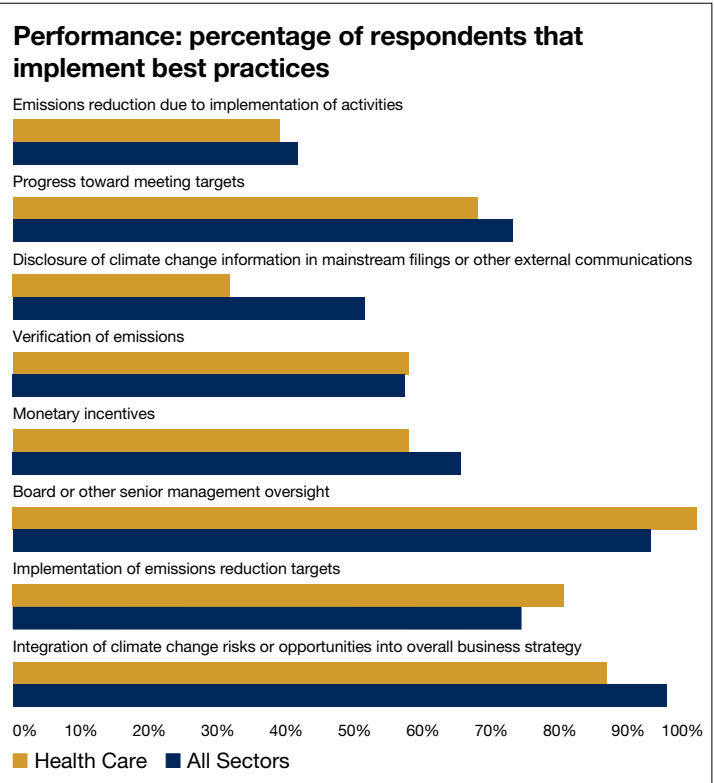
Global 500 response rate:  
 Health Care Overall: 91% (31 of 34)

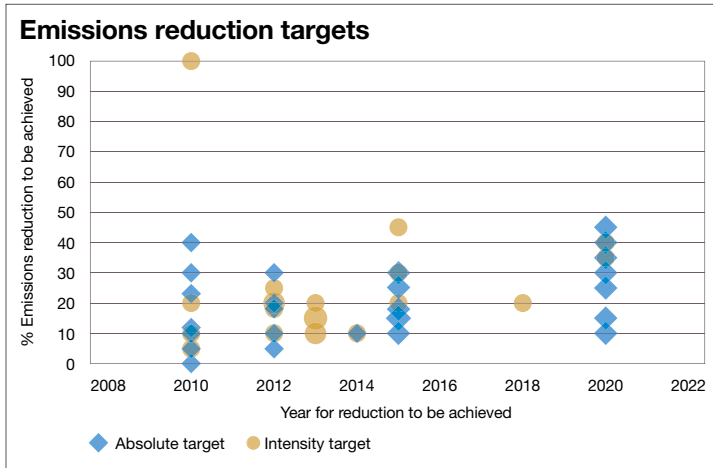
Key Industries within the sector:  
 Pharmaceuticals (17 of 17); Biotechnology (5 of 5); Health Care Equipment & Supplies (4 of 6); Health Care Providers & Services (4 of 5); Life Sciences Tools & Services (1 of 1).

Largest non-respondents include:  
 Alcon, Express Scripts, Stryker



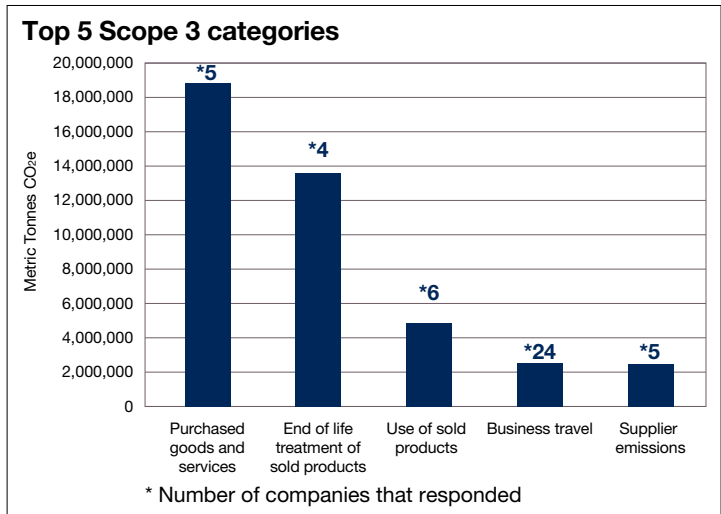
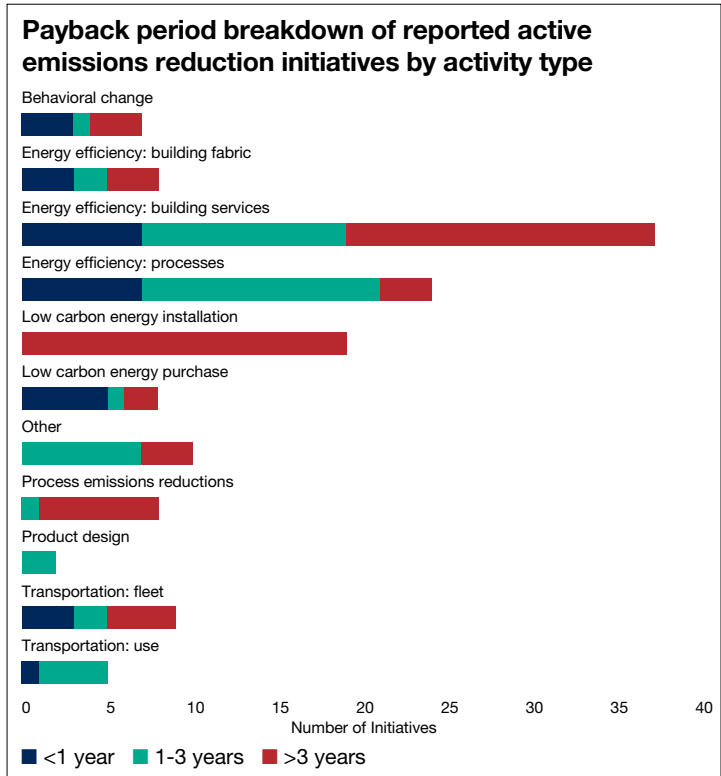
- ### Opportunities reported
- Changes in frequency of extreme weather conditions will present companies with opportunities that include the need for greater disease prevention and more patient treatments
  - Innovation in product packaging to lower carbon footprint e.g. inhalers
  - Financial benefit from selling excess permits in Cap and Trade schemes
  - Cost savings from increased energy efficiency in buildings
- ### Risks reported
- Regulatory pressure placed on both Health Care providers and pharmaceutical companies. Potential caps on production for carbon intensive pharmaceuticals
  - Reduced availability of raw materials due to the loss of biodiversity
  - Disruption of supply chains due to extreme weather
  - Water scarcity causing disruption to manufacturing processes
  - Potential difficulties on carrying products labelling due to the abundance of substances and products





Company	Low carbon solutions
Baxter International	"Baxter Product Sustainability Reviews help customers avoid certain product-related GHG emissions. The design stage is an opportunity to influence a product's environmental, health and safety performance across the entire product life cycle, including energy efficiency and reduced generation of GHG emissions."
Becton, Dickinson and Co.	"We introduced the BD ecoFinity Life Cycle Solution as a way to recycle sharps waste and recover materials for new products. These efforts help our hospital customers reduce their Scope 3 emissions."
Celgene	"We are actively involved in developing and delivering more effective in-home oral cancer therapies which offer the possibility of significantly reducing the GHG emissions generated by patients travelling to and from hospitals worldwide."
CSL	"CSL's manufacturing facility in Bern, exports heat to a nearby sports stadium and a school. This represents an on-going savings of 500 tonnes of CO <sub>2</sub> emissions per annum. Waste head space ethanol from the distillation process at CSL's Bern facility is fed into fouling sludge at the town's wastewater treatment plant where it contributes to the production of gas for the town's gas supply."
Thermo Fisher Scientific	"Thermo Fisher biological safety cabinets, ultra-low temperature lab freezers and other electric-powered equipment are designed for exceptional energy efficiency, resulting in reduced CO <sub>2</sub> emissions and lower operating costs. The Fisher Scientific catalog offers customers an Environmentally Friendly Product Guide containing products that meet one or more of 11 green standards, such as energy efficiency and recycled content."

"Besides its eco-friendly operations and green products, the Company also works with customers, industry and the scientific community to advance environmental management and science. The Company's goal is strong partnerships that support all sustainability initiatives, for example: decision support tools from the Company, such as a carbon calculator and chemical conversion chart, help our customers facilitate process change and chemical replacement opportunities."  
Thermo Fisher Scientific



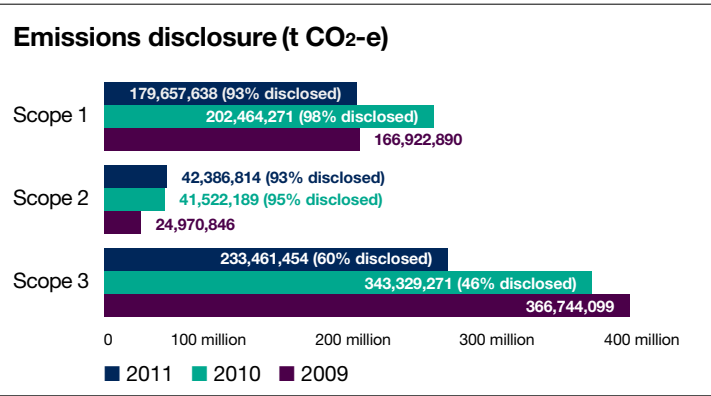
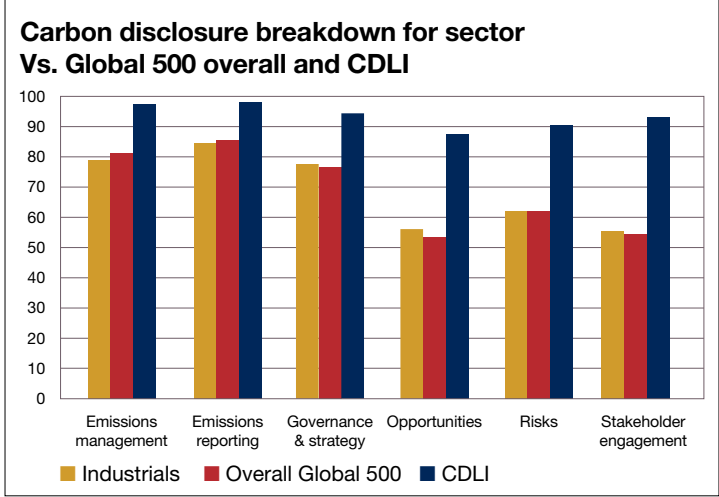
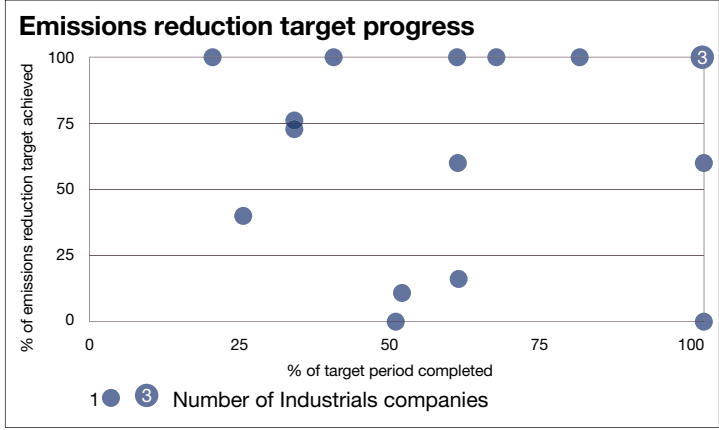
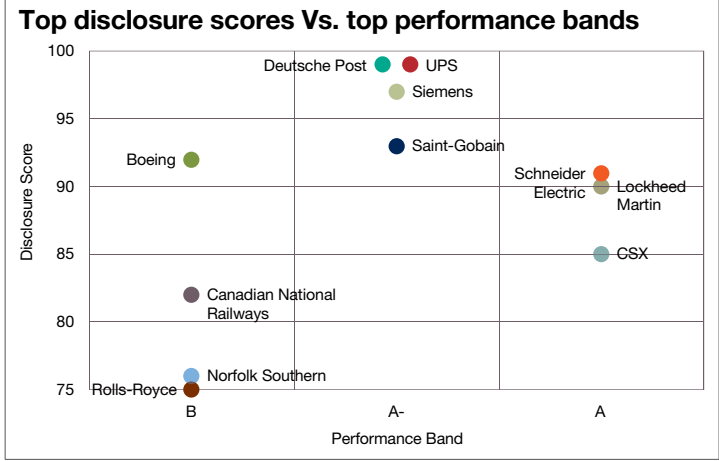
"The rising awareness of climate change issues and the emergence of green consumers are further boosting the demand for GHG abatement solutions. This trend impacts Bayer's business by creating additional market and revenue opportunities."  
Bayer AG

# Industrials

**Global 500 response rate:**  
**Industrials Overall:** 76% (42 of 55)

**Key Industries within the sector:**  
 Machinery (9 of 12); Industrial Conglomerates (7 of 12); Road & Rail (6 of 7); Aerospace & Defense (8 of 11); Air Freight & Logistics (3 of 3); Building Products (1 of 1); Commercial Services & Supplies (1 of 1); Construction & Engineering (2 of 2); Electrical Equipment (2 of 3); Marine (1 of 1); Trading Companies & Distributors (2 of 2).

**Largest non-respondents include:**  
 Reliance Industries, Hutchison Whampoa, Honeywell International

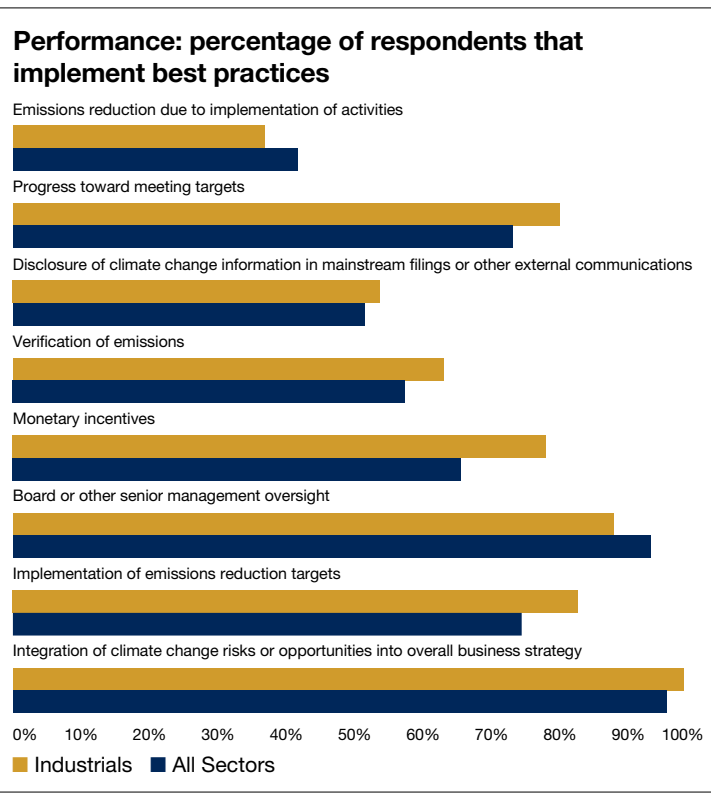


### Opportunities reported

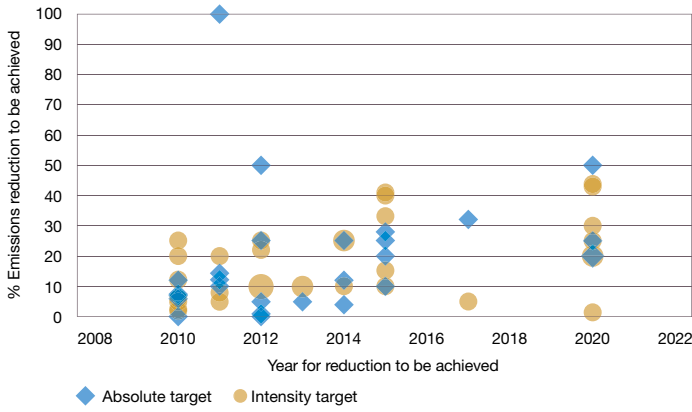
- Higher fuel prices as a result of fuel/energy taxes are likely to deter people from driving or using other forms of private road transport, thereby encouraging the use of public transport, which is more carbon efficient on a per passenger km basis
- New commercial opportunities for products and services (e.g. products that track GHG emissions and energy consumption as a result of regulatory requirements, and products with suitable durability to extreme increases/decreases in temperature)
- Regulation creating a modal shift of consumer behavior towards lower-carbon products and services. Companies are seeing opportunities to lobby and influence these regulations, moving customers towards their own products and services

### Risks reported

- Emissions reduction obligations, fines, and the associated costs and potential reputational loss, could have a financial impact
- Uncertainty around physical risks, such as extreme weather events and rising sea levels, could cause production factories to shut down

