

# **Business resilience in an uncertain, resource-constrained world**

**CDP Global 500 Climate Change Report 2012**  
**On behalf of 655 investors**  
**with assets of US\$ 78 trillion**

Global Advisor and Report Writer





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“Increasingly, our key stakeholders – our people, clients, shareholders and partners - expect us to operate our business in a way that is economically, socially and environmentally sustainable. Meeting these expectations helps us to function successfully as a business, attract and keep high calibre people, retain key contracts and take on new challenges.”

Logica

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# CEO Foreword



**“CDP has pioneered the only global system that collects information about corporate behaviour on climate change and water scarcity, on behalf of market forces, including shareholders and purchasing corporations.”**

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

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

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

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

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

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

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

A handwritten signature in black ink that reads "P. Simpson".

**Paul Simpson**  
CEO Carbon Disclosure Project

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

# Executive Summary



Governments have reiterated their ambition to tackle climate change but, in 2012, their focus is on economic growth. Business faces a period of high uncertainty, subdued growth, and volatile commodity prices. In this context, companies are increasingly challenged by their shareholders to demonstrate long-term resilience. It is for these reasons that, in 2012, the Carbon Disclosure Project (CDP) sent its annual request to the Global 500<sup>2</sup> companies on behalf of 655 investors with US\$78 trillion of assets, asking them to measure and report what climate change means for their business.

This year 81% (405) of corporations from the Global 500 responded to the CDP questionnaire. These responses provide a valuable insight into how companies are operating in an uncertain world. This report is based on analysis of 379 responses received by July 1st 2012<sup>3</sup> and investigates whether companies are strategically focusing on climate change and its long-term impact.

Overall we conclude that while some companies are demonstrating an awareness of the strategic opportunities associated with acting on climate change, few are setting the necessary targets or making the investments required to ensure their long-term resilience.

At the last UN climate summit in Durban<sup>4</sup>, all countries agreed to raise their ambition on climate change with the aim of limiting warming to 2°C. PwC analysis of current emissions trends and pledges shows that absolute emissions reductions of around 4% per year from 2020 to 2050 will be required if the objective agreed at COP17 is to be achieved. Corporate targets do not nearly match this level of ambition. Although 82% of companies have

set absolute or intensity emissions targets, only 20% of companies have set targets to 2020 and beyond. The average of the longer-term absolute targets outlined by CDP respondents is around only a 1% reduction per year.

Governments have not translated their declaration in Durban into more ambitious legislation, or long-term emissions targets, at the national level. The low level of corporate ambition is probably a reflection of this. In their responses to CDP, 49% of companies state that regulation is an important driver of corporate action. Conversely, some companies report that regulatory uncertainty is a barrier to long-term investment in mitigation technology.

Overall, the credit crunch and subsequent downturn has proved to be effective in reducing greenhouse gas emissions: the right kind of results, for the wrong reasons. Total reported Scope 1 emissions have fallen from 3.6 billion metric tons CO<sub>2</sub>e in 2009 to 3.1 billion metric tons CO<sub>2</sub>e in 2012, although a part of this is linked to a fall in the proportion of respondents to CDP from energy intensive sectors. Only 40% of respondents note a decrease in their emissions that was exclusively attributable to emissions reduction activities. Others note that cost-cutting measures and even staff redundancies have resulted in lower emissions. Economic activity is still closely coupled with emissions, raising the prospect of a rebound in emissions when countries recover from the downturn.

In spite of the economic downturn, climate change hasn't dropped off the board's agenda: 96% of respondents report that they still have board or senior executive oversight of climate change (2011: 93%) and most



## 1 TOP 10 COMPANIES BY DISCLOSURE AND PERFORMANCE

Company Name	Sector	Disclosure Score	Performance Band
Bayer	Healthcare	100	A
Nestlé	Consumer Staples	100	A
BASF	Materials	99	A
BMW	Consumer Discretionary	99	A
Gas Natural SDG	Utilities	99	A
Diageo	Consumer Staples	98	A
Nokia Group	Information Technology	98	A
Allianz Group	Financials	97	A
UBS	Financials	97	A
Panasonic	Consumer Discretionary	96	A

2: The Global 500 are the largest companies by market capitalization included in the FTSE Global Equity Index Series

3: Companies that submitted responses after the analysis cut off date of July 1, 2012 are marked AQ(L) in 2012 in the Appendix

4: 17th Conference of the Parties (COP17) to the United Nations Framework Convention on Climate Change (UNFCCC)

5: Performance of CDLI and CPLI companies is calculated on an equally-weighted basis relative to the FTSE Global Equity Index Series and re-balanced annually on October 1st. Therefore the 2012 CDLI and CPLI companies are not included in this analysis. Note Results presented should not and cannot be viewed as an indicator of future performance.

companies have integrated climate change into their wider business strategy (78%, up from 68% in 2011).

Recent extreme weather and natural events have tested companies' business resilience and increased their level of understanding of the timeframes of the physical risks they associate with climate change. Physical risks are viewed as tangible and present, impacting companies' operations, supply chains and business planning. The majority of companies (81%) report physical risks and the percentage of companies that view these risks as current has nearly quadrupled from 10% in 2010 to 37% in 2012. Insurance company Allianz reports that in 2011 it processed \$2.2 billion in natural catastrophe (including non-weather related) claims, the largest sum for natural catastrophes in its history.

Companies are aware that acting on climate change can result in benefits beyond short-term financial returns or savings. 68% of respondents (2011: 58%) note opportunities associated with customer behavior changes, enhancing their reputation, or both.

With capital hard to come by, companies are facing challenges justifying the business case for low carbon investment. Companies are more likely to be successful at raising investment for emissions reduction activities with a long-term payback (3 years or more) when they recognize that their climate change strategy gives them a competitive advantage. 65% of respondents showing at least one investment with payback of more than 3 years believe they have a strategic advantage over their competition. This compares with 42% of companies without any investments with paybacks of more than 3 years.

While nearly half of responding companies (48%) identify the potential for new products and business services as a response to climate change, just one-fifth of companies report a dedicated budget for low carbon product research and development (2012: 21%, 2011: 19%).

However, leading companies are thinking long term. Nearly all (94%) of the companies listed on the 2012 Carbon Performance Leadership Index (CPLI) state that their long-term strategy has been influenced by climate change compared to just half (54%) of the Global 500. Furthermore, the percentage of CPLI companies that can identify climate-related risks beyond a 10 year timeframe is almost double that of non-CPLI companies (55% vs. 29). It is therefore not surprising that a larger proportion of CPLI companies (85% vs. 60% non-CPLI) are able to raise investment for emissions reduction activities with a payback of more than 3 years.

Analysis of the companies that have entered either the CPLI or the Carbon Disclosure Leadership Index (CDLI) in the past suggests that companies achieving leadership positions on climate change generate superior stock performance<sup>5</sup>. An investment in a basket of stocks of CDLI companies following the publication of CDP's global report each year since 2006 and rebalanced on an annual basis to reflect that year's CDLI would have generated total returns of 67.4%, more than double the 31.1% return of the Global 500. Moreover, past CPLI companies generated average total returns of 15.9% since 2010, more than double the 6.4% return of the Global 500.

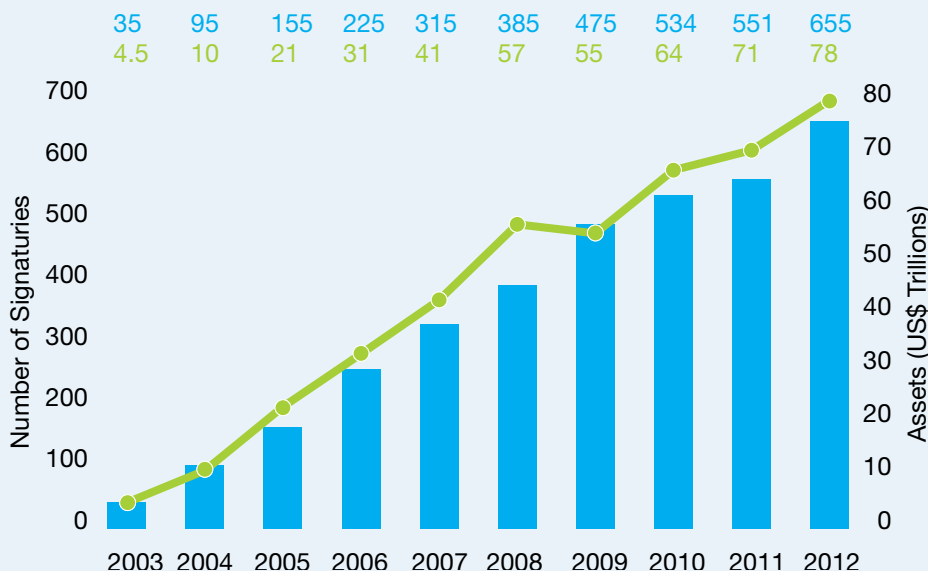
# CDP Investor Members 2012

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

<b>Aegon</b>	<b>Authority</b>
<b>AKBANK T.A.Ş.</b>	<b>Mongeral Aegon Seguros e Previdência S/A</b>
<b>Allianz Global Investors</b>	<b>Morgan Stanley</b>
<b>Aviva Investors</b>	<b>National Australia Bank</b>
<b>AXA Group</b>	<b>NEI Investments</b>
<b>Bank of America Merrill Lynch</b>	<b>Neuberger Berman</b>
<b>Bendigo and Adelaide Bank</b>	<b>Newton Investment Management Ltd</b>
<b>Blackrock</b>	<b>Nordea Investment Management</b>
<b>BP Investment Management</b>	<b>Norges Bank Investment Management</b>
<b>California Public Employees Retirement System - CalPERS</b>	<b>PFA Pension</b>
<b>California State Teachers Retirement Fund - CalSTRS</b>	<b>Robeco</b>
<b>Calvert Asset Management Company</b>	<b>Rockefeller &amp; Co.</b>
<b>Catholic Super</b>	<b>SAM Group</b>
<b>CCLA</b>	<b>Sampension KP</b>
<b>Daiwa Asset Management Co. Ltd.</b>	<b>Livsforsikring A/S</b>
<b>Generation Investment Management</b>	<b>Schroders</b>
<b>HSBC Holdings</b>	<b>Scottish Widows Investment Partnership</b>
<b>KLP</b>	<b>SEB</b>
<b>Legg Mason</b>	<b>Sompo Japan Insurance Inc Standard Chartered</b>
<b>London Pension Fund</b>	<b>TD Asset Management Inc. and TDAM USA Inc.</b>
	<b>The RBS Group</b>
	<b>The Wellcome Trust</b>

