

# Carbon Disclosure Project 2010 Global 500 Report

On behalf of 534 investors with assets of US\$64 trillion



Report written for  
Carbon Disclosure Project by:

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## Carbon Disclosure Project 2010

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<b>CARBON DISCLOSURE PROJECT</b>
<b>MEMBER 2010</b>

ABRAPP - Associação Brasileira das Entidades Fechadas de Previdência Complementar	KLP Insurance
Aegon N.V.	Legg Mason, Inc.
Akbank T.A.Ş.	The London Pensions Fund Authority
Allianz Global Investors AG	Mergence Africa Investments (Pty) Limited
ATP Group	Mitsubishi UFJ Financial Group (MUFG)
Aviva Investors	Morgan Stanley
AXA Group	National Australia Bank Limited
Banco Bradesco S.A.	Neuberger Berman
Bank of America Merrill Lynch	Newton Investment Management Limited
BBVA	Nordea Investment Management
BlackRock	Northwest and Ethical Investments LP
BP Investment Management Limited	PFA Pension
California Public Employees' Retirement System	Raiffeisen Schweiz
California State Teachers' Retirement System	RBS Group
Calvert Group	Robeco
Catholic Super	Rockefeller & Co. SRI Group
CCLA Investment Management Ltd	Russell Investments
Co-operative Asset Management	Schroders
Essex Investment Management, LLC	Second Swedish National Pension Fund (AP2)
Ethos Foundation	Sompo Japan Insurance Inc.
Generation Investment Management	Standard Chartered PLC
HSBC Holdings plc	Sun Life Financial Inc.
ING	TD Asset Management Inc.
	TDAM USA Inc.
	The Wellcome Trust
	Zurich Cantonal Bank

## Carbon Disclosure Project 2010

534 financial institutions with assets of over US\$64 trillion were signatories to the CDP 2010 information request dated February 1st, 2010, including:

Aberdeen Asset Managers  
 Aberdeen Immobilien KAG  
 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  
 Aeneas Capital Advisors  
 AGF Management Limited  
 AIG Asset Management  
 Akbank T.A.Ş.  
 Alberta Investment Management Corporation (AIMCo)  
 Alberta Teachers Retirement Fund  
 Alcyone Finance  
 Allianz Global Investors AG  
 Allianz Group  
 Altshuler Shaham  
 AMP Capital Investors  
 AmpegaGerling Investment GmbH  
 Amundi Asset Management  
 ANBIMA - Brazilian Financial and Capital Markets Association  
 APG Asset Management  
 Aprionis  
 ARIA (Australian Reward Investment Alliance)  
 Arma Portföy Yönetimi A.Ş.  
 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  
 AVANA Invest GmbH  
 Aviva Investors  
 Aviva plc  
 AvivaSA Emeklilik ve Hayat A.Ş.  
 AXA Group  
 Baillie Gifford & Co.  
 Bakers Investment Group  
 Banco Bradesco S.A.  
 Banco de Credito del Peru BCP  
 Banco de Galicia y Buenos Aires S.A.  
 Banco do Brazil  
 Banco Santander  
 Banco Santander (Brasil)  
 Banesprev Fundo Banespa de Seguridade Social  
 Banesto (Banco Español de Crédito S.A.)  
 Bank of America Merrill Lynch

Bank Sarasin & Co, Ltd  
 Bank Vontobel  
 Bankhaus Schelhammer & Schattera Kapitalanlagegesellschaft m.b.H.  
 BANKINTER S.A.  
 Bankinvest  
 Banque Degroof  
 Barclays Group  
 BBC Pension Trust Ltd  
 BBVA  
 Bedfordshire Pension Fund  
 Beutel Goodman and Co. Ltd  
 BioFinance Administração de Recursos de Terceiros Ltda  
 BlackRock  
 Blue Marble Capital Management Limited  
 Blue Shield of California Group  
 Blumenthal Foundation  
 BMO Financial Group  
 BNP Paribas Investment Partners  
 BNY Mellon  
 Boston Common Asset Management, LLC  
 BP Investment Management Limited  
 Brasilprev Seguros e Previdência S/A.  
 British Columbia Investment Management Corporation (bcIMC)  
 BT Investment Management  
 The Bullitt Foundation  
 Busan Bank  
 CAAT Pension Plan  
 Cadiz Holdings Limited  
 Caisse de dépôt et placement du Québec  
 Caisse des Dépôts  
 Caixa de Previdência dos Funcionários do Banco do Nordeste do Brasil (CAPEF)  
 Caixa Econômica Federal  
 Caixa Geral de Depósitos  
 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 Group  
 Canada Pension Plan Investment Board  
 Canadian Friends Service Committee (Quakers)  
 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  
 The Central Church Fund of Finland  
 Central Finance Board of the Methodist Church  
 Ceres, Inc.  
 Cheyne Capital Management (UK) LLP  
 Christian Super  
 Christopher Reynolds Foundation  
 CI Mutual Funds' Signature Advisors  
 CIBC

Clean Yield Group, Inc.  
 ClearBridge Advisors  
 Climate Change Capital Group Ltd  
 Close Brothers Group plc  
 The Collins Foundation  
 Colonial First State Global Asset Management  
 Comité syndical national de retraite Bâtirente  
 Commerzbank AG  
 Commlnsure  
 Companhia de Seguros Aliança do Brasil  
 Compton Foundation, Inc.  
 Connecticut Retirement Plans and Trust Funds  
 Co-operative Asset Management  
 Co-operative Financial Services (CFS)  
 The Co-operators Group Ltd  
 Corston-Smith Asset Management Sdn. Bhd.  
 Crédit Agricole S.A.  
 Credit Suisse  
 Daegu Bank  
 Daiwa Securities Group Inc.  
 The Daly Foundation  
 de Pury Pictet Turrettini & Cie S.A.  
 DekaBank Deutsche Girozentrale  
 Deutsche Asset Management  
 Deutsche Bank AG  
 Deutsche Postbank Vermögensmanagement S.A., Luxemburg  
 Development Bank of Japan Inc.  
 Development Bank of the Philippines (DBP)  
 Dexia Asset Management  
 DnB NOR ASA  
 Domini Social Investments LLC  
 Dongbu Insurance Co., Ltd.  
 DWS Investment GmbH  
 Earth Capital Partners LLP  
 East Sussex Pension Fund  
 Ecclesiastical Investment Management  
 Ecomonus Instituto de Seguridade Social  
 The Edward W. Hazen Foundation  
 EEA Group Ltd  
 Element Investment Managers  
 ELETRA - Fundação Celg de Seguros e Previdência  
 Environment Agency Active Pension fund  
 Epworth Investment Management Ltd  
 Equilibrium Capital Group  
 Erste Group Bank AG  
 Essex Investment Management, LLC  
 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  
 FASERN Fundação Cosern de Previdência Complementar  
 Fédérés Gestion d'Actifs  
 FIDURA Capital Consult GmbH  
 FIM Asset Management Ltd  
 Financière de Champlain  
 FIRA. - Banco de Mexico

## Carbon Disclosure Project

First Affirmative Financial Network	Henderson Global Investors	The Local Government Pensions Institution
First Swedish National Pension Fund (AP1)	Hermes Fund Managers	Local Government SA-NT
FirstRand Ltd.	HESTA Super	Local Government Super
Five Oceans Asset Management	Hospitals of Ontario Pension Plan (HOOPP)	Lombard Odier Darier Hentsch & Cie
Florida State Board of Administration (SBA)	HSBC Global Asset Management (Deutschland) GmbH	The London Pensions Fund Authority
Folketrygdfondet	HSBC Holdings plc	Lothian Pension Fund
Folksam	HSBC INKA Internationale Kapitalanlagegesellschaft mbH	Macif Gestion
Fondaction CSN	Hyundai Marine & Fire Insurance	Macquarie Group Limited
Fondation de Luxembourg	IDBI Bank Limited	Magnolia Charitable Trust
Fonds de Réserve pour les Retraites – FRR	Illinois State Treasurer	Maine State Treasurer
Forward Management, LLC	Ilmarinen Mutual Pension Insurance Company	Man Group plc
Fourth Swedish National Pension Fund, (AP4)	Impax Asset Management Ltd	Maple-Brown Abbott Limited
Frankfurter Service Kapitalanlage-Gesellschaft mbH	Industrial Bank	Marc J. Lane Investment Management, Inc.
FRANKFURT-TRUST Investment Gesellschaft mbH	Industrial Bank of Korea	Maryland State Treasurer
Friends Provident Holdings (UK) Limited	Industry Funds Management	Matrix Asset Management
Front Street Capital	Infrastructure Development Finance Company Ltd. (IDFC)	McLean Budden
Fukoku Capital Management, Inc.	ING	MEAG Munich Ergo Asset Management GmbH
Fundação AMPLA de Seguridade Social - Brasileiros	Insight Investment Management (Global) Ltd	Meeschaert Gestion Privée
Fundação Atlântico de Seguridade Social	Instituto de Seguridade Social dos Correios e Telégrafos - Postalis	Meiji Yasuda Life Insurance Company
Fundação Codesc de Seguridade Social - FUSESC	Instituto Infraero de Seguridade Social - INFRAPREV	Merck Family Fund
Fundação de Assistência e Previdência Social do BNDES - FAPES	Insurance Australia Group	Mergence Africa Investments (Pty) Limited
Fundação Forluminas de Seguridade Social	Investec Asset Management	Meritas Mutual Funds
Fundação Itaúsa Industrial	Irish Life Investment Managers	MetallRente GmbH
Fundação Promon de Previdência Social	Itaú Unibanco Banco Múltiplo S.A.	Metzler Investment GmbH
Fundação São Francisco de Seguridade Social	J.P. Morgan Asset Management	MFS Investment Management
Fundação Vale do Rio Doce de Seguridade Social - VALIA	Janus Capital Group Inc.	Midas International Asset Management
FUNDIÁGUA - Fundação de Previdência da Companhia de Saneamento e Ambiental do Distrito Federal	The Japan Research Institute, Limited	Miller/Howard Investments
Futuregrowth Asset Management	Jarislowsky Fraser Limited	Mirae Asset Global Investments Co. Ltd.
Gartmore Investment Management Limited	The Joseph Rowntree Charitable Trust	Mistra, The Swedish Foundation for Strategic Environmental Research
Generali Deutschland Holding AG	Jubitz Family Foundation	Mitsubishi UFJ Financial Group (MUFG)
Generation Investment Management	Jupiter Asset Management	Mitsui Sumitomo Insurance Co.,Ltd
Genus Capital Management	K&H Investment Fund Management / K&H Befektetési Alapkezelő Zrt	Mizuho Financial Group, Inc.
Gjensidige Forsikring	KB Asset Management	Mn Services
GLG Partners LP	KB Financial Group	Monega Kapitalanlagegesellschaft mbH
GLS Gemeinschaftsbank eG, Germany	KB Kookmin Bank	Morgan Stanley
Goldman Sachs & Co.	KBC Asset Management NV	Motor Trades Association of Australia Superannuation Fund Pty Ltd
GOOD GROWTH INSTITUT für globale Vermögensentwicklung mbH	KCPS and Company	Mutual Insurance Company Pension-Fennia
Governance for Owners LLP	KDB Asset Management Co., Ltd.	Natcan Investment Management
Government Employees Pension Fund (“GEPF”), Republic of South Africa	Kennedy Associates Real Estate Counsel, LP	The Nathan Cummings Foundation
Green Cay Asset Management	KEPLER-FONDS Kapitalanlagegesellschaft m. b. H.	National Australia Bank Limited
Green Century Funds	KfW Bankengruppe	National Bank of Canada
Groupe Investissement Responsable Inc.	KLP Insurance	National Bank of Kuwait
GROUPE OFI AM	Korea Investment & Trust Management	National Grid Electricity Group of the Electricity Supply Pension Scheme
Grupo Banco Popular	Korea Technology Finance Corporation	National Grid UK Pension Scheme
Gruppo Monte Paschi	KPA Pension	National Pensions Reserve Fund of Ireland
Guardian Ethical Management Inc	Kyobo AXA Investment Managers	National Union of Public and General Employees (NUPGE)
Guardians of New Zealand Superannuation	La Banque Postale Asset Management	Natixis
Guosen Securities Co., LTD.	La Financiere Responsable	Nedbank Limited
Hang Seng Bank	Landsorganisationen i Sverige	Needmor Fund
HANSAINVEST Hanseatische Investment GmbH	LBBW - Landesbank Baden-Württemberg	Nelson Capital Management, LLC
Harbourmaster Capital	LBBW Asset Management Investmentgesellschaft mbH	Nest Sammelstiftung
Harrington Investments, Inc	LD Lonmodtagernes Dyrtdidsfond	Neuberger Berman
The Hartford Financial Services Group, Inc.	Legal & General Group plc	New Amsterdam Partners LLC
Hastings Funds Management Limited	Legg Mason, Inc.	New Jersey Division of Investment
Hazel Capital LLP	Lend Lease Investment Management	New Mexico State Treasurer
HDFC Bank Ltd	Light Green Advisors, LLC	New York City Employees Retirement System
Health Super Fund	Living Planet Fund Management Company S.A.	New York City Teachers Retirement System
	Local Authority Pension Fund Forum	New York State Common Retirement Fund (NYSCRF)
		Newton Investment Management Limited
		NFU Mutual Insurance Society

NGS Super	Rei Super	Sumitomo Trust & Banking
NH-CA Asset Management	Resona Bank, Limited	Sun Life Financial Inc.
Nikko Asset Management Co., Ltd.	Reynders McVeigh Capital Management	Superfund Asset Management GmbH
Nissay Asset Management Corporation	Rhode Island General Treasurer	Sustainable Capital
Nord/LB Asset Management Holding GmbH	RLAM	Svenska Kyrkan, Church of Sweden
Nordea Investment Management	Robeco	Swedbank Ab (publ)
Norfolk Pension Fund	Robert Brooke Zevin Associates, Inc	Swiss Reinsurance Company
Norges Bank Investment Management (NBIM)	Rockefeller & Co. SRI Group	Swisscanto Holding AG
Norinchukin Zenkyouren Asset Management Co., Ltd	Rose Foundation for Communities and the Environment	Syntrus Achmea Asset Management
North Carolina State Treasurer	Royal Bank of Canada	TD Asset Management Inc. TDAM USA Inc.
Northern Ireland Local Government Officers' Superannuation Committee (NILGOSC)	RREEF Investment GmbH	Teachers Insurance and Annuity Association – College Retirement Equities Fund (TIAA-CREF)
Northern Trust	The Russell Family Foundation	Tempis Capital Management Co., Ltd.
Northwest and Ethical Investments LP	Russell Investments	Terra Forvaltning AS
Oddo & Cie	SAM Group	TFL Pension Fund
Old Mutual plc	Sampension KP Livsforsikring A/S	The University of Edinburgh Endowment Fund
OMERS Administration Corporation	Samsung Fire & Marine Insurance	Third Swedish National Pension Fund (AP3)
Ontario Teachers' Pension Plan	Samsung Life Insurance	Threadneedle Asset Management
OP Fund Management Company Ltd	Sanlam Investment Management	Tokio Marine & Nichido Fire Insurance Co., Ltd.
Oppenheim Fonds Trust GmbH	Santa Fé Portfolios Ltda	Toronto Atmospheric Fund
Opplysningsvesenets fond (The Norwegian Church Endowment)	Sauren Finanzdienstleistungen GmbH & Co. KG	The Travelers Companies, Inc.
OPSEU Pension Trust	Schroders	Trillium Asset Management Corporation
Oregon State Treasurer	Scotiabank	TRIODOS BANK
Orion Asset Management LLC	Scottish Widows Investment Partnership	TrygVesta
OTP Fund Management Plc.	SEB	UBS AG
Pax World Funds	SEB Asset Management AG	Unibanco Asset Management
Pensioenfonds Vervoer	Second Swedish National Pension Fund (AP2)	UniCredit Group
Pension Fund for Danish Lawyers and Economists	Seligson & Co Fund Management Plc	Union Asset Management Holding AG
The Pension Plan For Employees of the Public Service Alliance of Canada	Sentinel Investments	Unipension
Pension Protection Fund	SERPROS Fundo Multipatrocinado	UNISON staff pension scheme
Pensionsmyndigheten	Service Employees International Union Benefit Funds	UniSuper
PETROS - The Fundação Petrobras de Seguridade Social	Seventh Swedish National Pension Fund (AP7)	Unitarian Universalist Association
PFA Pension	The Shiga Bank, Ltd.	The United Church of Canada - General Council
PGGM	Shinhan Bank	United Methodist Church General Board of Pension and Health Benefits
Phillips, Hager & North Investment Management Ltd.	Shinhan BNP Paribas Investment Trust Management Co., Ltd	United Nations Foundation
PhiTrust Active Investors	Shinkin Asset Management Co., Ltd	Universities Superannuation Scheme (USS)
Pictet Asset Management SA	Siemens Kapitalanlagegesellschaft mbH	Vancity Group of Companies
The Pinch Group	Signet Capital Management Ltd	Veritas Investment Trust GmbH
Pioneer Alapkezelő Zrt.	SIRA Asset Management	Vermont State Treasurer
PKA	SMBC Friend Securities Co., LTD	VicSuper Pty Ltd
Pluris Sustainable Investments SA	Smith Pierce, LLC	Victorian Funds Management Corporation
Pohjola Asset Management Ltd	SNS Asset Management	VietNam Holding Ltd.
Portfolio 21 Investments	Social(k)	Visão Prev Sociedade de Previdencia Complementar
Portfolio Partners	Sociedade Ibgeana de Assistência e Seguridade (SIAS)	Waikato Community Trust Inc
Porto Seguro S.A.	Solaris Investment Management Limited	Walden Asset Management, a division of Boston Trust and Investment Management Company
PRECE Previdência Complementar	Sompo Japan Insurance Inc.	WARBURG - HENDERSON Kapitalanlagegesellschaft für Immobilien mbH
The Presbyterian Church in Canada	Sopher Investment Management	WARBURG INVEST KAPITALANLAGEGESELLSCHAFT MBH
PREVI Caixa de Previdência dos Funcionários do Banco do Brasil	SPF Beheer bv	The Wellcome Trust
PREVIG Sociedade de Previdência Complementar	Sprucegrove Investment Management Ltd	Wells Fargo
Principle Capital Partners	Standard Bank Group	West Yorkshire Pension Fund
Psagot Investment House Ltd	Standard Chartered PLC	WestLB Mellon Asset Management Kapitalanlagegesellschaft mbH (WMAM)
PSP Investments	Standard Life Investments	The Westpac Group
Q Capital Partners Co. Ltd	State Street Corporation	Winslow Management Company
QBE Insurance Group Limited	Statewide	Woori Bank
Rabobank	Storebrand ASA	YES BANK Limited
Raiffeisen Schweiz	Strathclyde Pension Fund	York University Pension Fund
Railpen Investments	Stratus Group	Youville Provident Fund Inc.
Rathbones / Rathbone Greenbank Investments	Sumitomo Mitsui Banking Corporation	Zegora Investment Management
RBS Group	Sumitomo Mitsui Card Company, Limited	Zurich Cantonal Bank
Real Grandeza Fundação de Previdência e Assistência Social	Sumitomo Mitsui Finance & Leasing Co., Ltd	
	Sumitomo Mitsui Financial Group	



**Commentary for the Carbon Disclosure Project:**  
*Robert B. Zoellick, President, World Bank Group*

I am very pleased to introduce the Carbon Disclosure Project's 2010 Global 500 Report. Climate change is one of the major challenges of our time. Developing countries and their populations are especially vulnerable to the effects of climate change on their livelihoods, environment, and biodiversity. Development and climate change are inextricably linked. Accordingly, initiatives to analyze, manage, and adapt to climate change are one of the main pillars of the World Bank Group's mission.

Successfully tackling climate change requires action on many fronts and the involvement of both the public and private sectors. The private sector is already contributing investments in renewable energy and energy efficiency. As the private sector is called upon to scale up these investments, accurate information about company behavior — such as their climate risks and liabilities — has become more essential. We need the benchmarking tools provided by the Carbon Disclosure Project (CDP) and other actors to guide investment choices, increase investment flows, and align corporate incentives for low-carbon growth.

The Global 500 reporting companies surveyed for this report account for 11% of global direct GHG emissions. A growing number of the reporting companies are located in emerging and developing economies, where the biggest increase in emissions over the next years will take place. The increasing participation of developing country companies in the CDP is a positive and essential development in our quest to curb global emissions. Companies that analyze their emission profiles will be in a better position to manage them and adapt to new circumstances. Through disclosure, emerging market investors will be able to better assess the strengths and weaknesses of the companies in which they seek to invest.

This year the International Finance Corporation (IFC), the Bank Group's private sector arm, teamed up with Standard & Poor's to develop the first Global Emerging Market Carbon Efficient Index. This new index gives carbon-efficient companies greater access to long-term investors and underscores the importance of accurate and timely emissions reporting. Transparency is essential to building a sound and sustainable development process and enhancing good governance, accountability, and competitiveness. The World Bank Group wants to lead by example. In 2009 we began to report our own global corporate emissions to the CDP. The core goal of our corporate greening program is to reduce our environmental footprint by managing carbon emissions, energy use, procurement, waste, and water associated with our day-to-day activities. We are pleased to report that we are carbon neutral in our internal business operations.

The countries of the world need to speed up their transformation to a low-carbon economy. Partnerships that identify the climate vulnerabilities of our economies are playing a key role in our shift to a new model. Carbon accounting and disclosure are powerful tools that enable us to improve climate risk management and promote sustainable economic growth.

A handwritten signature in black ink that reads "Robert B. Zoellick". The signature is written in a cursive style with a large, looping 'Z' at the end.

## Foreword

*Paul Dickinson, CEO Carbon Disclosure Project*

This year began with the clouds of global recession hanging over the economy. It was also tainted with heavy disappointment at the failure to reach agreement on a global deal at Copenhagen and smears against climate change science. Many asked us whether this would decrease corporate engagement in climate change. Would companies abandon commitments to carbon reporting and management to focus instead on shorter term wins? Would companies throw out their carbon reduction plans due to the lack of a global framework? The answers to these questions lie in CDP's 2010 dataset and I am delighted to say, that the answer is a categorical 'no'.

Fuelled by opportunities to reduce energy costs, secure energy supply, protect the business from climate change risk and damaged reputation, generate revenue and remain competitive, carbon management continues to rise as a strategic priority for many businesses. Companies globally are seizing commercial carbon opportunities, often acting ahead of any policy requirements. More companies than ever before are reporting through CDP and measuring and reporting their emissions.

The demand for primary corporate climate change data is growing too – it is now accessed through **Bloomberg** and **Google Finance**. It is also used by an increasing number of investment research providers and sell-side brokers to generate new insights into the impacts of climate change on global industry and to highlight the associated opportunities. The demand for analysis of CDP data is also growing and this year we launch a new performance score, which identifies companies who exhibit leadership in managing their carbon risks and exposures. We have also launched two index products based on CDP data – the **FTSE CDP Carbon Strategy Index series** and the **Markit Carbon Disclosure Leadership Index**. These products give investors exposure to companies better positioned in the transition to a low carbon economy.

CDP has set three key focus areas for the immediate future. One is to work with companies and the users of our data to continue improving quality and comparability. Data that supports action is central to fulfilling CDP's mission, to accelerate solutions to climate change by putting relevant information at the heart of business, policy and investment decisions. We have given greater weighting within our scoring to verification this year and advancing reporting consistency is crucial. In addition, we are also launching a new package, Reporter Services, exclusively for responding companies, to help them develop their carbon management strategies through increased data quality, deeper analysis and the sharing of best practice.

Never forget that climate change is a global problem and we need a global solution. That is why our second key focus is on globalizing CDP's programs in all major economies in the coming years. Beyond CDP's Investor Program, which sits at the heart of CDP, we intend to grow our Supply Chain and Public Procurement programs, as well as CDP Water Disclosure, to ensure that we maximize the fulfilment of CDP's mission.

Our third key focus is mitigation and emissions reduction. The number of companies within the Global 500 (FTSE Global Equity Series) reporting reduction targets has already increased fourfold since CDP's first reporting year. But this is just the first step. We know that we can do far more to help advance emissions reductions and are fully committed to working with investors and industry to achieve this.