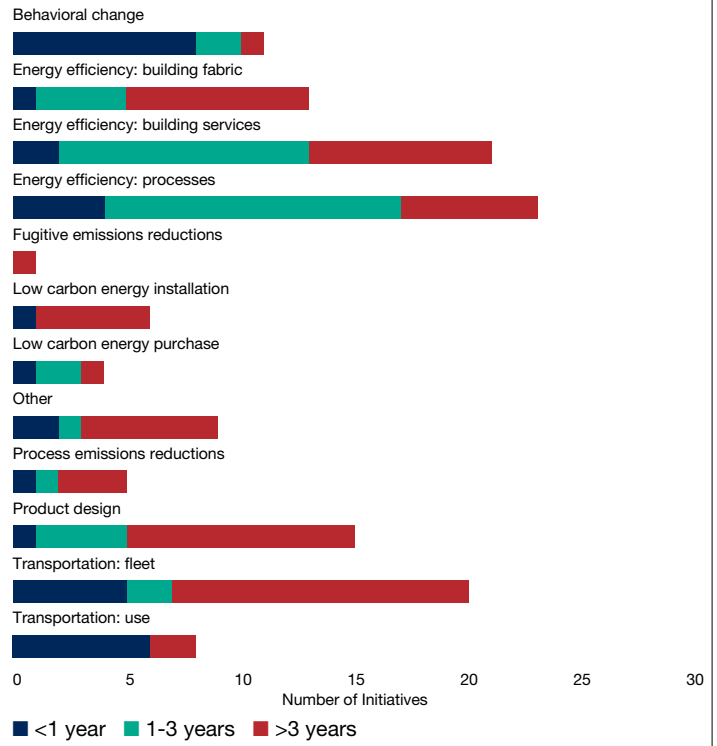


### Emissions reduction targets

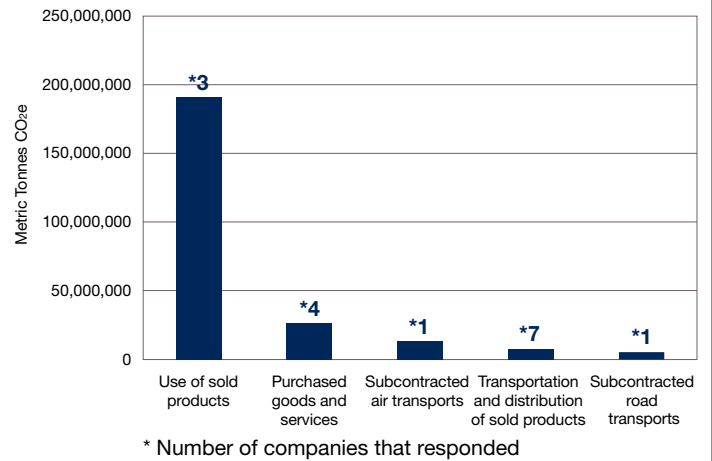


Company	Low carbon solutions
United Technologies	“High efficiency air conditioning systems as well as migrating away from using CFCs, a potent greenhouse gas, for air conditioning and refrigeration systems. Energy efficient Gen2 elevator reduces energy use by up to 50 percent compared with conventional elevators. Power’s PureCell system is a clean, efficient, reliable hydrogen fuel cell power plant, eliminating emissions equivalent to that of several hundred cars annually when installed at a single midsized building.”
Rolls-Royce	“In 2010, we invested £923 million in research and development, around two thirds of which has the objective of further reducing the environmental impact of our products. For example, within civil aerospace, the company has programmes in place to meet the ACARE target of reducing CO <sub>2</sub> emissions per passenger kilometer by 50% by 2020 (from a 2000 baseline). In addition, the company is investing in low carbon technologies (e.g. tidal stream turbines, fuel cells and nuclear). These investment programmes are driven both on a voluntary basis and in order to achieve mandatory targets. Ultimately, the corresponding saving in emissions will manifest itself in our scope 3 emissions in future years.”
Waste Management	“Waste Management creates enough renewable energy through waste-to-energy operations to power almost 1.1 million homes. We are implementing a range of technologies to make our trucks more efficient, including controlling emissions, using alternative fuels and optimizing truck design. By the close of 2010 we had nearly 850 natural-gas-powered trucks in our fleet. We also are working on green technologies to convert waste to fuel. We are investing in plants that convert landfill gas to liquefied natural gas and plants to convert organic waste to high-octane transportation fuel.”

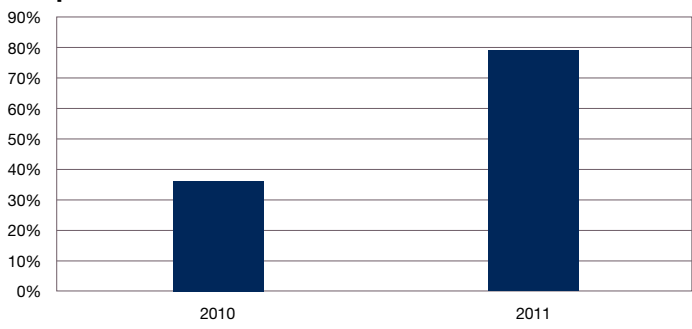
### Payback period breakdown of reported active emissions reduction initiatives by activity type



### Top 5 Scope 3 categories



### Percentage of companies disclosing Scope 3 emissions



“80 % of the Group’s growth investments in the 2011-2015 period will be devoted to solar and high value-added solutions in the habitat markets. In addition, Solar is always a high priority research program with total spending around 30 million, i.e. 25% of our Flat Glass Division research spending.”  
Saint-Gobain

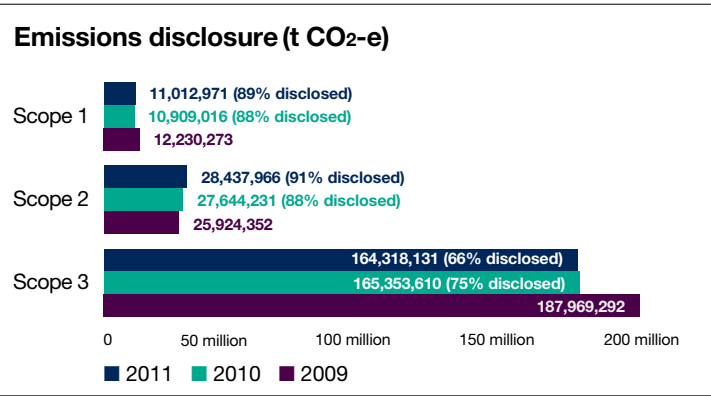
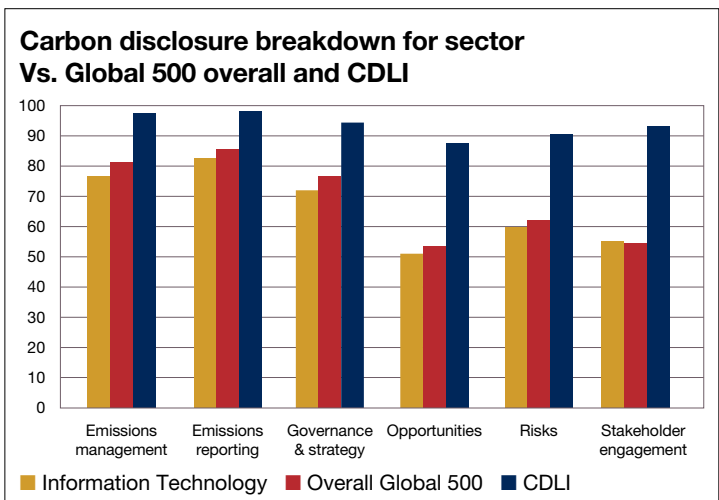
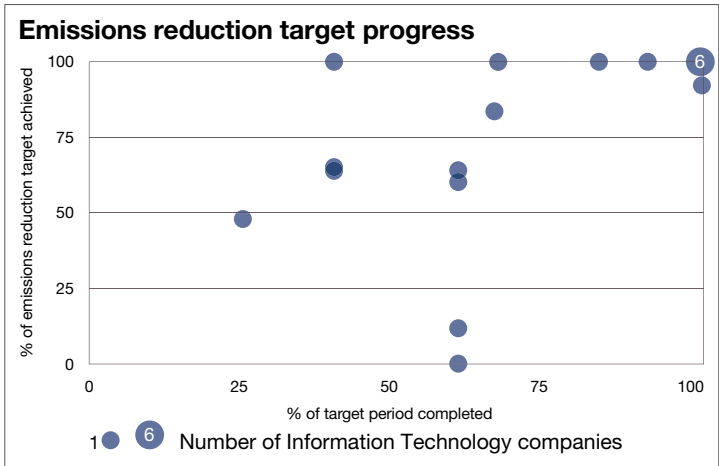
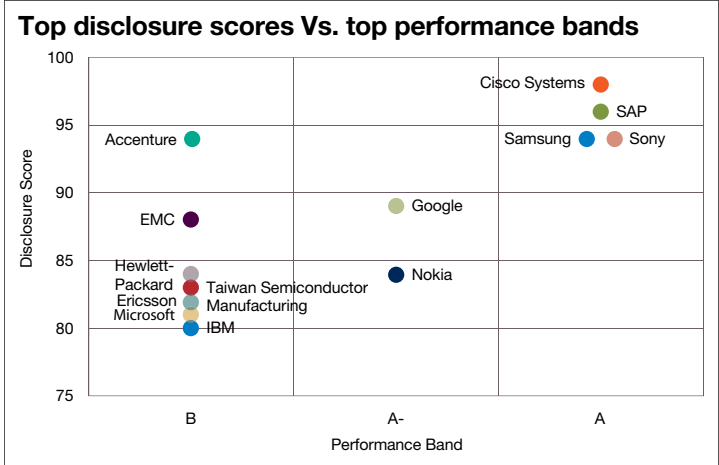
“Package Flow Technology (routing) initiatives are the hardware, software, and procedures that enable UPS to optimize delivery routes and time. The results include fewer turns, less waiting at lights, and less distance travelled to get the job done.”  
UPS

# Information Technology

Global 500 response rate:  
 Information Technology Overall: 95% (38 of 40)

Key Industries within the sector:  
 Computers & Peripherals (8 of 9); Electronic Equipment, Instruments & Components (7 of 7); IT Services (7 of 7); Communications Equipment (6 of 6); Internet Software & Services (4 of 4); Software (4 of 5); Semiconductors & Semiconductor Equipment (2 of 2).

Largest non-respondents include:  
 Apple, Nintendo

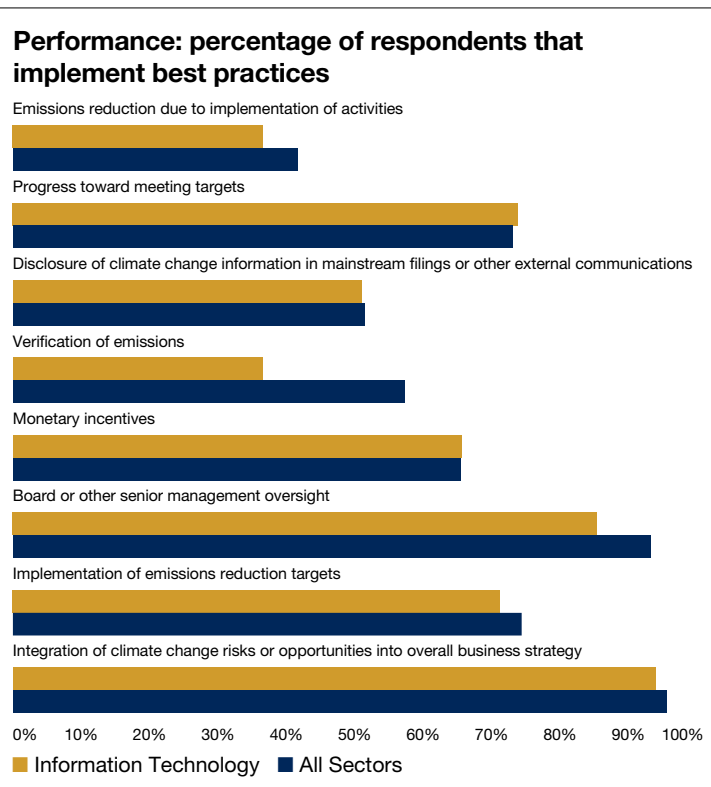


### Opportunities reported

- Use of various innovations to lessen the environmental impact of data centers, and the reduction of electricity and water consumption (e.g. the use of air-side economization, which results in "free cooling" for data centers year round)
- Innovative use of information and communications technology by third parties to reduce GHG emissions (e.g. video conferencing, Cloud Computing, electronics/computer materials, and software to support green initiatives such as the Smart Grid and sustainable building practices)

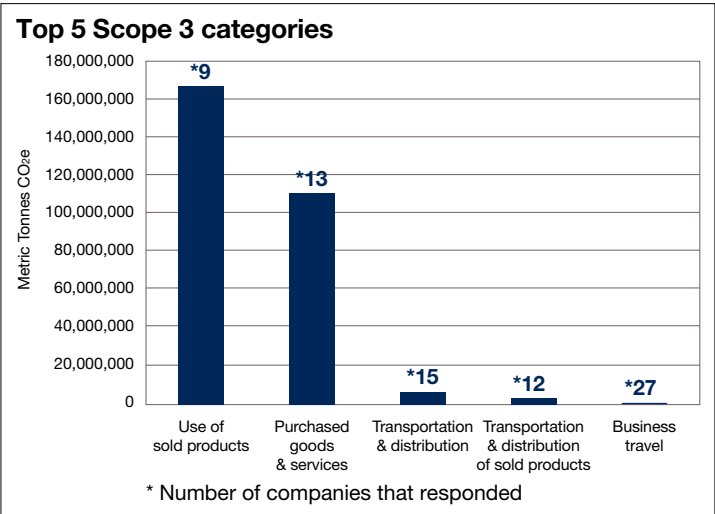
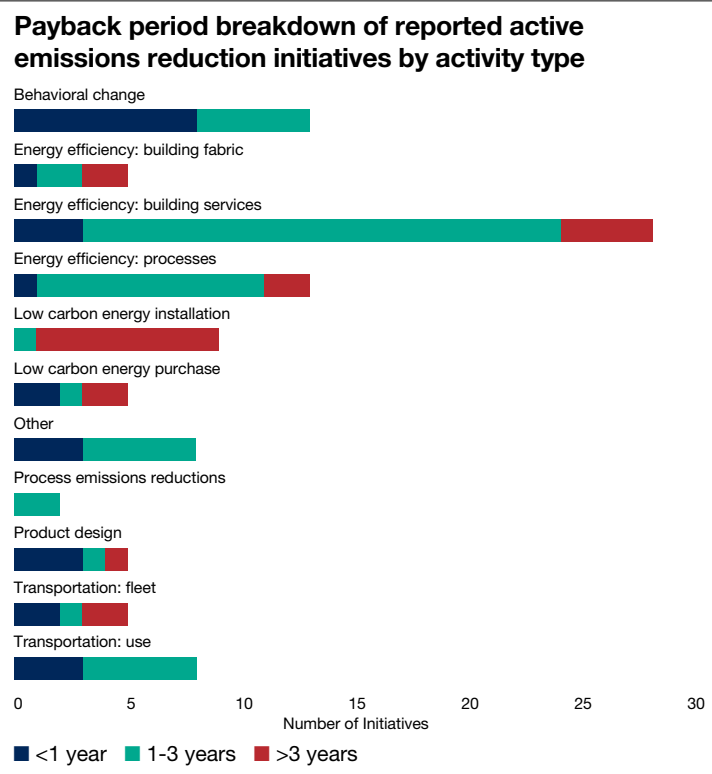
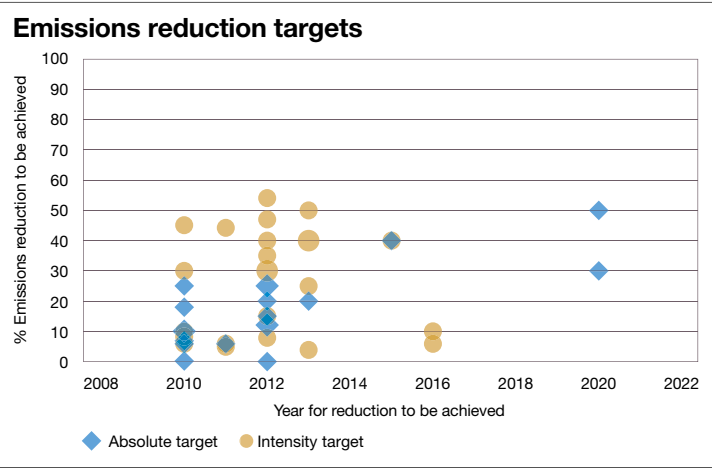
### Risks reported

- Extreme weather conditions could result in an immediate financial impact if the availability of IT services is disrupted and supply chain and production process are delayed
- Carbon and energy taxes and regulations could increase electricity costs
- Reputational risk resulting from inadequate management of ESG-related risks. As more customers become more environmentally conscious, the brand image of a company might become affected





Company	Low carbon solutions
Corning	"Corning's strength in developing and manufacturing LCD glass substrates, combined with its expertise in materials science and light management, positions Corning to develop thin-film photovoltaic solutions, accelerating the way the world collects and uses solar energy. We have shown that our specialty glass for thin-film photovoltaics can convert sunlight to energy more efficiently than the glass currently used. Last fall we reached a major milestone when we achieved a record-breaking conversion rate of 11.9 percent in lab trials on thin-film technology known as silicon tandem."
EMC	"EMC was the first in the industry to use Enterprise Flash solid state drives (SSDs) that offer efficiency in high-performance computing, using up to 97.7% less energy in operations per second than FC/SAS hard drives and 38% less energy per terabyte of data stored. High-capacity/low speed SATA hard disk drives use significantly less power than higher speed FC/SAS drives and have up to four times the storage capacity. SATA type drives can use up to 96% less energy per terabyte stored."
Nokia	"A recent study shows that many people have already replaced their separate devices with a smartphone: 17% have replaced their car navigator, 12 % have replaced their music player, 7% have replaced their camera, 6% have replaced their video camera, 3% have replaced their game console. This means that the 1,454 people who participated in the study have saved over 43,000 kg of CO <sub>2</sub> e."
Sony	"Digital cinema system records cinema in a hard disc drive (HDD) and therefore reduces CO <sub>2</sub> emissions associated with film materials and water and chemicals that would have been used for film development."
Yahoo!	"Freecycling is an example of an activity that is chiefly coordinated on Yahoo! Groups. Freecycling enables participants to locate and acquire products for re-use in their community thus avoiding the imbedded cost of manufacture for buying a new product, and postponing the landfilling of that product by extending its life."