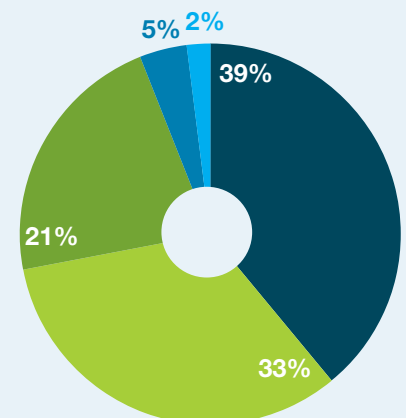
## 2 CDP INVESTOR SIGNATORIES & ASSETS (US\$ TRILLION) AGAINST TIME

- Investor CDP Signatories
- Investor CDP Signatory Assets



## 3 2012 SIGNATORY INVESTOR BREAKDOWN

- 259 Asset Managers
- 220 Asset Owners
- 143 Banks
- 33 Insurance
- 13 Other



# CDP Signatory Investors 2012

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

Aberdeen Asset Managers  
 Aberdeen Immobilien KAG mbH  
 ABRAPP - Associação Brasileira das Entidades Fechadas de Previdência Complementar  
 Achmea NV  
 Active Earth Investment Management  
 Acuity Investment Management  
 Addenda Capital Inc.  
 Advanced Investment Partners  
 AEGON N.V.  
 AEGON-INDUSTRIAL Fund Management Co., Ltd  
 AFP Integra  
 AIG Asset Management  
 AK Asset Management Inc.  
 AKBANK T.A.Ş.  
 Alberta Investment Management Corporation (AIMCo)  
 Alberta Teachers Retirement Fund  
 Alcyone Finance  
 AllenbridgeEpic Investment Advisers Limited  
 Allianz Elementar Versicherungs-AG  
 Allianz Global Investors Kapitalanlagegesellschaft mbH  
 Allianz Group  
 Altira Group  
 Amalgamated Bank  
 AMP Capital Investors  
 AmpegaGerling Investment GmbH  
 Amundi AM  
 ANBIMA – Associação Brasileira das Entidades dos Mercados Financeiro e de Capitais  
 Antera Gestão de Recursos S.A.  
 APG  
 AQEX LLC  
 Aquila Capital  
 Arisaig Partners Asia Pte Ltd  
 Arma Portföy Yönetimi A.Ş.  
 ASM Administradora de Recursos S.A.  
 ASN Bank  
 Assicurazioni Generali Spa  
 ATI Asset Management  
 ATP Group  
 Australia and New Zealand Banking Group Limited  
 Australian Ethical Investment  
 AustralianSuper  
 Avaron Asset Management AS  
 Aviva Investors  
 Aviva plc  
 AXA Group  
 Baillie Gifford & Co.  
 BaltCap  
 BANCA CIVICA S.A.  
 Banca Monte dei Paschi di Siena Group  
 Banco Bradesco S/A  
 Banco Comercial Português S.A.  
 Banco de Credito del Peru BCP  
 Banco de Galicia y Buenos Aires S.A.  
 Banco do Brasil S/A  
 Banco Espírito Santo, SA  
 Banco Nacional de Desenvolvimento Econômico e Social - BNDES  
 Banco Popular Español  
 Banco Sabadell, S.A.  
 Banco Santander  
 Banesprev – Fundo Banespa de Seguridade Social  
 Banesto  
 Bank Handlowy w Warszawie S.A.  
 Bank of America Merrill Lynch  
 Bank of Montreal  
 Bank Vontobel  
 Bankhaus Schelhammer & Schattera  
 Kapitalanlagegesellschaft m.b.H.  
 BANKIA S.A.  
 BANKINTER  
 Bankinvest  
 Banque Degroof  
 Banque Libano-Francaise  
 Barclays  
 Basellandschaftliche Kantonalbank  
 BASF Sociedade de Previdência Complementar  
 Basler Kantonalbank  
 Bätirente

Baumann and Partners S.A.  
 Bayern LB  
 BayernInvest Kapitalanlagegesellschaft mbH  
 BBC Pension Trust Ltd  
 BBVA  
 Bedfordshire Pension Fund  
 Beetle Capital  
 BEFIMMO SCA  
 Bendigo & Adelaide Bank Limited  
 Bentall Kennedy  
 Berenberg Bank  
 Berti Investments  
 BioFinance Administração de Recursos de Terceiros Ltda  
 BlackRock  
 Blom Bank SAL  
 Blumenthal Foundation  
 BNP Paribas Investment Partners  
 BNY Mellon  
 BNY Mellon Service Kapitalanlage Gesellschaft  
 Boston Common Asset Management, LLC  
 BP Investment Management Limited  
 Brasilprev Seguros e Previdência S/A.  
 British Airways Pension Investment Management Limited  
 British Columbia Investment Management Corporation (bcIMC)  
 BT Investment Management  
 Busan Bank  
 CAAT Pension Plan  
 Cadiz Holdings Limited  
 Caisse de dépôt et placement du Québec  
 Caisse des Dépôts  
 Caixa Beneficente dos Empregados da Companhia Siderurgica Nacional - CBS  
 Caixa de Previdência dos Funcionários do Banco do Nordeste do Brasil (CAPEF)  
 Caixa Econômica Federal  
 Caixa Geral de Depositos  
 CaixaBank, S.A  
 California Public Employees' Retirement System  
 California State Teachers' Retirement System  
 California State Treasurer  
 Calvert Investment Management, Inc  
 Canada Pension Plan Investment Board  
 Canadian Friends Service Committee (Quakers)  
 Canadian Imperial Bank of Commerce (CIBC)  
 Canadian Labour Congress Staff Pension Fund  
 CAPESESP  
 Capital Innovations, LLC  
 CARE Super  
 Carmignac Gestion  
 Catherine Donnelly Foundation  
 Catholic Super  
 CBF Church of England Funds  
 CBRE  
 Cbus Superannuation Fund  
 CCLA Investment Management Ltd  
 Celeste Funds Management Limited  
 Central Finance Board of the Methodist Church  
 Ceres  
 CERES-Fundação de Seguridade Social  
 Change Investment Management  
 Christian Brothers Investment Services  
 Christian Super  
 Christopher Reynolds Foundation  
 Church Commissioners for England  
 Church of England Pensions Board  
 CI Mutual Funds' Signature Global Advisors  
 City Developments Limited  
 Clean Yield Asset Management  
 ClearBridge Advisors  
 Climate Change Capital Group Ltd  
 CM-CIC Asset Management  
 Colonial First State Global Asset Management  
 Comerica Incorporated  
 COMGEST  
 Commerzbank AG  
 Commlnsure  
 Commonwealth Bank Australia  
 Commonwealth Superannuation Corporation  
 Compton Foundation  
 Concordia Versicherungsgruppe  
 Connecticut Retirement Plans and Trust Funds  
 Co-operative Financial Services (CFS)  
 Credit Suisse  
 Daegu Bank  
 Daesung Capital Management  
 Daiwa Asset Management Co. Ltd.  
 Daiwa Securities Group Inc.  
 Dalton Nicol Reid

de Pury Pictet Turrettini & Cie S.A.  
 DekaBank Deutsche Girozentrale  
 Delta Lloyd Asset Management  
 Deutsche Asset Management Investmentgesellschaft mbH  
 Deutsche Bank AG  
 Development Bank of Japan Inc.  
 Development Bank of the Philippines (DBP)  
 Dexia Asset Management  
 Dexus Property Group  
 DnB ASA  
 Domini Social Investments LLC  
 Dongbu Insurance  
 DWS Investment GmbH  
 Earth Capital Partners LLP  
 East Sussex Pension Fund  
 Ecclesiastical Investment Management  
 Ecofi Investissements - Groupe Credit Cooperatif  
 Edward W. Hazen Foundation  
 EEA Group Ltd  
 Elan Capital Partners  
 Element Investment Managers  
 ELETRA - Fundação Celg de Seguros e Previdência  
 Environment Agency Active Pension fund  
 Epworth Investment Management  
 Equilibrium Capital Group  
 equinet Bank AG  
 Erik Penser Fondkommission  
 Erste Asset Management  
 Erste Group Bank  
 Essex Investment Management Company, LLC  
 ESSSuper  
 Ethos Foundation  
 Etica Sgr  
 Eureka Funds Management  
 Eurizon Capital SGR  
 Evangelical Lutheran Church in Canada Pension Plan for Clergy and Lay Workers  
 Evangelical Lutheran Foundation of Eastern Canada  
 Evli Bank Plc  
 F&C Investments  
 FACEB – FUNDAÇÃO DE PREVIDÊNCIA DOS EMPREGADOS DA CEB  
 FAELCE – Fundacao Coelce de Seguridade Social  
 FAPERS- Fundação Assistencial e Previdenciária da Extensão Rural do Rio Grande do Sul  
 FASERN - Fundação COSERN de Previdência Complementar  
 Fédérés Gestion d'Actifs  
 FIDURA Capital Consult GmbH  
 FIM Asset Management Ltd  
 FIM Services  
 FIPECq - Fundação de Previdência Complementar dos Empregados e Servidores da FINEP, do IPEA, do CNPq  
 FIRA. - Banco de Mexico  
 First Affirmative Financial Network, LLC  
 First Swedish National Pension Fund (AP1)  
 Firstrand Group Limited  
 Five Oceans Asset Management  
 Florida State Board of Administration (SBA)  
 Folketrygdfondet  
 Folksam  
 Fondation CSN  
 Fondation de Luxembourg  
 Forma Futura Invest AG  
 Fourth Swedish National Pension Fund, (AP4)  
 FRANKFURT-TRUST Investment-Gesellschaft mbH  
 Fukoku Capital Management Inc  
 FUNCEF - Fundação dos Economistas Federais  
 Fundação AMPLA de Seguridade Social - Briletros  
 Fundação Atlântico de Seguridade Social  
 Fundação Atilio Francisco Xavier Fontana  
 Fundação Banrisul de Seguridade Social  
 Fundação BRDE de Previdência Complementar - ISBRE  
 Fundação Chef de Assistência e Seguridade Social – Fachesf  
 Fundação Corsan - dos Funcionários da Companhia Riograndense de Saneamento  
 Fundação de Assistência e Previdência Social do BNDES - FAPES  
 FUNDAÇÃO ELETROBRÁS DE SEGURIDADE SOCIAL - ELETROS  
 Fundação Forluminas de Seguridade Social - FORLUZ  
 Fundação Itaipu BR - de Previdência e Assistência Social  
 FUNDAÇÃO ITAUBANCO  
 Fundação Itaúsa Industrial  
 Fundação Promon de Previdência Social  
 Fundação Rede Ferroviária de Seguridade Social - Refer  
 FUNDAÇÃO SANEPAR DE PREVIDÊNCIA E ASSISTÊNCIA SOCIAL - FUSAN