It is through partnerships that we can achieve the largest impact. We're delighted to be working with our global advisor, **PricewaterhouseCoopers** and our global sponsor **Bank of America Merrill Lynch**, as well as **Accenture**, **Microsoft** and **SAP** to accelerate our mission and highlight the huge opportunities for business to capitalize on the transition to a low carbon economy.

These are exciting times for business, with significant changes coming to the way we produce and consume energy. New power from low or zero emissions sources is an urgent priority for climate change policy that simultaneously helps deliver energy security. New technologies, such as smart grids, electric vehicles, alternative fuel sources and advanced telepresence videoconferencing, are showing a clear case for business growth with reduced emissions. The opportunities for business are enormous – it is through the intelligent investment of capital in the right solutions, identified by the business community, that we will achieve the low carbon future we need.



Paul Dickinson  
CEO, Carbon Disclosure Project

# Executive Summary

## Introduction

In the 10 years since the launch of the Carbon Disclosure Project (CDP), the quality and quantity of reporting on climate change have increased dramatically. CDP is now looking beyond disclosure to identify the companies that are taking active steps toward a low-carbon economy. This year, CDP (backed by 534 institutional investors representing more than US\$64 trillion of assets under management) sent questionnaires to more than 4,700 of the world's largest corporations, requesting information on greenhouse gas (GHG) emissions, on the significant risks and opportunities related to climate change and on the actions companies are taking to manage those risks and opportunities. The results are published in more than 20 geographies around the world and are freely available at [www.cdproject.net](http://www.cdproject.net).

In 2010, the CDP asked the world's 500 largest public companies in the FTSE Global Equity Index Series (Global 500) more directly than ever to demonstrate that they are taking action on climate change. This report,<sup>1</sup> prepared by CDP's global adviser, PricewaterhouseCoopers (PwC), analyzes the responses from those corporations. For this report particular attention was paid to ways that organizations in every sector are capitalizing on commercial opportunities—in particular, those presented by emissions reductions. Readers will learn how the Global 500 companies are driving innovation and taking action to embrace a low-carbon future.

## Highlights from 2010 disclosures

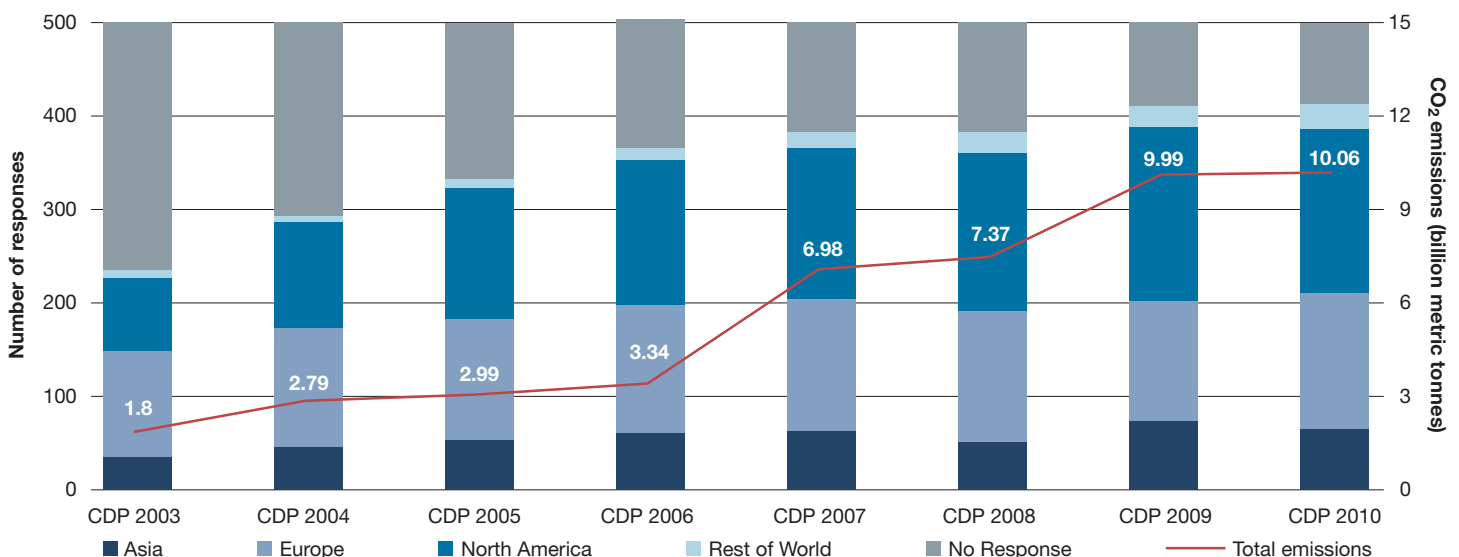
**In 2010 the response rate for the Global 500 remains high at 82% (410),** which is impressive against a backdrop of economic downturn and

policy uncertainty. It sends a strong message from the world's largest companies that climate change remains on the business agenda and requires attention and allocation of appropriate resource.

Global emissions fell 1% last year on the back of the economic downturn, but **Scope 1 emissions reported by the Global 500 rose to 3.4 billion metric tonnes CO<sub>2</sub>-e, now accounting for 11%<sup>2</sup> of total global emissions.** Given there was no shift towards intensive<sup>3</sup> companies in the respondents in 2010 this increase reflects a greater focus on carbon management and reporting by the Global 500.

- <sup>1</sup> Please see the Important Notice on the back cover of this report regarding its content and use.
- <sup>2</sup> Based on total global emissions in 2009 of 31.3 billion tonnes t CO<sub>2</sub>-e. Source: NEAA [www.pbl.nl/en/publications/2010/No-growth-in-total-global-CO2-emissions-in-2009.html](http://www.pbl.nl/en/publications/2010/No-growth-in-total-global-CO2-emissions-in-2009.html)
- <sup>3</sup> 'Intensive companies' represents Energy, Industrials, Materials and Utilities in this instance.
- <sup>4</sup> Scope 1, 2 and 3 emissions are terms used under the GHG Protocol. For a full description see: GHG Protocol: A Corporate Accounting and Reporting Standard, available at [www.ghgprotocol.org/files/ghg-protocol-revised.pdf](http://www.ghgprotocol.org/files/ghg-protocol-revised.pdf)

**Figure 1: Total response rates and disclosed emissions over time by geography (All Scopes<sup>4</sup> CDP 2003 to CDP 2010)**





**The CDP responses of 2010 suggest there has been a shift in emphasis from an approach dominated by risk, to one that now also embraces opportunity.**

In 2010, nearly nine in every ten respondents identified ‘significant opportunities’ arising from climate change, whether as a result of regulatory, physical, or commercial drivers. By contrast just under eight in every ten respondents reported at least one significant risk.

The most obvious example of new commercial opportunities lies in the development and marketing of ‘green’ products, but ‘climate resilience’ is also starting to emerge as a driver for business growth. Customers increasingly value companies who can offer a secure and reliable source of supply, which means companies should ensure their supply chain is equally climate resilient.

**48% (187) of respondents are embedding climate change and carbon management into group business strategy.** Though this is nearly half of all respondents it is short of the 85% (328) of companies who report having board-level or other executive level responsibility for climate change.

The responses show two main areas of focus for action: the energy efficiency of operations, no doubt encouraged by cost saving potential, and **28% (120) of respondents report developing products and services which enable customers to cut their emissions.**

A number of significant challenges still remain. Last year many companies expressed the hope that a global agreement in Copenhagen would provide increased certainty around medium and long-term emissions reduction targets, which would facilitate investment decision-making. Prior to Copenhagen, business had been pressing governments to send clear, long-term signals about the pace and direction of climate policy. The Copenhagen Accord, although a

political commitment, is still some way from a legally-binding, global agreement that would set the world firmly on the path to a low carbon economy.

In this context it is interesting that the number of companies engaging with policymakers on climate change issues increased relative to the responses of 2009 (80% from 71% respectively). However, just over half (56% or 175) of these companies clearly show the engagement is used to encourage policy makers to implement, or strengthen, regulation that drives mitigation or adaptation to a changing climate. Business has a key role to play in the race for green job creation and green growth that is now central to climate policy.

Business is anticipating some progress in Cancun later this year, and in Cape Town at the end of 2011. Increasingly however, companies realize that waiting for greater clarity from policymakers may mean missing the boat on new opportunities, or letting competitors get ahead. Leaders across all sectors are already taking action to seize opportunities and mitigate climate change, and others will follow.

### **The Carbon Performance Score continues to develop**

**This year, CDP recognizes 48 Global 500 companies in its new Carbon Performance Leadership Index (CPLI).** As the level of understanding of climate change and its challenges for business has improved, so have the number of companies taking positive action to mitigate the risks of climate change. The CPLI recognizes companies that are taking action to reduce global emissions by listing the companies with the highest performance scores. These carbon performance leaders have demonstrated commitment to strategy, governance, stakeholder communications and most of all, emissions reduction in their CDP responses.

“CDP’s data set is a unique and valuable tool in quantifying and comparing companies’ carbon emissions management and strategies. CDP’s work is a key part of GS SUSTAIN’s analysis of the direct and indirect impacts of climate change on corporate performance, which we believe will become increasingly important to investment analysis.”

**Andrew Howard,  
GS SUSTAIN  
Goldman Sachs Group**

## The Carbon Disclosure Score remains as important as ever

The CPLI complements the existing Carbon Disclosure Leadership Index (CDLI), which assesses the quality and completeness of companies' reporting and carbon management. All carbon performance and disclosure scores can be found in the Appendix.

### Notably the average disclosure score of the CDLI rose to 91 in 2010 from 84 in 2009 highlighting that the leaders continue to raise the bar.

Table 1 shows the companies with the highest Carbon Disclosure Scores in the Global 500 that also score in the top category for performance. As would be expected, most of the companies that lead on disclosure are also in the top band for performance. Interestingly seven of the ten industry sectors are represented in this small group highlighting that companies are taking leading action on disclosure and performance across many areas of business. All ten sectors were represented by leading companies in both the CPLI and CDLI.

Only 18% (90) of the Global 500 did not respond to the 2010 CDP request, consistent with last year. As in prior years, a disproportionate number of non-respondents were from key geographies, including China (8 of 12 did not respond), Hong Kong (12 of 16), Mexico (3 of 4), Poland (3 of 3), Russia (8 of 10) and Singapore (4 of 5). The largest non-respondents by market capitalization are listed in Table 2.

**Table 1: Top companies recognized on both the Carbon Disclosure Leadership Index and the Carbon Performance Leadership Index**

Company	Carbon disclosure score	Carbon performance score	Sector
Siemens	98	A	Industrials
Deutsche Post	97	A	Industrials
BASF	96	A	Materials
Bayer	95	A	Health Care
Samsung Electronics	95	A	Information Technology
Lafarge	94	A	Materials
News Corporation	94	A	Consumer Discretionary
Philips Electronics	94	A	Industrials
National Australia Bank	93	A	Financials
Praxair	93	A	Materials
Reckitt Benckiser	93	A	Consumer Staples
Royal Bank of Scotland Group	93	A	Financials

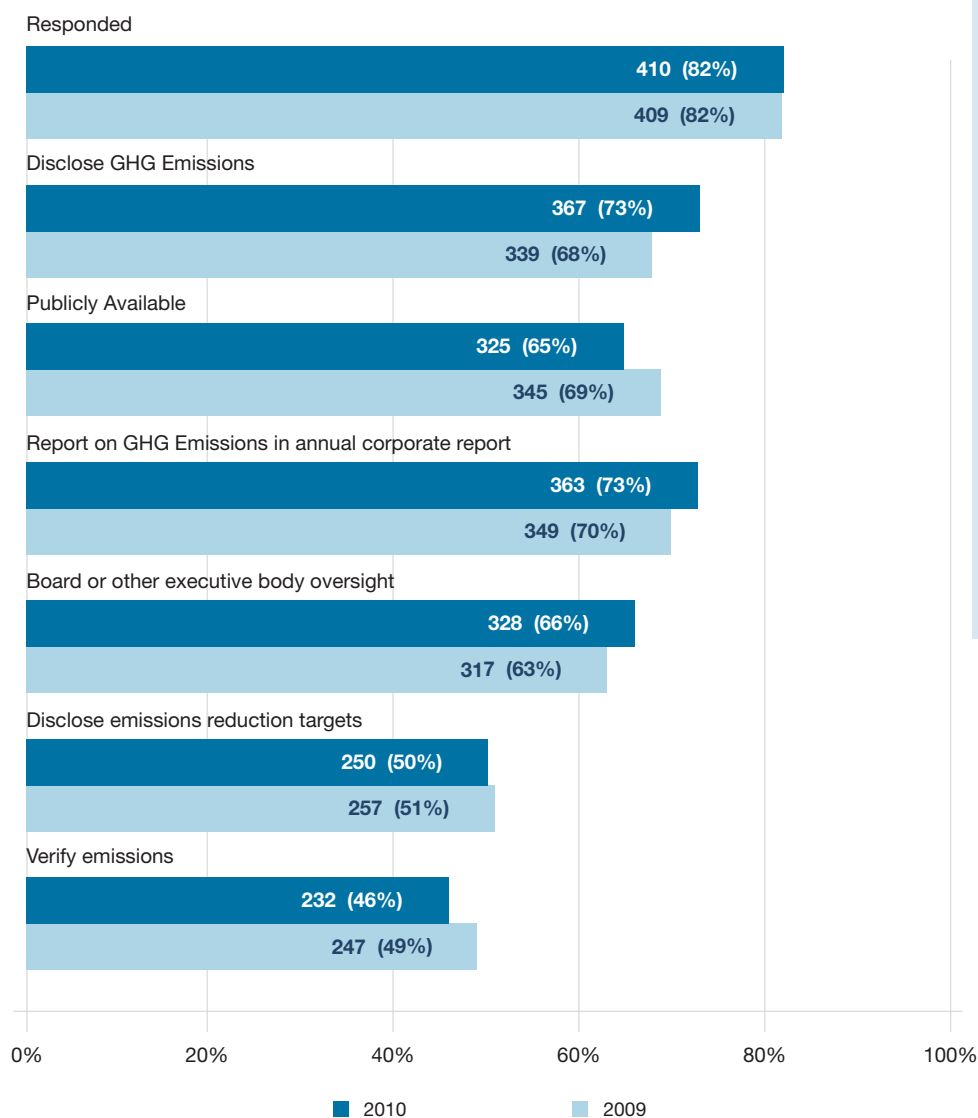
The companies highlighted are those that have been in the Global 500 CDLI for three consecutive years<sup>5</sup>.

**Table 2: Largest non-responders by market capitalization<sup>6</sup>**

Company	Sector
China Mobile	Telecommunications
Gazprom	Energy
Berkshire Hathaway	Financials
Rosneft	Energy
Reliance Industries	Energy
Amazon.com	Consumer Discretionary
Sberbank	Financials
Teva Pharmaceutical Industries	Health Care
América Móvil	Telecommunications
Alcon	Health Care

<sup>5</sup> 2008, 2009 and 2010

<sup>6</sup> Based on market capitalization data available from Thomson Reuters as of May 15, 2010

**Figure 2: Year-over-year disclosure levels<sup>7</sup>**

“We are using extensively the Carbon Disclosure Project to fine tune our CO<sub>2</sub> analysis on the companies we cover. The Carbon Disclosure Leadership Index is a very important metric: the more transparent the company, the less risk to discover additional CO<sub>2</sub> emissions (and costs) moving forward.”

Thierry Bros,  
Senior Gas Equity Analyst  
**Société Générale**

Figure 2 highlights that **the number of companies disclosing emissions has increased by 6% (21) from 2009.**

The level of disclosure of emissions reduction targets has remained consistent to 2009 (65% (250) of respondents relative to 67% (257) in 2009).

<sup>7</sup> 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 10, 2010. Six companies (including Akbank, Arcelor Mittal, Mitsubishi Electric, Nissan Motor, Nomura Holdings, and Shin Etsu Chemical) submitted their response on time and are listed as AQ for 2010, but could not be included in the analysis of this report due to technical issues.

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# 1

## The 2010 Carbon Disclosure Scores

### The 2010 CDP Scores - Introduction to the CDLI and CPLI

When the Carbon Disclosure Project first challenged the world's largest companies to measure and report their carbon emissions and integrate the long term cost of climate change into their risk assessments, few companies had the level of understanding or the quality of responses they have today. As the level of understanding of the issues has improved, so have the number of companies taking positive action to mitigate the risks of climate change.

In recognition of this trend, CDP has introduced a performance component that complements its Carbon Disclosure Scores system to recognize companies that are taking action.

The Carbon Disclosure Scores assess companies on the quality and completeness of their disclosures and considers factors including:

- Clear consideration of business-specific risks and potential opportunities related to climate change

- Good internal data management practices for understanding GHG emissions, including energy use

It is important to note that the carbon disclosure score is not a metric of a company's performance in relation to climate change management, because the score does not make any judgment about mitigation actions. A company's disclosure score is based solely on the information disclosed in the company's CDP response.

### What does a CDP carbon disclosure score represent?

The carbon disclosure score is normalized to a 100-point scale. Generally, companies scoring within a particular range suggest levels of commitment to, and experience of, carbon disclosure. Indicative descriptions of these levels are provided below for guidance only; investors should read individual company responses to understand the context for each business.

#### High (>70)

A higher score typically indicates one or more of the following.

- Strong understanding and management of company-specific exposure to climate-related risks and opportunities
- Strategic focus and commitment to understanding the business issues related to climate change, emanating from the top of the organization
- Ability to measure and manage the company's carbon footprint
- Regular and relevant disclosure to key corporate stakeholders

#### Midrange (50–70)

A midrange score typically indicates one or more of the following.

- Growing maturity in understanding and managing company-specific risks and potential opportunities related to climate change
- Good evidence of ability to measure and manage carbon footprint across global operations
- Commitment to the importance of transparency

#### Low (<50)

A lower score typically indicates one or more of the following.

- Relatively new commitment to understanding climate-related issues
- Limited ability to disclose known risks or potential opportunities related to climate change
- Limited ability to measure and manage the company's carbon footprint
- Possible reluctance to disclose certain requested information due to commercial sensitivity

**The Carbon Disclosure Leadership Index**

(see Table 3) includes the companies with the highest Carbon Disclosure Scores and provides a valuable perspective on the range and quality of responses to CDP's questionnaire. This year's CDLI includes the top-scoring 10% of the Global 500: 51 companies in total<sup>8</sup>. To qualify for this leadership index, a company must respond to CDP using the Online Response System prior to the deadline and make its response available for public use. Five companies (10%) of the 2009 CDLI were no longer in the Global 500 when the population was cut for the 2010 report.

The companies highlighted in **orange** are those that have moved into the Global 500 CDLI this year from being outside it last year.

The companies highlighted in **green** are those that have been in the Global 500 CDLI for three consecutive years<sup>9</sup>.

**Table 3: The Global 500 CDLI 2010**

Sector	Company	Disclosure score
Consumer Discretionary	News Corporation	94
	TJX Companies	94
	Panasonic	90
	Johnson Controls	87
Consumer Staples	Reckitt Benckiser	93
	Nestle	92
	Tesco	92
	Colgate-Palmolive	91
	Kraft Foods	91
	Woolworths	91
	Philip Morris International	87
Energy	Wal-Mart Stores	86
	Hess	90
	Royal Dutch Shell	89
Financials	Repsol YPF	88
	Royal Bank of Scotland Group	93
	National Australia Bank	93
	Commonwealth Bank of Australia	92
	HSBC Holdings	92
	Wells Fargo & Company	89
	Barclays	87
Health Care	Westpac Banking	86
	Bayer	95
	Novo Nordisk	89
Industrials	GlaxoSmithKline	88
	Siemens	98
	Deutsche Post	97
	Philips Electronics	94
	CSX	91
	Saint-Gobain	89
	Boeing	86
Information Technology	Samsung Electronics	95
	Cisco Systems	92
	Nokia Group	91
	Accenture	91
Materials	BASF	96
	Lafarge	94
	Praxair	93
	POSCO	90
	Rio Tinto	89
	Anglo Platinum	89
	VALE	88
	Newmont Mining	87
	Telecommunications	Telefónica
BT Group	89	
Utilities	Centrica	92
	Exelon	90
	Scottish & Southern Energy	90
	PG&E	90
	EDP - Energias de Portugal	90
	National Grid	87

<sup>8</sup> 51 companies are included in the CDLI due to more than one company having the lowest score in this group.

<sup>9</sup> 2008, 2009 and 2010

**Overall the average CDLI score in 2010 is 91, up from 84 in 2009, indicating the leaders continue to raise the bar for carbon disclosure.**

There are three particular areas where companies in the CDLI outperform the Global 500 overall:

- CDLI companies scored 10 percentage points higher than the overall average within the governance section.
- Good governance tends to be a driver for understanding possible risks and opportunities: CDLI companies scored 29 and 35

percentage points higher than the overall average within the risks and opportunity sections respectively. This indicates a better understanding among CDLI companies of the potential impacts and value drivers of climate change.

- All companies in the CDLI disclose some Scope 3 emissions, with emissions from business travel still featuring most frequently (88%). By comparison, 29% of non-CDLI companies made no disclosure of Scope 3 emissions, with companies most commonly citing lack of information.

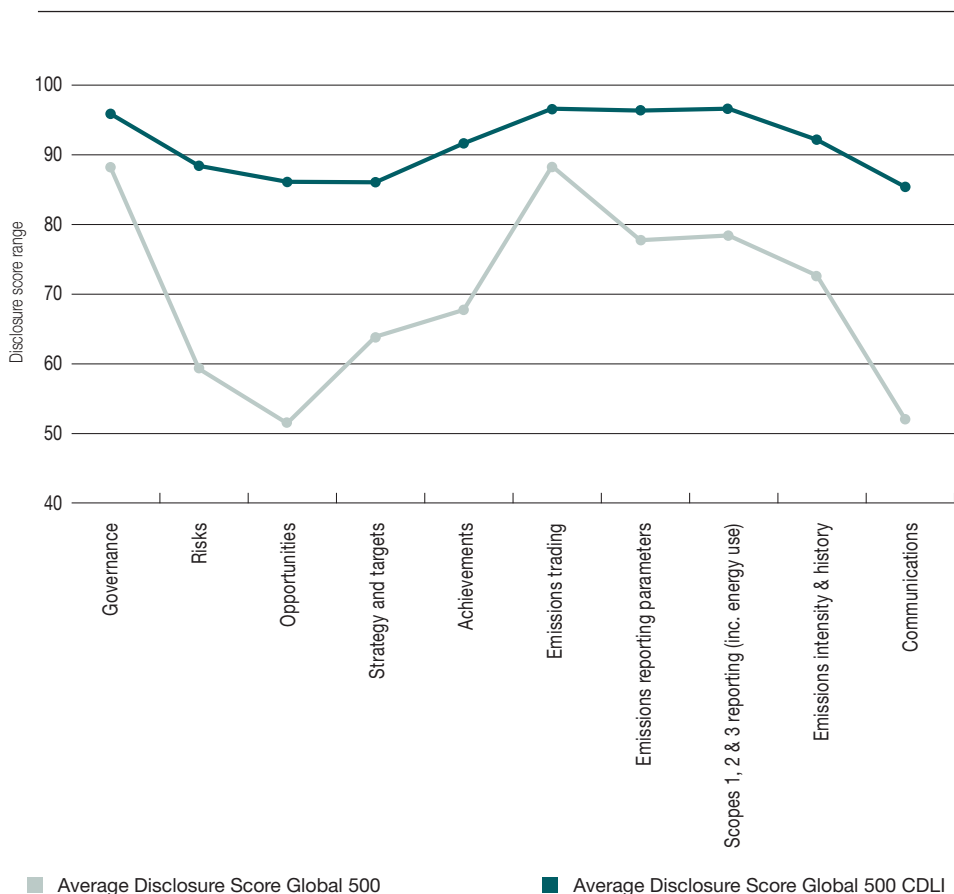
**Sector representation**

All 10 industry sectors are represented in the CDLI highlighting clear and in some cases, consistent, leading companies across industries. In both 2008 and 2009 the Financial sector held the largest representation in the CDLI, however in 2010 it is the Materials and Consumer Staples sectors, both with 8 companies.