"Qualcomm has long recognized the synergies in developing leading edge wireless communications technology and minimizing the potential impact to the environment. Qualcomm's strategy recognizes that energy efficient wireless technology is valued by our customers and we continue to focus on wireless technology opportunities in the smart grid, as well as in intelligent transportation systems."  
Qualcomm

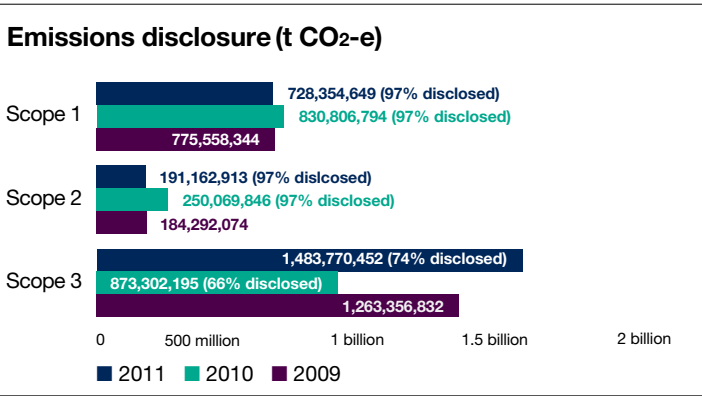
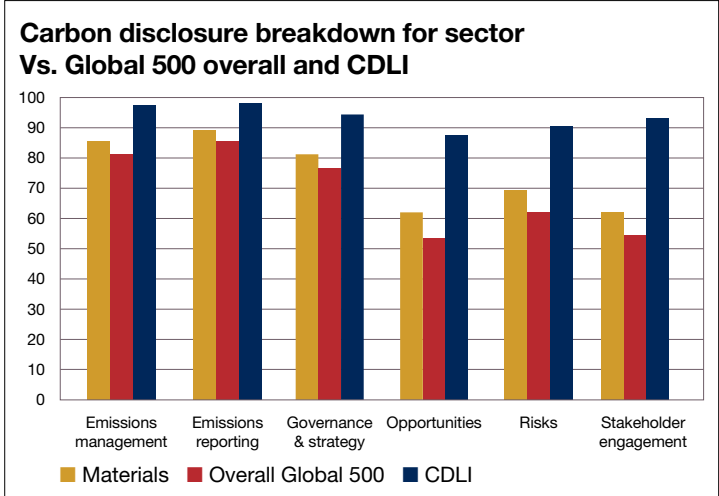
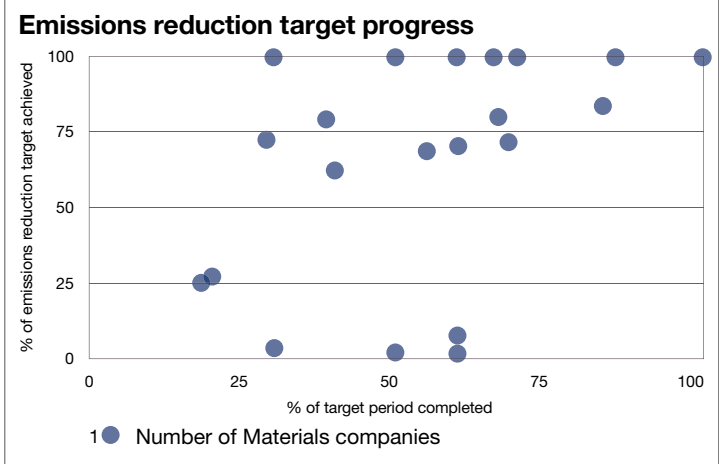
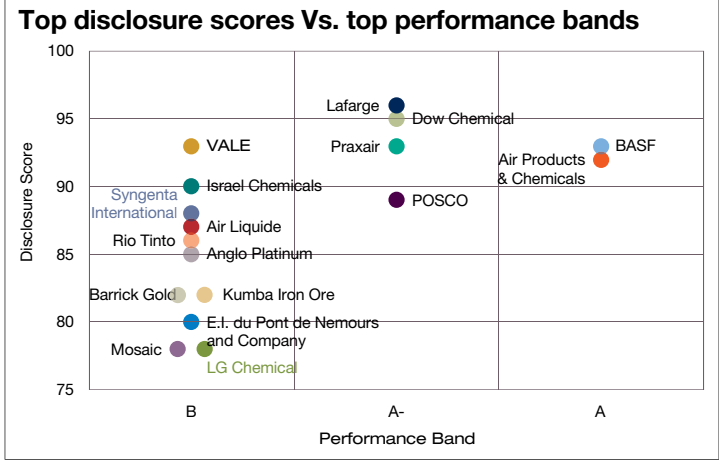
"SAP's goal is not only to reduce the carbon footprint - SAP also wants to do that in the most profitable way possible from an operational perspective and to serve the market for carbon solutions to enable our customers to do the same. We believe that only the combination of ecological and economic criteria can transform SAP into a more sustainable company in the long term. We see sustainability as an integrated part of the way we do business. Our portfolio development strategy for sustainability solutions is fully aligned and integrated to the overall technology strategy for SAP. SAP is a people powered company, hence SAP biggest carbon reduction lever is driving the behavioral change of our employees. With raising knowledge and visibility about sustainability topics we could create a momentum that supports us to reduce carbon emissions."  
SAP

# Materials

Global 500 response rate:  
 Materials Overall: **81%** (38 of 47)

Key Industries within the sector:  
 Chemicals (15 of 17), Metals & Mining (21 of 28);  
 Construction Materials ( 2 of 2).

Largest non-respondents include:  
 MMC Norilsk Nickel, PTT, Southern Copper Corporation

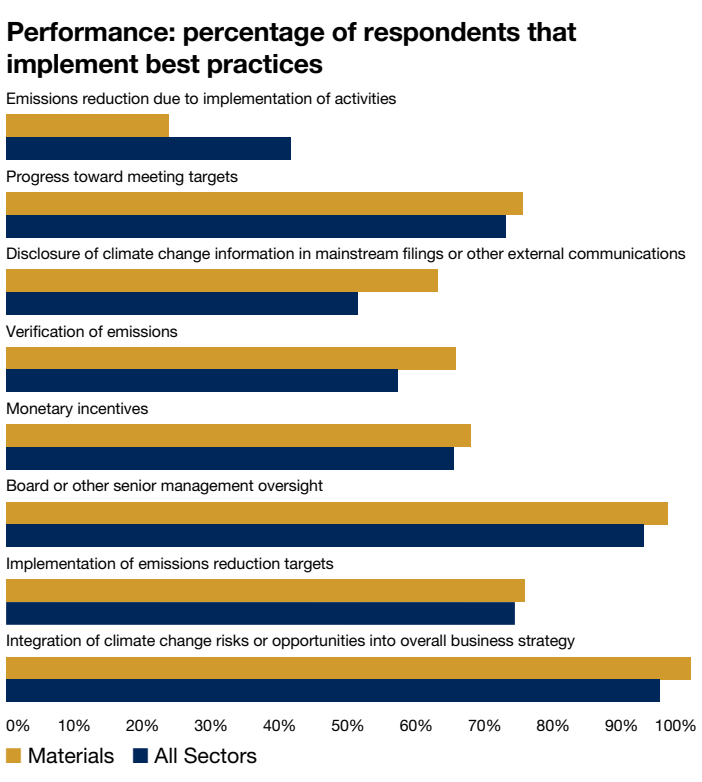


### Opportunities reported

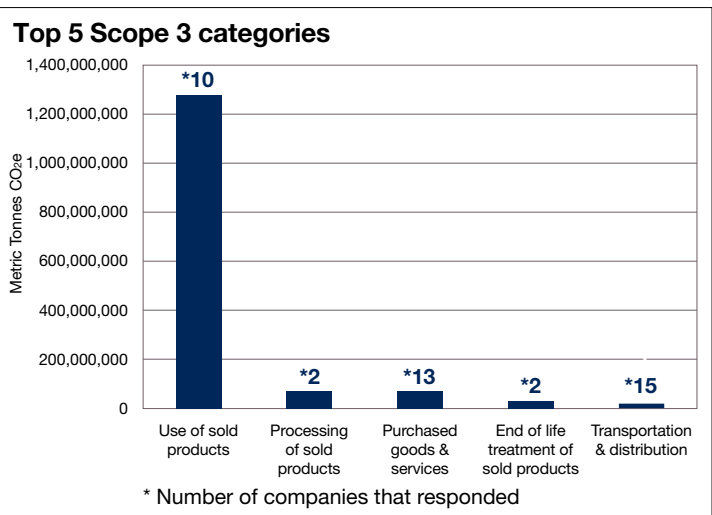
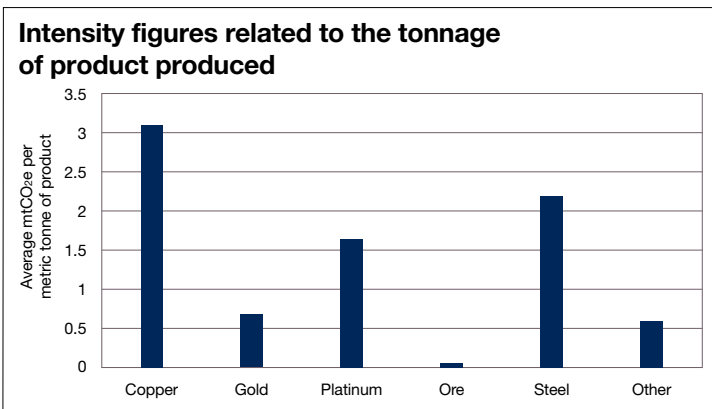
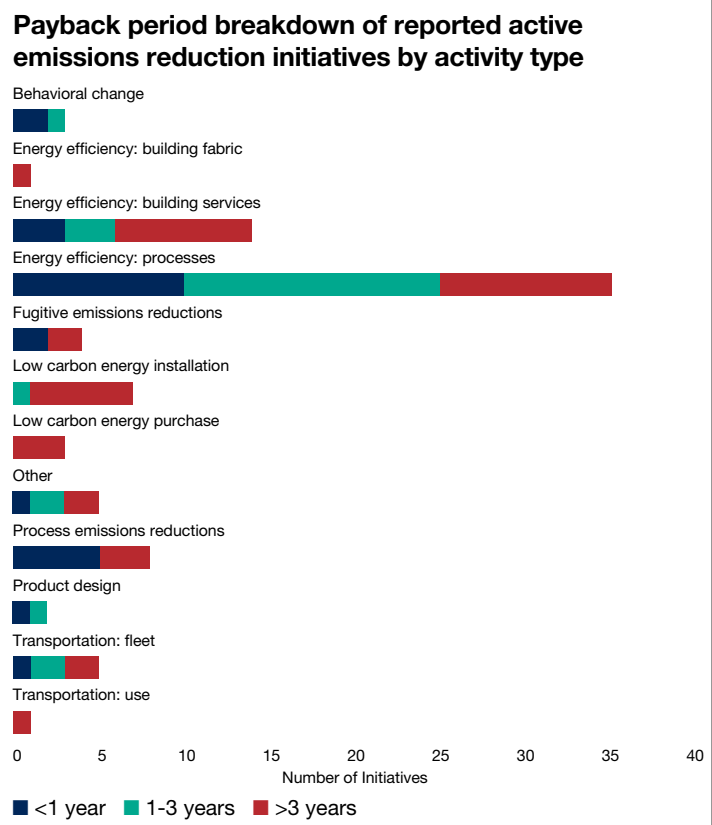
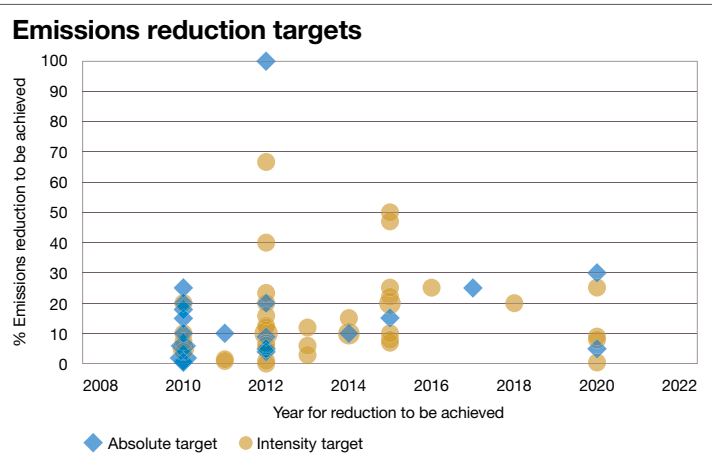
- Tightly regulated emission schemes may enable market leaders to monetize their ability to operate at a lower carbon intensity than competitors
- Consumers are increasingly recognizing how companies are taking advance actions to disclose and mitigate climate change which is leading to increased sales of carbon efficient products

### Risks reported

- Risks related to carbon taxes and cap and trade schemes
- The main physical risk is the change in precipitation patterns and water availability. The lack of water availability could increase the operational costs through cost of water or possibly water shortages and could lead to increased competition for water between local communities and the operations sites. Stronger rains over shorter periods could cause flooding, disrupting roads so the delivery of products is compromised



Company	Low carbon solutions
BASF	“Energy efficiency: process – BASF’s Verbund system links BASF’s production and energy demands, thus making a major contribution to energy efficiency. Heat from production processes is not discharged to the environment but rather captured to be used at other production plants. In 2010, this resulted in primary energy savings of 19 million MWh, which equals approximately e285 million. The energy savings correspond to an annual reduction of GHG emissions of 3,800,000 metric tons CO <sub>2</sub> e. Furthermore networking several production facilities at one site reduces fuel consumption as fewer transports are required. Monetary savings were calculated based on the theoretical approach of generating heat with 50% natural gas and 50% coal. The activity refers to our scope 1 and scope 2 emissions and is fully developed. It is voluntary and the lifetime of this activity is expected to be an indefinite period.”
Israel Chemicals	“Power station began transitioning from the use of fuel oil and diesel to the use of natural gas, resulting in a dramatic reduction in the Company’s use of fuel oil and diesel. According to DEFRA 2010, the standard commonly used for corporate CFP calculations, the use of natural gas generates approximately 73% of the GHG emissions generated by the use of fuel oil and 76% of the GHG emissions generated by diesel to produce an equivalent quantity of energy. In addition, they may reduce our Scope 2 emissions, because the employment of new more efficient CHP plants effectively reduces company’s dependency on the purchase of electricity from the national grid. The transition will significantly improve the company’s group energy efficiency, and is expected to reduce energy, maintenance and other costs, thereby saving company over 100 million U.S dollars annually.”
LG Chemical	“Reducing steam consumption by optimizing deaerator operation; Reducing steam consumption by building DWC (Dividing Wall Column) for alcohol distillation tower (Acrylate Plant; Yeosu).”
POSCO	“Building new heat recovery steam generators.”
VALE	“Energy efficiency: process – Nature of activity: Project to replace the use of kerosene for natural gas, at Matsuzaka Nickel Refinery, Japan, reducing the Vale’s scope 1 emissions in about 2200 tonnes of CO <sub>2</sub> e. Implemented in December of 2010, a part of the project costs will be subsidized by the Japanese government in accordance with the Japan’s Voluntary Emissions Trading (JVETS). Scope: it reduces scope 1 emissions. This is a voluntary initiative. Development stage: implemented in December of 2010. Expected lifetime: 7 years (legal useful life).”



# Telecommunications

Global 500 response rate:

Telecommunications Overall: 72% (21 of 29)

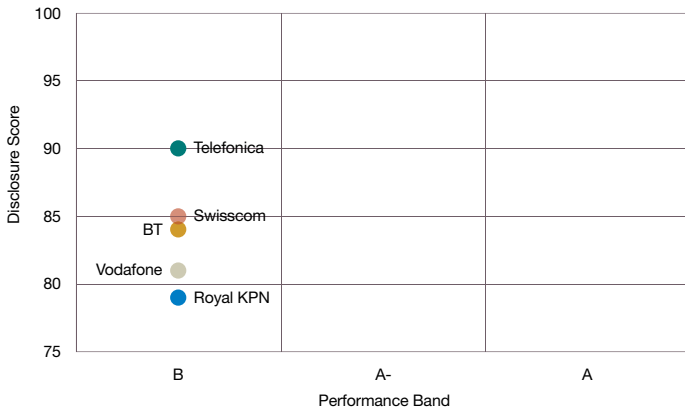
Key Industries within the sector:

Diversified Telecommunication Services (15 of 20);  
Wireless Telecommunication Services (6 of 9).

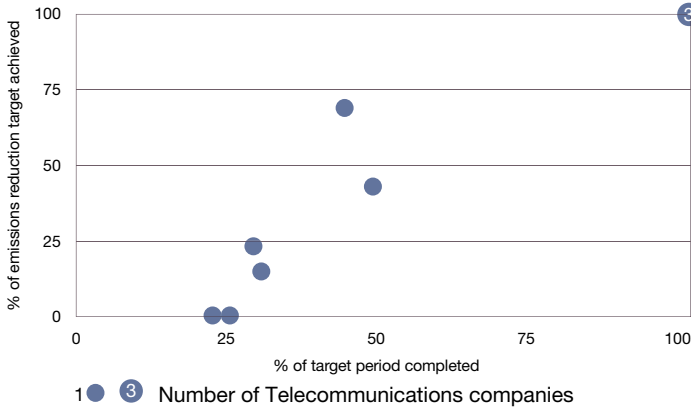
Largest non-respondents include:

China Mobile, America Movil, China Unicom

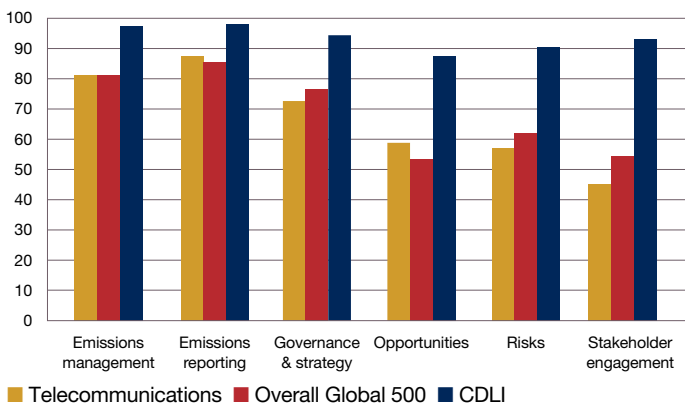
## Top disclosure scores Vs. top performance bands



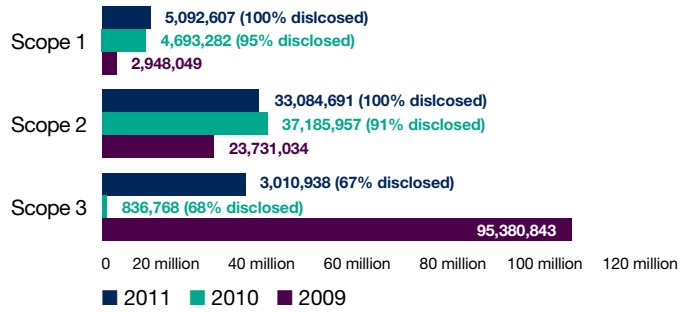
## Emissions reduction target progress



## Carbon disclosure breakdown for sector Vs. Global 500 overall and CDLI



## Emissions disclosure (t CO<sub>2</sub>-e)



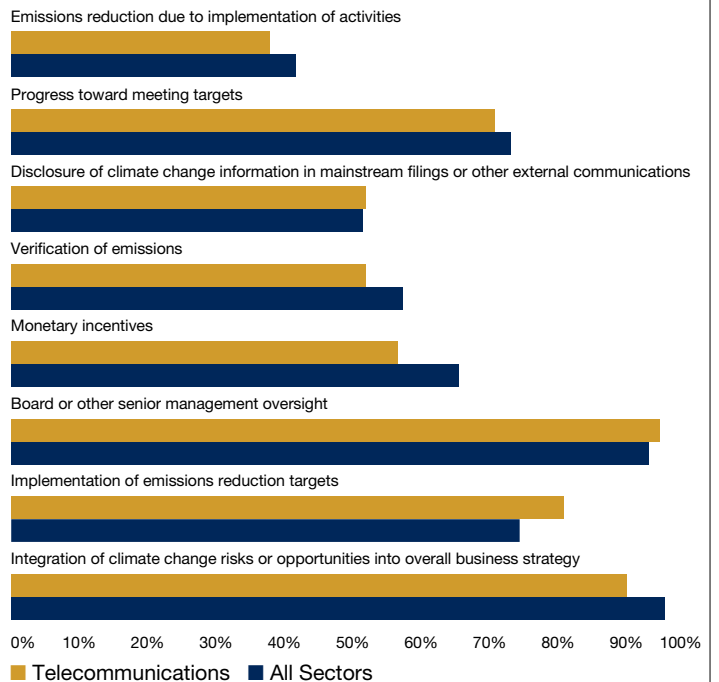
## Opportunities reported

- Increased use of telecommunications technology presents a number of opportunities to reduce emissions e.g. reduced travel, improved logistics, dematerialization
- Social disruptions resulting from extreme weather events may prevent populations from travelling and may result in greater use of telecommunication services. Such conditions would also generate opportunities to provide emergency response telecom solutions