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



Resolution  
 Resona Bank, Limited  
 Reynders McVeigh Capital Management  
 RLAM  
 Robeco  
 Robert & Patricia Switzer Foundation  
 Rockefeller Financial (trade name used by Rockefeller & Co., Inc.)  
 Rose Foundation for Communities and the Environment  
 Rothschild  
 Royal Bank of Canada  
 Royal Bank of Scotland Group  
 RPMI Railpen Investments  
 RREEF Investment GmbH  
 Russell Investments  
 SAM Group  
 SAMPENSION KP LIVSFORSIKRING A/S  
 SAMSUNG FIRE & MARINE INSURANCE  
 Samsung Securities  
 Sanlam Life Insurance Ltd  
 Santa Fé Portfolios Ltda  
 Santam  
 Sarasin & Cie AG  
 SAS Trustee Corporation  
 Sauren Finanzdienstleistungen GmbH & Co. KG  
 Schroders  
 Scotiabank  
 Scottish Widows Investment Partnership  
 SEB  
 SEB Asset Management AG  
 Second Swedish National Pension Fund (AP2)  
 Seligson & Co Fund Management Plc  
 Sentinel Investments  
 SERPROS - Fundo Multipatrocinado  
 Service Employees International Union Pension Fund  
 Seventh Swedish National Pension Fund (AP7)  
 Shinhan Bank  
 Shinhan BNP Paribas Investment Trust Management Co., Ltd  
 Shinkin Asset Management Co., Ltd  
 Siemens Kapitalanlagegesellschaft mbH  
 Signet Capital Management Ltd  
 Smith Pierce, LLC  
 SNS Asset Management  
 Social(k)  
 Sociedade de Previdencia Complementar da Dataprev - Previdata  
 Socrates Fund Management  
 Solaris Investment Management Limited  
 Sampo Japan Insurance Inc.  
 Sopher Investment Management  
 SouthPeak Investment Management  
 SPF Beheer bv  
 Sprucegrove Investment Management Ltd  
 Standard Bank Group  
 Standard Chartered  
 Standard Chartered Korea Limited  
 Standard Life Investments  
 State Bank of India  
 State Street Corporation  
 StatewideSuper  
 StoreBrand ASA  
 Strathclyde Pension Fund  
 Stratus Group  
 Sumitomo Mitsui Financial Group  
 Sumitomo Mitsui Trust Holdings, Inc.  
 Sun Life Financial Inc.  
 Superfund Asset Management GmbH  
 SUSI Partners AG  
 Sustainable Capital  
 Sustainable Development Capital  
 Svenska Kyrkan, Church of Sweden  
 Swedbank AB  
 Swift Foundation  
 Swiss Re  
 Swisscanto Asset Management AG  
 Syntrus Achmea Asset Management  
 T. Rowe Price  
 T. SINAI KALKINMA BANKASI A.Ş.  
 Tata Capital Limited  
 TD Asset Management Inc. and TDAM USA Inc.  
 Teachers Insurance and Annuity Association – College Retirement Equities Fund  
 Telluride Association  
 Tempis Asset Management Co. Ltd  
 Terra Forvaltning AS  
 TerraVerde Capital Management LLC  
 TfL Pension Fund  
 The ASB Community Trust  
 The Brainerd Foundation

The Bullitt Foundation  
 The Central Church Fund of Finland  
 The Children's Investment Fund Management (UK) LLP  
 The Collins Foundation  
 The Co-operative Asset Management  
 The Co-operators Group Ltd  
 The Daly Foundation  
 The Environmental Investment Partnership LLP  
 The Hartford Financial Services Group, Inc.  
 The Joseph Rowntree Charitable Trust  
 The Korea Teachers Pension (KTP)  
 The Pension Plan For Employees of the Public Service Alliance of Canada  
 The Pinch Group  
 The Presbyterian Church in Canada  
 The Russell Family Foundation  
 The Sandy River Charitable Foundation  
 The Shiga Bank, Ltd.  
 The Sisters of St. Ann  
 The United Church of Canada - General Council  
 The University of Edinburgh Endowment Fund  
 The Wellcome Trust  
 Third Swedish National Pension Fund (AP3)  
 Threadneedle Asset Management  
 TOBAM  
 Tokio Marine Holdings, Inc  
 Toronto Atmospheric Fund  
 Trillium Asset Management Corporation  
 Triodos Investment Management  
 Tri-State Coalition for Responsible Investment  
 Tryg  
 UBS  
 Unibail-Rodamco  
 UniCredit SpA  
 Union Asset Management Holding AG  
 Union Investment Privatfonds GmbH  
 Unione di Banche Italiane S.c.p.a.  
 Unionen  
 Unipension  
 UNISON staff pension scheme  
 UniSuper  
 Unitarian Universalist Association  
 United Methodist Church General Board of Pension and Health Benefits  
 United Nations Foundation  
 Unity Trust Bank  
 Universities Superannuation Scheme (USS)  
 Vancity Group of Companies  
 VCH Vermögensverwaltung AG  
 Ventas, Inc.  
 Veris Wealth Partners  
 Veritas Investment Trust GmbH  
 Vermont State Treasurer  
 Vexiom Capital, L.P.  
 VicSuper  
 Victorian Funds Management Corporation  
 VietNam Holding Ltd.  
 Voigt & Coll. GmbH  
 VOLKSBANK INVESTMENTS  
 Waikato Community Trust Inc  
 Walden Asset Management, a division of Boston Trust & Investment Management Company  
 WARBURG - HENDERSON Kapitalanlagegesellschaft für Immobilien mbH  
 WARBURG INVEST KAPITALANLAGEGESELLSCHAFT MBH  
 Water Asset Management, LLC  
 Wells Fargo & Company  
 West Yorkshire Pension Fund  
 WestLB Mellon Asset Management (WMAM)  
 Westpac Banking Corporation  
 WHEB Asset Management  
 White Owl Capital AG  
 Winslow Management, A Brown Advisory Investment Group  
 Woori Bank  
 Woori Investment & Securities Co., Ltd.  
 YES BANK Limited  
 York University Pension Fund  
 Youville Provident Fund Inc.  
 Zegora Investment Management  
 Zevin Asset Management  
 Zurich Cantonal Bank

## CalSTRS (California State Teachers Retirement System)

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

Jack Ehnes, CEO

# Investor Perspective



**“The Carbon Disclosure Project plays a vital role – in helping investors like AEGON compare performance, assess risk and identify opportunities.”**

At the beginning of the last century, the world’s population numbered 1.7 billion people. Today, it’s more than 7 billion. By 2050, we expect it to exceed 9 billion. Such growth is putting great strains on the planet’s resources. We’ve seen significant climate change, an increase in extreme weather events and growing concerns, in some places, over the long-term availability of water, food and other key commodities. Business is having to adapt to a new world – a world where resources and raw materials can no longer be taken for granted. Investors have a vital role to play in identifying and managing these new risks, but also in seizing the opportunity to create a new, sustainable low-carbon economy, where growth does not come at the expense of the Earth’s shrinking resources.

Many companies, of course, are already adapting. They are reducing carbon emissions. Devising new, more environmentally-friendly products or services. Creating new business models that simply did not exist twenty or thirty years ago. In doing so, they are winning over customers – and driving profits. A number of large listed companies in chemicals, food manufacturing, engineering, power generation and electronics are leading the way with innovations that are re-shaping our economy, and opening up new opportunities for investors.

At AEGON, we have more than EUR 420 billion in revenue-generating investments, and have a responsibility to our investors and policyholders to take environmental risks into account in our investment decisions. Where necessary, we engage with companies on how they approach the issue of climate change and resource management. Last year, AEGON engaged with 227 companies worldwide – many

in the mining, manufacturing, transport and energy sectors, where environmental issues have a very real and immediate impact. And this is where the Carbon Disclosure Project plays a vital role – in helping investors like AEGON compare performance, assess risk and identify opportunities.

AEGON, like many other long-term investors, is exploring opportunities to invest more in renewable energy or more energy efficient projects. For this kind of investment to be viable, investors need a supportive regulatory environment – for example, solvency requirements that do not unjustifiably penalize long-term investments and stable tax incentives that do not change when political circumstances change. It’s clear to me that, in the coming years, investors will have to work more closely than ever with governments and regulators. Public-private partnerships, such as the Green Investment Bank currently being proposed in the Netherlands could be one of the solutions.

Naturally, building a more sustainable economy won’t be easy, in view of the magnitude of the required investments. But there are reasons to be optimistic. Encouraged by our stakeholders – customers, employees and shareholders – large investors such as ourselves see both the necessity and the opportunities of investing in cleaner, greener technologies. Through these investments, will also come a longer-term approach, a more sustainable global economy and more effective management of our scarce resources.

A handwritten signature in black ink, appearing to read 'Wynaendts'.

**Alex Wynaendts,**  
CEO AEGON

# Key Themes and Highlights of 2012 Responses

## Scale of global ambition

The 17th Conference of the Parties (COP17) to the United Nations Framework Convention on Climate Change (UNFCCC) last year concluded with an agreement to launch a new process called the Durban Platform for Enhanced Action. This will aim “to develop a protocol, another legal instrument or an agreed outcome with legal force” and is expected to increase mitigation ambition with a view to limiting global warming to 2°C or 1.5°C above pre-industrial levels. According to this ‘roadmap’, all countries are expected to sign up to targets in 2015 which limit or reduce their emissions from 2020.

Fulfilling the objectives of the Durban Platform will require governments to commit to, and deliver, significant reductions in emissions from 2020. The PwC Low Carbon Economy Index tracks the annual carbon reductions required by G20 countries to achieve the UN ambition to limit temperature rise to 2°C. Recent analysis by PwC shows that, based on current emissions trends and pledges, countries must reduce their absolute emissions by around 4% every year from 2020 to 2050. This will require a radical transformation of the global economy.

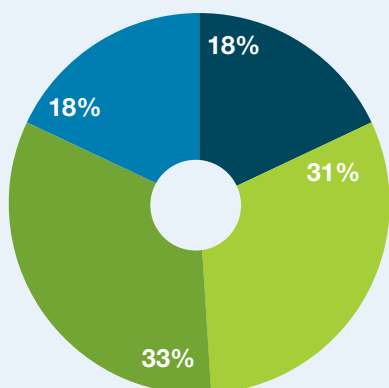
Corporate reduction targets disclosed to CDP are not nearly this radical. Although 82% of companies set absolute or intensity emissions targets, only 20% of companies have set targets to 2020 and beyond. The average of the longer-term absolute targets outlined by CDP respondents is only around a 1% reduction per year, which is well below the level of ambition needed to limit the temperature rise to 2°C.

Corporate approaches to setting targets vary widely – some are absolute, others relative to revenue or production. The proportion of companies with targets has stayed roughly constant over the years (2007: 76% of companies had an emissions reduction target, 2011: 74%, 2012: 82%). Some targets are ambitious, such as Nokia’s 30% absolute emissions reduction target by 2020, but most reported targets fall some way short of this.

Since 2009, as the repercussions of the global economic slowdown began to surface, total reported Scope 1 emissions have fallen from 3.6 billion metric tons CO<sub>2</sub>e to 3.1 billion metric tons CO<sub>2</sub>e in 2012 (see Figure KS5 on page 36). While a small part of this is linked to a fall in the proportion of respondents to CDP from the energy intensive sectors (2012: 25%, 2011: 26%, 2010: 27%), the economic downturn may have helped indirectly to accelerate emissions reductions, with companies seeking to lower costs through reductions in business travel, energy efficiency improvements, production cuts or even staff reductions. Fewer than half (40%) of respondents noted a decrease in their emissions which was exclusively attributable to emissions reduction activities (see Figure 5). This suggests that emissions remain closely tied to economic activity and unless businesses make wholesale changes to their business models, emissions will rise again once the economy recovers.