**Geographic representation**

Companies in the CDLI show a wider geographical distribution in 2010 than in the prior year. 16 countries are represented, compared with just eight in 2009. This encouraging trend reflects the spread of best practice internationally, although the churn in companies in the Global 500 index due to the economic downturn may also be a factor.

**Figure 3: Score breakdown – overall versus CDLI averages**



It is worth highlighting the highest scoring companies in countries not covered by the regulatory driver of the Kyoto Protocol. The five highest scoring companies based in non-Annex 1 countries are: **Samsung Electronics** (South Korea), **POSCO** (South Korea), **Anglo Platinum** (South Africa), **VALE** (Brazil) and **Sasol** (South Africa).

# 2

## The 2010 Carbon Performance Scores

“CDP enables collaboration with other investors to obtain valuable climate change information and to emphasize to companies the importance of climate change to investors. We use the CDP data as a basis for our dialogue with companies aiming for better conduct in environmental issues.”

Erik Breen,  
Head of Responsible  
Investing  
Robeco

In the 10 years that CDP has monitored disclosure practices, corporate activity has advanced to a stage where analysis of performance can aid investors who want to identify leading companies in carbon management. In 2009, CDP piloted a performance component in an effort to respond to investor requests for this analysis.

This year, all companies with sufficient disclosure received a performance score; the qualifying threshold to receive a performance score was a minimum disclosure score of 50. Disclosure scores lower than 50 do not necessarily indicate poor performance; rather, they indicate insufficient information to evaluate performance.

While performance scoring is an instructive exercise for all stakeholders, CDP recognizes that this is a process that will evolve over time. CDP recommends investors review individual company disclosures<sup>10</sup> in addition to performance rankings in order to gain the most comprehensive understanding of company performance. A listing of companies and their scores is included in the Appendix. Companies that did not qualify for a performance score appear in the Appendix with a dash in the Carbon Performance Score column.

While clear indicators of good performance emerge from the results, there are several factors to consider when evaluating where a company is ranked in comparison to its peers.

- Carbon performance ranking is based solely on information disclosed in a company's CDP response. Any additional negative or positive actions that are not disclosed in a company's CDP

response are not considered in the application of the performance score methodology.

- CDP performance results should be considered in conjunction with other carbon metrics to provide a more comprehensive picture of a company's performance on mitigating climate change.
- The relative weighting of performance indicators within the scoring methodology does not take into consideration certain sector-specific issues and challenges, such as customer expectations, regulatory requirements, or cost of doing business.

It's important for investors to keep in mind that the CDP carbon performance score is not:

- 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 or to climate mitigation; the score simply recognizes evidence of forward action.
- A comprehensive measure of how green or low carbon a company is but, rather, an indicator of the extent to which a company is taking action to manage its impacts on, and from, climate change.

<sup>10</sup> Available at [www.cdproject.net](http://www.cdproject.net)



Carbon performance scores form the basis for determining the CPLI (see Table 4)—the companies with the highest performance scores. As with the CDLI, a company’s response must be publicly available to be eligible for the CPLI.

The descriptions on the following page explain the four performance bands that were used for categorizing respondents. They provide an illustrative example of the potential profiles of the companies that may be included in each band. The key indicators that identify the characteristics of 2010’s performance

leaders are outlined in Figure 4 below. Investors are also encouraged to read individual company responses in order to gain further context for a company’s carbon performance score. Care should be taken when comparing performance across companies.

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

**Figure 4: What are the characteristics of carbon performance leadership in 2010?**

<b>Strategy</b>	<ul style="list-style-type: none"> <li>• Integrate climate change risks and opportunities into overall company strategy</li> <li>• Establish GHG emissions reduction target</li> <li>• Engage with policy makers on climate policy</li> </ul>
<b>Governance</b>	<ul style="list-style-type: none"> <li>• Identify formal accountability for oversight and management</li> <li>• Establish incentives for climate change related activities</li> </ul>
<b>Stakeholder communications</b>	<ul style="list-style-type: none"> <li>• Communicate in mainstream reporting or other regulatory filings</li> <li>• Verify emissions data through an external third party</li> </ul>
<b>Achievements</b>	<ul style="list-style-type: none"> <li>• Implement energy or emissions reduction initiatives</li> <li>• Achieve significant emissions reduction</li> <li>• Capitalize on opportunities as a source of business value</li> </ul>

“The availability of comparable data on environmental and social issues has long bedeviled the investment industry. The CDP now provides a foundation for sophisticated analysis of carbon-related risks and opportunities. By enabling direct comparisons between companies, improvements in the quality of company strategies and performance in this area will undoubtedly accelerate.”

**Seb Beloe,**  
 Head of SRI Research,  
 Sustainable &  
 Responsible Investment  
**Henderson Global  
 Investors**

## The CDP 2010 carbon performance bands

The carbon performance score is given as a banded score. Indicative descriptions of the bands follow and are for guidance only. The drivers of any individual company score may vary across a number of different indicators. As such, investors should read individual company responses to understand the context for each business.

### **Band A (Leading): Companies with carbon performance scores greater than 80**

Companies in this band excel for overall performance—relative to those in other bands—indicating both higher degrees of maturity in their climate change initiatives and achievement of their objectives. Companies in this band demonstrate the following characteristics:

- **Strategy:** With the highest number of significant risks and opportunities identified, companies in this group were the most likely to demonstrate integration of their climate-related priorities into their overall business strategy. They frequently disclose targets aligned with those ambitions and emission reduction initiatives.
- **Governance:** These companies demonstrate the most structured and most defined climate change management mechanisms by frequently reporting formalized accountability, incentives and oversight from the board or executive level.

- **Stakeholder communications:** These companies also recognize the importance of providing transparent and quality disclosure for their stakeholders by taking steps to verify data and report climate-related information in their external communications.
- **Achievements:** In support of their commitment to reduce emissions, these companies disclose the highest number of actions taken to reduce their emissions, and most report success in achieving emissions reduction.

### **Band B (Fast following): Companies with carbon performance scores of 51 to 80**

Companies in band B also recognize the importance of climate change and are quickly following in the footsteps of the leading companies. While the majority of companies in band B note climate change as a priority, their responses indicate that actions and initiatives may not be as established or as well integrated into the companies' overall structures and strategies compared with those in band A. However, there may be a broad spectrum of performance maturity within this tier, because some seemingly higher-performing companies in this band may have provided limited information for certain key performance areas, thereby constraining the ability to fully evaluate them.

### **Band C (On the journey): Companies with carbon performance scores of 21 to 50**

Companies in band C indicate some activity on climate change. Most companies in this group identify at least one risk from climate change and accordingly exercise some degree of oversight to monitor the progress of their climate change initiatives. The levels of integration and maturity of those initiatives tend to vary according to disclosure of emissions reduction targets, implementation of emissions reduction activities, employee incentives and verification of emissions information. This group represents a variety of companies, including those that are new to taking action on climate change, those that do not have climate change objectives as strategic actions for the organization, and those that do not believe the agenda to be a shorter-term priority.

### **Band D (Just starting): Companies with carbon performance scores of 20 or below**

Companies in this band recognize the importance of participating in CDP, and they have therefore achieved reasonable levels of disclosure (i.e., a carbon disclosure score >50). However, they have disclosed limited evidence of actions taken on mitigation or adaptation. Companies in this band may include those that believe that issues regarding climate change are not relevant to them and those that are just beginning to take action on climate change. As such, no further assertions can be made about their performance.

### The Carbon Performance Leadership Index (CPLI)

shown in Table 4 includes all the companies in the Global 500 which made their CDP responses public and achieved a Carbon Performance Score in Band A. The table is sorted alphabetically within each sector. Overall 310 Global 500 companies (76% of respondents) received a performance score.

Utilities has the highest proportion of respondents in the CPLI with 24% (7) though Financials has the most companies overall with 13 (14%). Also notable is that Europe has the highest proportion of its respondents in the CPLI at 21% (29), relative to 6% (11) for North America. Both of these facts suggest that policy and regulation is a key driver for carbon performance.

Disclosure and performance are measures of good carbon management and transparency, and positive action on mitigation respectively. Within any business the two areas are strongly linked and complement each other. In 2010 the Utilities sector scored highest on both scales followed by Materials, also for both. Interestingly the Energy sector, also carbon-intensive, scored lowest on both scales. Also, it is notable that 69% (33) of the CPLI were listed in the CDLI.

**Table 4: The Global 500 CPLI 2010<sup>11</sup>**

Sector	Company	Also in the CDLI?
Consumer Discretionary	BMW Bayerische Motoren Werke	
	Johnson Controls	✓
	News Corporation	✓
	Panasonic	✓
	Toyota Motor	
Consumer Staples	Nestle	✓
	Reckitt Benckiser	✓
	Tesco	✓
Energy	Eni	
	Repsol YPF	✓
	Royal Dutch Shell	✓
Financials	Ace	
	Australia and New Zealand Banking Group	
	Bank of America Merrill Lynch	
	Bank of Montreal	
	Barclays	✓
	Commonwealth Bank of Australia	✓
	HSBC Holdings	✓
	Munich Re	
	National Australia Bank	✓
	Royal Bank of Scotland Group	✓
	Swiss Re	
	UBS	
	Westpac Banking	✓
Health Care	Bayer	✓
	Novo Nordisk	✓
Industrials	CSX	✓
	Deutsche Post	✓
	Philips Electronics	✓
	Siemens	✓
Information Technology	Cisco Systems	✓
	Nokia Group	✓
	Samsung Electronics	✓
Materials	BASF	✓
	Lafarge	✓
	POSCO	✓
	Praxair	✓
Telecommunications	BT Group	✓
	Deutsche Telekom	
	Royal KPN	
	Telefónica	✓
Utilities	E.ON AG	
	Exelon	✓
	Iberdrola	
	National Grid	✓
	PG&E	✓
	Public Service Enterprise Group	
	Scottish & Southern Energy	✓

<sup>11</sup> The CPLI contains all companies with public responses which achieved the performance band 'A'.

# 3

## A Profile of Carbon Performance Leadership

The following sections outline key characteristics of the 2010 carbon performance leaders from the Global 500 – opportunity, action, strategy, governance and communication. They also provide context by highlighting key findings and trends across all Global 500 respondents.

Figure 5 provides a detailed view of the key indicators used to identify performance leaders – strategy, achievements, governance and communication – which we will look into in this chapter. These compare the Global 500 CPLI with the wider group of responding companies. The gap between the two groups is notable, highlighting the continued advancement of the leaders and the potential of the pack to be left behind.

### Leadership in commercial opportunities

The 2010 responses suggest that there has been a shift in emphasis from an approach dominated by risk, to one that also embraces potential opportunities. 86%<sup>12</sup> of respondents state that they see ‘significant opportunities’ arising from climate change, whether regulatory, physical, or commercial, and many companies are investing cash and resources into this pathway. For instance:

*“At Airbus and Eurocopter, 80% of the R&T budgets are dedicated for green growth.”*  
**EADS**

Emerging cap-and-trade schemes provide a good example of a risk which creates short-term competitive

disadvantages but which also presents an opportunity for innovation and cost savings in the longer term. If and when trading schemes are extended or new schemes introduced, companies with experience and knowledge of carbon trading may realize a competitive advantage.

### Maximizing business resilience

Another arena of competitive differentiation identified by a number of companies is business resilience. Businesses that can adapt best to the challenge of climate change will be best placed to continue providing reliable and relevant services in an environment of physical, regulatory, and commercial change. This is demonstrated by the responses of **Anglo American**, **Centrica** and **Nestle** among others:

**Figure 5: Key indicators of performance – leaders versus all respondents**

Performance scorecard	Global 500 CPLI	Global 500 respondents
Sample size	48	386
<b>Strategy</b>		
Integration of climate change risks or opportunities into overall business strategy	85%	48%
Implementation of emissions reduction targets	96%	65%
<b>Governance</b>		
Board or executive level oversight	100%	85%
Monetary incentives	92%	49%
<b>Stakeholder communications</b>		
Verification of emissions	100%	61%
Disclosure of climate change information in mainstream filings or other external communications	92%	60%
<b>Achievements</b>		
Progress toward meeting targets	94%	55%
Significant emissions reduction in the past year	52%	19%

<sup>12</sup> It should be noted that last year’s questionnaire asked respondents to disclose whether they perceived opportunities associated with climate change (94%, 361, did); this year the question has been refined to ask respondents instead to identify ‘significant’ climate change opportunities.

*“Developing robust adaptation strategies based on our work with Imperial College will enable Anglo American to guard our operations, and the value chains, environments, and communities linked to those operations, against the negative impacts of climate change. More than simply managing risk, this is an opportunity for us to be more competitive than our peers who often operate in the same region and face the same risks. It is also an opportunity for us to work towards our vision of becoming a partner of choice...”*

**Anglo American**

*“By managing climate risk and weather risk effectively, we will be better positioned than our competitors, which provides us with commercial opportunities. For example, in the event of a severe weather event, if our facilities and processes are better protected, we are likely to be able to resume any interruption in supplies more quickly than our competitors.”*

**Centrica**

*“Factories may not be favourably located if the comparative advantage of dairy production shifts to new geographies... Producers may adapt by diversifying their range of crops and switching to more drought resistant crops.”*

**Nestle**

**Products and services**

Many companies had already identified real commercial opportunities from climate change, and those who have invested in this area appear to be starting to see returns. Businesses with ‘greener’ or ‘cleaner’ operations or products are creating competitive advantage by anticipating new regulations and standards, responding to changing customer attitudes and enhancing their overall reputation. For example A.P.Moller – Maersk states:

*“We anticipate that the ship-owners that can offer the most energy efficient or low carbon fleet will have a competitive advantage in the future.”*

**A.P. Moller – Maersk**

In industries such as food retail, ‘green’ products are still seen to be a niche market, whereas in IT and automotive, they are rapidly becoming mainstream, and even a key purchasing criterion for customers. Car manufacturers are striving for efficiencies across the value chain:

*“Every new product generation has to be more resource-efficient and has to cause less emissions than its predecessor ... not only the fuel consumption but a whole lifecycle based calculation taking all resources into account.”*

**Volkswagen**

*“TI’s power management devices and microcontrollers reduce energy consumption in electronics, industrial equipment, appliances, PCs, and automobiles, and enable smarter homes/buildings and electricity grids.”*

**Texas Instruments**

As well as low-carbon products, we are seeing more evidence of climate related services in many sectors. For example, financial services businesses are offering consultancy advice on managing the impact of carbon pricing, and a range of products to help with structuring, hedging, and trading.

*“The Commonwealth Bank’s Indigenous Banking Team has a relationship with the Bank’s dedicated Carbon Solutions team, which develops solutions and provides management advice to assist clients with current and future opportunities. This has the potential to benefit the Bank by opening new markets, and exposing us to investment opportunities that might otherwise remain unknown.”*

**Commonwealth Bank of Australia**

*“[American Express has] a green travel reporting and consulting program for Business Travel clients that tracks activities, and measures environmental impacts.”*

**American Express**

**“Siemens sees opportunities in climate change, has taken appropriate actions in its business strategy and adheres to the guiding principle of sustainability. We identified market-specific forward-looking trends and drew the strategic consequences early on.”**

**Siemens**

**“By 2020 we intend to improve our CO<sub>2</sub> efficiency including subcontracted transportation by 30% compared with 2007. By 2012 we want to have improved our own CO<sub>2</sub> efficiency by 10%. Besides working to tackle climate change, this will also reduce energy costs and boost our own and our customers competitiveness in a sustainable manner.”**

**Deutsche Post**

A key step towards capitalizing on climate change opportunities is to understand and reduce the carbon footprint of the business and its value chain. For example, this can lead to more attractive products with lower embedded carbon as well as reputational benefits.

### Leadership in achievements

Across different sectors there are understandably variations in the level of ambition and the focus of effort and resources across operations, the supply chain, or in products and services. A selection of targets is shown in Table 5 along with the actions and governance systems being implemented to achieve them. These examples provide different perspectives across different sectors.

#### Energy

Energy efficiency is a particular focus in 2010, driven partly by pressure on costs in the downturn, and partly by concern that energy prices may continue to rise, not least because of the impact of carbon pricing mechanisms. Investments in energy efficiency are attractive as they are often a lowest cost option with a rapid payback, as well as helping to reduce emissions.

*“In 2010 BT Group implemented projects which save more than 100 GWh of energy and 41,800 tonnes of CO<sub>2</sub> a year, by finding ways to reduce*

*energy use at no cost; for example by switching off legacy network equipment, server virtualisation, reducing office space, conducting building energy audits, and raising employee awareness about energy efficiency.”*

#### BT Group

For many sectors, energy is a major cost to the business, either directly or through the supply chain. This may provide a significant incentive to work more collaboratively with suppliers to reduce energy use – and the associated carbon emissions – in the supply chain.

*“We recently announced an aggressive goal to eliminate 20 million metric tons of GHG’s from our global supply chain by the end of 2015 (Supply Chain GHG Innovation Program). This represents one and a half times our anticipated cumulative carbon footprint growth over the next five years and is equal to what 3.8 million cars emit in GHG’s during one year.”*

#### Wal-Mart Stores

#### Customers

A number of companies are now taking a more active role in helping their customers or end consumers to reduce their own carbon emissions. This highlights the potential influence corporations have to drive change. 31% (120) of respondents already show evidence of having goods or services that are designed specifically to do this.

*“Fiat was the world’s first automaker to involve drivers in a virtuous process to reduce fuel consumption and emissions... To use eco:Drive, just insert a USB pen into the Blue & Me™ port and drive normally... Once home, simply transfer the information onto a PC where the eco:Drive software will provide an eco:Index score that shows how efficiently you drive. It will also offer tips on how to adapt your driving style to reduce CO<sub>2</sub> emissions and economise on fuel. A little over a year after its launch, it has already made it possible to save more than 2,500 tonnes of CO<sub>2</sub>.”*

#### Fiat

*“This year, we updated Sky boxes to switch to standby mode after four hours of inactivity during the day, in addition to turning themselves off at night. All our customers have had this software downloaded to their boxes during the year. In total this is expected to cut our customers’ energy bills by an estimated £20 million a year; and will reduce carbon dioxide emissions by around 124,000 tonnes, more than our own net carbon footprint.”*

#### British Sky Broadcasting

The CDP responses highlight significant actions taken to reduce emissions across all sectors. However to capitalize on opportunities that climate change presents, companies need to integrate action on climate change into core business strategy.

**Table 5: Examples of targets and actions**

Company	Target	Actions	Governance system
Arriva (Industrials)	To reduce like-for-like greenhouse gas footprint by 15% measured from 2006-2012. Greenhouse gas emissions are normalized against group revenue.	A combination of improved operating techniques, the use of alternative fuels and alternative vehicle technologies.	Corporate Responsibility Committee appointed by the Group Executive Committee
National Grid (Utilities)	Target was first introduced as 60% reduction against baseline in 2006 and subsequently increased to 80% reduction in February 2008.	Improved building utilization, improvements in efficiency of generation facilities, infrastructure improvements	Committee appointed by the Board
Novo Nordisk (Health Care)	Voluntary 10% absolute reduction target for emissions.  In light of the projected significant growth in production capacity, the absolute target represents a reduction of approximately 65%.	Energy efficiency programs, purchase of renewable energy from offshore wind sources and introduction of biomass boilers.	Committee appointed by the Board

## **PwC commentary: Linking climate change to corporate strategy**

*Alan McGill, Partner, PricewaterhouseCoopers UK*

I am pleased to see that CDP's request for information this year has for the first time included a question that deals with the issue of how carbon strategy is integrated within the wider corporate strategy of the business. This continues the move of carbon into the mainstream of business consciousness. Boards of Directors will now have to actively consider how this issue impacts the business model of the company; how it manages, monitors and adapts the business model; and what oversight and accountability it will provide.

In the last 12 months we have seen regulators looking more closely at the implications of climate change for business, reflecting the strategic repositioning of the issue inside many organizations. For example the U.S. Securities and Exchange Commission (SEC) has made it clear that management teams have a duty to disclose the risks for the company from potential climate change; in the UK the Department for the Environment, Food and Rural Affairs (DEFRA) is contemplating whether mandatory carbon reporting should be brought into mainstream annual filings from April 2012; and in South Africa under King III the integration of social, environmental and economic issues are now a requirement to be considered by the main Board in the preparation of the company mainstream annual report and accounts.

Investors are also increasingly asking companies to identify carbon risks in financial disclosures, and see carbon performance as an indicator of the quality of management, corporate governance and strategic thinking. Business partners too are increasingly imposing carbon criteria, while pressure is also increasing from both consumers and employees. But the focus shouldn't be just on risks. Climate change presents new opportunities that can drive growth and enhanced profitability. Climate risks and opportunities and the associated actions, all have a role in enhancing corporate strategy and the climate innovation that can and will be played out in businesses.

Reporting on a company's climate change strategy, therefore, and how it is delivering against it, are going to become far more critical as we move forward. Those companies that can provide clarity of strategic thought around the carbon and climate change agenda and can support their actions with hard data on performance will benefit from air time, trust and competitive advantage within their industry.

Does your company's strategic thinking fully embrace the risks and opportunities that flow from a real understanding of carbon and climate change within the company? A good carbon strategy will link and connect all aspects of the business, and provide an umbrella for delivering a unique change program capable of delivering not only cost reductions, but just as importantly new commercial opportunities. Done well, it also creates a positive force for changing the culture and driving the value of the business.

There will be winners and losers in the corporate world from climate change. The ability of the market to identify these depends on the quality of information and reporting it is provided. This year's responses to CDP have shown that many companies are on this journey; reporting externally on an embedded strategy and that they are really starting to drive commercial opportunity and performance through climate innovation.

“BNY Mellon is extremely pleased to see the response rates and quality of the disclosures continuing to significantly improve. The value of this information is becoming much richer as the quality and completeness increases.”

John T. Buckley,  
Managing Director,  
Corporate Social  
Responsibility  
BNY Mellon

### Leadership in business strategy

This year’s responses suggest that companies are increasingly including aspects of climate change in their core business processes, in particular in risk assessments, research and development and mainstream reporting. The 2010 questionnaire for the first time asked companies whether climate change – actions, risks and opportunities – is integrated within their overall business strategy. Just under half (48% or 187) of respondents are demonstrating this. The focus of others appears to be more operational than strategic.

The importance of a strategic approach will clearly depend on how material climate change is to the business, whether in terms of activities, location, or risks. For example, climate change is likely to have a more significant impact on profitability for companies in the insurance, power production, aviation, and agriculture sectors, than it does in a sector like advertising.