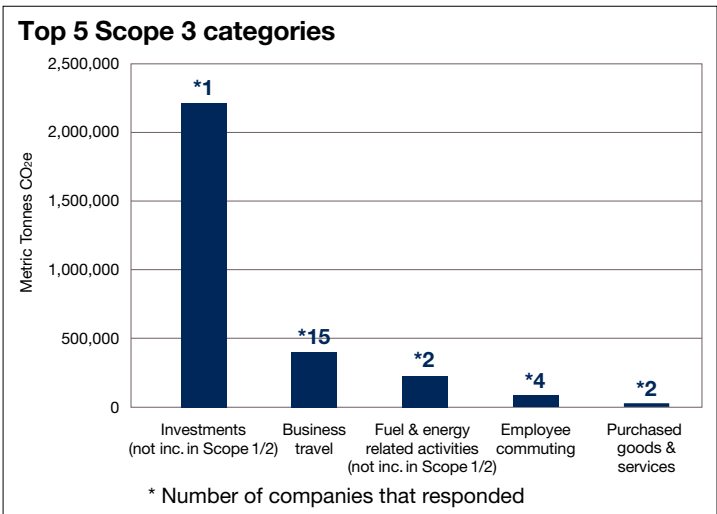
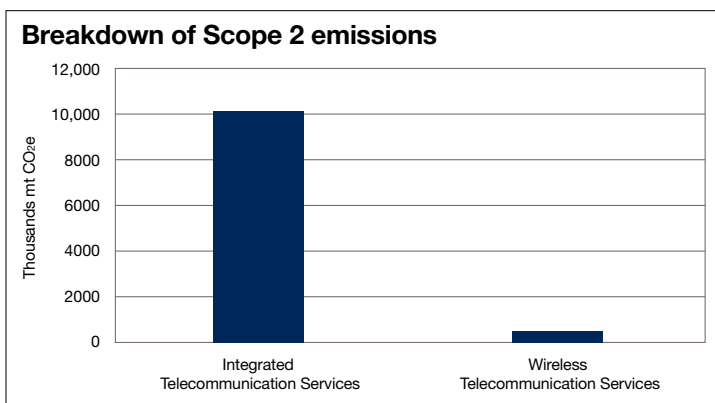
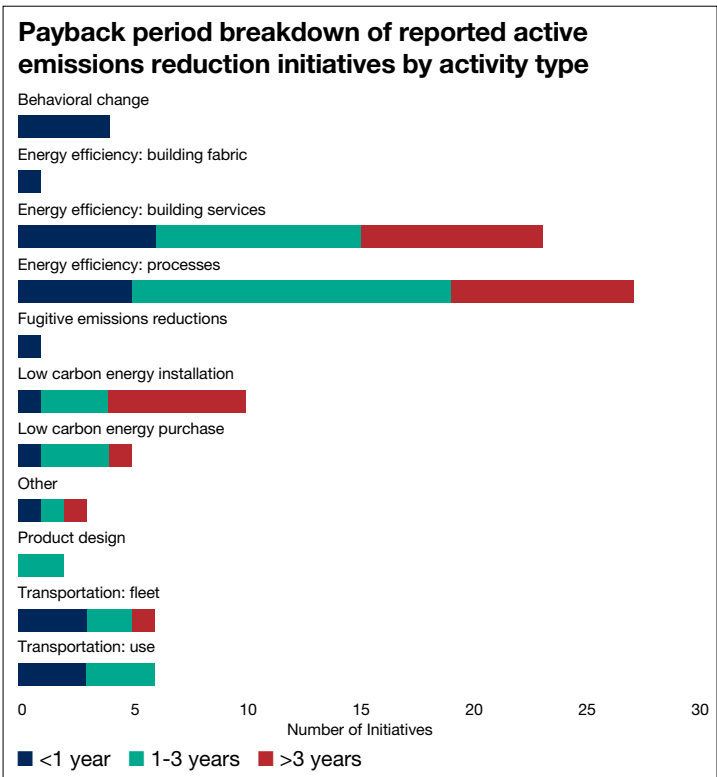
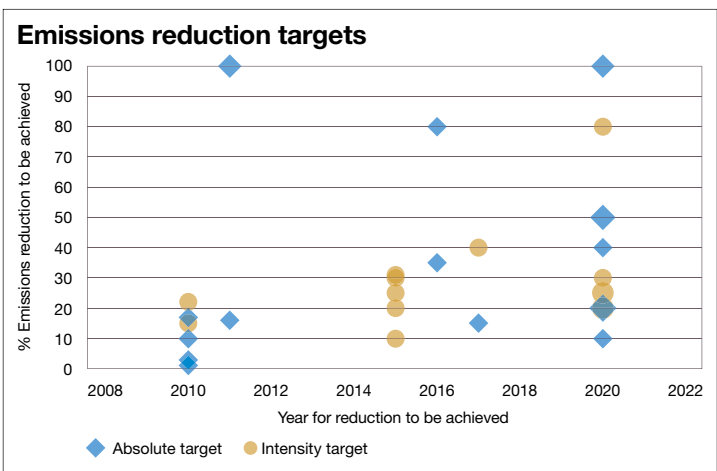
## Risks reported

- Threat of extreme temperatures and changes in precipitation patterns could result in damaged equipment
- Lack of clarity surrounding climate change regulations. Emissions from telecom sector are indirect and not covered by international agreements (i.e. EU ETS or Kyoto Protocol). However, improving energy consumption is being targeted via various legislative initiatives

## Performance: percentage of respondents that implement best practices



Company	Low carbon solutions
American Tower	"Service offering one generator set with the capacity to service all carriers at a site. In the past, each carrier at a wireless tower site would leased space for and located in our compound a backup power generator for purpose of servicing their equipment only. With the introduction of this service, it allows a reduction in the aggregate Scope 1 emissions."
AT&T	"1) Decreasing energy-intensive travel through telecommuting, teleconferencing and other services; 2) Providing centralized data management, Internet, communications and software service for customers; 3) Dematerializing public and commercial activities through electronic billing, 4) online provision of governmental services and online delivery of goods and services, such as education, libraries, research, medicine, videos and music; 5) Rationalizing transportation and distribution systems using next-generation dispatching and planning software combined with satellite-based GPS systems; 6) Improving energy efficiency in commercial and residential buildings through more sophisticated monitoring and dispatching systems for more accurate control and delivery of energy."
France Telecom	"Orange has developed innovative remote monitoring services based on M2M ( Machine to Machine) connectivity; making it possible to carry out various types of operation remotely: remote meter reading (gas; water; etc.); remote stock management; supply chain automation; remote management and maintenance of manufacturing equipment; remote management of public infrastructure (lighting)."
Vodafone	"1) Smart metering Wireless M2M smart meters deployed across the energy distribution network monitor energy losses and the network's load capacity. This helps utility companies to locate areas where energy is being lost, and minimise energy shortages and power outages. Smart meters also support the sale of excess energy from small-scale renewable energy generators (such as rooftop solar panels or wind turbines) to the grid. Utility companies can keep track of the amount of electricity fed into the grid from individual locations remotely via M2M mobile connections. 2) Smart logistics Remote tracking systems: Wireless, GPRS-enabled vehicle tracking devices feed data about each vehicle's position and the latest traffic information into a centralised fleet management system. This then generates routes that cover the shortest distance and alerts drivers about optimum driving speeds."

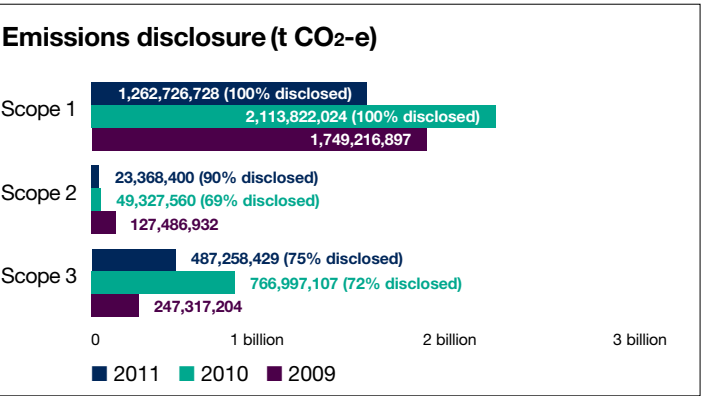
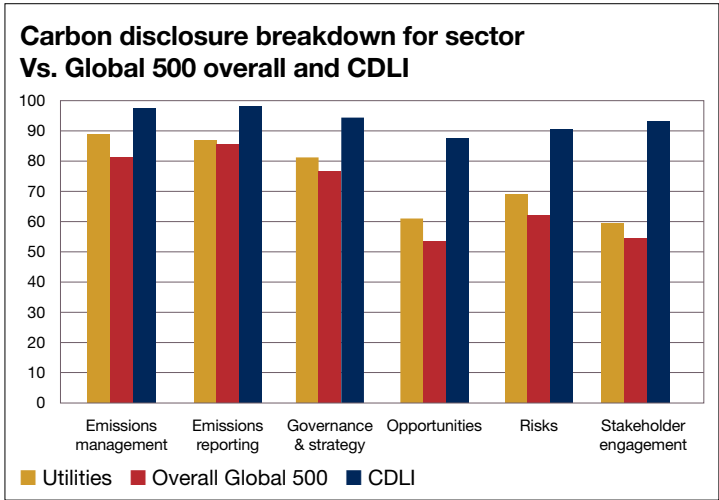
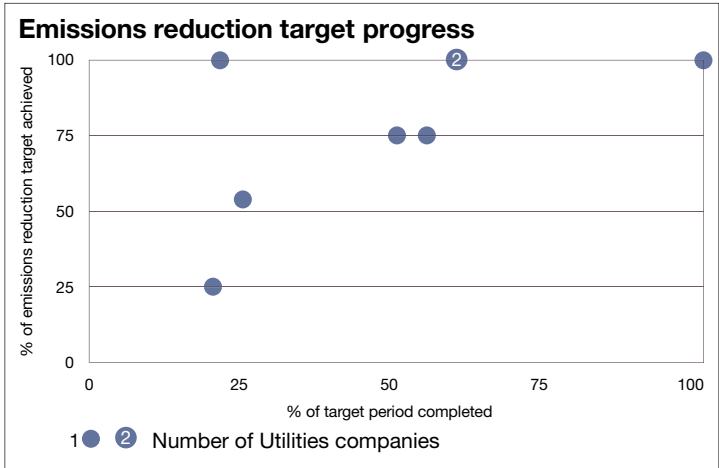
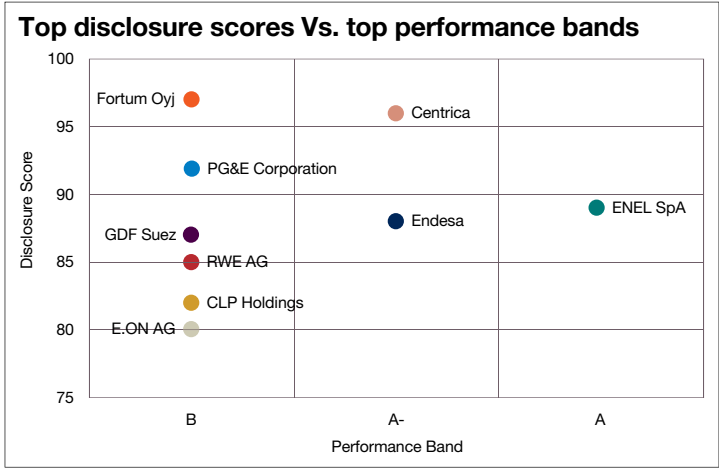


# Utilities

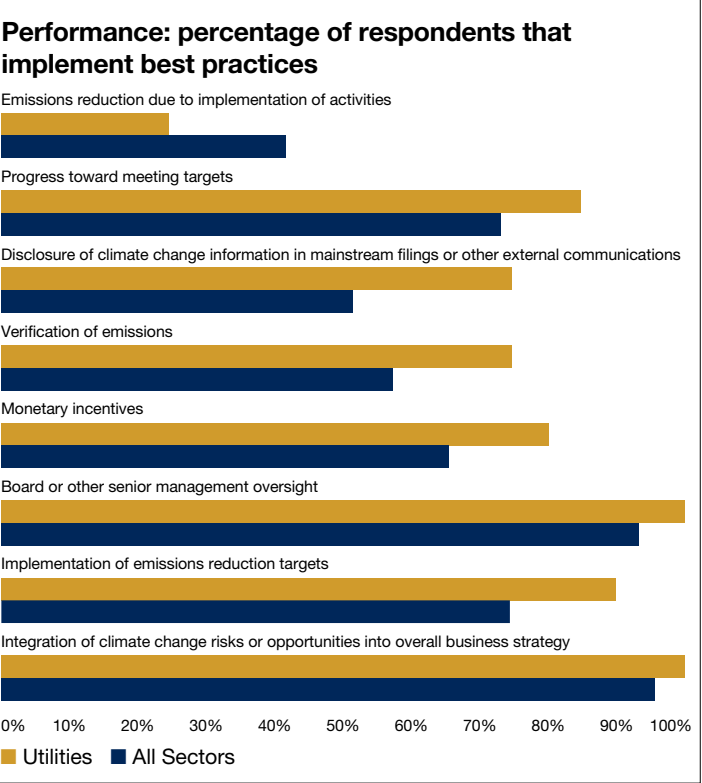
Global 500 response rate:  
 Utilities Overall: **77%** (20 of 27)

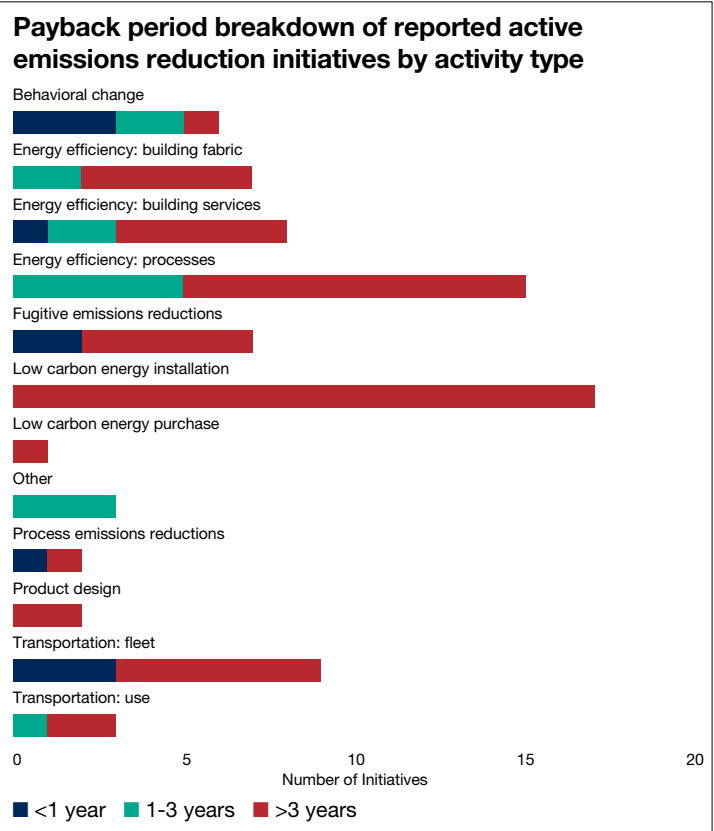
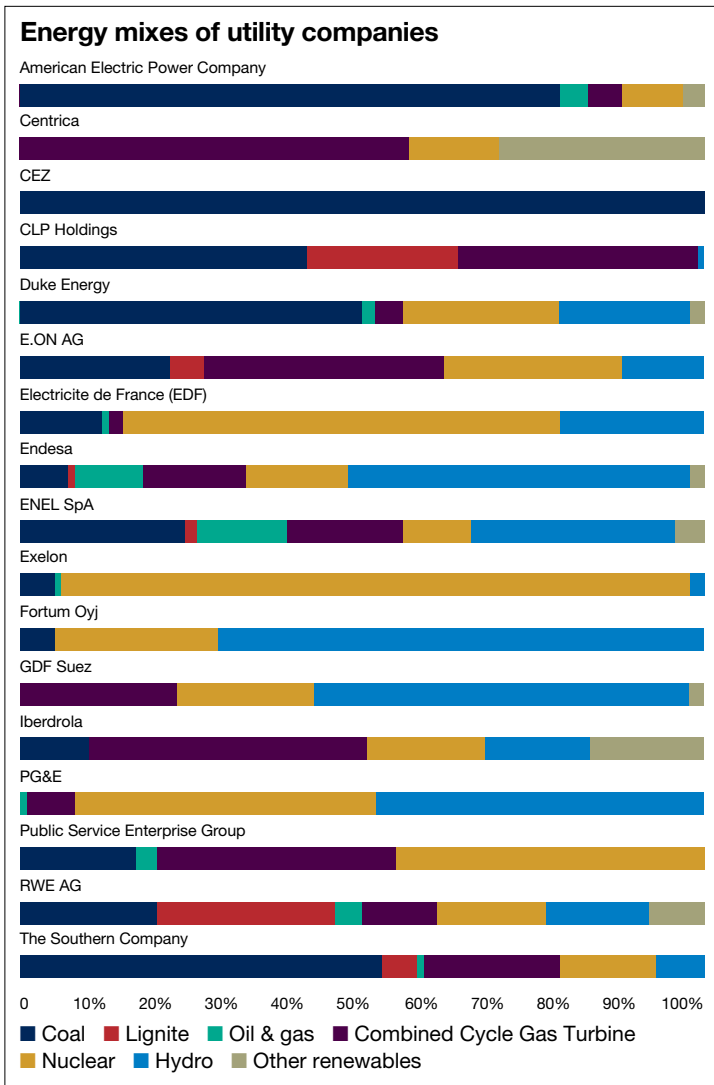
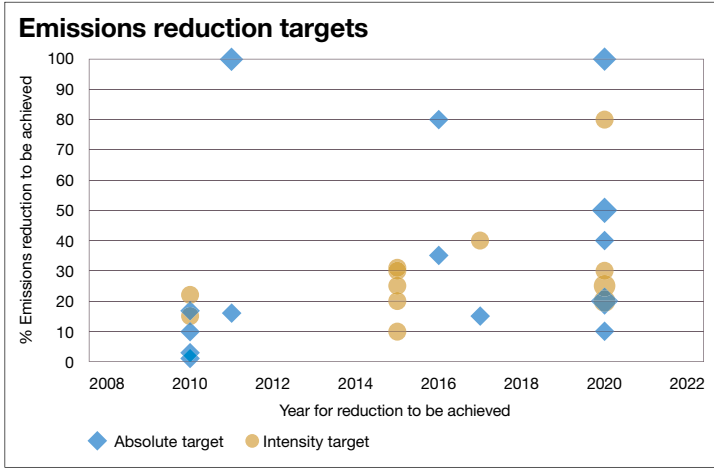
Key Industries within the sector:  
 Electric Utilities (13 of 19), Gas Utilities (1 of 2),  
 Multi Utilities (6 of 6).