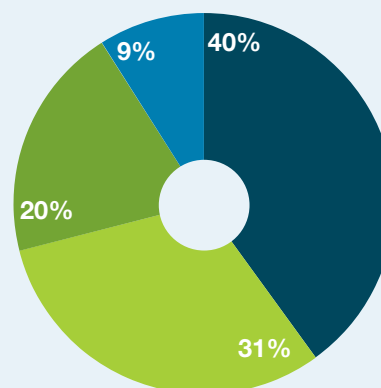
## 4 COMPANIES DISCLOSING TARGETS

- 69 Companies with absolute and intensity targets
- 117 Companies with absolute target
- 127 Companies with intensity target
- 66 Companies with no targets



## 5 REASONS FOR DECREASES IN EMISSIONS

- 152 Reductions exclusively due to emissions reduction activities
- 117 No reductions
- 76 Reductions due to emissions reduction activities and changes in business conditions
- 34 Reductions exclusively due to changes in business conditions





The debate about the relationship between the environment and the economy continued at COP17 and at Rio+20<sup>6</sup>, where business was well represented at both events. Despite the weakened global economy and austerity measures imposed by many governments, there are no clear indications that climate change is a lower priority for companies.

Climate change hasn't dropped off the board's agenda during the downturn. 96% reported that they have board or senior executive oversight of climate change (2011: 93%). Most companies have integrated climate change into their wider business strategy (78% of respondents, up from 68% in 2011). Of these, 65% of companies report that climate change is influencing their near-term strategies (2011: 63%), while 54% report changes to their long-term strategies (2011: 48%). Additionally, as in 2011, two-thirds describe monetary incentives that they make available to their staff for meeting climate change-related targets (2011: 65%). This is encouraging as senior level oversight and financial incentives for staff and directors are important in driving and maintaining measures to tackle emissions.

#### Drivers for action

There are a number of drivers other than a global deal which can help achieve the scale of global ambition required to mitigate climate change. Physical changes, regulation, stakeholder pressure and customer behavior are all drivers for companies to take action.

6: United Nations Conference on Sustainable Development

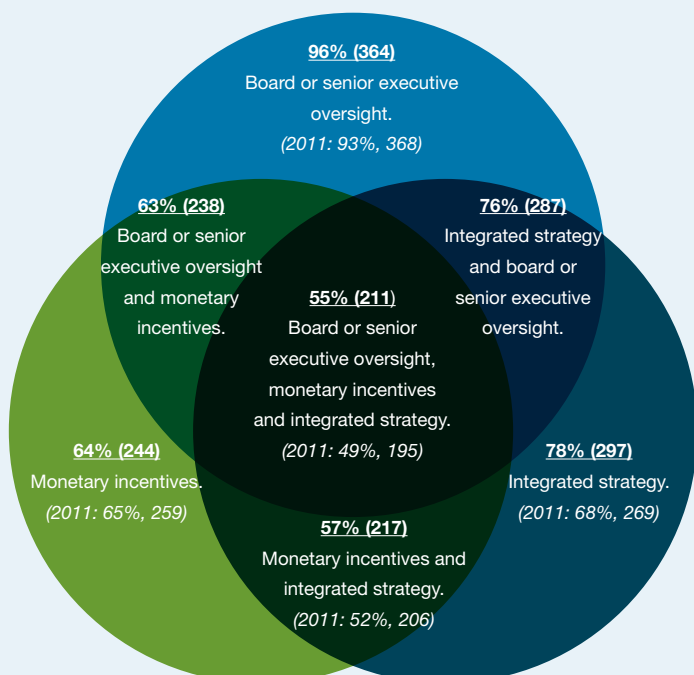
#### Recent extreme weather events are raising awareness of climate risks

Recent extreme weather and natural events have tested companies' business resilience and increased their level of understanding of the timeframes of the physical risks they identify. 81% of companies now report physical risks (see Figure 8, 2011: 71%) and companies are increasingly able to define both the immediate and long-term timeframes of these risks (see Figure 7). For example, Gas Natural SDG reports how extreme weather could cause damage to their infrastructure in the immediate future and interrupt gas and energy supplies, while sea level rise could, in the long term, affect their coastal facilities.

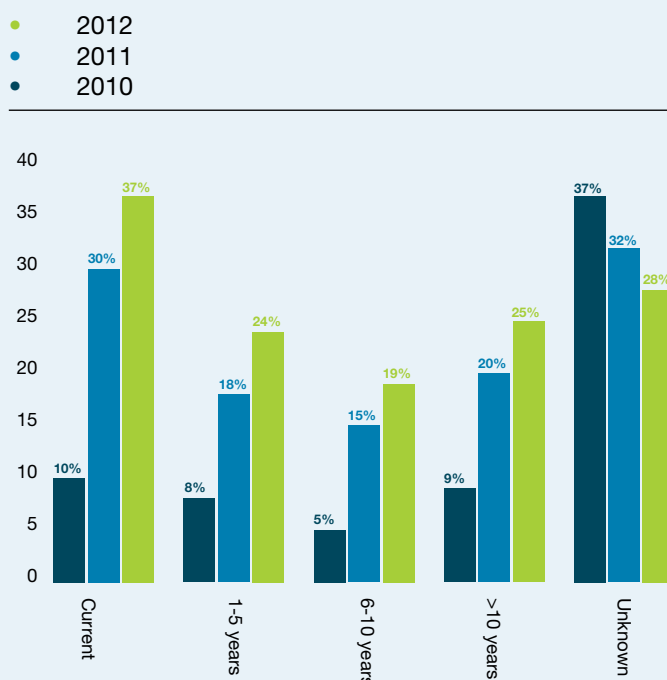
Physical risks are viewed as tangible and real: this includes destructive weather events, the rise in temperature and sea level and, increasingly, water scarcity. The percentage of companies that view physical risks as current has jumped from 10% in 2010 to 37% in 2012. The effect of climate change on companies' supply chains is increasingly being reported, with a number of companies giving clear examples of how this has affected their business planning. Nike notes how temperature changes can support a business case for systemic changes in their supply chain to manage climate-sensitive materials. Other companies are managing the risks of extreme weather events to their operations: Vale has invested \$8 million in implementing weather-monitoring radar.

Companies are increasingly reflecting on their past resilience to weather events and some explain how they assess the market impact of climate change and make this available to customers and shareholders alike. This level of transparency is designed to increase shareholder confidence and support finance-raising.

## 6 INTEGRATION OF CLIMATE CHANGE INTO CORPORATE GOVERNANCE



## 7 TIMEFRAME FOR EXPECTED PHYSICAL RISK IMPACT (NUMBER OF COMPANIES)



### Companies need clarity on regulation

While clear government regulations can drive action (Figure 10 shows that 49% see compliance with regulation as a key driver), policy uncertainty is a barrier and can increase costs. The lack of clarity surrounding regulation after UN summits, whether in Copenhagen, Durban or Rio, is a real barrier to action. Uncertainty about when or how politicians will intervene hinders investment in emissions reductions. The recent fall in the EU Allowance price and the potential for government intervention is a good example of this. Siemens notes how the lack of a ratified climate change agreement and regional political uncertainty may lead to higher energy and electricity prices.

Companies require a longer-term, stronger price signal in order to make their return on investments more predictable: for example, both AngloGold Ashanti and Deutsche Bank note the effect of regulatory uncertainty on delaying investment decisions.

### Stakeholder pressure is driving companies to act

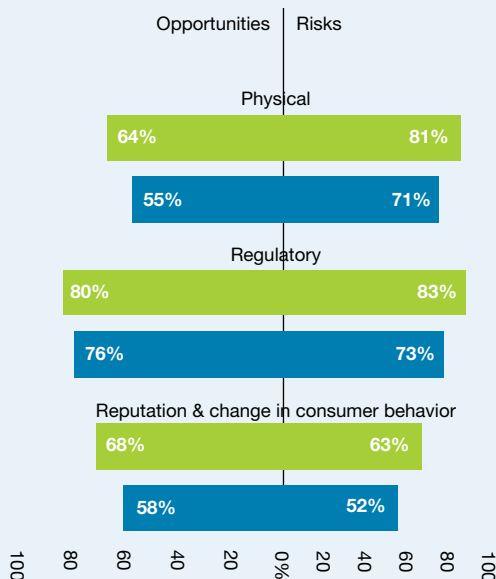
Reputation and positive stakeholder engagement are seen as key drivers for action on climate change, with companies aware of the benefits beyond short-term financial returns or savings. 68% of respondents (2011: 58%) note the opportunities associated with customer behavior changes, enhancing their reputation, or both. Logica reports how its key stakeholders are increasingly expecting it to operate in a way which is economically, socially and environmentally sustainable. It notes that meeting these expectations helps it to function more successfully, attract and keep high caliber people and retain key contracts.

This also shows that companies are aware of how their revenue can be affected by customer behavior and investor interest. Some see longer-term financial opportunities in developing a 'low carbon' brand. Beyond simply reducing their emissions, Nestlé and Siemens describe their efforts to make a positive impact through 'creating shared value', i.e. recognizing that their competitiveness and the long-term prospects of society are mutually dependent. Siemens, for instance, has developed an environment portfolio which shows the net environmental effect of all of its products. It states that 41% of revenue comes from products with a net positive impact on the environment, relative to a benchmark.

Responses show that companies are regularly reporting risks associated with their supply chain or with their clients. For example, 17% of respondents note indirect reputational and consumer behavior risks from climate change (21% of all reputational and consumer behaviour risks reported) and 34% report indirect physical risks (30% of all physical risks reported). Understanding and managing risks throughout the entire value chain is necessary for true business resilience. Swiss Re notes the high risk of losing socially-responsible investors if it did not act in the spirit of its public stance on climate change. Time Warner also highlights the importance of corporate responsibility: acting as a responsible environmental steward and working to reduce its overall emissions is part of the effort to deliver superior returns to its stockholders and exceptional value to its customers in a sustainable and long-term way.

## 8 PERCENTAGE OF COMPANIES REPORTING RISKS AND OPPORTUNITIES

- 2012 Respondents (379)
- 2011 Respondents (396)



## 9 PROPORTION OF DIRECT AND INDIRECT RISKS & OPPORTUNITIES

- Direct
- Indirect (Client)
- Indirect (Supply chain)



# CFO Perspective



**“It is insufficient, and even irresponsible, to consider only short term payback when making investment decisions.”**

The finance function is responsible for driving growth across Diageo and is fundamental to successfully embedding sustainability in the business in a robust and efficient way for the long term. Key to this efficiency is the environmental performance of our production assets – in terms of carbon, water and waste performance – and our ability to decouple the impact we have on the environment from our continued increase in production to support business growth. Our focus is less on payback periods and more on targeting environmental investments to be ‘value positive’.

Some decisions on energy efficiency related capex are straight forward as they meet traditional ROI criteria – typically fewer than four years. Take the £700,000 we invested in a range of energy efficiency projects at Cameronbridge distillery. This reduced carbon emissions by 3,000 tonnes per year and drove annual savings of £1.4m – a payback of six months.

In contrast, Roseisle distillery, the first major distillery to be built in Scotland for 30 years, and we believe Scotland’s most sustainable, cost £45m overall – and the bioenergy plant which generates renewable energy from the co-products of distilling cost £17m. This total investment funded cutting edge green technology combined with traditional distilling methods. Currently the distillery is using 50% less fossil fuel than a comparable site. This represents a £900,000 annual saving in energy costs to the combined malting and distilling operations – approximately 12% of total energy costs and a 17 year payback based on current fossil fuel prices.

The investment removes our exposure to future fossil fuel price rises impacting on our unit cost. There is a focus on calculating the net present value of the investment in a

discounted cash flow model rather than focusing solely on the short term payback. If we can deliver a better than value neutral outcome now, future fossil fuel price trends will enhance that value going forward. While the financial returns are longer in this case, the security of energy supply in terms of both avoiding possible intermittent disruptions and longer term supply issues, together with the better management of our input costs in the future are equally, if not more, important to the long-term performance and growth of our business, which is our ultimate goal.