Here are some examples of how climate change is linking with strategy in some forward-thinking companies:

#### **HSBC - Valuing the opportunity**

*“HSBC’s Group strategy is influenced by our insights into global economic trends, which are driven by shifts in society and the natural environment. Climate change touches each of these aspects. HSBC therefore considers climate change to be a long term influencing factor in the development of Group Strategy. This is both because of the potential for climate change to disrupt our own activities and those of our clients, and also because the shift to a low carbon economy requires finance which presents an opportunity for HSBC.”*

#### **Bayer - Investment in new technologies and product innovation**

*“Climate change plays an important role within Bayer’s business strategy, focusing on investing in growth areas*

*and innovative technologies. Thus, in 2007, Bayer launched its Climate Program [which] has accelerated ongoing initiatives and boosted our focus on climate change. It is promoting further innovation within the focus of our business strategy to exploit climate-related opportunities (e.g. with EUR 1 billion for climate-related R&D and projects between 2008 and 2010).”*

#### **E.ON - Focusing investment where the market opportunities lie**

*“The future holds two main sources of opportunities: Climate Protection and European Market Integration. And that’s where we’re focusing a significant share of our resources... By 2030, we plan for renewables to be our single biggest energy source and account for about one third of our total generation capacity.”*

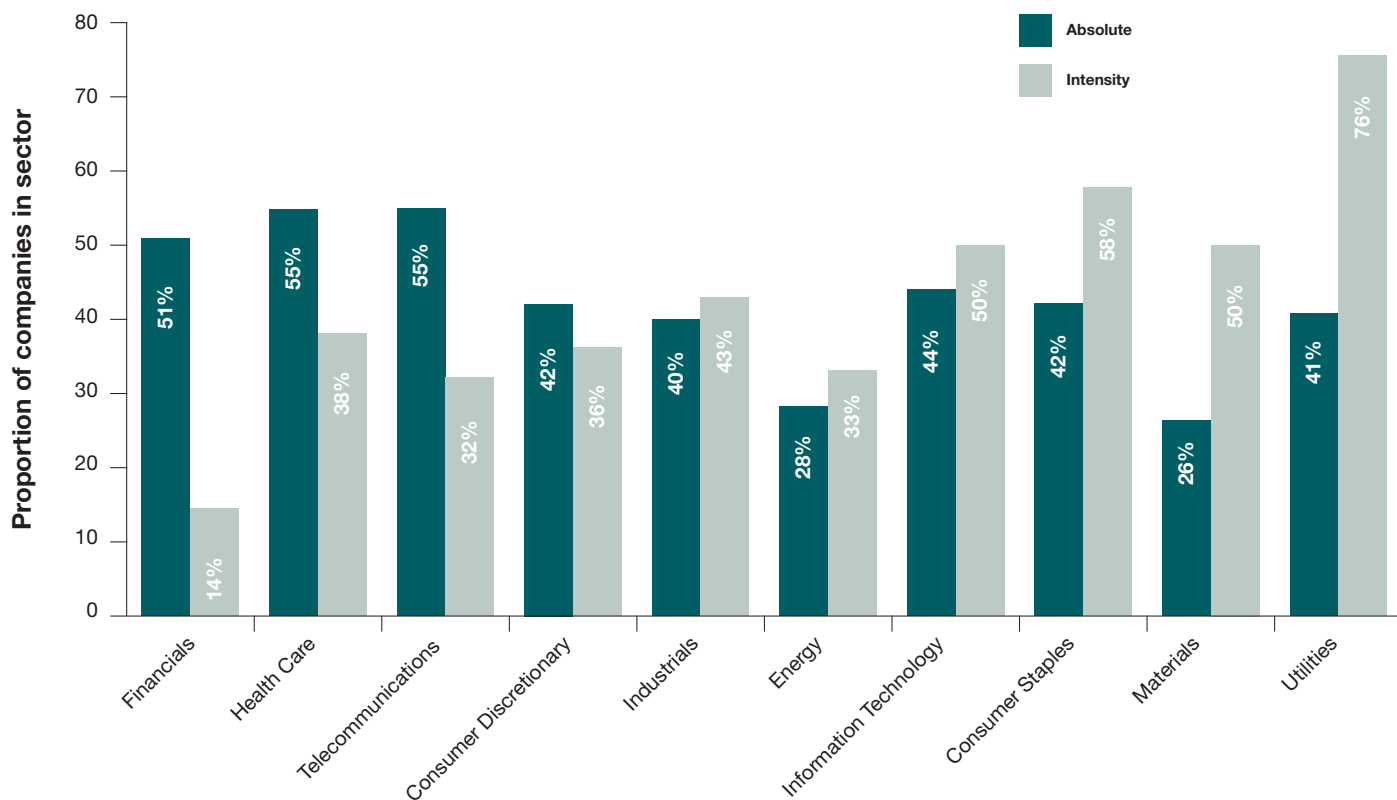
#### **Emission reduction targets**

The level of disclosure of emissions reduction targets in 2010 is consistent with the prior year (65% (250) relative to 67% (257) in 2009). There is now a general recognition of the need for absolute targets, rather than solely intensity targets, to drive reductions in carbon output. Several responses, including **A.P. Moller-Maersk** in shipping, **Caterpillar** in manufacturing and **Holcim** in cement, state the economic downturn as a driver for significant reduction in emissions. Any absolute targets by companies may need to be reassessed for this accordingly.

Figure 6 is ordered by the proportion to which the sector has more companies with absolute targets than intensity. It is notable that the highest direct emitting sectors have proportionally more intensity targets. This may suggest that we have a long way to go before we see any real de-linking of emissions and economic growth. Overall, 43% (166) of responding companies stated they have absolute emissions targets<sup>13</sup>, relative to 39% (150) with intensity targets.

<sup>13</sup> Absolute targets in this analysis include rolling and stabilization targets. They may also be at a sub-divisional rather than group level.



**Figure 6: Proportion of companies disclosing absolute and intensity targets by sector**

It is difficult to comment in isolation on individual targets. However, the overall level of corporate ambition does not yet appear commensurate with the goal of limiting the global temperature rise to two degrees Celsius.

**BT Group** aligns its carbon financial intensity metric to the two degrees Celsius goal by establishing a 'Carbon Stabilisation Intensity' (CSI) target, but this is not common practice:

*"The CSI approach associates an organisation's total carbon emissions with the contribution its profits and employment costs make to the world economy. Targets for reducing the company's carbon intensity (CO<sub>2</sub>e per unit of contribution to GDP) are then set in line with world targets to reduce CO<sub>2</sub>e emissions per unit of GDP."*

**BT Group**

### Engaging policymakers

In 2010 the number of responding companies engaging actively with policymakers is up to 80% (310) from 71% (292) in 2009. This is likely to reflect the public-private sector discussions in the lead up to Copenhagen. Just over half (56% or 175) of these companies clearly indicate that they are doing this to encourage mitigation or adaptation.

*"To raise awareness of how urgent the climate change issue is, Allianz is working closely with key opinion leaders in the regulatory, public and private sectors. We also want to help these three sectors work together effectively in channelling international financial investment towards mitigating and adapting to climate change."*

**Allianz**

There are a number of partnerships and trade groups that work with policymakers for a group of companies or a whole sector, and this can often be a more effective way of getting the voice of business heard.

*"We are a member of the Digital Energy Solutions Campaign (DESC), a coalition of technology companies and environmental nongovernmental organizations (NGOs), working to educate policymakers about the role of ICT in our shift to a low-carbon economy."*

**AT&T**

### Leadership in governance

This year's responses highlight a range of devices for embedding climate change in strategy and operations and for driving change throughout an organization. For many companies though, the key areas are an integrated strategy, monetary incentives and having the highest level of responsibility for climate change at board or other executive level.

Figure 7 highlights the proportion of companies who have used these approaches. Many companies have a framework for governance, but are not yet articulating a comprehensive strategy. Investors should view companies applying all three as exhibiting best practice in corporate governance on climate change, though this was the case for only 30% (115) of 2010 respondents.

Responses suggest that climate change is becoming an increasingly important issue for the senior management of the world's largest public companies. **The proportion of respondents with responsibility for climate change at board or other executive level responsibility increased to 85% (328) this year, up from 77% (317) in CDP 2009.** The most significant increase was seen in the Telecommunications sector.

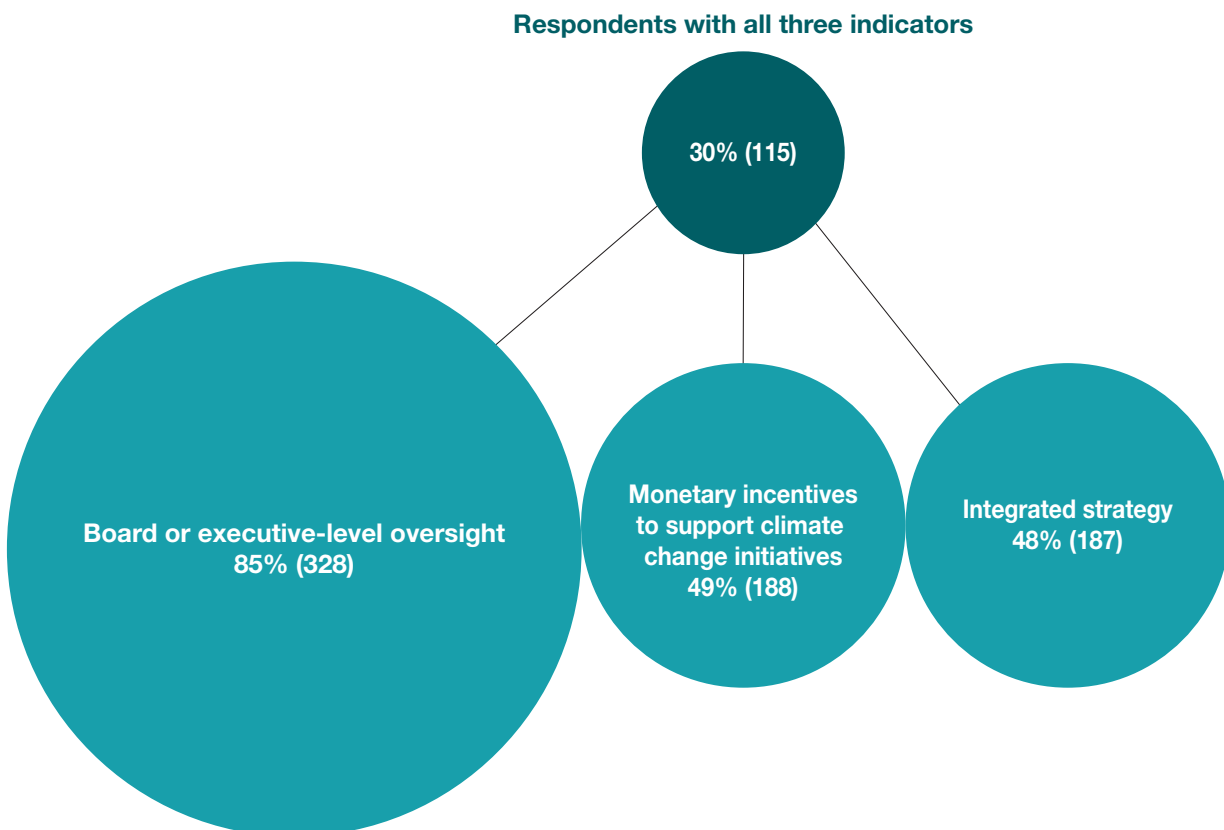
### Incentivization

The use of incentives to encourage emission reductions has also increased. While 85% (328) of respondents may have board or other executive level responsibility, only 64% (248) have a process for incentivizing emissions reductions within their organization, which is up from 54% (207) in CDP 2009. 49% (188) of respondents

have monetary incentives, but only 29% (112) demonstrate formal mechanisms for reporting to the board or other executive level on climate change at least quarterly. There may be a number of factors at play here: some procedures may be in the development phase, some may not be part of the formal reporting process, and some companies may find it hard to separate out actions and progress in this area from the broader umbrella category of 'Health, Safety and the Environment'.

*"Senior managers receive bonuses on a sliding scale based on performance against KPIs set out in our annual business plan. This business plan contains KPIs on each of the three key aspects of our climate change strategy: direct emissions reduction, supply chain emissions reduction and reducing consumer emissions."*  
**Tesco**

Figure 7: Proportion of Global 500 respondents displaying key performance indicator



## Leadership in communications

### 61% of respondents now have their emissions data verified in some form (100% in the CPLI).

Verification can mean a vastly different thing from one company to another. It may refer to a rigorous and comprehensive examination that is carefully attested to, or simply a series of interviews and review of high-level analytics.

A key strategic priority of CDP is to enhance the quality and reliability of the data reported by companies so that investors and other stakeholders can use it for analyses. To do this CDP encourages the application of robust and credible assurance and verification procedures to the collection and presentation of carbon emissions and energy use data, as well as to the actions being taken to reduce them.

### External reporting

Companies face increasing pressure from stakeholders to disclose their carbon numbers. Investors want to know that the information can be properly validated, whether explicitly by third-party assurance, or through disclosure of comparable key performance indicators used by management. Where necessary, investors will 'triangulate' (compare and contrast) the information they can find, to get comfort that they seem reasonable.

Building trust with investors on this subject is a process that has a number of stages and can take companies several years. But the initial motivation is clear: undergoing third-party scrutiny gives an organization valuable knowledge about its challenges and opportunities, which can pay off both in efficiencies and in greater strategic value. This is true even where the results gleaned are only used internally.

Another key area identified by responses on communication is reputation, especially in relation to customers and employees. Samsung has quantified its exposure to the loss of brand value in this regard:

*"A 1% decrease in brand value of the company due to unfavourable evaluations from investment organizations and/or NGOs, caused by insufficient climate change response is equivalent to losing about 200 million USD."*

#### **Samsung Electronics**

Many respondents describe the action they are taking to protect or enhance their reputations and the value of their brands, by demonstrating a commitment to tackling and mitigating climate change. Financial services, in particular, has seen its collective reputation fall recently as a result of the credit crunch, and many companies in this sector see action on climate change as a potential way to build customer and public trust. In general, however, responses suggest it is regulation that drives change, rather than consumer demand – though this may also be a result of the impact of the recession as consumers focus first on price. That said, if regulatory pressure results in more consumer uptake of products, such as low-energy light-bulbs, then the two aims are ultimately aligned.

Companies are beginning to show a deep understanding of the value of good communication. When done well it can encourage good practice internally and reassure key stakeholders externally, in particular those investors who value robust and reliable data. Ultimately all the areas we have touched on so far – strategy, governance and communications – can be used to drive action and leading carbon performance.

**"In today's economic environment, climate data is often inadequate and not uniformly delivered. We want to support CDP's efforts at providing comprehensive and consistent climate emissions data to the investment community. CDP data is an essential input into our corporate governance engagement efforts that work to enhance shareholder value."**

**Jack Ehnes, CEO  
CalSTRS**

# 4

# Geographical Perspectives

The Global 500 population continues to be largely biased towards certain geographies, notably North America which accounts for 39% of the total sample and 42% (173) of the responses received in 2010 (2009: 45% (186)). There is also little change in the representation of other territories. However, the international nature of the companies and their responses once again reflect a wide variety of perspectives, challenges and initiatives.

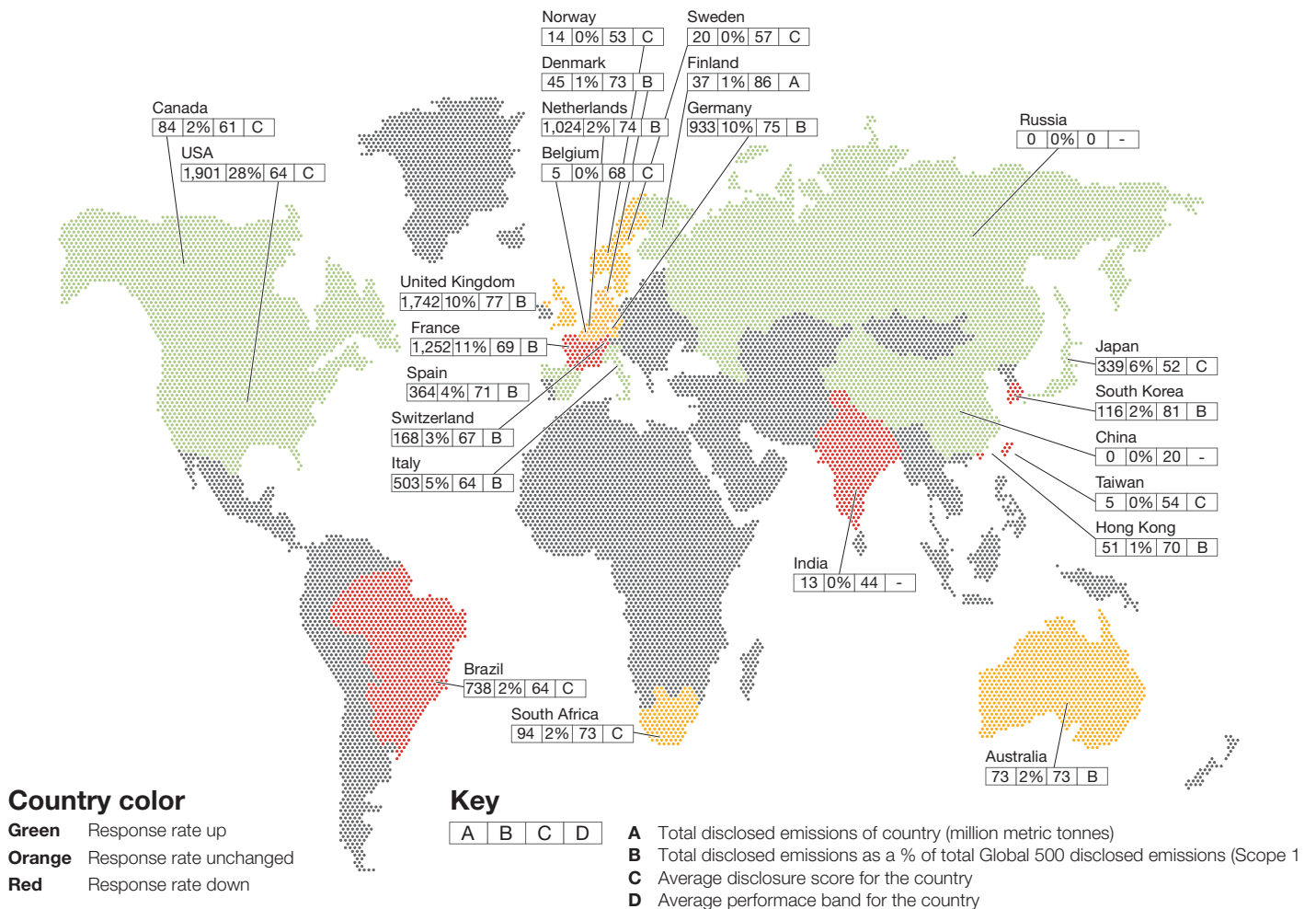
In 2010 ten countries with two or more responding companies achieved an impressive 100% response rate: Australia, Belgium, Denmark, Finland, Germany, Italy, Netherlands, Norway, South Africa, and Sweden. Only one of the 32 UK companies did not respond this year (**Eurasian Natural Resources**), giving a 97% response rate. The number of respondents from the BRIC<sup>14</sup> countries has increased to 23 from 17 in 2009, though the

response rate remains largely consistent (42% relative to 44% in 2009). The map in Figure 8 highlights that European respondents remain ahead of those from other parts of the world in disclosure and performance.

Figure 8 highlights key statistics for each country represented by more than one company in the Global 500, including emissions, scores and response rates.

14 Brazil, Russia, India and China

**Figure 8: Key facts by geography**



# 5

## Global key trends<sup>14</sup> summary

This table outlines some of the key findings from CDP 2010 by geography or industry data-set.<sup>15</sup>

Sample: geography / number of companies	% of sample answering CDP 2010 <sup>16</sup>	% of responders with Board or other executive level responsibility for climate change	% of responders with management incentives	% of responders with emissions reduction targets	% of responders taking actions to reduce emissions	% of responders indicating that their products and services help third parties to avoid GHG emissions	% of responders seeing regulatory risks	% of responders seeing regulatory opportunities	% of responders engaging policymakers on climate issues to encourage mitigation or adaptation	% of responders reporting the company's response to climate change in mainstream annual filings / CSR reports	% of responders independently verifying any portion of Scope 1 emissions data	% of responders independently verifying any portion of Scope 2 emissions data
Asia ex-JICK 135 <sup>17</sup>	32	80	46	56	73	41	65	70	60	80	48	40
Australia 200	47	83	46	40	73	55	69	76	73	88	43	43
US Bonds 180	82	78	62	70	87	55	60	71	88	91	54	46
Brazil 80	72	68	29	23	57	55	61	78	66	74	28	28
Canada 200	46	72	41	32	63	47	51	65	64	73	28	21
Central & Eastern Europe 100	12	85	57	57	71	43	71	100	85	57	57	57
China 100	11	57	57	57	57	43	71	71	57	86	43	29
Emerging Markets 800	29	77	50	47	74	49	70	84	68	78	39	37
Europe 300	84	94	62	79	87	71	74	87	77	97	68	60
FTSE All-World 800	74	83	61	70	77	65	69	78	85	92	57	49
France 250	30	89	48	69	79	60	72	86	62	93	57	46
Germany 200	61	70	33	47	50	57	43	68	42	66	35	23
Global 500	82	84	63	70	87	66	66	77	80	93	59	52
Global Electric Utilities 250	48	86	47	60	72	75	85	90	88	92	58	31
Global Transport 100	25	88	60	89	72	52	88	72	64	84	44	36
India 200	21	88	33	33	69	39	39	90	63	64	25	19
Ireland 40	50	80	26	60	80	33	66	53	46	80	33	33
Italy 60	35	66	57	76	85	71	76	80	66	90	62	62
Japan 500	41	89	61	91	84	73	81	81	60	94	28	28
Korea 200	42	60	52	46	61	44	70	73	50	56	29	29
Latin America 50	54	72	25	15	50	53	68	84	40	78	31	32
Netherlands 50	66	93	63	70	76	71	66	86	70	97	61	65
New Zealand 50	46	78	21	39	39	16	60	43	60	52	22	22
Nordic 200	65	88	44	69	77	67	68	79	62	93	45	37
Portugal 40	30	83	41	41	83	83	91	91	58	91	67	67
Russia 50	8	50	0	100	50	50	50	50	0	50	0	0
South Africa 100	74	95	50	42	82	42	77	85	80	92	39	41
Spain 85	40	87	53	71	84	72	81	84	62	97	69	63
Switzerland 100	58	77	26	52	59	56	38	63	42	82	40	35
Turkey 50	24	75	87	37	62	0	88	72	37	50	25	25
UK FTSE 600	51	96	49	61	73	48	68	74	59	87	41	39
US S&P 500	70	67	48	53	77	53	50	61	63	80	35	29

<sup>14</sup> The key trends table provides a snapshot of response trends based on headline data. The numbers in this table are based on the online responses submitted to CDP as of 14 July 2010. They may therefore differ from numbers in the rest of the report which are based on the number of companies which responded by the deadline.

<sup>15</sup> For some samples the number of companies included in the table may be lower than the original sample size due to takeovers, mergers, and acquisitions.

<sup>16</sup> Includes offline responses to the CDP 2010 questionnaire & indirect answers submitted by parent companies. All other key trend indicators are based on direct & online company responses only.

<sup>17</sup> Asia excluding Japan, India, China and Korea.

# 6

## Industry Perspectives: Sector Snapshots

The nature and scale of climate-related risks and opportunities are often best compared on a sector-by-sector basis. While all responding companies were scored based on the same criteria, an examination of the data by sector can provide insight into the challenges each sector faces in implementing its carbon reduction programs. At the same time, it may be instructive to look across sectors in order to see the full picture of activity — particularly as it relates to CDP's performance scores.

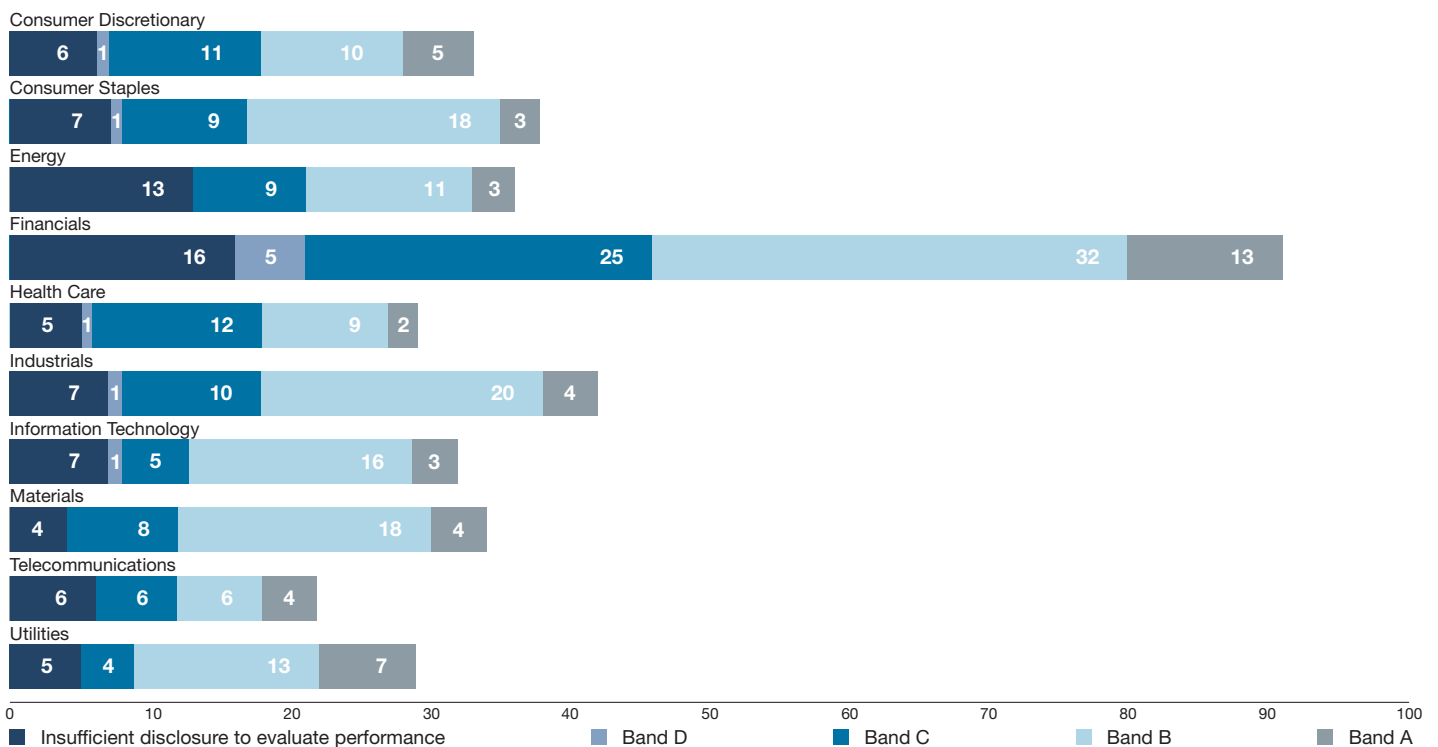
For example, as illustrated in Table 4 (CPLI) earlier, Utilities has the highest proportion of respondents in the CPLI with 24% (7) though Financials has the most companies overall with 14% (13). Possible explanations include the coverage of the sector by emissions trading schemes and the subsequent cost of carbon.