Largest non-respondents include:  
 National Thermal Power (NTPC), NextEra Energy,  
 Hong Kong & China Gas



- ### Opportunities reported
- Limits on air pollution (roadside or in urban areas) and carbon emissions reduction targets could stimulate demand for non-emitting (at point of use) products such as electric vehicles, electric cookers and boilers which will, in turn, increase demand for electricity
  - Ageing coal and nuclear power stations could be replaced with renewable energy, new gas and nuclear stations
  - Droughts and water shortages may stimulate demand for water related industries such as desalination and water recycling, which, in turn, would stimulate demand for electricity
- ### Risks reported
- Extreme weather conditions could affect operations (e.g. transmission cables are impacted by higher temperatures and greater electricity use during extreme heat. In addition, generating plant, which are usually in proximity of water, will be most susceptible to storm surges and rises in sea level)
  - Increased environmental constraints related to air quality and increased scope of regulation to include additional GHGs (CH<sub>4</sub>, N<sub>2</sub>O, HFC, PFC, SF<sub>6</sub>)





“AEP is committed to further reduce its emissions footprint and risk. Through a generation transition plan which includes retirement of aging coal assets, retrofitting environmental controls on newer assets and construction of new natural gas facilities, AEP expects to further reduce its GHG profile over the next 10 years. In 2010, coal-fired generation accounted for 80% of AEP’s total energy production. By 2020 the percentage coal generation is expected to drop to 65%, helping achieve a targeted 10% reduction in emission from 2010 levels. The additional environmental controls and new generation will likely require capital expenditures of \$6-11 billion over the next ten years.”  
American Electric Power

“According to CERES and Natural Resources Defense Council we are in the top 3rd of the national 100 largest U.S. electric utilities in minimizing carbon intensity. Our regulated electric generating fleet utilizes multiple fuel sources (coal, uranium, natural gas, oil and market purchases), each with a different CO<sub>2</sub> emission intensity. Sources are dispatched based on the lowest total production costs, so these programs could alter the mix of sources from the business as usual case.”  
Dominion Resources

“The feed-in tariff arrangements in China, India and Thailand, and the sales of Renewable Energy Certificates in Australia provide incremental revenue above the normal tariff which is incorporated into the financial model prior to making an investment decision. The costs associated with this are higher investments required for RE generation assets.”  
CLP Holdings

# Appendix I: Table of emissions, scores and sector information by company

Please refer to the Key on page 77 for further explanation of the abbreviations used.

Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
3M	Industrials	AQ	AQ	76	C		6250000	4300000	1950000	-		†	Int
A.P. Moller - Maersk	Industrials	AQ	AQ	74	C		39076000	38516000	560000	-		✓	Abs Int
ABB	Industrials	AQ	AQ	72	C		1469000	714000	755000	645000	Tr	†	Int
Abbott Laboratories	Health Care	AQ	AQ	72	C		1609000	838000	771000	1338000	TI Wa Tr EC Ld	✓	Abs
Accenture	Information Technology	AQ	AQ	93	B		212599	14270	198329*	366942	Tr	✓	Int
Ace Ltd	Financials	AQ	AQ	82	B		56406	14741	41665	10213	Tr	✓	Int
Aflac	Financials	AQ	AQ	66	E		27721	4352	23369	-		†	
Air Liquide	Materials	AQ	AQ	87	B		19475000	10181000	9294000	-	Oth	✓	
Air Products & Chemicals	Materials	AQ	AQ	92	A		23691275	14366791	9324484	97169	Tr TSP	✓	Int
Akbank	Financials	AQ	AQ	72	C	NP	-	-	-	-	-		
Alcon	Health Care	DP	DP	-	-		-	-	-	-			
Allergan	Health Care	AQ	AQ	83	B		95299	42674	52625	15296	TI Tr	✓	Abs Int
Allianz	Financials	AQ	AQ	92	A-		339817	41496	298321*	171087	PGS Wa Tr Oth	✓	Int
Allstate	Financials	AQ	AQ	89	C		218978	35504	183474	33543	Tr Oth	†	
Altria Group	Consumer Staples	AQ	AQ	67	C		524631	273437	251194	41799	PGS Tr	†	Abs
Amazon.com	Consumer Discretionary	NR	DP	-	-		-	-	-	-			
Ambev - Cia. Bebidas das Americas	Consumer Staples	AQ	AQ	69	C		1048442	865202	183240	29886	PGS	†	Int
América Móvil		NR	NR	-	-		-	-	-	-			
American Electric Power	Utilities	AQ	AQ	75	C		138294800	138294800	-	1634883	PGS Fu TI Tr	†	Abs
American Express	Financials	AQ	AQ	80	C		221850.56	32504.01	189346.55*	38143	Tr	✓	Abs
American Tower		AQ	AQ	63	C		144379.34	5819.79	138559.55	8953.97	Tr EC	†	
Amgen	Health Care	AQ	AQ	66	E		430983	136986	293997	36340	Tr	†	Abs
Anadarko Petroleum	Energy	AQ	AQ	75	B		8770874	7872285	898589	-		✓	
Anglo American	Materials	AQ	AQ	81	C		19999891	9809076	10190815	177645320	Tr USP	†	Abs
Anglo Platinum	Materials	AQ	AQ	85	B		5611738	457336	5154402	466194.51	PGS TI Wa Tr EC TSP USP DSP	✓	Int
AngloGold Ashanti	Materials	AQ	AQ	74	C		4697000	1215000	3482000	-		✓	Int
Anheuser Busch InBev	Consumer Staples	AQ	AQ	77	B		4353161	2901360	1451801	12283	TI Tr	†	Int
Antofagasta	Materials	AQ	AQ	59	E		1294371	529560	764811	47373	Fu Tr Oth	†	
Apache	Energy	AQ	AQ	65	D		10900000	9860000	1040000	-		†	
Apple Inc.	Information Technology	DP	AQ	-	-		-	-	-	-			



Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
Arcelor Mittal	Materials	AQ	AQ	34	-		184825000	165226000	19599000	-		†	Int
Archer Daniels Midland	Consumer Staples	NR	NR	-	-		-	-	-	-			
Assicurazioni Generali Spa	Financials	AQ	AQ	68	C		65745.5	12506.2	53239.3*	29090.3	Tr Oth	†	Abs Int
Astellas Pharma	Health Care	AQ	AQ	60	D		1225638.27	457296.87	768341.4	1999.84	TI	†	Abs
Astra International	Consumer Discretionary	AQ(L)	NR	-	-	NP	-	-	-	-	-		
AstraZeneca	Health Care	AQ	AQ	68	C		679391	385210	294181*	365716	PGS TI Wa Tr USP	†	Abs
AT&T		AQ	AQ	72	C		8903473	1105251	7798222	63209	Tr	†	
Atlas Copco	Industrials	AQ	AQ	72	C		116000	25000	91000	202000	TI	†	Int
Australia and New Zealand Banking Group	Financials	AQ	AQ	89	B		220577	18278	202299	101090	PGS Fu Wa Tr	✓	Abs Int
Automatic Data Processing	Information Technology	AQ	AQ	25	-		173000	18000	155000	-		†	
Aviva	Financials	AQ	AQ	80	B		132412	63784	68628*	15839.7	Tr EC	✓	Abs
AXA Group	Financials	AQ	AQ	92	A		245701	68554	177147	214266	Tr EC	✓	Int
BAE Systems	Industrials	AQ	AQ	56	E	NP	-	-	-	-	-		
Baker Hughes	Energy	AQ	AQ	67	D		600000	300000	300000	116600	Tr	✓	Int
Banco Bradesco	Financials	AQ	AQ	47	-		24875	4554	20321	24216	EC Oth	✓	
Banco do Brasil	Financials	AQ	AQ	54	E		35838	6071	29767	8869	Tr Oth	†	
Banco Santander	Financials	AQ	AQ	85	C		453442.19	29882.19	423560	128666.05	Tr EC	✓	
Banco Santander Brasil	Financials	AQ	IN	67	D		19561	5541	14020*	94744	PGS TI Wa Tr SE	○	Abs
Banco Santander Chile	Financials	AQ(SA)	AQ(SA)	-	-		-	-	-	-			
Bank Central Asia	Financials	NR	NR	-	-		-	-	-	-			
Bank Mandiri	Financials	NR	NR	-	-		-	-	-	-			
Bank of America	Financials	AQ	AQ	97	A		1872213	119760	1752453*	1052130	TI Wa Tr EC	✓	Abs
Bank of China	Financials	NR	IN	-	-		-	-	-	-			
Bank of Communications (H)	Financials	AQ	AQ(L)	-	-	NP	-	-	-	-			
Bank of Montreal	Financials	AQ	AQ	88	A		64907.87	16545.66	48362.21	92796.19	Wa Tr Lu TSP	✓	Abs
Bank of Nova Scotia (Scotiabank)	Financials	AQ	AQ	54	D		86362	17560	68802	3075	Tr	†	
Barclays	Financials	AQ	AQ	89	B		993000	57000	936000	110000	Tr	✓	Int
Barrick Gold	Materials	AQ	AQ	82	B		4946281	2823002	2123279	-		†	Abs

Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
BASF	Materials	AQ	AQ	93	A		25701000	21312000	4389000	134289000	PGS Eq Fu TI Wa Tr EC Lu In TSP USP DSP	✓	Abs Int
Baxter International	Health Care	AQ	AQ	74	C		801000	339720	461280*	2144000	Tr EC TSP USP DSP SE	✓	Abs Int
Bayer	Health Care	AQ	AQ	99	A		8500000	4800000	3700000	27009800	PGS TI Tr Lu DSP Oth	✓	Abs Int
BB&T	Financials	AQ	AQ	58	E		172066	1643	170423	-		†	
BBVA	Financials	AQ	AQ	74	B		329870	8494	321376	35232	Tr	✓	Int
BCE		AQ	AQ	74	C		234529	93132	141397	4348	Tr	†	Abs
Becton, Dickinson and Co.	Health Care	AQ	AQ	43	-		530124	61975	468149	-		†	Abs Int
Belle International	Consumer Discretionary	NR	NR	-	-		-	-	-	-			
Berkshire Hathaway	Financials	NR	NR	-	-		-	-	-	-			
Best Buy	Consumer Discretionary	AQ	AQ	70	B		940696	236170	704526	-		✓	Abs
BG Group	Energy	AQ	AQ	85	A		7974747	7951198	23549	88692000	USP	✓	Abs
Bharat Heavy Electricals	Industrials	NR	NR	-	-		-	-	-	-			
Bharti Airtel		NR	NR	-	-		-	-	-	-			
BHP Billiton	Materials	AQ	AQ	73	B		45731137	19591969	26139168	325311000	Fu USP	✓	Int
BM&F Bovespa	Financials	AQ	AQ	81	C		1179.67	155.57	1024.1	1746.81	TI Wa Tr EC	✓	
BMW Bayerische Motoren werke	Consumer Discretionary	AQ	AQ	96	A		1343008	409911	933097	38186203	TI Tr EC USP	✓	Abs Int
BNP Paribas	Financials	AQ	AQ	78	C		535513	86808	448705	166392	Tr	†	
BNY Mellon	Financials	AQ	AQ	81	B		211570	9474	202096	26827	Tr	†	Abs
BOC Hong Kong	Financials	DP	NR	-	-		-	-	-	-			
Boeing	Industrials	AQ	AQ	92	B		1717000	595000	1122000	255000	Tr	✓	Abs Int
BP	Energy	AQ	AQ	80	B		74920000	64920000	10000000	573000000	USP	✓	
Bristol-Myers Squibb	Health Care	AQ	AQ	76	D		524189	253398	270791	73480	Tr	†	Abs
British American Tobacco	Consumer Staples	AQ	AQ	91	A		743599	371610	371989	58518	Wa Tr Oth	✓	Int
British Sky Broadcasting	Consumer Discretionary	AQ	AQ	90	B		152580	27462	125118*	-	Oth	✓	Int
BT Group		AQ	AQ	84	B		1674583	204497	1470086*	48434	Wa Tr Oth	†	Abs Int
BYD Company	Consumer Discretionary	NR	NR	-	-		-	-	-	-			

Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
Canadian Imperial Bank of Commerce (CIBC)	Financials	AQ	AQ	69	C		93225	31287	61938	10398	Tr	†	
Canadian National Railway	Industrials	AQ	AQ	82	B		4778872	4584604	194268	3198	Tr	†	Int
Canadian Natural Resources	Energy	AQ	AQ	36	-		18210358	16892972	1317386	-		†	Int
Canon	Information Technology	AQ	AQ	80	C	NP	-	-	-	-	-		
Capital One Financial	Financials	AQ	AQ	51	D		219615	14896	204719	-		†	Abs
Carnival	Consumer Discretionary	AQ	AQ	88	B		10748637	10700267	48370	46246	PGS Wa Tr	✓	Int
Carrefour	Consumer Staples	AQ	AQ	75	B		4306000	2155000	2151000	990000	PGS TI	†	Int
Caterpillar	Industrials	AQ	AQ	58	D		2651000	831000	1820000*	19443	Tr Lu	†	Abs Int
Celgene	Health Care	AQ	AQ	62	E		15547	5903	9644	-		†	
Cenovus Energy	Energy	AQ	AQ	78	C		4946354	3996987	949367	565.3	Tr Oth	✓	Int
Centrica	Utilities	AQ	AQ	96	A-		10714959	10559082	155877	8992	Tr Oth	✓	Abs Int
CEZ	Utilities	AQ	AQ	39	-		38845671	38845671	-	-		†	Int
Charles Schwab	Financials	AQ	AQ	-	-	NP	-	-	-	-	-		
Cheung Kong	Financials	NR	NR	-	-		-	-	-	-			
Chevron	Energy	AQ	AQ	86	B		66619864	62136044	4483820	404000000	USP	✓	Abs
China Construction Bank (H)	Financials	IN	IN	-	-		-	-	-	-			
China Life Insurance (H)	Financials	NR	NR	-	-		-	-	-	-			
China Mobile	Financials	NR	AQ	-	-		-	-	-	-			
China Overseas Land & Investment	Financials	NR	NR	-	-		-	-	-	-			
China Telecom	Financials	IN	IN	-	-		-	-	-	-			
China Unicom	Financials	NR	NR	-	-		-	-	-	-			
Christian Dior	Consumer Discretionary	AQ	NR	39	-	NP	-	-	-	-	-		
Chubb	Financials	AQ	AQ	42	-		14216	-	14216	-		†	
Chubu Electric Power	Utilities	DP	AQ	-	-		-	-	-	-			
Chunghwa Telecom	Information Technology	AQ	AQ	74	C		905137.79	30753.37	874384.42	256499	EC	†	Abs
Cia. Siderurgica Nacional - CSN	Materials	AQ	AQ	61	E		11192361	10621377	570984*	474485	PGS Fu	†	
CIMB Group Holdings	Financials	NR	NR	-	-		-	-	-	-			
Cisco Systems	Information Technology	AQ	AQ	98	A		650620	53363	597257*	6837461	PGS Eq Fu TI Tr EC TSP USP DSP	✓	Abs

Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
Citigroup	Financials	AQ	AQ	70	B		1184848.77	43116.32	1141732.45	100243	Tr	†	Abs
CLP Holdings	Utilities	AQ	AQ	82	B		41897000	41649000	248000	175000	Lu	✓	Int
CME Group	Financials	AQ	AQ	7	-	NP	-	-	-	-	-		
CNOOC (Red Chip)	Energy	AQ	AQ	32	-		5860000	5860000	-	-		†	
Coca-Cola Company	Consumer Staples	AQ	AQ	78	C		3359909	2113413	1246496	6342126	Tr TSP Fr Oth	†	Abs
Cognizant Technology Solutions	Information Technology	AQ	AQ	68	C		175935	28647	147288	46270	Tr	†	Int
Colgate Palmolive	Consumer Staples	AQ	AQ	80	B		692284	267077	425207	105969	PGSTI Wa Tr Lu	†	Abs Int
Comcast	Consumer Discretionary	DP	IN	-	-		-	-	-	-			
Commonwealth Bank of Australia	Financials	AQ	AQ	89	A		251696	15073	236623	120295	TI Wa Tr SE	✓	Abs
Compagnie Financière Richemont	Consumer Discretionary	AQ	AQ	83	C	NP	-	-	-	-			
ConocoPhillips	Energy	AQ	AQ	41	-		68005000	57981000	10024000	512000000	USP	†	
Corning	Information Technology	AQ	AQ	34	-		1175452	266635	908817	-		†	
Costco Wholesale	Consumer Staples	AQ	AQ	49	-	NP	-	-	-	-			
Covidien	Health Care	AQ	NR	48	-		662351.45	229615	432736.45	-		†	Int
Credit Agricole	Financials	AQ	AQ	57	D		10613	757	9856	10705	Tr	†	Abs
Credit Suisse	Financials	AQ	AQ	81	C		227120	19946	207174	138693	PGS Fu Wa Tr	○	Abs
Criteria Caixa	Financials	AQ	AQ	54	C		360	-	360	98.66	Tr	†	
CSL	Health Care	AQ	AQ	72	D		185318	51460	133858	13000	Tr	○	Abs Int
CSX	Industrials	AQ	AQ	85	A		5475420	5214546	260874	20899	Tr	✓	Int
Cummins India	Consumer Discretionary	AQ(SA)	AQ(SA)	-	-		-	-	-	-		†	
CVS Caremark	Consumer Staples	AQ	AQ	67	D		1766839	220888	1545951	10933	Tr	†	
Daimler	Consumer Discretionary	AQ	AQ	78	B		3699102	1063986	2635116	31064085	TI Tr EC USP DSP	✓	Int
Danaher	Industrials	AQ	AQ	10	-	NP	-	-	-	-			
Danone	Consumer Staples	AQ	AQ	89	A-		1329924	530119	799805*	1984000	TSP DSP Oth	†	Int
Danske Bank	Financials	AQ	AQ	66	E		41656	4402	37254	10520	PGSTr	†	Abs Int
DBS Group Holdings	Financials	DP	DP	-	-		-	-	-	-			
Deere	Industrials	AQ	AQ	63	C		1336644	455171	881473	37656	Tr	†	Int
Dell	Information Technology	AQ	AQ	72	C		438906	34115	404791*	112679	Tr	†	Abs Int
Denso	Consumer Discretionary	AQ	AQ	48	-	NP	-	-	-	-			
Deutsche Bank	Financials	AQ	AQ	82	B		496933.65	26643.3	470290.35*	115654.44	Tr	✓	Abs

Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
Deutsche Post	Industrials	AQ	AQ	99	A-		6300000	5300000	1000000*	50000	Tr Oth	✓	Int
Deutsche Telekom		AQ	AQ	79	C		3484504	391152	3093352*	91184	Tr	†	Abs Int
Devon Energy	Energy	AQ	AQ	59	D		4170000	3680000	490000	16063	Fu	†	
Diageo	Consumer Staples	AQ	AQ	89	A-		724509	619161	105348	200000	TI	†	Abs
DIRECTV Group	Consumer Discretionary	NR	NR	-	-		-	-	-	-			
DnB NOR	Financials	AQ	AQ	63	D		11892.46	1176.06	10716.4	8487.6	Wa Tr	†	Int
Dominion Resources	Utilities	AQ	AQ	69	D		59353956	59004018	349938	-	Oth	○	
Dongfeng Motor Group	Consumer Discretionary	DP	NR	-	-		-	-	-	-			
Dow Chemical	Materials	AQ	AQ	95	A-		38084000	29043000	9041000	3025000	TI Tr TSP	✓	Abs Int
Duke Energy	Utilities	AQ	AQ	62	C		90612245	90612245	-	-		†	Abs Int
E.I. du Pont de Nemours and Company	Materials	AQ	AQ	80	B		15432000	10749000	4683000	146253	Tr	†	Abs
E.ON AG	Utilities	AQ	AQ	80	B		132326014	126884620	5441394	143866848	PGS Eq Fu TI Tr EC USP	✓	Int
EADS	Industrials	AQ	AQ	52	D		-	-	-	-		✓	Abs
East Japan Railway	Industrials	AQ	AQ	43	-		2540000	210000	2330000	-		✓	Abs Int
eBay	Consumer Discretionary	AQ	AQ	63	C		207746	11462	196284	21600	Tr	†	Abs
Ecopetrol	Energy	AQ	AQ	40	-		6072260	5880210	192050*	-		†	
Electricite de France (EDF)	Utilities	AQ	AQ	62	D		81246570	80575870	670700	685702	PGS TI Tr	✓	Abs Int
Eli Lilly	Health Care	AQ	AQ	61	C		1621619	454521	1167098	204478	TI Wa Tr EC Oth	†	Int
EMC	Information Technology	AQ	AQ	88	B		346066	28031	318035	105029	Tr	✓	Abs Int
Emerson Electric	Industrials	AQ	AQ	24	-		-	-	-	-		†	
Empresas Copec	Energy	NR	NR	-	-		-	-	-	-			
Enbridge	Energy	AQ	AQ	61	C		4598000	1733000	2865000	203200	PGS Fu Tr	†	Abs
Encana	Energy	AQ	AQ	72	C		5841898	5242617	599281*	2327	Tr	✓	
Endesa	Utilities	AQ	AQ	88	A-		39291885	38631310	660575	17184	Tr Oth	✓	Int
ENEL	Utilities	AQ	AQ	89	A		116649738	116404742	244996	991855	PGS Fu Wa Oth	✓	Int
Eni	Energy	AQ	AQ	83	B		62561965	60676123	1885842	268737319	PGS Tr USP	✓	Abs Int
EOG Resources	Energy	DP	AQ	-	-		-	-	-	-			
Ericsson	Information Technology	AQ	AQ	82	B		204000	30000	174000	18443000	TI Tr EC USP	✓	Int
Eurasian Natural Resources	Materials	DP	DP	-	-		-	-	-	-			

Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
Exelon	Utilities	AQ	AQ	79	C		9522374	9245696	276678	5033	Tr	†	Abs
Express Scripts	Health Care	NR	NR	-	-		-	-	-	-			
Exxon Mobil	Energy	AQ	AQ	70	B		147000000	132000000	15000000	1600000	USP	✓	Abs Int
FANUC	Industrials	NR	NR	-	-		-	-	-	-			
FedEx	Industrials	AQ	AQ	50	D		14149767	13152895	996872	1008493	PGS	†	Int
Fiat	Consumer Discretionary	AQ	AQ	93	A		2062497	414875	1647622	2106700	PGS EC TSP USP	✓	Int
Firststrand	Financials	AQ	AQ	88	B		321228.24	12219.75	309008.49	23196.51	PGS Tr	✓	Abs Int
Ford Motor	Consumer Discretionary	AQ	AQ	46	-		5268477	1602246	3666231	-		✓	Int
Formosa Petrochemical	Energy	NR	DP	-	-		-	-	-	-			
Fortum Oyj	Utilities	AQ	AQ	97	B		25704279	25600000	104279*	5654740	Fu Tr USP	✓	Int
France Telecom		AQ	AQ	63	E		1467681	405758	1061923	54910	Tr	†	Abs
Franklin Resources	Financials	AQ	AQ	62	D		39949	10362	29587	7966	Tr	†	
Freeport-McMoRan Copper & Gold	Materials	AQ	AQ	87	C		9985750	5622379	4363371	337500	TI Tr PSP	✓	
Fresenius Medical Care KGaA	Health Care	AQ	AQ	55	D	NP	-	-	-	-			
FujiFilm Holdings	Materials	AQ	AQ	62	E		1315765	793333	522432	3891000	PGS TI Wa USP	†	Abs
Gazprom	Energy	AQ	AQ	50	D		131219300	131219300	-	-		†	Abs
Gazprom Neft	Energy	NR	DP	-	-		-	-	-	-			
GDF Suez	Utilities	AQ	AQ	87	B		112575205	109324454	3250751	163417207	Fu USP	†	Abs Int
General Dynamics	Industrials	IN	IN	-	-		-	-	-	-			
General Electric	Industrials	AQ	AQ	73	C		5650000	2500000	3150000	-		†	Abs
General Mills	Consumer Staples	AQ	AQ	64	C		1002526	279484	723042	452295	TI Tr	†	Int
Genting Singapore	Financials	NR	NR	-	-		-	-	-	-			
Genzyme	Health Care	AQ		85	B	NP	-	-	-	-			
Gilead Sciences	Health Care	AQ	AQ	95	B		67094	29725	37369	18795	Tr EC	✓	Int
GlaxoSmithKline	Health Care	AQ	AQ	93	A		2007715	1001746	1005969	4923155	TI Tr USP Oth	✓	Abs Int
Goldcorp	Materials	AQ	AQ	51	D		1194496	596767	597729	-		†	
Goldman Sachs Group	Financials	AQ	AQ	83	B		351487	14645	336842	168250	Tr	✓	Abs
Google	Information Technology	AQ	AQ	89	A-		1237476	11126	1226350	207065	Tr EC Ld SE	✓	Abs
Great West Lifeco	Financials	DP	DP	-	-		-	-	-	-			

Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
Grupo Mexico	Industrials	NR	NR	-	-		-	-	-	-			
H&M Hennes & Mauritz	Consumer Discretionary	AQ	AQ	57	D		281888	11466	270422	215377	TI Tr	†	Int
Halliburton	Energy	AQ	AQ	54	E		4020000	4020000	-	44	Tr	†	
Hang Lung Properties	Financials	NR	NR	-	-		-	-	-	-			
Hang Seng Bank	Financials	AQ	AQ	51	D		23965.79	-	23965.79	-		†	Abs
HDFC Bank	Financials	AQ	AQ	55	D		239540	29724	209816*	-	Oth	†	Int
Heineken	Consumer Staples	AQ	AQ	59	D		1990911	1201314	789597	-		✓	Int
Hermes International	Consumer Discretionary	NR	NR	-	-		-	-	-	-			
Hess	Energy	AQ	AQ	91	B		9034065	8452627	581438	40308994	TI Tr TSP USP	✓	Abs Int
Hewlett-Packard	Information Technology	AQ	AQ	84	B		1865170	136660	1728510	5850300	PGS Tr TSP	†	Abs
High Tech Computer	Information Technology	AQ	AQ	27	-	NP	-	-	-	-			
Hitachi	Industrials	AQ	AQ	88	C		4719794	932098	3787696	12223173	PGS Tr TSP	✓	Abs Int
Holcim	Materials	AQ	AQ	79	C		108334034	102218000	6116034	8177160	PGS Fu TI Wa Tr EC SE	†	Int
Home Depot	Consumer Discretionary	AQ	AQ	82	B		3073094	268091	2805003	3390000	TI	†	Abs Int
Hon Hai Precision Industry	Information Technology	AQ(SA)	AQ(SA)	-	-		-	-	-	-			
Honda Motor Company	Consumer Discretionary	AQ	AQ	95	A		4365000	1418000	2947000	65796	TSP	✓	Int
Honeywell International	Industrials	IN	IN	-	-		-	-	-	-			
Hong Kong and China Gas	Utilities	DP	NR	-	-		-	-	-	-			
Hong Kong Exchanges & Clearing	Financials	AQ	AQ	67	C	NP	-	-	-	-			
Housing Development Finance	Financials	NR	NR	-	-		-	-	-	-			
HSBC Holdings	Financials	AQ	AQ	95	A-		831642	84025	747617	91814	Tr	✓	Int
Husky Energy	Energy	AQ	AQ	41	-		7547000	7547000	-	-		†	Int
Hutchison Whampoa	Industrials	NR	NR	-	-		-	-	-	-			
Hyundai Heavy Industries	Industrials	NR	AQ	-	-		-	-	-	-			
Hyundai Mobis	Consumer Discretionary	AQ	AQ	64	D		332454	42351	290103	-		†	Int
Hyundai Motor	Consumer Discretionary	AQ	AQ	83	B		2227634	799295	1428339	36844	TSP	✓	Abs

Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
Iberdrola	Utilities	AQ	AQ	78	C		46171669	39939109	6232560	23247787	Tr TSP Oth	✓	Abs Int
ICICI Bank	Financials	AQ	AQ	67	E		54806.22	2130.54	52675.68	7502.76	Wa Tr EC Oth	†	
Illinois Tool Works	Industrials	AQ	AQ	75	C	NP	-	-	-	-	-		
Impala Platinum Holdings	Materials	AQ	AQ	80	C		3692977	584504	3108473	217449	Fu Wa Tr EC Oth	✓	Abs
Imperial Oil	Energy	AQ	AQ	59	C		11517000	10149000	1368000	-		†	Int
Imperial Tobacco Group	Consumer Staples	AQ	AQ	71	D		266544	112299	154245	-		†	Abs
Indian Oil	Energy	DP	DP	-	-		-	-	-	-			
Inditex	Consumer Discretionary	AQ	AQ	57	D		332472	22870	309602	41029	TI	†	Int
Industrial and Commercial Bank of China	Financials	AQ	AQ	10	-	NP	-	-	-	-	-		
Infosys Technologies	Information Technology	AQ(L)	AQ	-	-	NP	-	-	-	-	-		
ING Group	Financials	AQ	AQ	64	D		276370	31587	244783*	51243	Tr	✓	Abs
Inpex	Energy	AQ	AQ	62	C		411995	396091	15904	5594	TI EC	†	Int
Intel	Information Technology	AQ	AQ	66	C		2878008	1165284	1712724*	43595000	PGS TI Tr USP	†	Abs Int
International Business Machines (IBM)	Information Technology	AQ	AQ	83	B		2704276	578290	2125986*	3134613	Tr EC Lu USP	☹	Abs
Intesa Sanpaolo S.p.A	Financials	AQ	AQ	68	C		119239	55444	63795	18390	Tr	✓	Abs
Israel Chemicals	Materials	AQ	AQ	90	B		2880617	1857777	1022840	48289	Fu Wa Tr Oth	†	Abs
Itaú Unibanco Holding	Financials	AQ	AQ	72	C		34195.6	3648.9	30546.7	28439.4	Fu TI Wa Tr Oth	✓	
Itaúsa Investimentos Itau S.A.	Financials	AQ	AQ(SA)	77	C		547903	443011	104892	36355.38	Fu TI Wa Tr Oth	✓	Abs
ITC	Industrials	AQ	AQ	64	D		1463039	1307766	155273	583250	TI	†	
Japan Tobacco	Consumer Staples	AQ	AQ	41	-	NP	-	-	-	-	-		
Jardine Matheson	Industrials	DP	NR	-	-		-	-	-	-			
Jardine Strategic	Industrials	DP	DP	-	-		-	-	-	-			
JFE Holdings	Materials	NR	AQ	-	-		-	-	-	-			
Johnson & Johnson	Health Care	AQ	AQ	78	C		1279804	345723	934081	296286	Tr	☹	Abs Int
Johnson Controls	Consumer Discretionary	AQ	AQ	83	B		1911629	562223	1349406	79785	Tr	†	Abs Int
JPMorgan Chase	Financials	AQ	AQ	81	B		1322231.5	96034.4	1226197.1	137804	Tr	†	Abs
Kansai Electric Power	Utilities	DP	AQ	-	-		-	-	-	-			
KB Financial Group	Financials	AQ	AQ	73	C		39005	2303	36702	1659	PGS Fu Tr Oth	†	Abs



Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
KDDI Group		AQ	AQ	34	-		1108282	1034	1107248	-		†	Abs
Kellogg Company	Consumer Staples	AQ	AQ	85	B		1343409	580482	762927	260000	TI	✓	Int
Kimberly-Clark	Consumer Staples	AQ	AQ	70	C		5728814	2611787	3117027	648040	TI	✓	Abs
Kinross Gold	Materials	AQ	AQ	73	D		1125494	570404	555090	-	Oth	†	
Kohl's	Consumer Discretionary	AQ	AQ	78	C		859581	27062	832519	226902	TI Tr	✓	Abs
Komatsu	Industrials	AQ	AQ	74	C		561300	167900	393400*	4069600	TSP USP SE	✓	Abs Int
Koninklijke KPN NV		AQ	AQ	79	B		263500	70500	193000	1841.6	Tr Oth	†	Abs Int
Korea Electric Power (Kepeco)	Utilities	NR	DP	-	-		-	-	-	-			
Kraft Foods	Consumer Staples	AQ	AQ(SA)	86	C		3319396	1468901	1850495	37225790	PGS Fu TI Tr EC TSP USP DSP	†	Int
Kumba Iron Ore	Materials	AQ	AQ	82	B		837473	329906	507567	28129380.2	PGS TI Tr EC USP	✓	Int
Kyocera	Information Technology	AQ	AQ	65	C	NP	-	-	-	-	-		
Lafarge	Materials	AQ	AQ	96	A-		104663099	96336401	8326698	6574249	PGS TI Tr TSP	✓	Abs Int
Larsen & Toubro	Industrials	AQ	AQ	69	C		394320	288045	106275	17466	EC	✓	
Las Vegas Sands	Consumer Discretionary	NR	NR	-	-		-	-	-	-			
LG Chemical	Materials	AQ	AQ	78	B		5784113	4200586	1583527	-		✓	Int
Li & Fung	Consumer Discretionary	AQ(L)	AQ	46	-	NP	-	-	-	-			
Linde	Materials	AQ	AQ	63	C		15350000	5830000	9520000	354701	TI Tr	✓	Int
Lloyds Banking Group	Financials	AQ	AQ	85	B		406497	73182	333315	36038	Tr	†	Abs
Lockheed Martin	Industrials	AQ	AQ	90	A		1374988	313866	1061122	212431	Tr	✓	Abs
L'Oreal	Consumer Staples	AQ	AQ	57	C		195016	79938	115078*	5640000	TI TSP USP DSP	†	Abs
Lowe's	Consumer Discretionary	AQ	AQ	36	-	NP	-	-	-	-			
Lukoil	Energy	NR	AQ	-	-		-	-	-	-			
LVMH	Consumer Discretionary	AQ	AQ	64	C		304782	43100	261682	551235	PGS Wa Tr TSP Oth	✓	Abs
Malayan Banking	Financials	AQ	AQ	37	-	NP	-	-	-	-			
Manulife Financial	Financials	AQ	AQ	47	-	NP	-	-	-	-			
Marathon Oil	Energy	AQ	AQ	47	-		18809000	13885000	4924000	-		✓	Int
MasterCard	Information Technology	AQ	AQ	29	-	NP	-	-	-	-			
McDonald's	Consumer Discretionary	AQ	AQ	32	-	NP	-	-	-	-			

Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
Medco Health Solutions	Health Care	AQ	AQ	55	E		87211	5914	81297	-		†	
Medtronic	Health Care	AQ	AQ	43	-		236697	25040	211657	-		†	Int
Merck & Co.	Health Care	AQ	AQ	79	B		2075661	1046881	1028780	300299	TI Tr USP	✓	Abs
MetLife	Financials	AQ	AQ	33	-		-	-	-	927	Wa	†	Abs
Metro	Consumer Discretionary	AQ	AQ	90	B		3374778	759094	2615684	517583	Fu Tr TSP Oth	†	Int
Microsoft	Information Technology	AQ	AQ	81	B		1191654	47383	1144271*	389017	TI Tr SE	✓	Int
Mitsubishi	Industrials	AQ	AQ	73	C		5116416	3205957	1910459	67100	TI	☹	Abs
Mitsubishi Electric	Information Technology	AQ	AQ	56	E		1200000	358000	842000	351000	TSP	†	Abs
Mitsubishi Estate	Financials	AQ	AQ	24	-	NP	-	-	-	-	-		
Mitsubishi UFJ Financial Group	Financials	AQ	AQ	74	C		254862	18317	236545	15875	Tr	†	Abs
Mitsui & Co	Industrials	AQ	AQ	59	D	NP	-	-	-	-	-		
Mizuho Financial Group	Financials	AQ	AQ	85	C		198809.57	17360.56	181449.01	8852.74	TI Tr	☹	Abs
MMC Norilsk Nickel	Materials	DP	DP	-	-		-	-	-	-			
Mobile TeleSystems OJSC		NR	DP	-	-		-	-	-	-			
Monsanto	Materials	AQ	AQ	38	-		1815700	1153800	661900	-		†	Abs
Morgan Stanley	Financials	AQ	AQ	87	A		359073	14322	344751	63103	Fu Tr	✓	Int
Mosaic Company	Materials	AQ	AQ	78	B		4169555	2579616	1589939	7800000	PGS	†	Abs
Motorola <sup>3</sup>	Information Technology	AQ	IN	60	E		279233.85	15793.85	263440	125438	Tr	†	Abs Int
MTN Group		AQ	AQ	75	D		1122962	744074	378888	4739	Tr	†	
MTR	Industrials	AQ	AQ	71	C		1150976	37808	1113168	-	Oth	†	
Munich Re	Financials	AQ	AQ	79	A-		216588	69621	146967*	28914	Wa Tr Oth	†	Abs
Nan Ya Plastics	Materials	NR	AQ	-	-		-	-	-	-			
Naspers	Consumer Discretionary	AQ	AQ	27	-	NP	-	-	-	-	-		
National Australia Bank	Financials	AQ	AQ	91	A		208563	22084	186479*	112276.2	PGS Fu Wa Tr SE	✓	Abs
National Grid	Utilities	AQ	AQ	63	C		9658188	9328836	329352	32370591	PGS USP Oth	†	Abs Int
National Oilwell Varco	Energy	NR	NR	-	-		-	-	-	-			
National Thermal Power (NTPC)	Utilities	NR	NR	-	-		-	-	-	-			
NATIXIS	Financials	AQ	AQ	61	E		15461	499	14962	7986	PGS Tr	†	
Nestle	Consumer Staples	AQ	AQ	91	A-		7125398	3981400	3143998	2643850	TSP Oth	†	Int
NetApp	Information Technology	AQ	AQ	59	E		96320	8082	88238	-		†	

Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
Newcrest Mining	Materials	AQ	AQ	59	E		2228979	1430611	798368	15204	Tr	†	
Newmont Mining	Materials	AQ	AQ	88	C		4694161	3048246	1645915	538893	Fu	†	
News Corporation	Consumer Discretionary	AQ	AQ	93	A-		538264	81791	456473*	40067	Tr	✓	Abs
NextEra Energy	Utilities	DP	AQ	-	-		-	-	-	-			
NIKE	Consumer Discretionary	AQ	AQ	40	-		71900	6900	65000	1405800	Tl Tr SE	†	Abs Int
Nintendo	Information Technology	DP	AQ	-	-		-	-	-	-			
Nippon Steel	Materials	AQ	AQ	84	C	NP	-	-	-	-	-		
Nippon Telegraph & Telephone (NTT)		AQ	AQ	49	-		4015000	224000	3791000	-		†	Int
Nissan Motor	Consumer Discretionary	AQ	AQ	72	C		2867158	972804	1894354	91586000	TSP USP	†	Int
NLMK	Materials	NR	NR	-	-		-	-	-	-			
NMDC	Materials	NR	NR	-	-		-	-	-	-			
Nokia Group	Information Technology	AQ	AQ	84	A-		306500	20100	286400*	8501500	Tr EC USP SE	✓	Abs
Nomura Holdings	Financials	AQ	AQ	66	E		90105	3650	86455	12068	Tr	†	Abs
Nordea Bank	Financials	AQ	AQ	87	B		56206	236	55970	20675	Tr	✓	Int
Norfolk Southern	Industrials	AQ	AQ	76	B		5238171	4958921	279250	-		†	Int
Northrop Grumman	Industrials	AQ	AQ	80	C		1261649.69	323050	938599.69	1220151.74	Tr EC TSP	†	Int
Novartis	Health Care	AQ	AQ	94	A		1513597	587269	926328	1353000	PGS Wa Tr	✓	Abs
Novatek	Energy	AQ	AQ	33	-		2225791	2113024	112767	-		†	
Novo Nordisk	Health Care	AQ	AQ	89	B		179462	47562	131900*	272700	Tl Wa Tr EC TSP Ld Oth	✓	Abs
NTT DOCOMO		AQ	AQ	54	D		1210408	87161	1123247	-		†	Abs
Occidental Petroleum	Energy	AQ	AQ	57	C		17800000	11200000	6600000	-		✓	
OGX Petróleo e Gás Participações	Energy	DP	DP	-	-		-	-	-	-			
Oil & Natural Gas	Energy	AQ	AQ	34	-		9050000	8360000	690000	-		†	
Oracle	Information Technology	AQ	AQ	54	E		448731	15208	433523	-		†	Int
Oversea-Chinese Banking	Financials	NR	NR	-	-		-	-	-	-			
PACCAR	Industrials	NR	NR	-	-		-	-	-	-			
Panasonic	Consumer Discretionary	AQ	AQ	93	B		4135797	847855	3287942	91000000	PGS	†	Abs
PepsiCo	Consumer Staples	AQ	AQ	90	A-		6048225	4006160	2042065	112000	Fr Oth	✓	Abs Int
Pernod-Ricard	Consumer Staples	AQ	AQ	66	C		358676	260918	97758	-	Oth	†	Int
PETROBRAS	Energy	AQ	AQ	81	C		61213363	59957141	1256221.84	504059819	USP	†	
PETROCHINA	Energy	IN	IN	-	-		-	-	-	-			

Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
Pfizer	Health Care	AQ	AQ	81	B		2707928	1459943	1247985	9781207	PGS Eq Fu TI Wa Tr EC Lu SE	✓	Abs
PG&E	Utilities	AQ	AQ	92	B		4216239	3218256	997983*	48753850	Fu Wa Tr USP	✓	Abs
Philip Morris International	Consumer Staples	AQ	AQ	83	B		768773	355789	412984	627767	TI Tr	✓	Int
Philips Electronics	Consumer Discretionary	AQ	AQ	99	A		896987	426771	470216	911092	TI Tr	✓	Abs Int
Ping An of China	Financials	NR	AQ	-	-		-	-	-	-			
PKO Bank Polski	Financials	DP	DP	-	-		-	-	-	-			
PNC Financial Services	Financials	AQ	AQ	75	B		369651	44700	324951	107453	PGS Fu Tr EC	†	Abs
POSCO	Materials	AQ	AQ	89	A-		71679000	68705000	2974000	997720	TI Tr EC	✓	Int
Potash Corporation of Saskatchewan	Materials	AQ	AQ	63	D		10314700	8714700	1600000	-		†	Int
Power Financial	Financials	DP	DP	-	-		-	-	-	-			
PPR	Consumer Discretionary	AQ	NR	64	C		197792	42612	155180	231826	TI Tr	✓	Int
Praxair	Materials	AQ	AQ	93	A-		15050000	4350000	10700000*	582025	Eq TI Wa Tr	✓	Abs Int
Precision Castparts Corp.	Industrials	NR	NR	-	-		-	-	-	-			
Priceline.com	Consumer Discretionary	AQ	NR	12	-		-	-	-	-		†	
Procter & Gamble	Consumer Staples	AQ	AQ	49	-		5904000	2795000	3109000	-		†	Int
Prudential	Financials	AQ	AQ	58	E		108099	14839	93260	5029	Tr	†	
Prudential Financial	Financials	AQ	AQ	41	-		84370	5836	78534	12422	Tr	†	Abs
PTT	Materials	NR	NR	-	-		-	-	-	-			
PTT Exploration & Production	Energy	AQ	AQ	69	D		3732909.9	3731455.09	1454.81	4790.21	TI	†	
Public Service Enterprise Group	Utilities	AQ	AQ	79	C		24123436	22873019	1250417*	66428619	PGS Fi TI Tr EC Lu USP	†	Abs
Public Storage	Financials	NR	NR	-	-		-	-	-	-			
QBE Insurance Group	Financials	AQ	AQ	47	-		37411	1268	36143	14034	Tr	†	
Qualcomm	Information Technology	AQ	AQ	63	C		97537	57713	39824	-		✓	
Raytheon	Industrials	AQ	AQ	71	C		602876	98909	503967	-		†	Abs
Reckitt Benckiser	Consumer Staples	AQ	AQ	81	B		290587	104813	185774	25928065	PGS TI Wa Tr TSP USP DSP Ld Oth	†	Int
Reliance Industries	Industrials	NR	NR	-	-		-	-	-	-			

Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
Repsol YPF	Energy	AQ	AQ	89	B		25438767	23380302	2058465	150295524	Fu TI Tr TSP USP	✓	Abs
Research In Motion		AQ	AQ	47	-		63868	13688	50180	-	Oth	†	
Reynolds American	Consumer Staples	AQ	AQ	56	D		309614	117383	192231	-		†	Abs
Rio Tinto	Materials	AQ	AQ	86	B		44600000	27600000	17000000	492000000	PGS Fu TI USP	✓	Int
Roche Holding	Health Care	AQ	NR	66	C		865995	454010	411985	171261	Tr	✓	Int
Rogers Communications	Consumer Discretionary	AQ	AQ	60	D		172149	38861	133288	61384	Wa Tr EC Oth	†	
Rolls-Royce	Industrials	AQ	AQ	75	B		592123	232009	360114	175056020	TI Tr USP	†	Abs Int
Rosneft	Energy	NR	DP	-	-		-	-	-	-			
Royal Bank of Canada	Financials	AQ	AQ	71	D		202476	33136	169340	145705	TI Tr	†	
Royal Bank of Scotland Group	Financials	AQ	AQ	91	B		708324.75	84290.7	624034.05	143404	Fu Tr	✓	Abs
Royal Dutch Shell	Energy	AQ	AQ	90	A-		85000000	75000000	10000000	690000	Fr Oth	✓	Abs
RWE	Utilities	AQ	AQ	85	B		170200000	167100000	3100000	137.98	Fu TI USP	✓	Int
S.A.C.I. Falabella	Consumer Discretionary	NR	NR	-	-		-	-	-	-			
SABMiller	Consumer Staples	AQ	AQ	63	C		2353867.55	1144900.89	1208966.66	261307	TI	†	Int
Saint-Gobain	Industrials	AQ	AQ	94	A-		18700000	13800000	4900000	132200	Tr	✓	Int
Saipem	Energy	AQ	AQ	45	-	NP	-	-	-	-	-		
Samsung Electronics	Information Technology	AQ	AQ	94	A		9910000	4034000	5876000	45706000	TI Tr USP SE	✓	Int
Samsung Life Insurance	Financials	NR	NR	-	-		-	-	-	-			
Sandvik AB	Industrials	AQ	AQ	54	E	NP	-	-	-	-	-		
Sanofi-Aventis	Health Care	AQ	AQ	58	D		1040566	469311	571255	-		†	Int
SAP	Information Technology	AQ	AQ	96	A		261033	136003	125030	35796	ECTSP Oth	✓	Abs
Sasol	Energy	AQ	AQ	79	C		74981000	64166000	10815000	576937	TI Tr	✓	Abs Int
Sberbank	Financials	NR	DP	-	-		-	-	-	-			
Schlumberger	Energy	AQ	AQ	80	B		1940000	1610000	330000*	1563500	PGS TI Tr Oth	†	
Schneider Electric	Industrials	AQ	AQ	91	A		472300	137500	334800	577352	PGS TI Tr	✓	Abs
Seven & I Holding	Consumer Staples	AQ	AQ	71	C		2615712.94	17033.98	2598678.96	213898	TI Wa	†	Int
Shin Etsu Chemical	Materials	AQ	AQ	24	-		-	-	-	-		†	Int
Shinhan Financial Group	Financials	AQ	AQ	73	C		38237	4298	33939	-	Oth	†	Abs Int

Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
Siemens	Industrials	AQ	AQ	97	A-		3228718	1387420	1841298	14203460	PGS TI Tr	✓	Abs Int
Sime Darby Berhad	Industrials	DP	NR	-	-		-	-	-	-			
Simon Property Group	Financials	AQ	AQ	96	A-		606269	23432	582837	11522	Tr EC	✓	Abs
Singapore Telecom		AQ	NR	55	E	NP	-	-	-	-	-		
Snam Rete Gas	Utilities	AQ	AQ	51	D		2690900	2636000	54900	-		✓	Int
Societe Generale	Financials	AQ	AQ	66	D		201558	28115	173443*	76177	PGS Tr	†	Int
SoftBank		DP	AQ	-	-		-	-	-	-			
Sony Corporation	Information Technology	AQ	AQ	94	A		1644726	361183	1283543	22381000	TI Tr USP	☹	Abs
Southern Copper Corporation	Materials	NR	NR	-	-		-	-	-	-			
Standard Bank Group	Financials	AQ	AQ	74	C		160561	11195	149366	7336	Tr Oth	†	
Standard Chartered	Financials	AQ	AQ	77	B		257673	6318	251355	56685	Tr	†	Int
Starbucks	Consumer Discretionary	AQ	AQ	65	C		1014105	209828	804277	-		✓	Int
State Bank of India	Financials	AQ	AQ	24	-		-	-	-	-		†	
State Street	Financials	AQ	AQ	84	B		146754	5683	141071	20855	Tr	✓	Int
Statoil	Energy	AQ	AQ	60	E		14407321	14179708	227613	37000	Tr	†	Int
Steel Authority of India	Materials	NR	NR	-	-		-	-	-	-			
Stryker	Health Care	DP	AQ	-	-		-	-	-	-			
Sumitomo Mitsui Financial Group	Financials	AQ	AQ	46	-	NP	-	-	-	-	-		
Sun Hung Kai Properties	Financials	NR	NR	-	-		-	-	-	-			
Suncor Energy	Energy	AQ	AQ	92	A-		19228524	17039586	2188938	40728	Tr EC Oth	☹	Int
Surgutneftegas	Energy	NR	AQ	-	-		-	-	-	-			
Svenska Handelsbanken	Financials	AQ	AQ	76	C		8169.58	17.27	8152.31*	2665.99	TI Tr	†	Abs
Swiss Re	Financials	AQ	AQ	91	A		21721	5190	16531	17665	Tr	✓	Int
Swisscom		AQ	AQ	85	B		31077	25422	5655*	1570	Tr	†	Abs Int
Syngenta International	Materials	AQ	AQ	88	B		985000	684000	301000	319000	TI Tr	✓	Int
Sysco	Consumer Staples	NR	NR	-	-		-	-	-	-			
T. IS BANKASI	Financials	NR	DP	-	-		-	-	-	-			
T.GARANTI BANKASI	Financials	AQ	AQ	74	C		59969.48	10703.47	49266.01	1324	Tr	†	
Taiwan Semiconductor Manufacturing	Information Technology	AQ	AQ	83	B		4427145	1836591	2590554	2493468	PGS Tr TSP Oth	†	Abs Int

Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
Takeda Pharmaceutical	Health Care	AQ	AQ	63	B		294609	147880	146729	7719	TSP	†	Abs
Talisman Energy	Energy	AQ	AQ	36	-		12792000	12618000	174000	-		†	
Target	Consumer Discretionary	AQ	AQ	77	C		3129941	414968	2714973	22986	Tr	†	Int
Tata Consultancy Services	Information Technology	AQ	AQ	86	C		302684	33064	269620	-	Oth	☹	Int
Teck	Materials	AQ	AQ	68	D		2948297	2689678	258619	1886	Tr	†	Int
Telecom Italia		AQ	AQ	73	B		974305	146045	828260	85829	Tr EC	✓	Abs
Telefonica		AQ	AQ	90	B		1814799	126652	1688147	47795	TI Tr EC	✓	Int
Telekom Indonesia		NR	NR	-	-		-	-	-	-			
Telenor Group		AQ	AQ	72	C		1059344	344881	714463	25120	Fu TI Tr	○	Int
TeliaSonera		AQ	AQ	72	C		263823	18154	245669*	35877	PGS Tr TSP	†	Int
Telstra Corporation		AQ	AQ	70	D		1482493	81803	1400690	241396	Fu Wa Tr Oth	†	Int
Tenaris	Energy	NR	NR	-	-		-	-	-	-			
Tencent Holdings	Financials	NR	NR	-	-		-	-	-	-			
Tesco	Consumer Staples	AQ	AQ	97	A		3152927	1889765	3483297	62233	Tr	✓	Abs Int
Teva Pharmaceutical Industries	Health Care	AQ	NR	59	E		695441.75	193603.09	501838.66	-		†	
Texas Instruments	Information Technology	AQ	AQ	52	E		1956912	831460	1125452	-		†	
The Southern Company	Utilities	AQ	IN	52	D		132000000	132000000	-	-		†	
The Tokyo Electric Power (TEPCO)	Utilities	DP	AQ	-	-		-	-	-	-			
Thermo Fisher Scientific	Health Care	AQ	AQ	35	-		-	-	-	-		†	
Thomson Reuters	Consumer Discretionary	AQ	AQ	63	D	NP	-	-	-	-			
ThyssenKrupp	Industrials	AQ	AQ	67	D		28867441	24085967	4781474	-		†	Int
Time Warner	Consumer Discretionary	AQ	AQ	45	-		260618	24767	235851	50525	Tr	†	
Time Warner Cable	Consumer Discretionary	NR	DP	-	-		-	-	-	-			
TJX Companies	Consumer Discretionary	AQ	AQ	82	C		762410	64250	698160	14300	Tr	☹	Int
Tokio Marine Holdings	Financials	AQ	AQ	79	B		69145	17129	52016	4379	Tr	☹	Abs
Toronto-Dominion Bank	Financials	AQ	AQ	60	C		196180	42464	153716*	38561	Tr Ld	†	Abs
Toshiba	Information Technology	AQ	AQ	68	C		2513970	570197	1943773	59079	TI	†	Abs Int
Total	Energy	AQ	AQ	81	B		57000000	51600000	5400000*	633600000	TSP USP	✓	Abs

Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
Toyota Motor	Consumer Discretionary	AQ	AQ	73	D		7057000	2792000	4265000	334145	TI Tr	†	Abs Int
TransCanada	Energy	NR	AQ	-	-		-	-	-	-			
Transocean	Energy	AQ	AQ	71	C		1768402	1761738	6664	94699	Tr Oth	†	Int
Travelers Companies	Financials	AQ	AQ	60	D		88472	37084	51388	-		†	Abs
Tullow Oil	Energy	AQ	AQ	50	D		294531.13	294531.13	-	-		✓	
Tyco International	Industrials	AQ	AQ	66	C	NP	-	-	-	-			
U.S. Bancorp	Financials	AQ	AQ	70	C		411379	40445	370934	24256	Tr	†	
UBS	Financials	AQ	AQ	91	A		276046	27153	248893	89957	PGS Wa Tr	✓	Abs
Unibail-Rodamco	Financials	AQ	AQ	75	C		117902	22366	95536	1374	Tr	✓	Int
Unicredit Group	Financials	AQ	AQ	70	D		469550	100100	369450	24836	Wa Tr Oth	†	Abs
Unilever	Consumer Staples	AQ	AQ	79	B		2599158	1125515	1473643	-		†	Int
Union Pacific	Industrials	AQ	AQ	57	D		11560004	11207344	352660	-		†	
UnitedHealth Group	Health Care	AQ	AQ	74	D	NP	-	-	-	-			
United Overseas Bank	Financials	NR	NR	-	-		-	-	-	-			
United Technologies	Industrials	AQ	AQ	58	D		1914377	946075	968302	66336	Tr	†	Abs
UPS	Industrials	AQ	AQ	99	A-		12630498	11712803	917695	9864729	Fu Tr EC TSP Fr	✓	Int
VALE	Materials	AQ	AQ	93	B		19993423	18711050.35	1282372.68	91212923	PGS TI Tr EC TSP PSP USP	✓	
Verizon Communications		AQ	AQ	61	C		6062598	567297	5495301	-		†	Int
Viacom	Consumer Discretionary	AQ	AQ	17	-	NP	-	-	-	-			
Vinci	Industrials	AQ	AQ	75	B		2150000	1971500	178500	12862206	USP	✓	Abs
Visa	Information Technology	AQ	DP	40	-	NP	-	-	-	-			
Vivendi Universal	Consumer Discretionary	AQ	AQ	51	E		296901	22308	274593	28430	Tr	†	
Vodafone Group		AQ	AQ	81	B		2325463	414121	1911342*	2295731	Tr In	✓	Abs
Volkswagen	Consumer Discretionary	AQ	AQ	91	B		7594928	1287439	6307489	23456849	PGS TI TSP USP	✓	Abs Int
Volvo	Industrials	AQ	AQ	57	D	NP	-	-	-	-			
VTB Bank	Financials	NR	DP	-	-		-	-	-	-			
Wal-Mart de Mexico	Consumer Staples	AQ	AQ(SA)	51	D		1023120	477449	545671	147433	TI Tr	†	Abs
Wal-Mart Stores	Consumer Staples	AQ	AQ	85	B		21365864	5883816	15482048*	42841	TI Tr	☹	Abs Int
Walgreens	Consumer Staples	AQ	AQ	66	C		2252701	280991	1971710	-		†	Int



Company	Sector	2011 Response status	2010 Response status	Carbon disclosure score	Carbon performance band	Non-Public	Total Emissions <sup>1</sup>	Scope 1	Scope 2	Scope 3	Scope 3 source type	Verification/Assurance <sup>2</sup>	Target(s) Implemented
Walt Disney Company	Consumer Discretionary	AQ	AQ	51	C		1465646	550782	914864	-		†	Abs
Waste Management	Industrials	AQ	AQ	61	C		24732846	24531046	201800	-		†	Abs Int
WellPoint	Health Care	AQ	AQ	66	D		159871	7151	152720	84493	Tr EC	†	Abs
Wells Fargo & Company	Financials	AQ	AQ	81	A-		1602788	116858	1485930	124316	Tr	✓	Abs
Wesfarmers	Financials	AQ	AQ	66	B		5510532	2703397	2807135	660642	Fu Wa Tr	✓	
Westfield Group	Financials	AQ	AQ	74	C		513557	30975	482582	175940	PGS Fu Wa Tr EC	☹	
Westpac Banking	Financials	AQ	AQ	96	A		200165	9573	190592*	70646	Fu Wa Tr	✓	Abs
Wharf Holdings	Financials	NR	DP	-	-		-	-	-	-			
Wilmar International	Consumer Staples	IN	AQ	-	-		-	-	-	-			
Wipro	Information Technology	AQ(L)	AQ	-	-		-	-	-	-			
Woodside Petroleum	Energy	AQ	AQ	68	B		8326829	8304547	22282	-		✓	Abs
Woolworths	Consumer Staples	AQ	AQ	80	B		3005155	489347	2515808	724600	TI Wa	✓	Abs Int
Xstrata	Materials	AQ	AQ	75	C	NP	-	-	-	-			
Yahoo Japan	Information Technology	AQ	AQ	11	-	NP	-	-	-	-			
Yahoo!	Information Technology	AQ	AQ	36	-		-	-	-	49342	Tr EC	†	Int
Yum! Brands	Consumer Discretionary	AQ	AQ	61	D	NP	-	-	-	-			
Zurich Financial	Financials	AQ	AQ	63	D	NP	-	-	-	-			

# Appendix II: Global Key Trends Summary<sup>1</sup>

This table outlines some of the key findings from CDP 2011 by geography or industry data-set.<sup>2</sup>

		Sample: geography/number of companies															
Key Trends Indicators		Asia ex-JIJK 170*4	Australia 200	Benelux 150**	Brazil 80	Canada 200	Central & Eastern Europe 100	China 100	Emerging Markets 800	Europe 300	FTSE All-World 800	France 250	Germany and Austria 250*	Global 500	Global Electric Utilities 250	Global Transport 100	Iberia 125
Governance	% of sample answering CDP 2011 <sup>3</sup>	25	49	34	67	53	20	8	34	89	75	33	50	81	38	41	36
	Number of companies answering CDP 2011 <sup>3</sup>	43	99	51	53	106	20	8	271	268	590	82	126	404	96	41	45
	% of responders with Board or other executive level responsibility for climate change	68	74	80	79	57	40	75	72	85	71	81	64	73	78	66	82
	% of responders with incentives for the management of climate change issues	46	53	61	45	42	30	75	55	70	71	64	38	72	61	71	58
Strategy	% of responders with climate change integrated into their business strategy	83	83	89	81	72	60	88	79	91	88	87	69	90	93	90	98
	% of responders engaging policymakers on climate issues to encourage mitigation or adaptation	68	74	78	70	63	20	38	68	83	80	76	54	84	92	83	73
Targets & Initiatives	% of responders with emissions reduction targets	71	45	70	30	32	60	38	56	81	75	68	48	76	61	73	67
	% of responders with absolute emissions reduction targets	44	27	41	26	16	30	13	33	42	43	35	28	44	43	37	33
	% of responders with active emissions reduction initiatives in the reporting year	90	88	91	83	86	50	88	82	96	95	96	73	97	87	95	96
	% of responders indicating that their products and services directly help third parties to avoid GHG emissions	66	60	65	60	52	30	50	54	68	69	64	62	70	81	56	80
Risks & Opportunities	% of responders seeing regulatory risks	76	81	76	77	66	60	63	79	79	74	79	56	79	94	85	87
	% of responders seeing regulatory opportunities	76	74	83	83	68	50	63	76	87	78	87	68	81	93	78	89
Emissions Data	% of responders whose absolute emissions (Scope 1 & 2) have decreased compared to last year due to emissions reduction activities	27	29	48	11	27	40	13	31	48	46	37	19	48	24	34	56
	% of responders independently verifying any portion of Scope 1 emissions data <sup>7</sup>	49	45	70	45	32	40	13	44	74	61	65	40	67	67	68	85
	% of responders independently verifying any portion of Scope 2 emissions data <sup>7</sup>	54	45	65	43	20	30	0	42	69	57	54	34	61	35	59	85

## Sample: geography/number of companies

Sample: geography/number of companies															Key Trends Indicators	
India 200	Ireland 40	Italy 100*	Japan 500 <sup>5</sup>	Korea 200	Latin America 50	New Zealand 50	Nordic 260*	Russia 50	South Africa 100	Switzerland 100	Turkey 100	UK FTSE 350	US S&P 500	Overall <sup>6</sup>		
25	44	29	12	45	54	42	52	8	81	59	16	68	68	N/A	% of sample answering CDP 2011 <sup>3</sup>	
49	17	29	61	89	27	21	136	4	81	59	16	238	339	2038	Number of companies answering CDP 2011 <sup>3</sup>	
74	76	59	93	63	73	55	67	67	89	69	64	92	49	66	% of responders with Board or other executive level responsibility for climate change	Governance
55	53	56	68	57	32	45	46	33	55	37	71	63	63	53	% of responders with incentives for the management of climate change issues	Governance
84	71	89	91	76	73	65	87	33	78	75	79	79	78	78	% of responders with climate change integrated into their business strategy	Strategy
71	53	70	84	64	68	45	73	33	78	61	50	72	70	66	% of responders engaging policymakers on climate issues to encourage mitigation or adaptation	Strategy
47	47	78	96	60	32	50	67	33	51	58	36	65	64	57	% of responders with emissions reduction targets	Targets & Initiatives
5	29	56	66	34	23	35	33	33	26	24	36	31	40	36	% of responders with absolute emissions reduction targets	Targets & Initiatives
92	94	100	98	61	86	65	90	33	95	88	79	93	90	85	% of responders with active emissions reduction initiatives in the reporting year	Targets & Initiatives
53	35	67	75	54	59	40	73	67	54	61	57	55	60	58	% of responders indicating that their products and services directly help third parties to avoid GHG emissions	Targets & Initiatives
79	71	81	91	72	73	65	78	33	96	58	71	79	63	71	% of responders seeing regulatory risks	Risks & Opportunities
82	65	85	82	64	73	45	81	67	92	68	79	77	63	71	% of responders seeing regulatory opportunities	Risks & Opportunities
18	35	44	48	42	9	25	41	33	39	31	36	40	38	33	% of responders whose absolute emissions (Scope 1 & 2) have decreased compared to last year due to emissions reduction activities	Emissions Data
33	59	85	46	56	59	40	51	33	49	39	36	39	34	46	% of responders independently verifying any portion of Scope 1 emissions data <sup>7</sup>	Emissions Data
34	53	70	46	60	50	40	43	0	50	37	29	36	28	41	% of responders independently verifying any portion of Scope 2 emissions data <sup>7</sup>	Emissions Data

1. The key trends table provides a snapshot of response trends based on headline data. That is, responses given to main questions without assessment of detailed explanations in follow up questions. The numbers in this table are based on the online responses submitted to CDP as of 11 July 2011. They may therefore differ from numbers in the rest of the report which are based on the number of companies which responded by the applicable local deadline (e.g. 30 June 2011). Please refer to the CDP website and the local reports for an updated version of this table.

2. In some cases, the number of companies in a sample may differ slightly from the named sample size due to takeovers, mergers, acquisitions and duplicate share listings.  
 3. Includes offline responses to the CDP 2011 questionnaire and indirect answers submitted by parent companies. All other key trend indicators are based on direct and online company responses only.  
 4. Asia excluding Japan, India, China and Korea (ex-JICK).  
 5. Due to major disruptions caused by the tsunami the deadline for the Japan 500 sample was extended until 31 August 2011. Therefore, the values in this table do not represent the final numbers but interim figures as of 11 July 2011.

6. Includes responses across all samples as well as responses submitted by companies not included in specific geographic or industry samples in 2011.  
 7. This takes into account companies reporting that data verification is either complete or underway.

\*Denotes change in number of companies in sample compared to previous year.

\*\*Denotes new sample for 2011.

# Appendix III: Global 500 companies by country

G500 companies by country – number responded and total.

Country	Total	Responded	In CDLI	In CPLI
Australia	13	13	2	3
Belgium	1	1	0	0
Bermuda	1	1	0	0
Brazil	11	10	1	0
Canada	26	23	1	1
Chile	3	1	0	0
China	19	6	0	0
Colombia	1	1	0	0
Czech Republic	1	1	0	0
Denmark	3	3	0	0
Finland	2	2	1	0
France	25	24	4	2
Germany	18	18	9	4
Hong Kong	17	5	0	0
India	18	10	0	0
Indonesia	4	1	0	0
Ireland	1	1	0	0
Israel	2	2	1	0
Italy	9	9	1	2
Japan	40	33	3	2
Luxembourg	2	1	0	0
Malaysia	3	1	0	0
Mexico	3	1	0	0
Netherlands	6	6	2	1
Norway	3	3	0	0
Poland	1	0	0	0
Russia	11	2	0	0
Singapore	6	1	0	0
South Africa	9	9	0	0
South Korea	10	7	1	1
Spain	8	8	1	0
Sweden	8	8	0	0
Switzerland	16	15	4	3
Thailand	2	1	0	0
Turkey	3	2	0	0
United Kingdom	30	29	7	4
USA	164	145	14	6
Total	500	404	52	29

## Key to Appendix I

Key:	Scope 3 Source Key:		
AQ	Answered questionnaire	DSP	End of life treatment of sold products
AQ(L)	Answered questionnaire late <sup>4</sup>	EC	Employee commuting
AQ(SA)	Company is either a subsidiary or has merged during the reporting process. See company in brackets for further information on company's status	Eq	Capital goods
DP	Declined to participate	Fr	Franchises
IN	Provided information	Fu	Fuel energy – related activities not included in Scope 2
NP	Answered questionnaire but response not made publicly available	In	Investment
NR	No response	Ld	Leased assets (downstream)
–	Hyphen/dash = Company has not provided information or the information has not been made publicly available	Lu	Leased assets (upstream)
*	Company provided a figure for scope 2 contract arrangements	Oth	Other
†	No verification or assurance, or verification undertaken did not meet CDP's verification requirements. For more details, please see <a href="http://www.cdproject.net/verification">www.cdproject.net/verification</a>	PGS	Purchased goods and services
□	Verification complete for reporting year	PSP	Processing sold products
○	Verification ongoing for reporting year - first year started	SE	Supplier emissions
◐	Verification ongoing for reporting year - prior year(s) completed	TI	Transportation and distribution (goods and services)
		Tr	Business travel
		TSP	Transportation and distribution of sold products inc. warehousing and retail
		USP	Use of sold products
		Wa	Waste generated in operations

## Footnotes for Appendix I

1. Total of Scope 1 and Scope 2 reported emissions.
2. The verification/assurance key provided for each company is based on the CDP's criteria. If a company had more than one level of completion of verification/assurance across the different scopes, the highest level was used for purposes of the key. Moving from highest to lowest levels of verification/assurance:
  - complete;
  - prior year(s) complete;
  - first year started; and
  - no verification/assurance.
3. Motorola Solutions was part of Motorola in 2010.
4. Those companies marked AQ(L) in 2011 submitted responses after the analysis cut off date of July 1, 2011. These companies' responses are not included in the analysis of this report. PwC presents the overall scores in this report but confirms that we were not involved with the detailed scoring for these companies.



Advisor and Report Writer



Carbon Disclosure Project 2011

This report and all of the public responses from corporations are available to download from [www.cdproject.net](http://www.cdproject.net)

In addition, CDP has been generously supported by:



Our sincere thanks are extended to the following:

Allen & Overy, Esben Madsen, Freshfields, Global Reporting Initiative, Institutional Investors Group on Climate Change, Investor Group on Climate Change, Investor Network on Climate Risk, Principles for Responsible Investment, UK Foreign & Commonwealth Office, United Nations Environment Programme Finance Initiative, United Nations Global Compact, World Business Council for Sustainable Development, World Resources Institute.

Global Partners



Consultancy Partners



Verification Partners



Move Forward with Confidence



Lavish

Design and production

Lavish is a leading Creative Services agency based in London. We specialise in the creation and management of brand assets and communication materials for clients in the corporate and not-for-profit sectors.

For more information on Lavish visit [www.lavishconnect.co.uk](http://www.lavishconnect.co.uk)

## CDP Contacts

---

Sue Howells  
Head of Global Operations

Emanuele Fanelli  
Senior Manager  
Investor CDP

Paul Robins  
Director of Fundraising

Marcus Norton  
Head Investor CDP and  
CDP Water Disclosure

Frances Way  
Program Director

Daniel Turner  
Head of Disclosure

Carbon Disclosure Project  
40 Bowling Green Lane  
London, EC1R ONE  
United Kingdom  
Tel: + 44 (0) 20 7970 5660  
Fax: + 44 (0) 20 7691 7316  
[www.cdproject.net](http://www.cdproject.net)  
[info@cdproject.net](mailto:info@cdproject.net)

Carbon Disclosure Project  
c/o RPA, 6 W 48th Street  
10th Floor  
New York, NY 10036  
United States of America  
Tel: + 1 (212) 378 2086  
Fax: + 1 (212) 812 4335

## Report Writers Contacts

---

PricewaterhouseCoopers LLP  
7, More London  
London, SE1 2RT  
United Kingdom  
Tel: +44 (0) 20 7583 5000  
Fax: + 44 (0) 20 7822 4652

Alan McGill  
Partner

Richard Gledhill  
Partner

Malcolm Preston  
Partner

Jon Williams  
Partner

Jonathan Grant  
Assistant Director

PricewaterhouseCoopers LLP  
300 Madison Avenue  
24th Floor  
New York, NY 10017  
United States of America  
Tel: +1 (646) 471 4000  
Fax: +1 (813) 286 6000  
Email: [sustainability@us.pwc.com](mailto:sustainability@us.pwc.com)

Douglas Kangos  
Partner

Kathy Nieland  
Partner

Liz Logan  
Partner

Contact details can be found at  
the following web address:  
<http://pwc.com/sustainability>

## CDP Board of Trustees

---

Chairman: Alan Brown  
Schroders

James Cameron  
Climate Change Capital

Chris Page  
Rockefeller Philanthropy  
Advisors

Dr. Christoph Schroeder  
TVM Capital

Jeremy Smith  
Berkeley Energy

Takejiro Sueyoshi

Tessa Tennant  
The Ice Organisation

Martin Wise  
Relationship Capital Partners

## Important Notice

The contents of this report may be used by anyone providing acknowledgement is given to Carbon Disclosure Project (CDP). This does not represent a license to repackage or resell any of the data reported to CDP and presented in this report. If you intend to do this, you need to obtain express permission from CDP before doing so.

PwC and CDP prepared the data and analysis in this report based on responses to the CDP 2011 information request. PwC and CDP do not guarantee the accuracy or completeness of this information. PwC and CDP make no representation or warranty, express or implied, and accept no liability concerning the fairness, accuracy, or completeness of the information and opinions contained herein or for any consequences of you or anyone else acting, or refraining to act, in reliance on the information contained in this publication or for any decision based on it. You should not act upon the information contained in this publication without obtaining specific professional advice. All information and views expressed herein by CDP and/or PwC are based on their judgment at the time of this report and are subject to change without notice due to economic, political, industry and firm-specific factors. Guest commentaries where included in this report reflect the views of their respective authors; their inclusion is not an endorsement of them.

PwC and CDP and their affiliated member firms or companies, or their respective shareholders, members, partners, principals, directors, officers and/or employees, may have a position in the securities of the companies discussed herein. The securities of the companies mentioned in this document may not be eligible for sale in some states or countries, nor suitable for all types of investors; their value and the income they produce may fluctuate and/or be adversely affected by exchange rates.

'PricewaterhouseCoopers' and 'PwC' refer to PricewaterhouseCoopers LLP (a limited liability partnership in the United Kingdom) or, as the context requires, other member firms of PricewaterhouseCoopers International Limited, each member firm of which is a separate legal entity.

'Carbon Disclosure Project' and 'CDP' refers to Carbon Disclosure Project, a United Kingdom company limited by guarantee, registered as a United Kingdom charity number 1122330.