Understanding and quantifying the benefits that aren’t directly related to cost savings is the biggest challenge to assessing the business case for environment related investments. Factoring in possible future energy prices and the potential cost to the business associated with intermittent disruptions to energy supplies is an example of this financing challenge. Traditional approaches cannot always incorporate these important influencing factors – therefore to understand the full implications of an investment decision a more flexible approach is required.

In my view, effective management is about making choices that support the efficient growth of the business over the long term. It is insufficient, and even irresponsible, to consider only short term payback when making investment decisions. This is entirely consistent with embedding a business model that is genuinely long-term and sustainable and reflects our commitment to holistic management.

**Deirdre Mahlan, CFO  
Diageo**



### Unlocking investment

With capital hard to come by, companies are facing challenges justifying the business case for low carbon investment.

To tackle this, companies are adopting a number of approaches to drive low carbon investment. These include: setting aside a dedicated budget for energy efficiency (50% of companies); complying with regulatory requirements/standards (49% of companies); engaging with employees (44%); and creating internal incentives/recognition programs (30%) (see Figure 10).

Investments in emissions reduction activities with faster paybacks (see Figure 12) should be easier to justify. Companies are more likely to be successful at raising investment for emissions reduction activities with a long-term payback (3 years or more) when they recognize that their climate change strategy gives them a competitive advantage. 65% of respondents showing at least one investment with payback of more than 3 years believe they have a strategic advantage over their competition. This compares with 42% of companies without any investments with paybacks of more than 3 years (see Figure 11).

Some companies describe how providing high-quality, externally verified information, which they know will be reported to investors and analysts, can facilitate internal investment decisions. Repsol states that obtaining independent verification against an approved assurance standard promotes the development and implementation of greenhouse gas emissions reduction opportunities throughout their company. 55% of respondents obtained independent verification or assurance of their emissions in 2012 (2011: 39%)<sup>7</sup>.

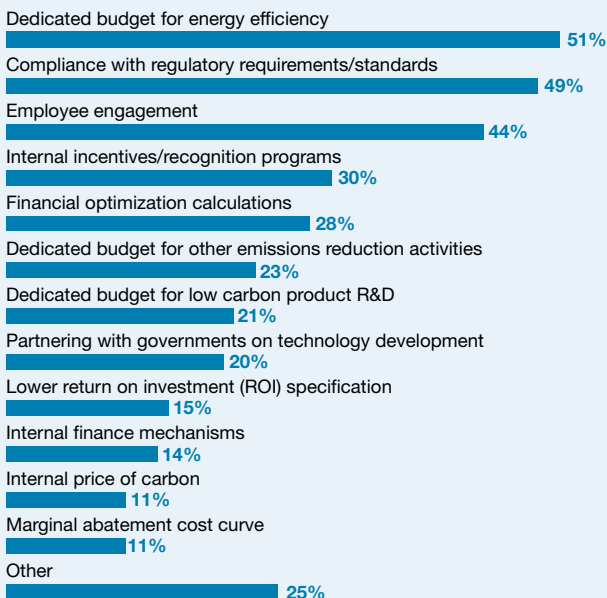
**“In 2011 we invested \$306 million in research and development and we have maintained that level of spend despite the economic slowdown, because we believe innovation will drive our future success and support our customers in their sustainability goals.”**

### ArcelorMittal

<sup>7</sup>: Refers to those companies gaining full points for verification of their Scope 1, Scope 2 or Scope 3 emissions (includes verification complete and verification underway with last year's statement available).

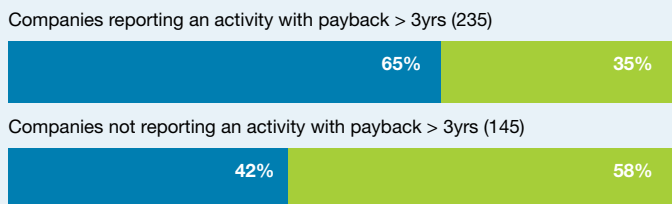
## 10 METHODS TO DRIVE INVESTMENTS IN EMISSIONS REDUCTION ACTIVITIES

### Percentage of responding companies (%)



## 11 LONG-TERM INVESTMENTS COMBINED WITH STRATEGIC ADVANTAGE

- Proportion noting strategic advantage
- Proportion not noting strategic advantage



## 12 PAYBACKS BY EMISSIONS REDUCTION ACTIVITIES

	<1 year	1-3 years	>3 years
Behavioral change	69%	15%	16%
Energy efficiency: building fabric	15%	33%	52%
Energy efficiency: building services	20%	45%	35%
Energy efficiency: processes	24%	44%	33%
Fugitive emissions reduction	13%	45%	42%
Low carbon energy installation	9%	18%	72%
Low carbon energy purchase	39%	21%	40%
Process emissions reduction	22%	20%	58%
Product design	34%	30%	36%
Transportation: fleet	41%	19%	39%
Transportation: use	50%	29%	21%

Companies which deliver products or services that reduce carbon emissions are seeing distinct potential growth opportunities. For example, Bayer notes that climate change is a core element of its sustainable business strategy, which sees it go beyond energy savings by focusing on growth in climate-related product lines. Chunghwa Telecom notes the increased business opportunities for its products and services in providing

more green products for both business communication and home entertainment. Investments in new, potentially higher-risk, climate change mitigation projects can generate a strong leadership position. For example, EDF launched a new 'managing consumption' product line which has attracted 120,000 new customers.

### The emergence of a new business as usual?

A 2012 Harvard Business School paper suggests that corporate short-termism is associated with greater risk and stock market volatility<sup>8</sup>. The Kay Review<sup>9</sup>, published earlier this year, found that short-termism is a problem, negatively impacting the UK equity market's ability to "enhance the performance of UK companies and to enable savers to benefit from the activity of these businesses through returns to direct and indirect ownership of shares in UK companies". Achieving business resilience to market changes is a greater challenge for companies during times of uncertainty, yet the need for companies to adopt a robust long-term strategy is more crucial than ever.

Corporations listed on the Carbon Performance Leadership Index (see Page 26) are recognized as having maturity in climate change management. Further analysis of these companies, however, reveals they may also be more resilient through an awareness of long-term climate change risks and opportunities and integration of these considerations into their strategic thinking.

Nearly all (94%) of the companies listed on the 2012 CPLI have a long-term strategy that has been influenced by climate change. This figure is closer to half (54%) when

## 13 CDLI [2006-2012] RETURNS AGAINST OVERALL GLOBAL 500 POPULATION<sup>10</sup>

- CDLI
- G500



looking at the Global 500 sample as a whole, suggesting that an effective and transparent climate change policy can help companies to practice a long-term approach.

Similar patterns are noted when assessing other examples of long-term thinking. The percentage of CPLI companies that can identify climate-related risks beyond a 10 year timeframe is almost double that of non-CPLI companies (55% vs 29%). The same is true of identifying opportunities with timeframes of more than 10 years (30% vs 15%). With a greater awareness of climate change risks and opportunities, a larger proportion of CPLI companies (85% vs 60%) are able to raise investment for emissions reduction activities with a payback longer than 3 years.

Annual analysis of the companies that have achieved leadership positions on either the CPLI or the Carbon Disclosure Leadership Index (CDLI) in the past suggests that companies that achieve leadership positions in climate change generate superior stock performance (see Figures 13 & 14). Since 2006, CDLI companies delivered total returns of 67.4%, more than double the 31.1% return of the Global 500. Moreover, CPLI companies generated average total returns of 15.9% since 2010, more than double the 6.4% return of the Global 500 index.

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

**“These [climate change] initiatives are intended to develop a competitive advantage by better incorporating environmental considerations into AXA’s products, tap into new markets as well as reduce operational risks and enhance AXA’s image and reputation.”**

## AXA Group

8: Francois Brochet, Maria Loumioti and George Serafeim, Short-termism, Investor Clientele, and Firm Risk, Harvard Business School (January 2012).

9: John Kay, The Kay Review of UK Equity Markets and Long-Term Decision Making, Final Report (July 2012)

10: Total Return includes interest, capital gains, dividends and distributions realized over a given period of time. Bloomberg, Carbon Disclosure Project. *Note: Results presented should not and cannot be viewed as an indicator of future performance. Performance of CDLI and CPLI companies is calculated on an equally-weighted basis relative to the FTSE Global Equity Index Series and re-balanced annually on October 1st. Therefore, the 2012 CDLI & CPLI companies are not included in this analysis. Please refer to the important notices on the contents page of this report regarding its content and use in publications.*

### 14 CPLI [2010-12] RETURNS AGAINST OVERALL GLOBAL 500 POPULATION<sup>10</sup>

- CPLI
- G500





Some scientists are now linking severe weather events, which have significant cost implications for companies globally, to higher concentrations of greenhouse gases<sup>11</sup>. Insurance company Allianz reports that in 2011 it processed \$2.2 billion [€1,764 million] in natural catastrophe (including non-weather related) claims. This is the largest sum for natural catastrophes in its history. The floods in Thailand in that year caused significant physical damage and major disruption to supply chains. Daimler references the interruptions to the automotive supplier industry caused by the floods, while Hewlett-Packard and Dell outline the shortage of critical components and materials caused by this natural disaster. Combined estimates from insurance groups put the total cost of floods at \$15bn to \$20bn.

Unpredictable weather challenges companies in a variety of ways. Samsung Electronics reports that potential tropical cyclones pose a risk estimated at almost \$80 million [90 billion KRW] per day as a result of the disruption to its manufacturing processes. Iberdrola and Royal Dutch Shell cite that more frequent tornadoes in the Gulf of Mexico are likely to increase interruptions to business operations. Swisscom notes that changes in mean and extreme temperatures could lead to increases in energy-related operational costs of \$2.5 million [2.4 million CHF]. Aon report that an extended bout of bitter cold and snow engulfed Eastern Europe between the end of January and the first half of February and cost an estimated \$660 million<sup>12</sup>.

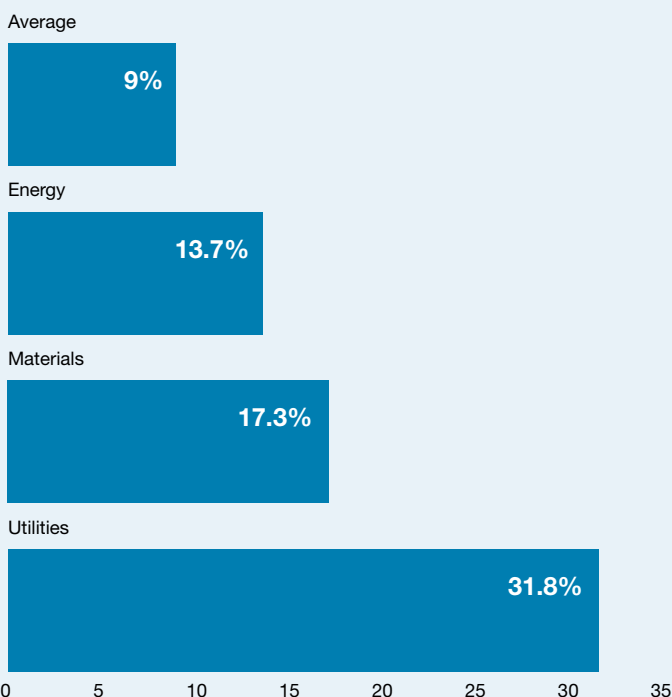
Reporting companies acknowledge the effect that a depleting supply of natural resources, coupled with an increasing demand, can have on commodity prices and operating costs. GlaxoSmithKline states that low water

supplies could shut down manufacturing operations, with a financial impact of around \$800 million [£500 million]. Fluctuating fuel prices also present challenges for companies. Figure 15 demonstrates that some sectors are particularly exposed to risk related to rising energy costs, with the utilities sector having four times higher fuel costs than the average company. However, companies that can successfully make the business case to reduce their fuel use are making investments which yield high returns. UPS, for example, has invested \$1.2 billion in upgrading its transportation fleet and is saving \$400 million a year. Air Liquide has optimized the way its gases are delivered worldwide and expects to make annual savings of \$500 million [€420 million].