Last year's CDP questionnaire asked respondents to identify their risks associated with climate change; this year the question was refined to ask respondents in particular to

identify 'significant' climate change risks. This has had some interesting consequences. The rate of decline in risk identification differs quite widely by sector, with Energy and Utility businesses reporting the same level of regulatory risk, but Healthcare reporting a 25 percentage point drop in all three types of risks – regulatory, physical and other.

However, the key statistic is that overall **78% (301)<sup>18</sup> of respondents reported at least one significant risk from climate change.**

Figure 9: Number of companies in each performance band (Global 500)



18 In 2009 90% (347) of companies reported that they identified at least one risk from climate change.

## Regulatory uncertainty remains a challenge for many companies

A key challenge for companies remains in the current and future uncertainty about the shape and scope of the regulatory framework, in particular in the U.S. Uncertainty affects important business decisions including site location, infrastructure investment, and supply contracts.

*“Uncertainty in the scope and implementation of regulation can severely undermine market confidence, create price volatility, and increase risk for lenders and investors.”*

### Barclays

Responses show that companies are also using a range of different carbon prices in their investment analyses and there is concern that emerging regulatory structures may conflict, whether at regional, national, or international levels. This conflict may create additional administrative burdens and costs for companies, and might even put some businesses at an unintended advantage.

Financial services is a good example of how regulation may start to have important indirect impacts: banks are now starting to look beyond the boundaries of their own organizations, to assess the compliance and regulatory risks they are exposed to through their investments and loan books.

*“Analysis was conducted on approximately 100 of RBC’s largest single name clients and included the review of borrowers in 12 industrial sectors... Results showed that our largest clients would continue to be profitable even when carbon is priced at \$100 / tonne and the impact on most companies will represent less than 5% loss of net income (profit).”*

### Royal Bank of Canada

## Physical impacts manifest themselves in a variety of ways

Physical risk varies widely depending on the nature of a company’s business, and its location. For example, the impact of changing weather patterns on the agricultural sector is relatively obvious, while the responses of office-based businesses, including **Bank of Nova Scotia, Morgan Stanley** and **Prudential**, show they may see initial impacts manifested in higher insurance premiums. Many responses indicate some companies are content to manage physical risk reactively, by establishing contingency plans to address specific issues if and when they arise. Others are pre-empting problems through physical risk mapping, site relocation or redesigning operations.

One theme continuing to emerge in 2010 responses is the awareness of the link between climate change and water scarcity, and the risk this poses to business. Water shortages can affect companies right across their value chain, but sectors that are likely to face the most obvious challenges here are those with a high-dependence on water for cooling/production processes (manufacturing), power (utilities) or raw materials (food and beverage) as well as water utilities themselves. The water challenge will in turn drive commercial opportunity for those companies able to deliver innovative water saving products. To help investors identify risks and opportunities from water issues, CDP initiated a new program in 2010: CDP Water Disclosure, to gather data and to help drive consistency in reporting. CDP sent a water specific questionnaire to 300 companies in water intensive industries and the first results will be issued in late 2010.

## Impact on the supply chain

*“As a result of changes in precipitation patterns, some GSK operations in the USA and Australia have seen water availability restricted due to water rationing. GSK anticipates that similar situations have the potential to affect its supply chain.”*

### GlaxoSmithKline

## Impact on operations

*“Water shortage can make an impact on the company’s finances since the operation of the steelworks will become temporarily suspended due to the water shortage.”*

### POSCO

## Impact on products

*“We are preparing a Water Footprint study... in which we will look at the risks related to water consumption across the whole production chain (from the farm to the consumer’s table).”*

### Ambev

Evaluations of and impacts of climate risks vary from sector to sector. A brief summary of the 2010 CDP results by Global Industry Classification Standard (GICS) sectors is provided in the following ten snapshots.

More-specific analysis for each of the ten GICS sectors is available online at [www.cdproject.net](http://www.cdproject.net) for investors and others interested in examining sector perspectives in more detail.

# Consumer Discretionary

**Global 500 response rate:**

Consumer Discretionary overall **83% (38 of 46)**

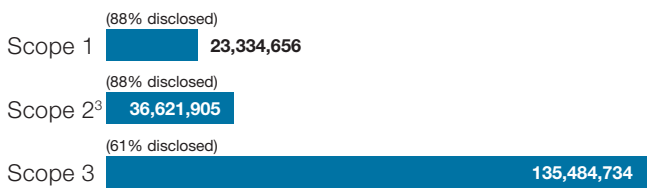
**Key industries within the sector:**

Media (8 of 11); Automobiles (9 of 9); Speciality Retail (9 of 10); Hotels, Restaurants & Leisure (4 of 4)

**Largest non-respondents<sup>1</sup> include:**

Amazon.com, Comcast, DIRECTV Group

**Total emissions<sup>2</sup> (t CO<sub>2</sub>-e):**



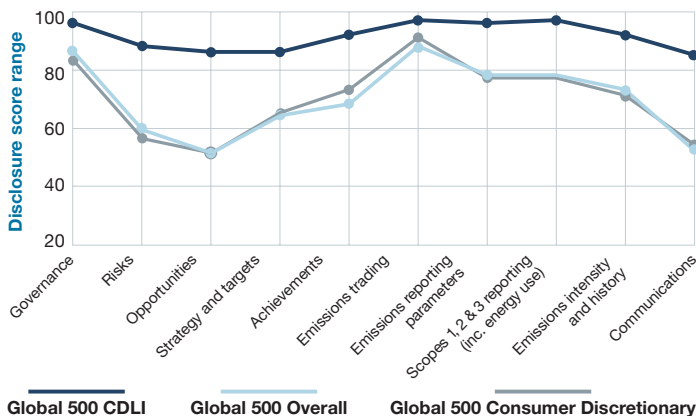
**Opportunities:**

- Greater demand for low carbon products driven by increased interest and awareness of environmental issues.
- Cost savings through Initiatives to improve energy efficiency of operations, particularly in buildings, utilities and transport.

**Risks:**

- Increased regulatory requirements resulting in increased compliance costs or higher energy prices, for example: EU ETS.
- Increased frequency of extreme weather events causing disruption and damage to operations and supply chains.

**Carbon disclosure score breakdown for Sector versus Global 500 overall and Global 500 CDLI<sup>4</sup>**



Sector leaders	Carbon disclosure score	Carbon performance score
News Corporation	94	A
TJX Companies	94	C
Panasonic	90	A
Johnson Controls	87	A
British Sky Broadcasting	83	B

Performance scorecard	Global 500	Consumer Discretionary
<b>Strategy</b>		
Integration of climate change risks or opportunities into overall business strategy	48%	45%
Implementation of emissions reduction targets	65%	55%
<b>Governance</b>		
Board or executive-level oversight	85%	70%
Monetary incentives	49%	55%
<b>Stakeholder communications</b>		
Verification of emissions	61%	52%
Disclosure of climate change information in mainstream filings or other external communications	60%	67%
<b>Achievements</b>		
Progress toward meeting targets	55%	61%
Significant emissions reduction in the past year	19%	15%

1 Based on market capitalization data available from Thomson Reuters as of May 15, 2010.

2 Percentage of respondents that reported emissions and total disclosed emissions for the sector.

3 Gross Scope 2 emissions represent the sum of all grid averages, not adjusted for contractual arrangements.

4 The 2010 Global 500 Carbon Disclosure Leadership Index is an index of the top 10% of companies with the highest disclosure scores in the Global 500 index and is used here as a benchmark.



# Consumer Staples

## Global 500 response rate:

Consumer Staples overall **95% (42 of 44)**

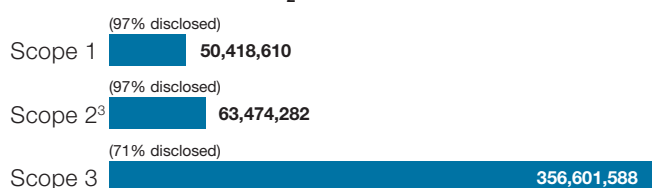
## Key industries within the sector:

Food & Staples Retailing (13 of 14); Beverages (9 of 9);  
Food Products (8 of 9); Tobacco (6 of 6)

## Largest non-respondents<sup>1</sup> include:

Sysco, Archer Daniels Midland

## Total emissions<sup>2</sup> (t CO<sub>2</sub>-e):



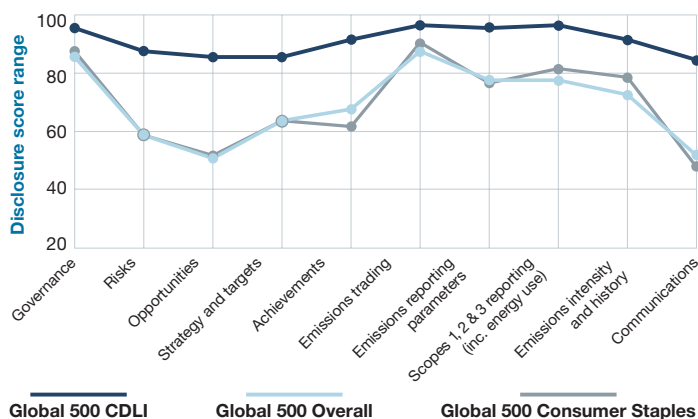
## Opportunities:

- New market for “green” products, such as sustainable packaging and locally sourced food with low carbon footprints.
- Longer growing seasons, stimulating an increased crop yield and potentially reduced raw material prices.

## Risks:

- Future regulatory requirements resulting in increased compliance costs.
- Reputational risk to brand image and competitiveness by being perceived as less sustainable than the competition.
- Increased risk of disruption to the supply chain from more frequent extreme weather events, resulting in increased cost of raw materials.

## Carbon disclosure score breakdown for Sector versus Global 500 overall and Global 500 CDLI<sup>4</sup>



Sector leaders	Carbon disclosure score	Carbon performance score
Reckitt Benckiser	93	A
Nestle	92	A
Tesco	92	A
Colgate-Palmolive	91	B
Kraft Foods	91	B
Woolworths	91	B

Performance scorecard	Global 500	Consumer Staples
<b>Strategy</b>		
Integration of climate change risks or opportunities into overall business strategy	48%	53%
Implementation of emissions reduction targets	65%	76%
<b>Governance</b>		
Board or executive-level oversight	85%	82%
Monetary incentives	49%	50%
<b>Stakeholder communications</b>		
Verification of emissions	61%	55%
Disclosure of climate change information in mainstream filings or other external communications	60%	61%
<b>Achievements</b>		
Progress toward meeting targets	55%	45%
Significant emissions reduction in the past year	19%	11%

1 Based on market capitalization data available from Thomson Reuters as of May 15, 2010.

2 Percentage of respondents that reported emissions and total disclosed emissions for the sector.

3 Gross Scope 2 emissions represent the sum of all grid averages, not adjusted for contractual arrangements.

4 The 2010 Global 500 Carbon Disclosure Leadership Index is an index of the top 10% of companies with the highest disclosure scores in the Global 500 index and is used here as a benchmark.

# Energy

**Global 500 response rate:**

Energy overall **72% (39 of 54)**

**Key industries within the sector:**

Oil, Gas & Consumable Fuels (36 of 49)  
 Energy Equipment & Services (3 of 5)

**Largest non-respondents<sup>1</sup> include:**

Gazprom, Rosneft, Reliance Industries

**Total emissions<sup>2</sup> (t CO<sub>2</sub>-e):**



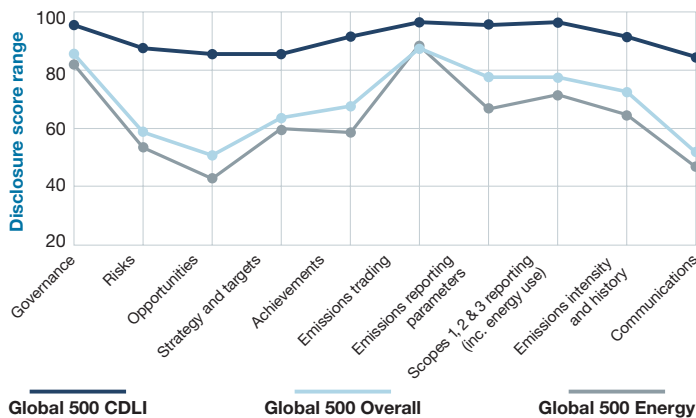
**Opportunities:**

- Diversification from traditional energy sources to low carbon alternatives, including solar, wind, biofuels and hydrogen fuel-cells.
- New products and services, including Carbon Capture and Storage, and collaboration with next generation infrastructure.
- Financial opportunities through the CDM market.

**Risks:**

- Increased cost of compliance resulting from future carbon regulations pertaining to intensity targets or cap and trade system.
- Risk to corporate reputation from regulatory non-compliance, environmental disasters and worker casualties from extreme weather.

**Carbon disclosure score breakdown for Sector versus Global 500 overall and Global 500 CDLI<sup>4</sup>**



Sector leaders	Carbon disclosure score	Carbon performance score
Hess	90	B
Royal Dutch Shell	89	A
Repsol YPF	88	A
Sasol	84	B
Eni	83	A

Performance scorecard	Global 500	Energy
<b>Strategy</b>		
Integration of climate change risks or opportunities into overall business strategy	48%	53%
Implementation of emissions reduction targets	65%	44%
<b>Governance</b>		
Board or executive-level oversight	85%	89%
Monetary incentives	49%	44%
<b>Stakeholder communications</b>		
Verification of emissions	61%	61%
Disclosure of climate change information in mainstream filings or other external communications	60%	53%
<b>Achievements</b>		
Progress toward meeting targets	55%	53%
Significant emissions reduction in the past year	19%	19%

1 Based on market capitalization data available from Thomson Reuters as of May 15, 2010.

2 Percentage of respondents that reported emissions and total disclosed emissions for the sector.

3 Gross Scope 2 emissions represent the sum of all grid averages, not adjusted for contractual arrangements.

4 The 2010 Global 500 Carbon Disclosure Leadership Index is an index of the top 10% of companies with the highest disclosure scores in the Global 500 index and is used here as a benchmark.

# Financials

## Global 500 response rate:

Financials overall **80% (95 of 119)**

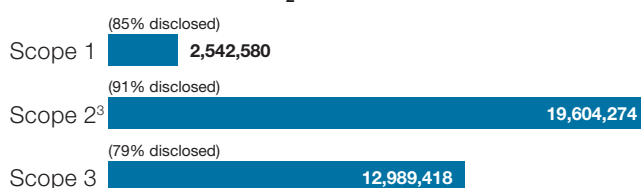
## Key industries within the sector:

Commercial Banks (49 of 60); Capital Markets (10 of 11)  
Insurance (22 of 27); Diversified Financial Services (8 of 8)

## Largest non-respondents<sup>1</sup> include:

Bershire Hathaway, Bank of China, Sberbank

## Total emissions<sup>2</sup> (t CO<sub>2</sub>-e):



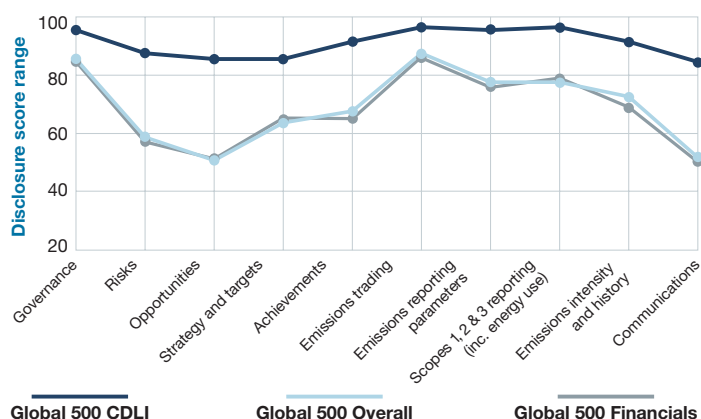
## Opportunities:

- New revenue streams through financing climate change mitigation and adaptation e.g. low-carbon technologies and renewable energy; carbon markets; responsible investing; energy efficiency.
- Increased revenue opportunities from new climate-related products and services e.g. new products by insurers, emissions trading, and consulting services by REITS and asset managers.

## Risks:

- Commercial and financial risks resulting from exposure of investee companies to increased regulation (e.g. cap and trade system) or physical disruption to operations or supply chain.
- Reputational risks arising from regulatory obligations and voluntary emissions reporting.

## Carbon disclosure score breakdown for Sector versus Global 500 overall and Global 500 CDLI<sup>4</sup>



Sector leaders	Carbon disclosure score	Carbon performance score
Royal Bank of Scotland	93	A
National Australia Bank*	93	A
Commonwealth Bank of Australia	92	A
HSBC Holdings*	92	A
Wells Fargo & Company	89	B

\* Global 500 CDLI for the past three years.

Performance scorecard	Global 500	Financials
<b>Strategy</b>		
Integration of climate change risks or opportunities into overall business strategy	48%	49%
Implementation of emissions reduction targets	65%	59%
<b>Governance</b>		
Board or executive-level oversight	85%	85%
Monetary incentives	49%	42%
<b>Stakeholder communications</b>		
Verification of emissions	61%	52%
Disclosure of climate change information in mainstream filings or other external communications	60%	56%
<b>Achievements</b>		
Progress toward meeting targets	55%	47%
Significant emissions reduction in the past year	19%	18%

1 Based on market capitalization data available from Thomson Reuters as of May 15, 2010.

2 Percentage of respondents that reported emissions and total disclosed emissions for the sector.

3 Gross Scope 2 emissions represent the sum of all grid averages, not adjusted for contractual arrangements.

4 The 2010 Global 500 Carbon Disclosure Leadership Index is an index of the top 10% of companies with the highest disclosure scores in the Global 500 index and is used here as a benchmark.

# Health Care

**Global 500 response rate:**

Health Care overall **86% (30 of 35)**

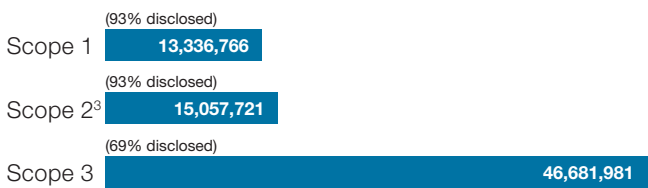
**Key industries within the sector:**

Health Care Providers & Services (5 of 6); Health Care Equipment & Supplies (4 of 7); Pharmaceuticals (16 of 17)

**Largest non-respondents<sup>1</sup> include:**

Teva Pharmaceutical Industries, Alcon, Express Scripts

**Total emissions<sup>2</sup> (t CO<sub>2</sub>-e):**



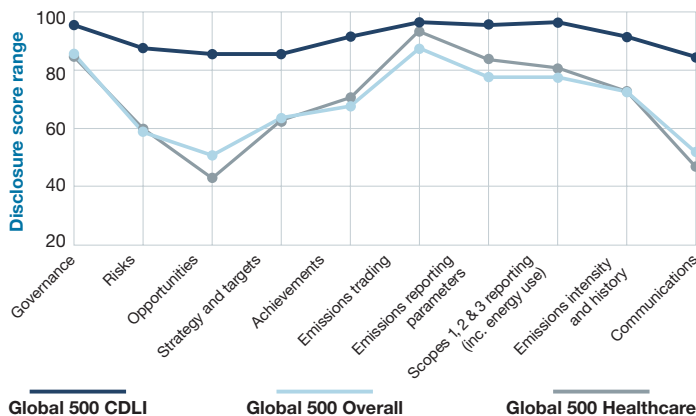
**Opportunities:**

- New sales opportunities for existing drugs due to the spread of existing and new diseases.
- Enhance reputation to consumers and potential employees through communication of low carbon products and initiatives.
- Financial benefit from selling excess permits in cap and trade schemes.

**Risks:**

- Reduced availability of supplies of ingredients for products due to loss of biodiversity as well as disruption of supply chains due to extreme weather.
- Potential caps on production for carbon intensive pharmaceuticals.

**Carbon disclosure score breakdown for Sector versus Global 500 overall and Global 500 CDLI<sup>4</sup>**



Sector leaders	Carbon disclosure score	Carbon performance score
Bayer*	95	A
Novo Nordisk	89	A
GlaxoSmithKline	88	B
Pfizer	84	B
Gilead Sciences	83	B

\* Global 500 CDLI for the past three years.

Performance scorecard	Global 500	Health Care
<b>Strategy</b>		
Integration of climate change risks or opportunities into overall business strategy	48%	28%
Implementation of emissions reduction targets	65%	79%
<b>Governance</b>		
Board or executive-level oversight	85%	83%
Monetary incentives	49%	52%
<b>Stakeholder communications</b>		
Verification of emissions	61%	62%
Disclosure of climate change information in mainstream filings or other external communications	60%	48%
<b>Achievements</b>		
Progress toward meeting targets	55%	48%
Significant emissions reduction in the past year	19%	24%

1 Based on market capitalization data available from Thomson Reuters as of May 15, 2010.

2 Percentage of respondents that reported emissions and total disclosed emissions for the sector.

3 Gross Scope 2 emissions represent the sum of all grid averages, not adjusted for contractual arrangements.

4 The 2010 Global 500 Carbon Disclosure Leadership Index is an index of the top 10% of companies with the highest disclosure scores in the Global 500 index and is used here as a benchmark.

# Industrials

### Global 500 response rate:

Industrials overall **81% (43 of 53)**

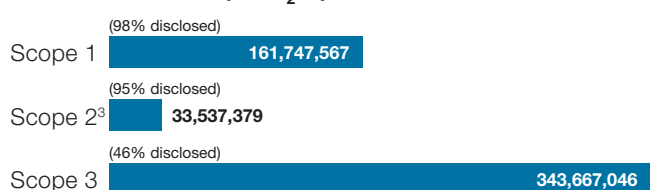
### Key industries within the sector:

Industrial Conglomerates (5 of 10); Road & Rail (7 of 8); Aerospace & Defense (7 of 9); Electrical Equipment (5 of 6)

### Largest non-respondents<sup>1</sup> include:

Honeywell International, Hutchison Whampoa, General Dynamics

### Total emissions<sup>2</sup> (t CO<sub>2</sub>-e):



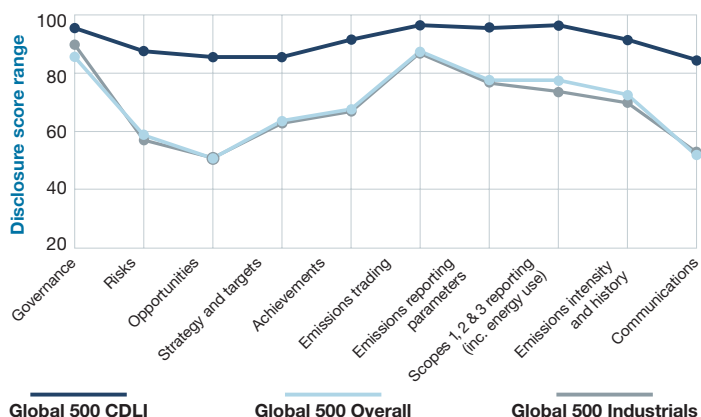
### Opportunities:

- Increased revenue streams from growing demand for energy efficiency products and services.
- Competitive advantages for the early-movers adapting their businesses to new legislation resulting in better cost management and improved reputation with customers.

### Risks:

- Increased regulatory requirements and variation in regulatory requirements across regions, e.g. Cap and trade systems such as the EU ETS.
- Market risks, including higher demands from customers for lower carbon products and services.
- Extreme weather events, flooding and rising sea levels that would modify sites infrastructures, locations and availability of goods and services.

### Carbon disclosure score breakdown for Sector versus Global 500 overall and Global 500 CDLI<sup>4</sup>



Sector leaders	Carbon disclosure score	Carbon performance score
Siemens*	98	A
Deutsche Post	97	A
Phillips Electronics	94	A
CSX	91	A
Saint-Gobain	89	B

\* Global 500 CDLI for the past three years.

Performance scorecard	Global 500	Industrials
<b>Strategy</b>		
Integration of climate change risks or opportunities into overall business strategy	48%	40%
Implementation of emissions reduction targets	65%	69%
<b>Governance</b>		
Board or executive-level oversight	85%	90%
Monetary incentives	49%	50%
<b>Stakeholder communications</b>		
Verification of emissions	61%	71%
Disclosure of climate change information in mainstream filings or other external communications	60%	71%
<b>Achievements</b>		
Progress toward meeting targets	55%	57%
Significant emissions reduction in the past year	19%	26%

1 Based on market capitalization data available from Thomson Reuters as of May 15, 2010.

2 Percentage of respondents that reported emissions and total disclosed emissions for the sector.

3 Gross Scope 2 emissions represent the sum of all grid averages, not adjusted for contractual arrangements.

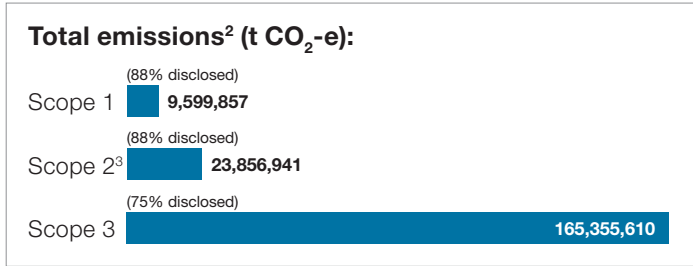
4 The 2010 Global 500 Carbon Disclosure Leadership Index is an index of the top 10% of companies with the highest disclosure scores in the Global 500 index and is used here as a benchmark.

# Information Technology

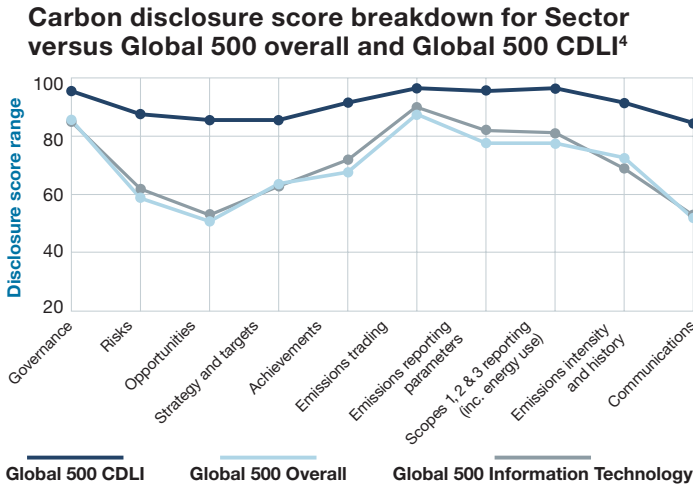
**Global 500 response rate:**  
 Information Technology overall **88% (35 of 40)**

**Key industries within the sector:**  
 IT Services (6 of 8); Communications Equipment (6 of 6); Semiconductors & Semiconductor Equipment (5 of 6)

**Largest non-respondents<sup>1</sup> include:**  
 Visa, Tencent Holdings, Wipro



- Opportunities:**
- Integration of carbon and climate change considerations into products, e.g. performance management software, smartgrids and carbon trading applications.
  - Improved efficiency and diversification of supply in operations to reduce costs and supply dependence, especially for utilities and raw materials.
- Risks:**
- Increasing regulatory pressures across various localities to reduce and report on emissions.
  - Increased utilities and material costs as a result of regulatory and physical changes from climate change.



Sector leaders	Carbon disclosure score	Carbon performance score
Samsung Electronics	95	A
Cisco Systems*	92	A
Nokia Group	91	A
Accenture	91	B
IBM	85	B
Taiwan Semiconductor Manufacturing	85	B

\* Global 500 CDLI for the past three years.

Performance scorecard	S&P 500	Information Technology
<b>Strategy</b>		
Integration of climate change risks or opportunities into overall business strategy	48%	38%
Implementation of emissions reduction targets	65%	69%
<b>Governance</b>		
Board or executive-level oversight	85%	75%
Monetary incentives	49%	53%
<b>Stakeholder communications</b>		
Verification of emissions	61%	59%
Disclosure of climate change information in mainstream filings or other external communications	60%	47%
<b>Achievements</b>		
Progress toward meeting targets	55%	72%
Significant emissions reduction in the past year	19%	25%

1 Based on market capitalization data available from Thomson Reuters as of May 15, 2010.  
 2 Percentage of respondents that reported emissions and total disclosed emissions for the sector.

3 Gross Scope 2 emissions represent the sum of all grid averages, not adjusted for contractual arrangements.  
 4 The 2010 Global 500 Carbon Disclosure Leadership Index is an index of the top 10% of companies with the highest disclosure scores in the Global 500 index and is used here as a benchmark.

# Materials

## Global 500 response rate:

Materials overall **86% (36 of 42)**

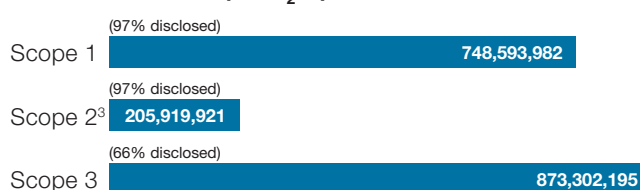
## Key industries within the sector:

Metals & Mining (19 of 25); Chemicals (14 of 14);  
Construction Materials (3 of 3)

## Largest non-respondents<sup>1</sup> include:

GMK Norilsk Nickel, Southern Copper Corporation, NLMK

## Total emissions<sup>2</sup> (t CO<sub>2</sub>-e):



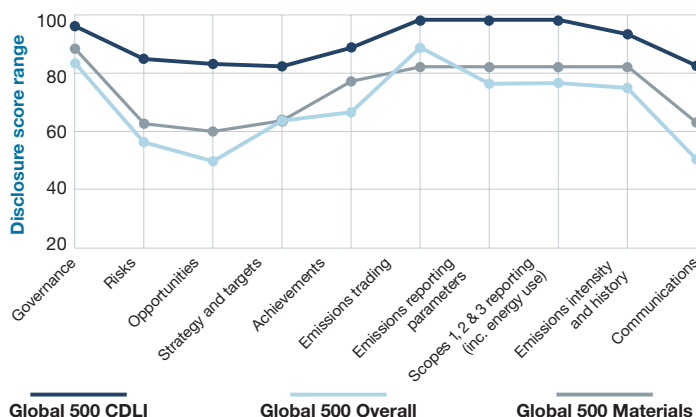
## Opportunities:

- Increased demand for resources and products to growing markets in the low-carbon economy.
- Competitive advantage obtained by pioneering efficient low cost carbon processes.

## Risks:

- Uncertainty of national and international future climate regulation creates a risk to making investment decisions.
- Increased costs due to regulatory obligations.
- Business disruptions caused by storms, floods, hurricanes, or water shortages.

## Carbon disclosure score breakdown for Sector versus Global 500 overall and Global 500 CDLI<sup>4</sup>



Sector leaders	Carbon disclosure score	Carbon performance score
BASF*	96	A
Lafarge*	94	A
Praxair*	93	A
POSCO	90	A
Rio Tinto*	89	B
Anglo Platinum	89	B

\* Global 500 CDLI for the past three years.

Performance scorecard	Global 500	Materials
<b>Strategy</b>		
Integration of climate change risks or opportunities into overall business strategy	48%	59%
Implementation of emissions reduction targets	65%	57%
<b>Governance</b>		
Board or executive-level oversight	85%	97%
Monetary incentives	49%	47%
<b>Stakeholder communications</b>		
Verification of emissions	61%	76%
Disclosure of climate change information in mainstream filings or other external communications	60%	74%
<b>Achievements</b>		
Progress toward meeting targets	55%	59%
Significant emissions reduction in the past year	19%	24%

1 Based on market capitalization data available from Thomson Reuters as of May 15, 2010.

2 Percentage of respondents that reported emissions and total disclosed emissions for the sector.

3 Gross Scope 2 emissions represent the sum of all grid averages, not adjusted for contractual arrangements.

4 The 2010 Global 500 Carbon Disclosure Leadership Index is an index of the top 10% of companies with the highest disclosure scores in the Global 500 index and is used here as a benchmark.

# Telecommunications

**Global 500 response rate:**

Telecommunications overall **72% (23 of 32)**

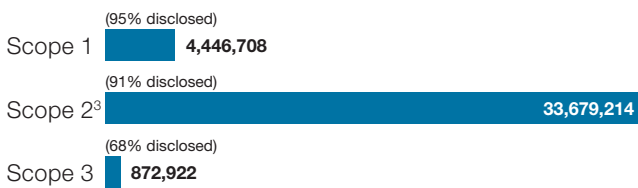
**Key industries within the sector:**

Diversified Telecommunication Services (16 of 21);  
Wireless Telecommunication Services (7 of 11)

**Largest non-respondents<sup>1</sup> include:**

China Mobile, America Movil, China Telecom

**Total emissions<sup>2</sup> (t CO<sub>2</sub>-e):**



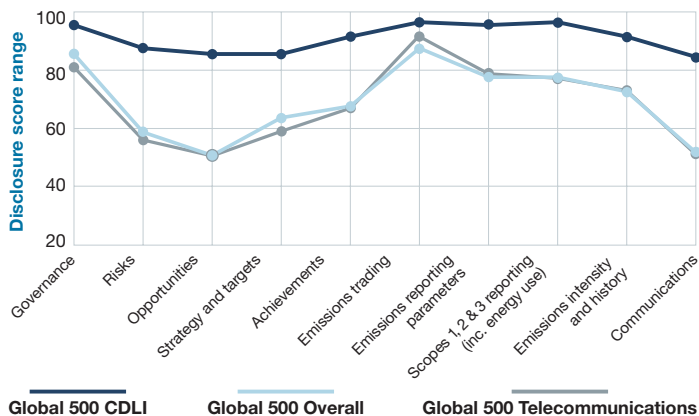
**Opportunities:**

- New market opportunities that allow customers to save energy, replace hardware with software, avoid traffic, or reduce paper.
- New regulation aimed at stimulating emissions reduction may increase demand for virtual interactions.
- Physical effect of climate change could lead to greater demand for communication networks.

**Risks:**

- Risk of damage to service-availability due to severe weather, such as network disruption.
- Potential increases in the cost of energy and fuel as a result of climate regulations.

**Carbon disclosure score breakdown for Sector versus Global 500 overall and Global 500 CDLI<sup>4</sup>**



Sector leaders	Carbon disclosure score	Carbon performance score
Telefónica	89	A
BT Group	89	A
Vodafone Group	83	C
TeliaSonera	80	B
AT&T	80	B
Royal KPN	80	A

\* Global 500 CDLI for the past three years.

Performance scorecard	Global 500	Telcom
<b>Strategy</b>		
Integration of climate change risks or opportunities into overall business strategy	48%	45%
Implementation of emissions reduction targets	65%	68%
<b>Governance</b>		
Board or executive-level oversight	85%	91%
Monetary incentives	49%	36%
<b>Stakeholder communications</b>		
Verification of emissions	61%	41%
Disclosure of climate change information in mainstream filings or other external communications	60%	50%
<b>Achievements</b>		
Progress toward meeting targets	55%	68%
Significant emissions reduction in the past year	19%	18%

1 Based on market capitalization data available from Thomson Reuters as of May 15, 2010.

2 Percentage of respondents that reported emissions and total disclosed emissions for the sector.

3 Gross Scope 2 emissions represent the sum of all grid averages, not adjusted for contractual arrangements.

4 The 2010 Global 500 Carbon Disclosure Leadership Index is an index of the top 10% of companies with the highest disclosure scores in the Global 500 index and is used here as a benchmark.



# Utilities

## Global 500 response rate:

Utilities overall **83% (29 of 35)**

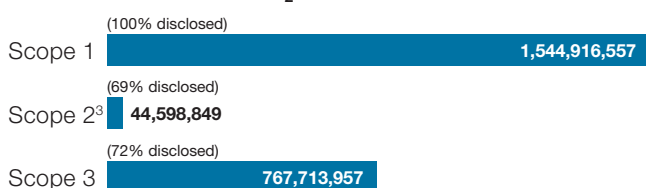
## Key industries within the sector:

Electric Utilities (19 of 21); Multi-Utilities (8 of 8); Gas Utilities (2 of 3)

## Largest non-respondents<sup>1</sup> include:

National Thermal Power, The Southern Company, Kepco

## Total emissions<sup>2</sup> (t CO<sub>2</sub>-e):



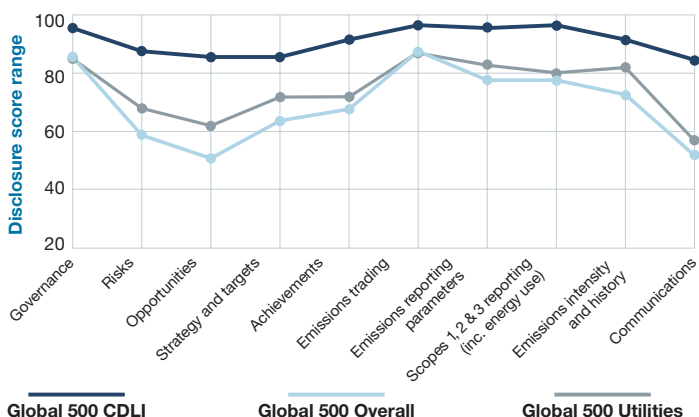
## Opportunities:

- Differentiation from competitors and enhanced reputation by providing low-carbon electricity or gas, in particular through renewables and clean coal.
- New revenue streams in providing infrastructure and power for electric cars.

## Risks:

- Uncertainty of national and international future climate regulation creates a risk to making investment decisions and planning for the long-term.
- Low carbon prices can create risks to the value of investments, for example in renewable energy.
- Climate change and future scarcity of water could increase the cost of water used for power generation (hydropower) and cooling.

## Carbon disclosure score breakdown for Sector versus Global 500 overall and Global 500 CDLI<sup>4</sup>



## Sector leaders

Sector leaders	Carbon disclosure score	Carbon performance score
Centrica*	92	B
Exelon	90	A
Scottish & Southern Energy	90	A
PG&E	90	A
EDP - Energias de Portugal	90	B

\* Global 500 CDLI for the past three years.

## Performance scorecard

	Global 500	Utilities
<b>Strategy</b>		
Integration of climate change risks or opportunities into overall business strategy	48%	72%
Implementation of emissions reduction targets	65%	86%
<b>Governance</b>		
Board or executive-level oversight	85%	90%
Monetary incentives	49%	76%
<b>Stakeholder communications</b>		
Verification of emissions	61%	86%
Disclosure of climate change information in mainstream filings or other external communications	60%	72%
<b>Achievements</b>		
Progress toward meeting targets	55%	66%
Significant emissions reduction in the past year	19%	17%

1 Based on market capitalization data available from Thomson Reuters as of May 15, 2010.

2 Percentage of respondents that reported emissions and total disclosed emissions for the sector.

3 Gross Scope 2 emissions represent the sum of all grid averages, not adjusted for contractual arrangements.

4 The 2010 Global 500 Carbon Disclosure Leadership Index is an index of the top 10% of companies with the highest disclosure scores in the Global 500 index and is used here as a benchmark.

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

Please refer to the Key at the end of the Appendix for further explanation of the abbreviations used.

Company	Sector	2010 Response status <sup>4</sup>	2009 Response status	Carbon disclosure score	Carbon performance score	Non-public	Total emissions <sup>1</sup>	Scope 1	Scope 2 grid average <sup>2</sup>	Scope 3 <sup>3</sup>	Scope 3 source type
3M	Industrials	AQ	AQ	68	B		4,980,000	3,290,000	1,690,000		
A.P. Moller - Maersk	Industrials	AQ	AQ	66	B		44,888,318	44,001,421	886,897		
ABB	Industrials	AQ	AQ	73	C		1,476,000	720,000	756,000		
Abbott Laboratories	Health Care	AQ	AQ	79	B		1,589,229	824,822	764,407	283,000	Tr Lr TSP
Abertis Infraestructuras	Industrials	AQ	AQ	83	B		205,232	34,087	171,145		
Accenture	Information Technology	AQ	AQ	91	B		205,564	15,366	190,198*	349,863	Tr
Ace	Financials	AQ	AQ	75	A		57,345	14,167	43,178	9,566	Tr
ACS Actividades de Construcción y Servicios	Industrials	AQ	AQ	50	C		8,126,971	8,070,259	56,712		
Adobe Systems	Information Technology	AQ	AQ	71	B		30,335	2,793	27,542	34,635	Tr Le
Aflac	Financials	AQ	AQ	76	C		27,683	3,857	23,826		
Ahold	Consumer Staples	AQ	AQ	55	B		2,681,665	1,259,093	1,422,570		
Air Liquide	Materials	AQ	AQ	76	B		16,833,000	9,386,000	7,447,000	250,000^	Tr
Air Products & Chemicals	Materials	AQ	AQ	81	B		20,970,000	12,650,000	8,320,000	103,500	Tr TSP
Akbank†	Financials	AQ	X	81	B	NP					
Akzo Nobel	Materials	AQ	AQ	78	B		4,600,000	1,900,000	2,700,000	18,300,000	AS USP
Alcon	Health Care	DP	AQ			NP					
Allergan	Health Care	AQ	AQ	80	B		94,620	42,351	52,269	10,875	Tr TSP
Allianz	Financials	AQ	AQ	82	B		309,552	53,205	256,347	280,100^	Tr Wa Oth
Allstate	Financials	AQ	AQ	75	C		218,262	37,094	181,168	153,371^	Tr Fe TSP
Alstom	Industrials	AQ	AQ	54	C		433,000	153,000	280,000		
Altria Group	Consumer Staples	AQ	AQ	45	-		563,167	268,602	294,565	5,427	Tr
Amazon.com	Consumer Discretionary	DP	NR			NP					
Ambev - Cia. Bebidas das Americas	Consumer Staples	AQ	AQ	63	C		591,192	542,719	48,473	37,701	TSP
América Móvil	Telecommunications	NR	NR								
American Electric Power	Utilities	AQ	AQ	78	B		136,602,600	136,602,600		137,205	Tr
American Express	Financials	AQ	AQ	50	C		238,413	26,887	211,526	64,324^	Tr
American Tower	Telecommunications	AQ	AQ	64	C		182,733	5,536	177,197	7,956	Tr EC
Amgen	Health Care	AQ	AQ	60	C	NP					
Anadarko Petroleum	Energy	AQ	AQ	73	C		7,852,742	7,230,684	622,058		
Anglo American	Materials	AQ	AQ	85	B		19,102,000	8,850,000	10,252,000	15,062	Tr
Anglo Platinum	Materials	AQ	AQ	89	B		5,580,083	427,290	5,152,790	459,430	Tr DSP EC S1 TI TSP USP
AngloGold Ashanti	Materials	AQ	AQ	79	C		15,420,000	1,183,000	14,237,000		
Anheuser Busch InBev	Consumer Staples	AQ	AQ	74	B		4,550,000	2,962,000	1,588,000		
Apache	Energy	AQ	AQ	66	B		11,542,000	10,985,000	557,000		
Apple Inc.	Information Technology	AQ	AQ	80	B		165,940	24,476	141,464*	9,438,370^	Tr DSP EC S1 TI USP
Applied Materials	Information Technology	AQ	AQ	66	B		180,740	25,740	155,000	32,000	Tr

Company	Sector	2010 Response status <sup>4</sup>	2009 Response status	Carbon disclosure score	Carbon performance score	Non-public	Total emissions <sup>1</sup>	Scope 1	Scope 2 grid average <sup>2</sup>	Scope 3 <sup>3</sup>	Scope 3 source type
Arcelor Mittal <sup>f</sup>	Materials	AQ	AQ	59	B		166,116,000	137,955,000	28,161,000		
Archer Daniels Midland	Consumer Staples	NR	NR								
Astellas Pharma	Health Care	AQ	AQ	46	-		312,800	205,000	107,800		
AstraZeneca	Health Care	AQ	AQ	65	B		695,300	397,000	298,300*	475,600	Tr S1 TSP USP Wa
AT&T	Telecommunications	AQ	AQ	80	B		8,915,778	1,170,232	7,745,550	57,706^	Tr
Atlantia	Industrials	AQ	AQ	53	B		194,593	49,810	144,783		
Australia and New Zealand Banking Group	Financials	AQ	AQ	82	A		191,788	15,218	176,570	37,980	Tr EA
Automatic Data Processing	Information Technology	AQ	AQ	43	-		188,204	20,026	168,178		
Aviva	Financials	AQ	AQ	69	B		137,587	55,593	81,994	17,139	Tr
AXA Group	Financials	AQ	AQ	64	B		277,002	83,998	193,004	202,521	Tr EC
BAE Systems	Industrials	AQ	AQ	58	D	NP					
Banco Bradesco	Financials	AQ	AQ	75	B	NP					
Banco do Brasil	Financials	AQ	AQ	53	D		23,065	5,475	17,590	8,233	Tr
Banco Santander	Financials	AQ	AQ	73	B		565,218	174,305	390,913	61,288	Tr EC
Bank of America Merrill Lynch	Financials	AQ	AQ	85	A		2,023,620	134,301	1,889,320	804,626^	Tr DSP EC TI
Bank of China	Financials	IN	IN								
Bank of Communications (H)	Financials	IN	AQ								
Bank of Montreal	Financials	AQ	AQ	81	A		65,506	20,060	45,446	94,108	Tr EA Lr TSP
Bank of Nova Scotia (Scotiabank)	Financials	AQ	AQ	72	B		60,853	15,884	44,969	4,809	Tr
Bank Pekao	Financials	NR	X								
Barclays	Financials	AQ	AQ	87	A		909,782	56,903	852,879	96,047	Tr
Barrick Gold	Materials	AQ	AQ	78	B		4,950,944	2,964,563	1,986,380		
BASF	Materials	AQ	AQ	96	A		31,631,000	27,523,000	4,108,000	120,007,000	Tr Eq DSP EC EA In Lr AS TI TSP USP Wa
Baxter International	Health Care	AQ	AQ	65	C		800,000	326,000	474,000	12,204,000	Tr DSP EC S1 TSP USP
Bayer	Health Care	AQ	AQ	95	A		8,100,000	4,570,000	3,530,000	21,802,000	Tr DSP AS TI TSP Oth
BB&T	Financials	AQ	AQ	60	D		128,909	1,942	126,967		
BBVA	Financials	AQ	AQ	64	C		546,213	9,912	536,301	25,595	Tr
BCE	Telecommunications	AQ	AQ	77	B	NP					
Becton, Dickinson and Co.	Health Care	AQ	AQ	60	C		530,236	125,858	404,378		
Beiersdorf	Consumer Staples	AQ	AQ	39	-		66,125	21,165	44,960		
Berkshire Hathaway	Financials	NR	NR								
Best Buy	Consumer Discretionary	AQ(L)	AQ	55	C	NP					
BG Group	Energy	AQ	AQ	71	B		8,673,594	8,644,396	29,198	88,653,000	Tr USP
Bharat Heavy Electricals	Industrials	NR	NR								
Bharti Airtel	Telecommunications	NR	NR								
BHP Billiton	Materials	AQ	AQ	71	B		49,043,000	21,355,000	27,688,000		
BMW Bayerische Motoren Werke	Consumer Discretionary	AQ	AQ	78	A		1,205,293	357,793	847,500	1,850,010	Tr TSP USP
BNP Paribas	Financials	AQ	AQ	81	B		303,481	43,036	260,445*	173,842	Tr EC
BNY Mellon	Financials	AQ	AQ	66	C		223,723	9,483	214,240	22,513	Tr
BOC Hong Kong	Financials	NR	NR								
Boeing	Industrials	AQ	AQ	86	B		1,720,000	579,000	1,141,000	229,000^	Tr
Bouygues	Industrials	AQ	AQ	33	-	NP					