Despite the high percentage of companies reporting opportunities as a result of acting on climate change, only a small number of companies are able to unlock investment with long-term paybacks. For example, while nearly half (48%) have identified the potential for new products and business services as a response to climate change, just one-fifth of companies report a dedicated budget for low carbon product research & development (2012: 21%, 2011: 19%).

Those companies that can identify value in investing in low carbon products, however, report significant investments. Dell is investing in developing new products designed to reduce its customers' emissions by more than 10 million metric tons of CO<sub>2</sub>e per year and expects to save customers just over \$1 billion per year as a result. Some companies are successfully using low carbon products to reduce their own emissions and implement dramatic cost savings.

## 15 PERCENTAGE OF OPERATING COSTS SPENT ON ENERGY [HIGHEST 3 SECTORS]<sup>13</sup>



In order to protect their investments, shareholders want to understand the risk climate change presents to their portfolios. Companies are expected to demonstrate long-term resilience and in order to effectively respond to the risks and opportunities related to climate change, businesses need to be strategic, not reactive.

Fulfilling the mitigation objectives of the Durban Platform for Enhanced Action will require a radical transformation of the global economy. Companies will have to set and achieve emissions reduction targets which are far more ambitious than currently reported.

The risks associated with the physical effects of climate change are increasingly perceived as immediate rather than unknown. The cost of recent severe weather events has been significant for companies and they will be expected to understand the potential implications from future events and show these are being mitigated.

Those companies that have an awareness of long-term climate change risks and opportunities reflected in their business strategy will gain strategic advantage over their competitors. Increasingly companies are reporting that they see opportunities as a result of acting on climate change and this year's responses provide evidence of the growth in green product lines and investments in emissions reduction activities which yield high returns.

**“Changing temperatures and precipitations patterns may lead to decreased availability of critical raw materials in the supply chain, especially agricultural commodities. These will lead to the increased operational cost or even disrupt the business operations along the entire value chain of Nestlé.”**

## **Nestlé**

**“[Reckitt Benckiser’s] target was to reduce its global products total carbon footprint by 20% per unit dose by 2020 against 2007 baseline. In 2011, emissions had been cut by 21%, achieving our goal 8 years early.”**

## **Reckitt Benckiser**



11: Perception of climate change, James Hansen, Makiko Sato and Reto Ruedy, published in the National Academy of Sciences' Proceedings of the National Academy of Sciences magazine (August 2012).  
12: AON reference for \$660million: [http://thoughtleadership.aonbenfield.com/Documents/201202\\_if\\_monthly\\_cat\\_recap\\_february.pdf](http://thoughtleadership.aonbenfield.com/Documents/201202_if_monthly_cat_recap_february.pdf)  
13: The data on the proportion of operational spend is collected in bands. To generate this figure, the mid range of each 5% band has been used.

# Corporate Natural Capital Accounting

Whatever you thought about the outcome of the UN conference on sustainable development in June, one thing was clear from Rio+20: natural capital accounting is the next big thing in the world of sustainability. Governments and NGOs are pushing for it, companies are interested in it and a few leaders are even trying to implement it.

In a world where resource scarcity is becoming increasingly important to companies – as outlined in this year's Global 500 CDP report – a strategic way of evaluating environmental impact is critical.

But what is natural capital and how do we account for it? Is this another short-term fad or will it help us save the planet?

## Background

PwC has been working with the global leaders in this field, supporting initiatives such as TEEB, to help define and measure natural capital. There are four natural capital accounting categories (air, water, land and biodiversity) and all are interdependent. These provide us with the crucial renewable and non-renewable resources and environmental services which benefit society.

Our ability to account for these environmental assets and their rate of depletion (commonly referred to as stocks and flows) is variable. In a limited number of cases (such as fossil fuels) our thinking is already advanced. However, we are failing to account for many more environmental services, especially those which are less visible. Why should this be critically important to all of us?

Understanding overall stocks of natural capital and monitoring stock changes is vital at a national level. This informs policy interventions and highlights whether countries are really creating new wealth and well-being, or simply converting one form of capital (natural) into another (e.g. financial or engineered).

Correctly undertaken, this identifies if 'critical natural capital' is being lost – i.e. are our actions truly sustainable?

## What is the corporate context?

Contrary to much current discussion, accounting for natural capital stocks at a company level is generally of little benefit.

Aside from agriculture and a few other primary industries (such as forestry and extractive industries), the natural capital under direct company control is typically a tiny fraction of that under their indirect influence (e.g. via supply chains). It is far more pertinent for companies to look at their annual impact on both stocks and flows from the four natural capital categories across their entire value chain.

These impacts stem from a company's net deficit when comparing the resources it uses and the waste it creates (including emissions/pollutants), with the benefits of any remediation efforts it makes. These represent its contribution to nature's profit & loss account which,

in turn, drives changes in nature's balance sheet. We recently worked with Puma in developing the world's first corporate environmental profit & loss account, valuing their operational and supply chain impact at €145million. This analysis offered a real insight into the environmental consequences of commercial decisions. It also highlights the potential commercial consequences of the environmental realities unfolding globally.

In short, corporate natural capital accounting is really about making significant improvements to the scope of company environmental accounting and reporting, as opposed to an entirely new concept. Almost all companies would benefit from measuring their impact more effectively. In doing so, they will better understand which impacts and which natural resources and services are strategically important to their businesses in the short and long term – and so be able to focus on them. We know that 53 companies mentioned water scarcity as a potential critical issue to their business continuity in their 2012 CDP responses: companies clearly know this is important. Now is the time to take action.

## How should we measure it?

Companies find the sheer number of environmental indicators hard to keep up with, which makes it difficult for them to define where they should focus their effort. For example, which of these has the greater impact: producing an extra ton of waste or using another cubic metre of water? Without converting the data in to a common unit of measure, direct comparison of relative impact is impossible.

Valuing impacts in monetary terms delivers environmental information in a form that executive boards and senior decision makers understand. It puts hitherto poorly understood metrics into a commonly understood currency (\$, €, £, etc) and into a single unit of measurement, for comparability.

And although some promising practical work is on-going, much of the benefit of corporate natural capital accounting is still being missed. Many companies are failing to see how these additional insights can drive an improvement in risk management or identification of areas for competitive advantage. And many investors still appear to be paying lip service to natural capital accounting. Thankfully, despite this lack of interest, leading companies are already changing the way they do business.

## What should governments be doing?

Several governments have natural capital accounting frameworks currently under development. The use of a broader range of measures of growth, sometimes referred to as "GDP+" (which the UK government has committed to implementing by 2020), will measure not only a country's economic growth but also other indicators of its well-being, such as its natural and social capital.

However, natural capital accounting frameworks will need the flexibility to be broken down, so that links between national, sector or even business level can be identified.



**“Over time, we will see companies make radical changes to their environmental accounting for emissions and resource use along their entire value chain.”**



In this way, corporate activity can be linked to more comprehensive measures of country level prosperity. This, in turn, will enable national accounts to be validated “bottom-up”. Armed with this information, regulators will be able to design better policies which will genuinely support the public and private sectors to limit their depletion, or even support their replenishment, of our natural capital stocks.

**What should companies be doing?**

Over time, we will see companies make radical changes to their environmental accounting for emissions and resource use along their entire value chain. This is likely to be combined with the monetary valuation of the associated impacts on society to provide the crucial link between environmental metrics and human well-being.

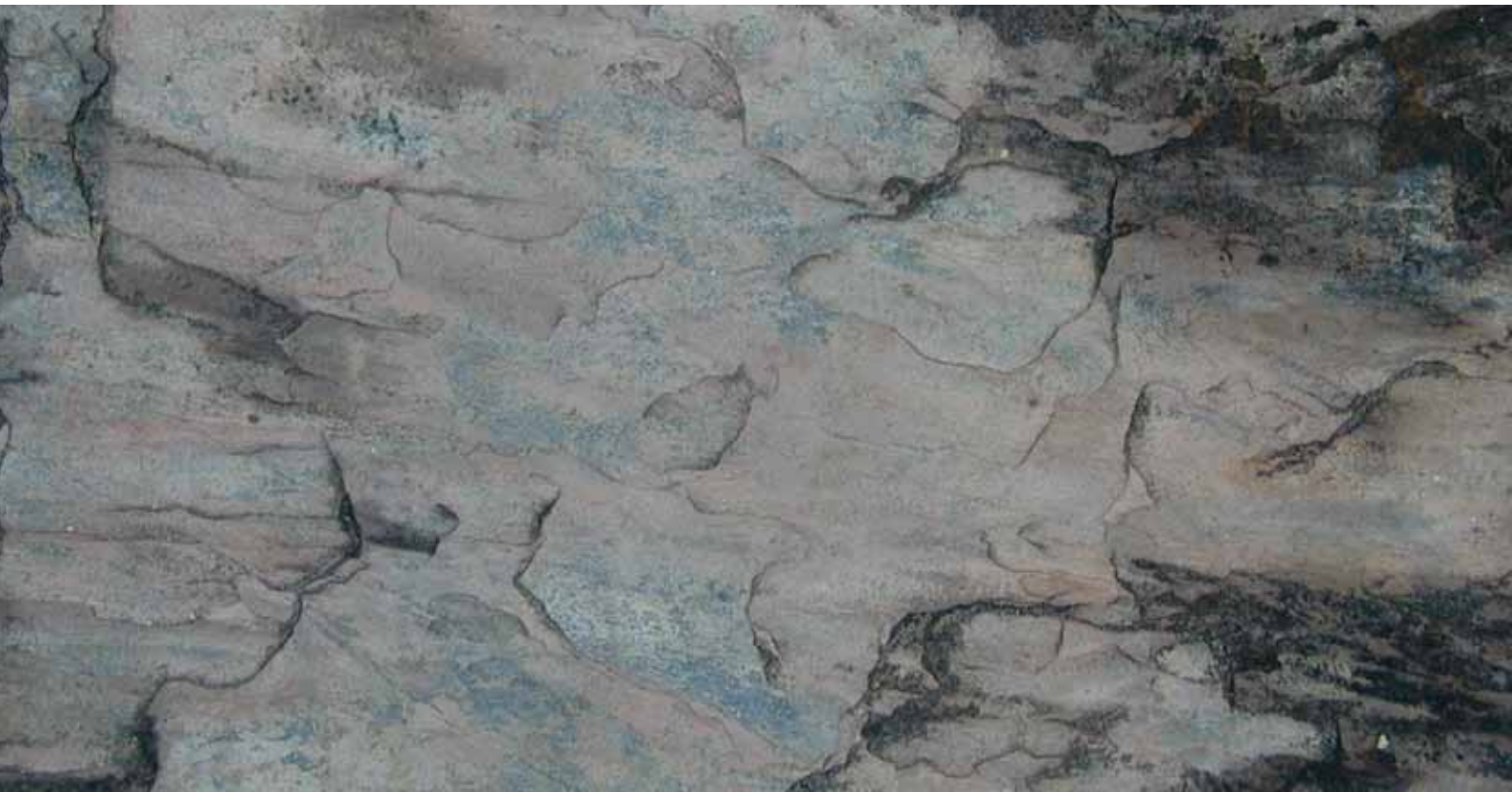
Coupled with country level data on natural capital stocks, companies will be able to prioritize what is of strategic importance to them.