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BP	Energy	AQ	AQ	67	B		74,620,000	65,030,000	9,590,000	554,000,000	USP
Bristol-Myers Squibb	Health Care	AQ	AQ	70	B		624,622	312,431	312,191	48,403 <sup>^</sup>	Tr
British American Tobacco	Consumer Staples	AQ	IN	58	C		760,625	393,531	367,094		Oth
British Sky Broadcasting	Consumer Discretionary	AQ	AQ	83	B		134,604	24,945	109,659*	8,884	Tr TSP Wa
BT Group	Telecommunications	AQ	AQ	89	A		1,630,801	211,738	1,419,060*	41,108 <sup>^</sup>	Tr Oth
Burlington Northern Santa Fe	Industrials	NR	AQ								
BYD Company	Information Technology	NR	X								
Cadbury (see Kraft Foods)	Consumer Staples	AQ(SA)	AQ								
Canadian Imperial Bank of Commerce (CIBC)	Financials	AQ	AQ	71	C		113,680	35,827	77,853	9,014 <sup>^</sup>	Tr Oth
Canadian National Railway	Industrials	AQ	AQ	59	B		4,462,753	4,236,310	226,443		
Canadian Natural Resources	Energy	AQ(L)	AQ(L)								
Canon	Information Technology	AQ	AQ	66	B	NP					
Capital One Financial	Financials	AQ	AQ	50	C		220,839	14,720	206,119		
Carnival Corporation	Consumer Discretionary	AQ	AQ	80	C		10,317,221	10,264,098	53,123	43,105	Tr S1 TI
Carrefour	Consumer Staples	AQ	AQ	63	B		4,811,568	2,319,453	2,492,120	1,124,210	Tr AS TSP
Carso Global Telecom	Telecommunications	NR	NR								
Caterpillar	Industrials	AQ	IN	46	-		2,054,500	638,000	1,416,500	21,400	Tr Le
Cathay Financial Holding	Financials	AQ	AQ	9	-						
Celgene	Health Care	AQ	AQ	54	D		16,046	5,892	10,154		
Central Japan Railway	Industrials	AQ	IN	19	-	NP					
Centrica	Utilities	AQ	AQ	92	B		11,799,441	11,598,816	200,625	38,576,400 <sup>^</sup>	Tr EA S1 TI
CEZ	Utilities	AQ	NR	46	-		37,195,443	37,195,443			
Charles Schwab	Financials	AQ	AQ	1	-	NP					
Chesapeake Energy	Energy	NR	IN								
Cheung Kong	Financials	NR	NR								
Chevron	Energy	AQ	AQ	80	B		65,853,377	60,755,989	5,097,390	410,000,000	USP
China Construction Bank (H)	Financials	NR	IN								
China Life Insurance (H)	Financials	NR	IN								
China Mobile	Telecommunications	NR	IN								
China Overseas Land & Investment	Financials	NR	NR								
China Shenhua Energy (H)	Energy	AQ	AQ	4	-	NP					
China Telecom	Telecommunications	IN	IN			NP					
China Unicom	Telecommunications	NR	NR								
Christian Dior	Consumer Discretionary	NR	X								
Chubb	Financials	AQ	AQ	53	D		11,787		11,787		
Chubu Electric Power	Utilities	AQ	AQ	47	-		55,060,000	55,060,000		27,000	Tr TI
Chunghwa Telecom	Telecommunications	AQ	AQ	69	C	NP					
Cia. Siderurgica Nacional - CSN	Materials	AQ	AQ	62	C		10,740,683	10,301,855	438,828*	260,412	USP
Cisco Systems	Information Technology	AQ	AQ	92	A		644,334	53,579	590,755*	6,812,830 <sup>^</sup>	Tr Eq DSP EC EA AS TSP USP
Citigroup	Financials	AQ	AQ	79	B		1,260,359	45,236	1,215,120*	8,700,000	In
CLP Holdings	Utilities	AQ	AQ	69	B		49,844,340	49,826,000	18,340		
CME Group	Financials	AQ	AQ	13	-	NP					
CNOOC (Red Chip)	Energy	AQ	AQ	35	-	NP					
Cnp Assurances	Financials	AQ	AQ	66	B		4,190	2,160	2,030	4,568	Tr AS

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Coca-Cola Company	Consumer Staples	AQ	AQ	78	B		933,778	314,290	619,488	19,848,400 <sup>^</sup>	Tr Eq Fe
Colgate-Palmolive	Consumer Staples	AQ	AQ	91	B		694,103	260,906	433,197	93,673	Tr TSP Wa
Comcast	Consumer Discretionary	IN	IN								
Commonwealth Bank of Australia	Financials	AQ	AQ	92	A		258,370	17,038	241,332	94,681	Tr AS S1
ConocoPhillips	Energy	AQ	AQ	56	C		68,284,041	60,679,122	7,604,920		
Corning	Information Technology	AQ	AQ	46	-		1,287,588	327,459	960,129		
Costco Wholesale	Consumer Staples	AQ(L)	AQ	32	-	NP					
Covidien	Health Care	NR	NR								
Credit Agricole	Financials	AQ	AQ	76	C		38,156	2,209	35,947	39,369	Tr EC
Credit Suisse	Financials	AQ	AQ	69	B		202,007	18,057	183,950	70,095 <sup>^</sup>	Tr AS Wa Oth
CRH	Materials	AQ	AQ	54	B		10,542,000	9,395,000	1,147,000	450,000 <sup>^</sup>	TSP
Criteria Caixa	Financials	AQ	NR	42	-		433		433	159	Tr
CSL	Health Care	AQ	AQ	71	C		160,691	51,439	109,252	373	S1
CSX	Industrials	AQ	AQ	91	A		5,033,344	4,772,785	260,559	20,899	Tr
CVS Caremark	Consumer Staples	AQ	NR	44	-		1,716,544	156,634	1,559,910	10,268	Tr
Daimler	Consumer Discretionary	AQ	AQ	75	B	NP					
Danaher	Industrials	AQ	AQ	36	-	NP					
Danone	Consumer Staples	AQ	AQ	81	B		1,131,427	497,245	634,182 <sup>*</sup>	17,365,200	Tr DSP EA S1 TSP Wa
Danske Bank	Financials	AQ	AQ	66	B		41,446	4,345	37,101	6,678 <sup>^</sup>	Tr Oth
DBS Group Holdings	Financials	DP	DP								
Deere	Industrials	AQ	AQ	64	B		1,466,152	497,581	968,571		
Dell	Information Technology	AQ	AQ	75	B		393,272	31,387	361,885 <sup>*</sup>	76,550 <sup>^</sup>	Tr
Denso	Consumer Discretionary	AQ	NR	15	-	NP					
Deutsche Bank	Financials	AQ	AQ	73	B		459,051	36,938	422,113 <sup>*</sup>	170,038 <sup>^</sup>	Tr
Deutsche Boerse	Financials	AQ	AQ	60	C		21,732	-	21,732	4,476	Tr EC
Deutsche Post	Industrials	AQ	AQ	97	A		5,800,000	4,900,000	900,000 <sup>*</sup>	13,460,000 <sup>^</sup>	Tr
Deutsche Telekom	Telecommunications	AQ	AQ	77	A		3,361,095	397,878	2,963,220	91,587	Tr
Devon Energy	Energy	AQ	AQ	63	C		4,170,000	3,680,000	490,000	16,063 <sup>^</sup>	TSP
Diageo	Consumer Staples	AQ	AQ	67	B		740,116	644,613	95,503		
DIRECTV Group	Consumer Discretionary	NR	NR								
DnB NOR	Financials	AQ	AQ	59	B		12,849	2,001	10,848	6,706	Tr Wa
Dominion Resources	Utilities	AQ	AQ	73	C		59,899,647	59,132,814	766,833	285,630 <sup>^</sup>	EA
Dow Chemical	Materials	AQ	AQ	80	B		35,613,000	27,505,000	8,108,000	3,221,600	Tr TSP
Duke Energy	Utilities	AQ	AQ	53	C		84,989,000	84,989,000			
E. I. du Pont de Nemours and Company	Materials	AQ	AQ	84	B		12,991,000	8,837,000	4,154,000	76,934	Tr
E.ON AG	Utilities	AQ	AQ	80	A		164,751,902	159,559,934	5,191,970	213,443,000	Tr EA S1 TI USP
EADS	Industrials	AQ	AQ	69	B		994,500	550,500	444,000	246,000	Tr
East Japan Railway	Industrials	AQ	AQ	49	-		2,260,000	200,000	2,060,000		
eBay	Information Technology	AQ	AQ	65	C		135,178	9,168	126,010	16,030 <sup>^</sup>	Tr
Ecopetrol	Energy	AQ	X	46	-		6,889,000	6,761,000	128,000		
EDP - Energias de Portugal	Utilities	AQ	AQ	90	B		21,313,670	20,039,249	1,274,420	8,938 <sup>^</sup>	Tr EC EA S1
Electricite de France (EDF)	Utilities	AQ	AQ(L)	78	B		78,672,080	78,192,000	480,080	688,005	Tr S1 TI
ELETRONBRAS	Utilities	AQ	AQ	45	-		5,100,450	5,100,450			
Eli Lilly	Health Care	AQ	AQ	58	C		1,832,081	549,301	1,282,780	170,393 <sup>^</sup>	Tr Wa Oth
EMC	Information Technology	AQ	AQ	82	B		386,263	39,211	347,052	70,800	Tr

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Emerson Electric	Industrials	AQ	AQ	22	-		361,454	361,454			
Empresas Copec	Industrials	NR	X								
Enbridge	Energy	AQ	AQ	65	B		6,307,800	3,372,000	2,935,800		Oth
Encana	Energy	AQ	AQ	66	B		5,885,063	5,380,336	504,727*		
Endesa	Utilities	AQ	AQ	78	B		46,335,184	45,267,968	1,067,220	285,885^	Tr EC TI
ENEL	Utilities	AQ	AQ	37	-		122,265,382	122,265,382			
Eni	Energy	AQ	AQ	83	A		58,963,266	57,326,278	1,636,990*	315,197,000	Tr S1 USP
Energy	Utilities	AQ	AQ	76	B		42,866,756	30,409,191	12,457,600		
EOG Resources	Energy	AQ	AQ	42	-		394,805	222,923	171,882		
Ericsson	Information Technology	AQ	AQ	72	B		201,000	26,000	175,000	19,355,200	Tr EC EA TSP
Erste Group Bank	Financials	AQ	AQ	43	-		7,641	2,561	5,080	1,171	Tr
Eurasian Natural Resources Corporation	Materials	DP	DP			NP					
Exelon	Utilities	AQ	AQ	90	A		8,953,413	8,720,988	232,425	10,234	EC
Express Scripts	Health Care	NR	NR								
Exxon Mobil	Energy	AQ	AQ	58	C		143,000,000	128,000,000	15,000,000		
FANUC	Industrials	NR	NR								
Fast Retailing	Consumer Discretionary	NR	NR								
FedEx Corporation	Industrials	AQ	AQ	61	B		15,167,241	14,101,552	1,065,690	1,132,570^	S1
Fiat	Consumer Discretionary	AQ	AQ	80	B		2,571,811	549,608	2,022,200	190,000	S1 TSP
Ford Motor	Consumer Discretionary	AQ	AQ	63	B		4,849,719	1,623,551	3,226,170		
Formosa Petrochemical	Energy	DP	NR			NP					
Fortum	Utilities	AQ	AQ	82	B		22,286,000	22,100,000	186,000*	5,135,570	Tr AS USP
France Telecom	Telecommunications	AQ	AQ	69	B		1,636,511	416,498	1,220,010	44,947	Tr
Franklin Resources	Financials	AQ	AQ	65	D		37,181	8,099	29,082	4,407	Tr
Freeport-McMoRan Copper & Gold	Materials	AQ	AQ	60	C		8,635,300	4,874,500	3,760,800		
Fresenius Medical Care KGaA	Health Care	AQ	AQ	32	-	NP					
Galp Energia	Energy	NR	X								
Gap	Consumer Discretionary	AQ	AQ	51	C		553,379	25,657	527,722	45,388	TSP
Gas Natural SDG	Utilities	AQ	AQ	73	B		26,810,000	25,800,000	1,010,000	18,410,000^	EA Oth
Gazprom	Energy	NR	AQ								
Gazprom Neft	Energy	DP	DP			NP					
GDF Suez (formerly Gaz de France / Suez)	Utilities	AQ	AQ	85	B		100,541,004	97,405,418	3,135,590	163,113,000^	TI USP
General Dynamics	Industrials	IN	IN								
General Electric	Industrials	AQ	AQ	63	B		5,793,206	2,696,177	3,097,030		
General Mills	Consumer Staples	AQ	AQ	66	C		1,054,570	269,530	785,040	15,208	Tr
Generali	Financials	AQ	NR	69	C		76,315	14,879	61,436	35,865	Tr S1 Wa
Gilead Sciences	Health Care	AQ	AQ	83	B		53,476	22,178	31,298	15,470	Tr EC
GlaxoSmithKline	Health Care	AQ	AQ	88	B		2,232,173	1,086,757	1,145,420	4,436,160	Tr TSP USP
GMK Norilsk Nickel	Materials	DP	DP			NP					
Goldcorp	Materials	AQ	AQ	44	-		847,420	547,140	300,280		
Goldman Sachs Group	Financials	AQ	AQ	62	B		323,884	9,721	314,163*		
Google	Information Technology	AQ	AQ	44	-						
Great West Lifeco	Financials	DP	DP			NP					
Grupo Mexico	Materials	NR	X								
H&M Hennes & Mauritz	Consumer Discretionary	AQ	AQ	52	C		250,152	11,951	238,201	148,007	Tr TSP

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Halliburton	Energy	AQ	AQ	53	C		3,838,404	3,688,812	149,592	42	Tr
Hang Lung Properties	Financials	NR	DP								
Hang Seng Bank	Financials	AQ	AQ	54	B		24,520	24,520			
HDFC Bank	Financials	AQ	X	46	-	NP					
Heineken	Consumer Staples	AQ(L)	AQ(L)			NP					
Henderson Land Development	Financials	NR	DP								
Hermes International	Consumer Discretionary	NR	DP								
Hess	Energy	AQ	AQ	90	B		9,537,175	9,084,125	453,050	46,087,800	Tr TI TSP USP
Hewlett-Packard	Information Technology	AQ	AQ	66	B		2,102,780	289,324	1,813,460	6,264,720	Tr DSP S1 TSP
Holcim	Materials	AQ	AQ	67	B		102,954,986	97,092,613	5,862,370	798,045	Tr EC TI TSP
Home Depot	Consumer Discretionary	AQ	AQ	37	-						
Hon Hai Precision Industry (see Foxconn International*)	Information Technology	AQ(SA)	AQ			NP					
Honda Motor Company	Consumer Discretionary	AQ	AQ	62	B		1,550,000	1,280,000	270,000	72,499	TSP
Honeywell International	Industrials	IN	AQ								
Hong Kong and China Gas	Utilities	NR	NR								
Hong Kong Exchanges & Clearing	Financials	AQ	AQ	78	C	NP					
Housing Development Finance Corporation	Financials	NR	X								
HSBC Holdings	Financials	AQ	AQ	92	A		830,310	90,586	739,724	75,865	Tr
Husky Energy	Energy	AQ	AQ	54	C		8,838,400	7,671,400	1,167,000		
Hutchison Whampoa	Industrials	NR	NR								
Hyundai Motor	Consumer Discretionary	AQ	AQ	73	B		1,985,624	700,800	1,284,820		
Iberdrola	Utilities	AQ	AQ	83	A		49,522,719	41,018,580	8,504,140	32,852,600	Tr TI TSP
Iberdrola Renovables	Utilities	DP	X								
IBM	Information Technology	AQ	AQ	85	B		2,837,601	456,655	2,380,950*	3,935,200	Tr EC Lr USP
ICICI Bank	Financials	AQ	AQ(L)	13	-						
ICL	Materials	AQ	X	9	-						
Illinois Tool Works	Industrials	AQ	AQ	73	C	NP					
Imperial Oil	Energy	AQ	AQ	49	-		10,286,000	9,778,000	508,000		
Imperial Tobacco Group	Consumer Staples	AQ	AQ	63	C		260,086	99,676	160,410		
Indian Oil Corporation	Energy	NR	X			NP					
Inditex	Consumer Discretionary	AQ	AQ	66	C		335,226	24,591	310,635	42,060	TSP
Industrial and Commercial Bank of China	Financials	AQ	AQ	23	-	NP					
Infosys Technologies	Information Technology	AQ(L)	AQ(L)			NP					
ING Group	Financials	AQ	AQ	54	B		280,596	35,775	244,821*	42,284	Tr
Inpex	Energy	AQ	AQ	66	B		214,377	200,562	13,815	6,552	EC S1
Intel	Information Technology	AQ	AQ	72	B		3,189,883	770,845	2,419,040*	43,595,000	Tr S1 TI USP
Intesa Sanpaolo S.p.A	Financials	AQ	AQ	66	B		159,877	73,636	86,241	16,267	Tr
Itaú Unibanco Holding	Financials	AQ	X	52	B		19,156	4,923	14,233	71,366^	TI
Itaúsa Investimentos Itau S.A. (see Itaú Unibanco Holding S.A)	Financials	AQ(SA)	SA								
ITC	Consumer Staples	AQ	AQ	56	C		1,482,604	1,330,790	151,814	226,817	TSP
Japan Tobacco	Consumer Staples	AQ	AQ(L)	33	-	NP					
Jardine Matheson	Industrials	NR	DP								
Jardine Strategic	Industrials	DP	X			NP					
JFE Holdings	Materials	AQ	AQ	51	C	NP					

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Johnson & Johnson	Health Care	AQ	AQ	78	C		1,276,729	337,217	939,512	256,897	Tr
Johnson Controls	Consumer Discretionary	AQ	AQ	87	A		1,677,888	502,582	1,175,310	54,359	Tr
JPMorgan Chase	Financials	AQ	AQ	74	C		1,377,723	107,958	1,269,770	103,815	Tr
Kansai Electric Power	Utilities	AQ	AQ	71	C		51,730,000	51,730,000		10,000	EA
KB Financial Group	Financials	AQ	AQ(L)	68	B		42,446	2,718	39,728	1,929	
KBC Group	Financials	AQ	AQ	64	C		65,610	65,610			
KDDI Group	Telecommunications	AQ	AQ	27	-		1,181,403	1,229	1,180,170		
Kellogg Company	Consumer Staples	AQ	AQ	67	C		1,285,525	578,608	706,917		
Kimberly-Clark	Consumer Staples	AQ	AQ	63	D		5,618,353	2,569,255	3,049,100	687,044	TSP
Kirin Holdings	Consumer Staples	AQ	AQ	82	B		1,685,557	934,101	751,456	138,940	TSP
Kohl's	Consumer Discretionary	AQ	AQ	58	C		861,838	28,004	833,834	195,001	Tr TSP
Komatsu	Industrials	AQ	AQ	54	C		328,043	93,625	234,418*	115,000	S1 TSP USP
Korea Electric Power (Kepeco)	Utilities	DP	AQ			NP					
Kraft Foods	Consumer Staples	AQ	AQ	91	B		2,568,985	1,263,250	1,305,740	39,210,600^	Tr DSP EA S1 TI TSP USP
Kroger	Consumer Staples	AQ	AQ	21	-		6,336,019	1,785,872	4,550,150		
Kyocera Corporation	Information Technology	AQ	AQ	68	B	NP					
L' Oreal	Consumer Staples	AQ	AQ	61	B		183,850	78,200	105,650	5,386,430^	Eq DSP EC AS TI USP Wa Oth
Lafarge	Materials	AQ	AQ	94	A		106,641,379	97,875,837	8,765,540	6,250,000	Tr S1 TSP
Larsen & Toubro	Industrials	AQ	AQ	70	B		344,772	256,279	88,493	2,941,670	Tr EC
Linde	Materials	AQ	AQ	71	B		14,400,000	5,400,000	9,000,000	320,000^	S1
Lloyds Banking Group	Financials	AQ	AQ	85	B		412,510	69,484	343,026	37,385	Tr
Lockheed Martin	Industrials	AQ	IN	76	B		1,511,909	341,082	1,170,830*	219,518	Tr
Loews	Financials	NR	NR								
Lowe's	Consumer Discretionary	AQ	AQ	78	C	NP					
Lukoil	Energy	AQ(L)	NR								
LVMH	Consumer Discretionary	AQ	AQ	75	B		253,390	48,723	204,667	544,413^	Tr AS TI TSP Wa Oth
Manulife Financial	Financials	AQ	AQ	43	-	NP					
Marathon Oil	Energy	AQ	AQ	49	-		18,300,000	13,750,000	4,550,000		
Maroc Telecom (see Vivendi Universal)	Telecommunications	AQ(SA)	NR								
MasterCard	Information Technology	AQ	AQ	44	-	NP					
McDonald's	Consumer Discretionary	AQ	AQ	15	-	NP					
McKesson	Health Care	AQ	AQ	48	-		122,835	30,063	92,772	27,632	Tr
Medco Health Solutions	Health Care	AQ	AQ	60	C		80,351	3,436	76,915		
MediaTek	Information Technology	DP	X			NP					
Medtronic	Health Care	AQ	AQ	54	C		227,715	27,141	200,574		
Merck & Co.	Health Care	AQ	AQ	73	B		2,196,545	1,072,054	1,124,490*	345,504^	Tr TI USP
MetLife	Financials	AQ	AQ	45	-		78,263	6,455	71,808*		
Metro	Consumer Staples	AQ	AQ	74	B		3,450,344	692,887	2,757,460	497,229^	Tr AS TSP Oth
Microsoft	Information Technology	AQ	AQ	78	B		1,077,034	41,649	1,035,390*	289,194	Tr S1
Mitsubishi	Industrials	AQ	AQ	56	C		2,975,910	1,647,173	1,328,740	83,500	TI
Mitsubishi Electric†	Industrials	AQ	NR	38	-		1,125,000	438,000	687,000	289,000	TSP
Mitsubishi Estate	Financials	AQ	AQ	24	-	NP					
Mitsubishi UFJ Financial Group	Financials	AQ	AQ	69	C		268,081	17,636	250,445	20,194	Tr