Companies that embrace natural capital accounting are likely to come to grips earlier with the major challenges and opportunities of the 21st century, as outlined by company responses to CDP: climate change, resource scarcity and energy security. The road to take is clear and specific and global steps need to be taken now.

**Malcolm Preston**  
Global Leader, Sustainability & Climate Change, PwC



# 2012 Leaders



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

Each year, company responses are reviewed, analyzed and scored for the quality of disclosure and performance on actions taken to mitigate climate change. The highest scoring companies for disclosure and/or performance enter the CDLI and the CPLI.

### **What are the CDLI and CPLI criteria?**

To enter the CDLI, a company must:

- Make their response public and submit it via CDP's online response system
- Achieve a score within the top 10% of the total Global 500 population (51 companies in 2012)

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

- Make their response public and submit it via CDP's online response system
- Attain a performance score greater than 85
- Score maximum performance points on question 13.1a (absolute emissions performance for GHG reductions due to emissions reduction actions over the past year)
- Disclose gross global Scope 1 and Scope 2 figures
- Score maximum performance points for verification of Scope 1 and Scope 2 emissions

Note: Companies that achieve a performance score high enough to warrant inclusion in the CPLI but do not meet all of the other CPLI requirements are classed as Performance Band A- but are not included in the CPLI.

### **Why are the CDLI and CPLI important to investors?**

Analyses of the CDLI and CPLI provide insights into the characteristics and common trends among the leading companies on carbon disclosure and performance. They highlight good practices in reporting, governance, risk management, verification and emissions reduction activities toward climate change adaptation and mitigation.

Additionally, good carbon management and disclosure may be an indicator of superior, forward-looking management with a better understanding of their risk profile. The relationship between CDLI and CPLI companies shows how companies with better data can drive value-adding activities.

Companies in the CDLI and CPLI typically show a deeper understanding of, and address more pro-actively, the risks and opportunities presented by climate change. Their transparency and willingness to disclose information is attractive to investors.

For further information on the CDLI and the CPLI and how scores are determined, please visit <https://www.cdproject.net/guidance>

## 16 THE GLOBAL 500 CDLI 2012

Sector	Company Name	Disclosure Score	Consecutive years in the CDLI	Performance Band
Consumer Discretionary	BMW	99	2	A
	Daimler	99	1	A-
	Philips Electronics	98	2	A-
	TJX Companies	97	1	B
	Honda Motor Company	96	1	B
	Panasonic	96	3	A
	Home Depot	95	1	B
	News Corporation	95	3	B
Consumer Staples	Nestlé	100	3	A
	Diageo	98	1	A
	Danone	97	1	B
	The Coca-Cola Company	96	1	B
	L'Oreal	94	1	B
	PepsiCo	94	2	B
Energy	Repsol	98	1	A-
	Hess	97	4	B
	Spectra Energy	95	1	B
Financials	Allianz Group	97	2	A
	UBS	97	2	A
	Goldman Sachs Group	95	1	B
	Swiss Re	95	2	B
	Wells Fargo	95	1	A
	Ace	94	1	A
Health Care	Bayer	100	4	A
	Gilead Sciences	96	2	B
Industrials	UPS	99	2	B
	Siemens	98	4	A-
	Deutsche Post	97	3	B
	CSX	95	1	B
	Saint-Gobain	95	3	B
	Information Technology	Microsoft	99	1
Nokia Group		98	1	A
Sony Corporation		97	2	B
Cisco Systems		96	4	B
Samsung Electronics		96	4	B
Google		95	1	B
Wipro		95	1	B
Materials	BASF	99	4	A
	Anglo Platinum	96	1	B
	Air Products & Chemicals	95	2	B
	Anglo American	94	1	A
	E.I. du Pont de Nemours	94	1	B
	POSCO	94	1	B
Telecommunication Services	AT&T	95	1	B
	Koninklijke KPN	94	1	A
Utilities	Gas Natural SDG	99	1	A
	Power Assets Holdings	99	1	B
	Fortum	98	2	B
	Centrica	96	4	B
	Iberdrola	95	1	A
	Exelon	94	1	A

In order to enter the CDLI this year, companies needed a disclosure score of 94 or above (2011: 90). Two companies scored full marks for disclosure (Bayer and Nestlé). For leaders, the high scores reflect their deep, long-term understanding of how they manage the climate risks to their business and disclose this to their stakeholders.

The majority (28 companies) of this year's CDLI were not in the CDLI last year. By improving their disclosures so significantly, today's leaders are learning from others and are updating their strategies accordingly. This also shows that no company can rest on its laurels: adapting to climate change is as crucial and fast-moving as adapting to other external elements. Geographically, 13 countries are in this year's CDLI. Germany and Finland are the most over-represented countries in the CDLI relative to their overall representation in the responding population (see Figure 17). Only one of the 15 responding companies from the BRICs region made it into the CDLI.

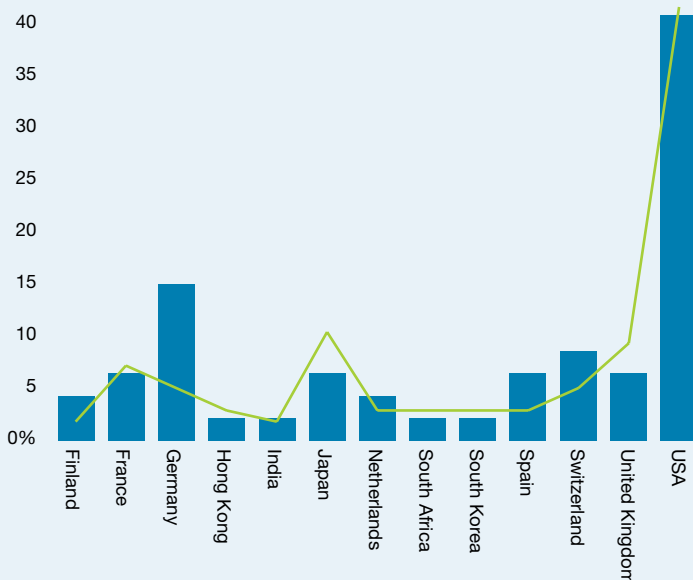
CDLI companies are prepared for climate change: they state, almost without exception, that they have a strategic advantage from climate change (CDLI: 90%, non-CDLI: 59%). For example, Google notes that securing stable renewable electricity prices over the long term (more than 20 years) lowers its operational costs relative to competitors' and protects it against future hikes in baseline electricity prices. UPS believes its climate change strategy results in gaining strategic advantages over its competitors and, subsequently, will win customers who desire to use more efficient, less carbon intensive logistics services.

CDLI companies significantly outperform the rest in their understanding of the risks and opportunities presented by climate change and how they quantify and manage these in their business (CDLI: 94%, non-CDLI 65%). For example, Nestlé sees that changes in extreme temperatures may favor the growth of certain agricultural raw materials. To seize this opportunity, it works to ensure the development of resilience among its suppliers and makes significant contributions to smallholder farmers to develop long-term relationships.

The vast majority (see Figure 18) are already verifying their Scope 1 and 2 emissions (approximately double the verification for non-CDLI companies). This ensures high quality data is used to develop their long-term strategies. 94% of CDLI companies are also already measuring some of their Scope 3 emissions to provide a better understanding of their overall impact on the environment.

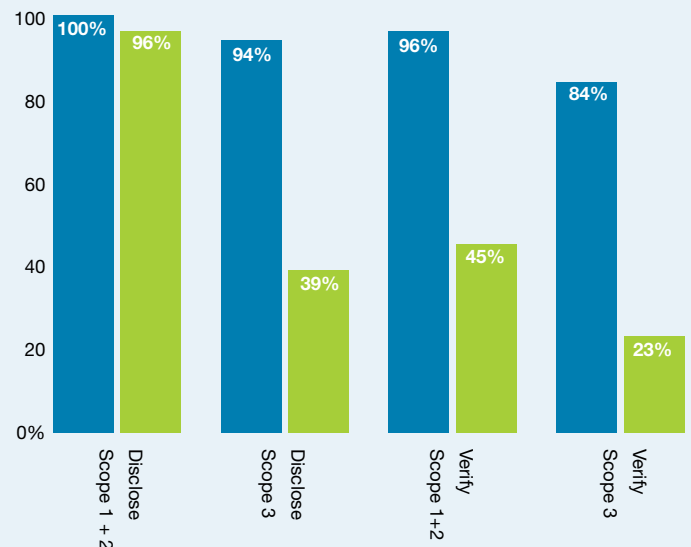
### 17 PERCENTAGE OF COMPANIES IN THE CDLI BY COUNTRY

- CDLI %
- % of G500 Respondents



### 18 CDLI VS. NON-CDLI METRICS

- CDLI
- Non-CDLI



16 of this year's CDLI companies are also in the CPLI (2011: 23). It is interesting to note the following areas, which are not key criteria for disclosure scores, where CDLI companies outperform non-CDLI companies.