Company	Sector	2010 Response status <sup>4</sup>	2009 Response status	Carbon disclosure score	Carbon performance score	Non-public	Total emissions <sup>1</sup>	Scope 1	Scope 2 grid average <sup>2</sup>	Scope 3 <sup>3</sup>	Scope 3 source type
Mitsui & Co	Industrials	AQ	AQ	31	-	NP					
Mitsui Fudosan	Financials	NR	NR								
Mizuho Financial Group	Financials	AQ	AQ	77	B	NP					
Monsanto	Materials	AQ	AQ	36	-		2,137,000	1,323,000	814,000		
Morgan Stanley	Financials	AQ	AQ	85	B		323,273	8,355	314,918	50,371	Tr EA
Mosaic Company	Materials	AQ	NR	74	B		3,795,915	2,218,355	1,577,560	6,899,010	S1
Motorola	Information Technology	AQ	AQ	81	C		433,373	33,217	400,156	19,945,700	Tr AS TSP USP
MTN Group	Telecommunications	AQ	AQ	71	C		561,447	280,246	281,201	4,414	Tr
MTR Corporation	Industrials	AQ	AQ	83	B		1,152,382	39,446	1,112,940	6,911 <sup>^</sup>	Tr Wa Oth
MTS	Telecommunications	DP	X			NP					
Munich Re	Financials	AQ	AQ	82	A		246,702	59,760	186,942 <sup>*</sup>	32,765 <sup>^</sup>	Tr Wa Oth
Naspers	Consumer Discretionary	AQ	X	41	-	NP					
National Australia Bank	Financials	AQ	AQ	93	A		209,728	16,019	193,709 <sup>*</sup>	33,489 <sup>^</sup>	Tr Lr Wa Oth
National Bank Of Greece	Financials	AQ	AQ	44	-		44,603		44,603		
National Grid	Utilities	AQ	AQ	87	A		8,850,000	8,500,000	350,000	41,765,400	Tr Eq EC EA AS TI USP Wa
National Oilwell Varco	Energy	NR	NR								
National Thermal Power (NTPC)	Utilities	NR	NR								
NATIXIS	Financials	AQ	AQ	42	-		12,414	421	11,993	3,029 <sup>^</sup>	Tr Oth
Nestle	Consumer Staples	AQ	AQ	92	A		6,975,093	3,976,158	2,998,940	50,985,700 <sup>^</sup>	TSP
Newcrest Mining	Materials	AQ	AQ	57	C		1,379,200	731,331	647,869	6,492	Tr
Newmont Mining	Materials	AQ	AQ	87	C		5,417,268	4,212,914	1,204,350 <sup>*</sup>		
News Corporation	Consumer Discretionary	AQ	AQ	94	A		597,087	86,008	511,079 <sup>*</sup>	44,735	Tr
NextEra Energy	Utilities	AQ	AQ	80	B		47,207,504	47,078,510	128,994	122,255	Tr
NIKE	Consumer Discretionary	AQ(L)	AQ	42	-		76,110		76,110	43,071	Tr Oth
Nintendo	Information Technology	AQ(L)	AQ			NP					
Nippon Steel	Materials	AQ	AQ	75	C	NP					
Nippon Telegraph & Telephone (NTT)	Telecommunications	AQ	AQ	43	-		4,017,000	224,000	3,793,000		
Nissan Motor <sup>†</sup>	Consumer Discretionary	AQ	AQ	66	C	NP					
NLMK	Materials	NR	X								
Nokia Group	Information Technology	AQ	AQ	91	A		299,300	18,700	280,600 <sup>*</sup>	9,355,280	Tr EC AS S1 TI TSP USP
Nomura Holdings <sup>†</sup>	Financials	AQ(L)	AQ	62	C		68,908	2,639	66,269	8,972	
Nordea Bank	Financials	AQ	AQ	50	C		51,519		51,519 <sup>*</sup>	20,304	Tr
Norfolk Southern	Industrials	AQ	AQ	57	C		5,533,760	5,200,000	333,760		
Northrop Grumman	Industrials	AQ	AQ	68	C		1,466,838	354,885	1,111,950	1,255,830	Tr EC TSP
Novartis	Health Care	AQ	AQ	72	B		1,509,227	578,343	930,884	400,000	Tr Wa
Novo Nordisk	Health Care	AQ	AQ	89	A		184,202	40,883	143,319 <sup>*</sup>	215,900	Tr EC Le TI TSP Wa
NTT DoCoMo	Telecommunications	AQ	AQ	31	-		1,203,479	38,797	1,164,680		
Occidental Petroleum	Energy	AQ	AQ	49	-		16,500,000	10,300,000	6,200,000		
OGX Petróleo e Gás Participações	Energy	DP	X			NP					
Oil & Natural Gas	Energy	AQ	AQ	42	-		8,110,000	7,860,000	250,000		
Optus (SingTel)	Telecommunications	NR	AQ								
Oracle	Information Technology	AQ	AQ	31	-	NP					

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Overseas Chinese Banking	Financials	NR	AQ								
Panasonic	Consumer Discretionary	AQ	AQ	90	A		3,310,869	758,053	2,552,820	64,782,000	TSP USP
PepsiCo	Consumer Staples	AQ	AQ	71	B		4,343,418	2,915,241	1,428,180	1,945,000 <sup>^</sup>	Eq Fe
Pernod-Ricard	Consumer Staples	AQ	AQ	60	C		421,786	317,631	104,155 <sup>*</sup>	1,795,000 <sup>^</sup>	Tr AS S1 TI Oth
PETROBRAS	Energy	AQ	AQ	79	C		62,824,648	62,011,394	813,254	645,198,000	USP
PetroChina	Energy	IN	IN								
Pfizer	Health Care	AQ	AQ	84	B		2,873,235	1,517,540	1,355,700		
PG&E	Utilities	AQ	AQ	90	A		3,554,886	2,117,534	1,437,350 <sup>*</sup>	47,479,400	Tr EA USP Wa
Philip Morris International	Consumer Staples	AQ	NR	87	B		716,471	305,004	411,467	52,270 <sup>^</sup>	Tr
Philips Electronics	Industrials	AQ	AQ	94	A		1,083,700	434,717	648,983	300,836,000	Tr TI USP
Ping An of China	Financials	AQ(L)	X			NP					
PKO Bank Polski	Financials	DP	NR			NP					
PNC Financial Services	Financials	AQ	DP	76	B		376,202	15,669	360,533	96,752 <sup>^</sup>	Tr EC TI
Polska Grupa Energetyczna	Utilities	NR	X								
POSCO	Materials	AQ	AQ	90	A		63,155,000	60,457,000	2,698,000	833,511	Tr EC TI
Potash Corporation of Saskatchewan	Materials	AQ	AQ	44	-		8,888,000	7,459,000	1,429,000		
Power Financial	Financials	DP	IN			NP					
PPR	Consumer Discretionary	NR	DP								
Praxair	Materials	AQ	AQ	93	A		13,215,314	4,147,267	9,068,050 <sup>*</sup>	226,120	Tr TSP
Procter & Gamble	Consumer Staples	AQ	AQ	46	-		5,824,000	2,625,000	3,199,000		
Prudential	Financials	AQ	AQ	66	C		127,261	18,878	108,383	3,643	Tr
Prudential Financial	Financials	AQ	AQ	54	C		90,249	5,577	84,672	11,735	Tr
PTT	Energy	NR	AQ								
Public Service Enterprise Group	Utilities	AQ	AQ	74	A		21,195,466	20,165,832	1,029,630 <sup>*</sup>	65,224,100	Tr EC EA Lr AS S1 TI USP Wa
QBE Insurance Group	Financials	AQ	AQ	63	D		37,928	1,254	36,674	11,937	Tr S1
Qualcomm	Information Technology	AQ	AQ	50	C		92,135	53,633	38,502		
Raytheon	Industrials	AQ	AQ	68	B		613,363	109,449	503,914		
Reckitt Benckiser	Consumer Staples	AQ	AQ	93	A		287,085	91,063	196,022	24,593,900 <sup>^</sup>	Tr DSP Le AS S1 TI TSP USP Wa Oth
Reliance Industries	Energy	NR	NR								
Repsol YPF	Energy	AQ	AQ	88	A		26,473,220	24,701,381	1,771,840	151,351,000 <sup>^</sup>	Tr EA TI TSP USP
Research In Motion	Information Technology	AQ	AQ	55	D		42,306	9,505	32,801	15,731	Tr
Richemont	Consumer Discretionary	AQ	AQ	46	-	NP					
Rio Tinto	Materials	AQ	AQ	89	B		42,437,000	26,100,000	16,337,000	459,600,000	EA S1 TI USP
Roche Holding	Health Care	AQ	AQ	56	C		889,412	433,535	455,877	150,319	Tr
Rogers Communications	Telecommunications	AQ	AQ	49	-		195,181	44,758	150,423	55,997 <sup>^</sup>	Tr EC Oth
Rosneft	Energy	NR	DP								
Royal Bank of Canada	Financials	AQ	AQ	75	C		211,562	33,482	178,080	21,261	Tr
Royal Bank of Scotland Group	Financials	AQ	AQ	93	A		776,487	87,629	688,858	95,136	Tr S1
Royal Dutch Shell	Energy	AQ	AQ	89	A		78,000,000	67,000,000	11,000,000	616,588,000 <sup>^</sup>	Tr EA Le AS
Royal KPN	Telecommunications	AQ	AQ	80	A		559,618	84,909	474,709 <sup>*</sup>	17,700	Tr EA
RWE	Utilities	AQ	AQ	67	B		149,100,000	149,100,000		138,570,000 <sup>^</sup>	EA
SABMiller	Consumer Staples	AQ	AQ	65	B		2,632,056	1,449,442	1,182,610	89,639	TSP
Saint-Gobain	Industrials	AQ	AQ	89	B		16,100,879	12,347,534	3,753,350	1,305,770	Eq S1 Oth

Company	Sector	2010 Response status <sup>4</sup>	2009 Response status	Carbon disclosure score	Carbon performance score	Non-public	Total emissions <sup>1</sup>	Scope 1	Scope 2 grid average <sup>2</sup>	Scope 3 <sup>3</sup>	Scope 3 source type
Samsung Electronics	Information Technology	AQ	AQ	95	A		9,114,871	3,777,513	5,337,360	40,587,000	Tr TSP USP
Sanofi-Aventis	Health Care	AQ	AQ	63	C	NP					
SAP	Information Technology	AQ	AQ	83	B		232,000	131,000	101,000*	191,000^	Tr EC TSP Oth
Sasol	Energy	AQ	AQ	84	B		71,321,000	61,768,000	9,553,000	582,159	Tr TSP
Sberbank	Financials	DP	NR			NP					
Schlumberger	Energy	AQ	AQ	63	C		1,705,000	1,315,000	390,000	1,467,000^	Tr S1 TI
Schneider Electric	Industrials	AQ	AQ	52	B		477,647	200,497	277,150		
Scottish & Southern Energy	Utilities	AQ	AQ	90	A		24,286,543	22,731,418	1,555,130*	10,735^	Tr
Seven & I Holding	Consumer Staples	AQ	AQ	52	C		2,669,679		2,669,680	189,848^	EA
Shin Etsu Chemical†	Materials	AQ	AQ	32	-	NP					
Shinhan Financial Group	Financials	AQ	AQ	80	B		35,921	2,599	33,322		Oth
Siemens	Industrials	AQ	AQ	98	A		3,371,990	1,509,736	1,862,250	894,310	Tr TSP
Sime Darby Berhad	Industrials	NR	DP								
Simon Property Group	Financials	AQ	AQ	78	B		643,745	23,996	619,749	11,021	Tr EC
Snam Rete Gas	Utilities	AQ	AQ	52	C		1,255,416	1,227,000	28,416		
Societe Generale	Financials	AQ	AQ	55	C		219,921	26,186	193,735	58,622^	Tr Oth
SoftBank	Telecommunications	AQ	NR	13	-	NP					
Sony Corporation	Consumer Discretionary	AQ	AQ	81	B		1,743,212	368,277	1,374,940	23,630,000	Tr TI USP
Southern Copper Corporation	Materials	NR	NR								
Southwestern Energy	Energy	NR	NR								
Standard Bank Group	Financials	AQ	AQ	74	B		149,178	10,284	138,894	9,072^	Tr AS
Standard Chartered	Financials	AQ	AQ	82	B		131,190	5,806	125,384	28,785	Tr
Staples	Consumer Discretionary	AQ(L)	AQ								
Starbucks	Consumer Discretionary	AQ	AQ	52	C		912,853	228,742	684,111		
State Bank of India	Financials	AQ	AQ(L)	12	-						
State Street	Financials	AQ	AQ	81	B		145,200	6,764	138,436	11,021^	Tr EC
Statoil	Energy	AQ	AQ	39	-		13,100,000	13,100,000			
Steel Authority of India	Materials	NR	X								
Stryker	Health Care	AQ(L)	IN								
Sumitomo Mitsui Financial Group	Financials	AQ	AQ	46	-	NP					
Sun Hung Kai Properties	Financials	NR	NR								
Sun Life Financial	Financials	AQ	AQ	64	C	NP					
Suncor Energy	Energy	AQ	AQ	66	B		19,523,758	16,394,417	3,129,340	21,904^	Tr
Surgutneftegas	Energy	AQ(L)	NR			NP					
Svenska Handelsbanken	Financials	AQ	AQ	36	-	NP					
Swiss Re	Financials	AQ	AQ	79	A		26,690	5,718	20,972	17,414	Tr
Swisscom	Telecommunications	AQ	AQ	42	-		26,300	26,300			
Syngenta International	Materials	AQ	AQ	71	B		1,059,000	641,000	418,000	393,000	Tr TSP
Synthes	Health Care	NR	DP								
Sysco	Consumer Staples	NR	IN								
Taiwan Semiconductor Manufacturing	Information Technology	AQ	AQ	85	B		3,578,530	1,528,133	2,050,400	994,737^	Tr EC AS TSP
Takeda Pharmaceutical	Health Care	AQ	AQ	64	C		351,674	211,753	139,921	8,757	TSP
Talisman Energy	Energy	AQ	AQ	43	-		12,509,000	12,195,000	314,000		
Target	Consumer Discretionary	AQ	AQ	66	C		3,027,914	310,277	2,717,640		
Tata Consultancy Services	Information Technology	AQ	AQ	75	B		268,018	26,123	241,895*	68,858	Tr
Teck	Materials	AQ	AQ	71	C	NP					

**Carbon Disclosure Project**

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Telecom Italia	Telecommunications	AQ	AQ	70	B		1,058,026	187,513	870,513	86,587	Tr EC
Telefónica	Telecommunications	AQ	AQ	89	A		1,886,030	119,510	1,766,520	58,238	Tr
Telekom Indonesia	Telecommunications	NR	DP								
Telenor Group	Telecommunications	AQ	AQ	63	C		810,252	196,414	613,838	13,721	Tr
TeliaSonera	Telecommunications	AQ	AQ	80	B		205,838	27,672	178,166*	40,045	Tr S1 TSP
Telstra Corporation	Telecommunications	AQ	AQ	72	C		1,287,955	89,952	1,198,000	227,233^	Tr EA Wa
Tenaris	Energy	NR	NR								
Tencent Holdings	Information Technology	NR	DP								
Tepco (Tokyo Electric Power)	Utilities	AQ	AQ(L)	32	-		107,500,000	107,500,000			
Tesco	Consumer Staples	AQ	AQ	92	A		5,094,719	1,956,628	3,138,090	70,349	Tr
Teva Pharmaceutical Industries	Health Care	NR	NR								
Texas Instruments	Information Technology	AQ	AQ	59	C		1,720,956	675,230	1,045,730		
The Southern Company	Utilities	IN	AQ								
Thermo Fisher Scientific	Health Care	AQ	AQ	28	-						
Thomson Reuters	Consumer Discretionary	AQ	AQ	50	D	NP					
ThyssenKrupp	Materials	AQ	AQ	70	B		20,380,906	15,280,906	5,100,000		
Time Warner	Consumer Discretionary	AQ(L)	AQ								
Time Warner Cable	Consumer Discretionary	DP	X			NP					
TJX Companies	Consumer Discretionary	AQ	IN	94	C		813,026	48,393	764,633	10,209	Tr
Tokio Marine Holdings	Financials	AQ	AQ	72	B		67,403	4,442	62,961	18,298	Tr
Toronto-Dominion Bank	Financials	AQ	AQ	58	C		233,505	46,842	186,663	27,048	Tr
Toshiba	Information Technology	AQ	AQ	72	C		3,134,000	980,000	2,154,000	58,000	TSP
Total	Energy	AQ	AQ	77	B		60,300,000	55,100,000	5,200,000*	598,200,000	TSP USP
Toyota Motor	Consumer Discretionary	AQ	AQ	80	A		7,334,000	2,910,000	4,424,000	635,342	Tr TI TSP
TransCanada Corporation	Energy	NR	NR								
Transocean	Energy	AQ	AQ	68	C		2,202,922	2,198,571	4,351	132,696^	Tr TI
Travelers Companies	Financials	AQ	AQ	52	B		89,005	37,075	51,930		
Tullow Oil	Energy	AQ	AQ	27	-		370,776	370,776			
Tyco International	Industrials	AQ	AQ	55	C	NP					
U.S. Bancorp	Financials	AQ	AQ	63	C		385,773	39,347	346,426	17,568	Tr
UBS	Financials	AQ	AQ	82	A		324,061	25,723	298,338	87,867	Tr AS Wa
Unibail-Rodamco	Financials	AQ	AQ	61	C		117,419	21,425	95,994		
Unicredit Group	Financials	AQ	AQ	67	C		502,909	96,122	406,787*	21,083	Tr Wa
Unilever	Consumer Staples	AQ	AQ	82	B		2,641,079	1,100,785	1,540,290	150,500,000^	Tr AS
Union Pacific	Industrials	AQ	AQ	51	C		10,030,828	10,030,828			
United Overseas Bank	Financials	NR	NR								
United Technologies Corporation	Industrials	AQ	AQ	64	B		1,886,208	905,586	980,622	59,477	Tr
UnitedHealth Group	Health Care	AQ	AQ	39	-		108,989	7,076	101,913		
UPS	Industrials	AQ	AQ	78	B		12,361,069	11,436,810	924,259	7,286,140^	Tr TSP
VALE	Materials	AQ	AQ	88	B		12,872,041	12,102,744	769,297*	617,552^	Tr TI Wa
Veolia Environnement	Utilities	AQ	AQ	82	B		50,026,560	44,482,430	5,544,130	841,660	Tr EC S1 TI Wa
Verizon Communications	Telecommunications	AQ	AQ	60	B		6,491,011	504,922	5,986,090		
Viacom	Consumer Discretionary	AQ	AQ	23	-	NP					
Vinci	Industrials	AQ	AQ	80	B		2,154,500	1,959,500	195,000	13,070,800	USP
Visa	Information Technology	DP	X			NP					
Vivendi Universal	Consumer Discretionary	AQ	AQ	78	C		247,969	27,614	220,355	6,855	Tr

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Vodafone Group	Telecommunications	AQ	AQ	83	C		1,622,535	249,087	1,373,450*	78,780	Tr
Volkswagen	Consumer Discretionary	AQ	AQ	77	B		6,516,034	1,510,950	5,005,080	7,832,710	Tr USP
VTB Bank	Financials	DP	DP			NP					
Wal-Mart de Mexico (see Wal-Mart Stores)	Consumer Staples	AQ(SA)	SA								
Wal-Mart Stores	Consumer Staples	AQ	AQ	86	B		21,016,196	5,693,933	15,322,300	27,428^	Tr
Walgreens	Consumer Staples	AQ	AQ	56	C		2,281,913	253,203	2,028,710		
Walt Disney Company	Consumer Discretionary	AQ	AQ	53	C		1,496,786	543,226	953,560		
Waste Management	Industrials	AQ	AQ	64	B		23,664,677	23,527,470	137,207		
WellPoint	Health Care	AQ	AQ	68	C		181,420	9,617	171,803	96,891	Tr EC
Wells Fargo & Company	Financials	AQ	AQ	89	B		1,707,040	142,889	1,564,150	118,503	Tr
Wesfarmers	Consumer Staples	AQ	AQ	58	B		5,708,000	3,012,000	2,696,000	431,253	Tr EA
Westfield Group	Financials	AQ	AQ	77	B		536,824	27,838	508,986	80,525^	Tr EC Wa Oth
Westpac Banking	Financials	AQ	AQ	86	A		201,691	10,963	190,728*	61,702	Tr EA Wa
Wharf Holdings	Financials	DP	DP			NP					
Wilmar International	Consumer Staples	AQ	AQ	29	-	NP					
Wipro	Information Technology	NR	AQ(L)								
Woodside Petroleum	Energy	AQ	AQ	45	-		9,020,494	8,979,762	40,732		
Woolworths	Consumer Staples	AQ	AQ	91	B		2,968,261	482,086	2,486,180	765,987^	Tr TI TSP Wa Oth
Xstrata	Materials	AQ	AQ	75	B	NP					
XTO Energy	Energy	AQ	AQ	14	-		5,571,810	4,821,960	749,850		
Yahoo Japan	Information Technology	AQ	AQ	10	-	NP					
Yahoo!	Information Technology	AQ	AQ	43	-					47,100	Tr EC
Yum! Brands	Consumer Discretionary	AQ	IN	63	B	NP					
Zurich Financial	Financials	AQ	AQ	57	C	NP					

**Key:**

<b>AQ</b>	Answered questionnaire
<b>SA</b>	Company is either a subsidiary or has merged during the reporting process. See company in brackets for further information on company's status
<b>AQ(L)</b>	Answered questionnaire late
<b>IN</b>	Provided information
<b>DP</b>	Declined to participate
<b>NP</b>	Answered questionnaire but response not made publicly available
<b>NR</b>	No response
<b>-</b>	Company did not meet disclosure score threshold of 50 to receive performance score
<b>X</b>	Company did not fall into one of the CDP samples in that year
<b>*</b>	Company provided a figure for scope 2 contract arrangements
<b>†</b>	These companies marked AQ in 2010 submitted their response on time, but could not be included in the analysis of this report due to technical issues.

**Scope 3 Source Key:**

<b>S1</b>	Purchased goods and services - direct/tier 1 supplier emissions
<b>AS</b>	Purchased goods and services - emissions of all upstream suppliers - tier 1 and beyond
<b>EA</b>	Energy-related activities not included in Scope 2
<b>Eq</b>	Capital equipment
<b>TI</b>	Transportation and distribution of inputs (goods and services) and waste generated in own operations
<b>Tr</b>	Business travel
<b>Wa</b>	Waste generated in operations
<b>Fr</b>	Franchises (Scope 1 emissions of the franchisor)
<b>Lr</b>	Leased assets (Scope 1 emissions of the lessor)
<b>In</b>	Investment (Scope 1 emissions of the company receiving investment)
<b>Fe</b>	Franchises (Scope 1 emissions of the franchisee)
<b>Le</b>	Leased assets (Scope 1 emissions of the lessee)
<b>TSP</b>	Transportation and distribution of sold products inc. warehousing and retail
<b>USP</b>	Use of sold goods and services
<b>DSP</b>	Disposal of sold products at the end of their life
<b>EC</b>	Employee commuting and teleworking
<b>Oth</b>	Other

1 Scopes 1 and 2 grid averaged reported emissions.  
 2 Where there is a \* in this column, the company did provide detail in relation to its contractual scope 2 emissions. Please refer to the company's response.  
 3 Where there is a ^ in this column the company provided an "Other" Scope 3 source type which was adjusted to be included in one of the main scope 3 source types.  
 4 Those companies marked AQ(L) in 2010 submitted responses after the analysis cut off date of July 1, 2010. These companies' responses are not included in the analysis of this report.  
 5 Formerly FPL Group

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In addition, CDP has been made possible through the generous funding of:



Our sincere thanks are extended to the following:

**Advisors:**

Amory Lovins, Bill Thomas, Chris Page, Hidemi Tomita, Hisakazu Okamura, Jane Ambachtscheer, Jon Johnson, Marc Fox, Martin Whittaker, Martin Wise, Masao Seki, Masaru Arai, Masayuki Itou, Ryuji Matsuhashi, Tsuyoshi Mizuguchi

**Organizations:**

Accounting for Sustainability, Allen & Overy, Association of British Insurers, Brooklyn Bridge, Ceres, Clinton Global Initiative, Confederation of British Industry, Development Bank of Japan, Environmental Research Group of the UK Faculty and Institute of Actuaries, EPA Energy Star, EPA Climate Leaders, Forest Footprint Disclosure Project, Freshfields, GHG Protocol, Global Reporting Initiative, Institutional Investors Group on Climate Change, Investor Group on Climate Change, LMI, Principles for Responsible Investing, Skadden Arps, The Climate Group, UK Foreign & Commonwealth Office, United Nations Environment Programme Finance Initiative, United Nations Global Compact, World Business Council for Sustainable Development, World Bank Group, World Economic Forum, World Resources Institute, WWF.

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