- 96% of CDLI companies have integrated climate change into their strategy (non-CDLI: 76%)
- 92% have monetary incentives in place to manage climate change within the company (non-CDLI: 60%)
- 100% of CDLI companies have emissions reduction targets (non-CDLI: 74%). CDLI companies are, on average, reporting emissions reduction targets for 2020 and beyond almost twice as often as non-CDLI companies (CDLI: 32%, non-CDLI: 18%)

The average (post-2020) absolute GHG emissions reduction target of leading companies rounds to the same as the overall responding population's target (1% reduction per year but is actually slightly lower. This re-affirms that company ambition, even for the CDLI companies, is significantly below the target outlined by PwC's Low Carbon Economy Index (4% reduction every year from 2020 to 2050) which is required to limit global warming to 2°C by 2050

**“Bayer’s emissions reduction targets are cascaded down through the organization and translated into energy efficiency targets for energy/site managers. These energy efficiency targets form part of the performance indicators within their variable income component.”**

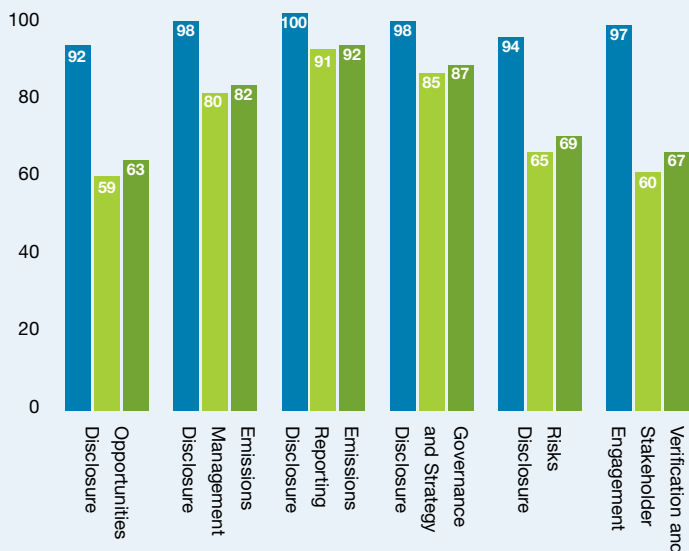
**Bayer**

**“Iberdrola integrates climate change issues as a transversal element of risk and opportunity in its business plans”**

**Iberdrola**

**19 DISCLOSURE SCORES FOR CDLI AND NON-CDLI COMPANIES BY CATEGORIES**

- CDLI
- Non-CDLI
- All



**“Improved energy efficiency is an important R&D theme for all Honda products. In automobiles, application of the original Honda IMA hybrid system is expanding”**

**Honda Motor Company**



## 20 THE GLOBAL 500 CPLI 2012

Sector	Company	Performance Band	Disclosure Score	Consecutive Years in the CPLI	
Consumer Discretionary	BMW	A	99	3	
	Panasonic	A	96	1	
Consumer Staples	Nestlé	A	100	1	
	Diageo	A	98	1	
	Reckitt Benckiser	A	93	1	
	Unilever	A	84	1	
	Eni	A	91	1	
Financials	Allianz Group	A	97	1	
	UBS	A	97	3	
	Wells Fargo	A	95	1	
	Ace	A	94	1	
	Bank of America	A	93	3	
	Bank of Montreal	A	91	3	
	Intesa Sanpaolo	A	91	1	
	National Australia Bank	A	91	3	
	Deutsche Bank	A	90	1	
	AXA Group	A	88	2	
	Mizuho Financial Group	A	85	1	
	Westpac Banking	A	83	3	
	Health Care	Bayer	A	100	3
		Allergan	A	90	1
		Pfizer	A	87	1
Industrials	Lockheed Martin	A	93	2	
	Schneider Electric	A	92	2	
Information Technology	Nokia Group	A	98	1	
	Intel	A	88	1	
Materials	BASF	A	99	3	
	Anglo American	A	94	1	
Telecommunication Services	Koninklijke KPN	A	94	1	
	France Telecom	A	89	1	
Utilities	Gas Natural SDG	A	99	1	
	Iberdrola	A	95	1	
	Exelon	A	94	1	

The criteria to enter the CPLI were raised in 2012 and companies now need to: achieve a performance score of more than 85, score maximum performance points on question 13.1a (absolute emissions performance), and disclose and verify Scope 1 and 2 emissions. Despite these more stringent criteria, the number of companies in the CPLI has risen from 29 in 2011 to 33 in 2012. All sectors are represented in this year's CPLI and Germany and Finland are the most represented countries relative to their overall Global 500 population (see Figure 21).

Companies in the CPLI are demonstrating best practice in terms of governance, strategy and emissions reductions. These companies are strongly out-performing the rest of the Global 500 population in all of the key metrics (see Figure 22).

CPLI companies have a strong understanding of how climate change affects their business strategy: 97% have integrated climate change into their strategy (non-CPLI: 77%) and 100% have board or senior executive oversight of climate change (non-CPLI: 96%).

Verified data and the ability to quantify carbon savings from emissions reduction activities allow CPLI companies to make confident strategic and investment decisions which result in absolute year-on-year emissions reductions. All CPLI companies must verify their emissions (non-CPLI: 51%) and report carbon savings associated with their emissions reduction activities (non-CPLI: 57%) in order to enter the CPLI.

CPLI companies are making more progress against their

targets, with 91% either having met or currently moved ahead of them (non-CPLI: 60%). Reckitt Benckiser met its 20% per unit reduction target by 2020 this year, 8 years early.

It is interesting to note that the outlook for CPLI companies appears to be longer-term than for the non-CPLI. Leading companies are more advanced at understanding and identifying risks with timeframes of more than 10 years (CPLI: 55%, non-CPLI: 29%) and opportunities with timeframes of more than 10 years (CPLI: 30%, non-CPLI: 15%). Unilever, for example, already recognizes how future water or energy scarcity could render their products unattractive to use.

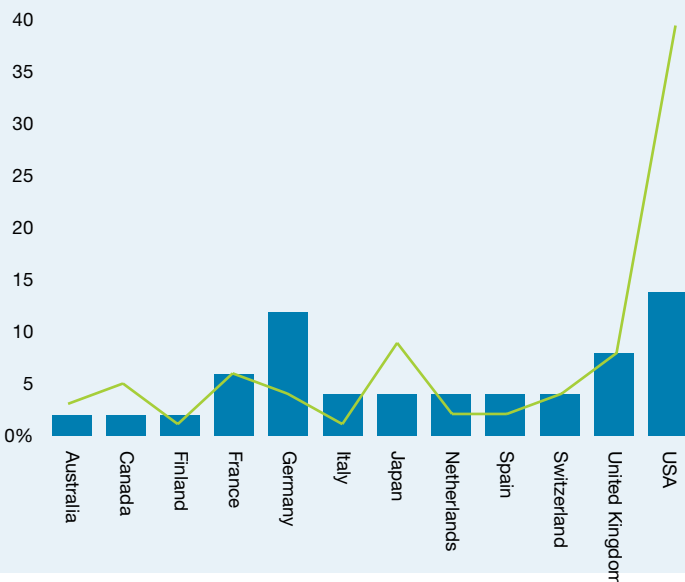
85% of these companies are investing in activities which have paybacks of more than 3 years (non-CPLI: 60%). This shows that leading companies recognize that climate change has no quick solutions: strategies and investments must be focused on the long term. France Telecom, for example, has been deploying solar-powered base stations in Africa.

Indeed, 82% of leading companies believe they have a strategic advantage from climate change and 94% note their long-term strategy has been influenced by climate change. This clear message should incentivize others to improve their response to climate change and integrate their response into their business strategies.

However, overall, leading companies need to significantly increase their emissions reduction targets to match the global ambition required to limit average global temperature increases to 2°C.

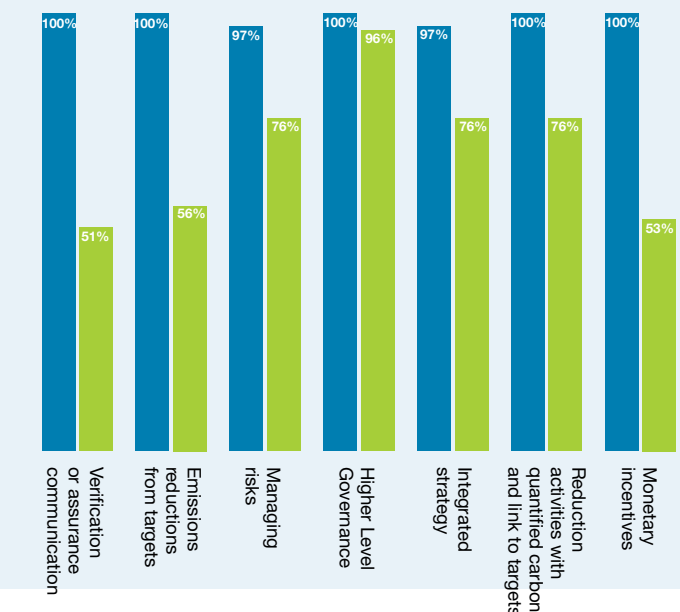
## 21 PERCENTAGE OF COMPANIES IN THE CPLI BY COUNTRY

● CPLI %  
● % of G500 Respondents



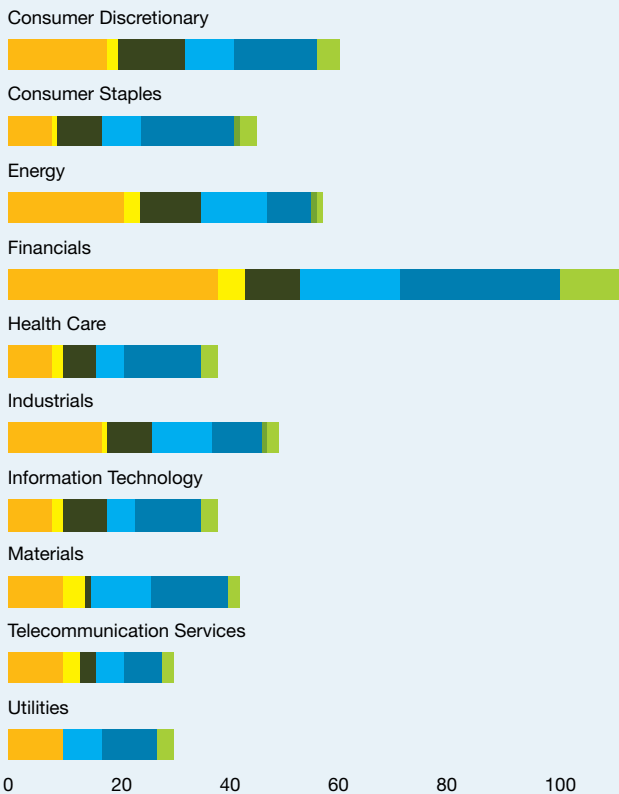
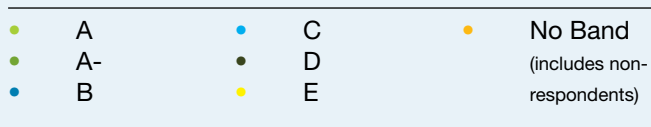
## 22 COMPARISON OF KEY PERFORMANCE STATISTICS BETWEEN CPLI AND NON-CPLI COMPANIES

● CPLI  
● Non-CPLI



# Sector Analysis

## 23 NUMBER OF COMPANIES IN EACH PERFORMANCE BAND



All 10 sectors are very diverse and this is reflected by the range of disclosure and performance scores obtained in each of them. The highest scoring sector in terms of both disclosure and performance is Utilities (average disclosure score: 86; 40% of their companies got A, A- or B performance bands).

The effect of national and international regulation can clearly be seen in the responses: 86% of the most energy intensive sector (Utilities) have either an absolute or an intensity target while only 77% of the other sectors disclose one.

Risks and opportunities are very different depending on the sectors. The main risks identified concern the effect of regulation on their operations, the effect of extra physical events on supply chain and business continuity and the effect of reputation and changing consumer behavior on their customers and investors.

Similarly, opportunities are varied and often relate to the maturity of the sector in addressing climate change. The development of low carbon products or services and the increased demand for services which improve overall emissions reductions are noted across all sectors. Some are better placed than others: for example, Telecommunications Services can support all other sectors by offering low-carbon products such as teleworking, e-billing and cloud solutions.

14 & 15: Refers to companies who highlighted reputational risks/opportunities and/or customer behavior

## 24 RISKS IDENTIFIED BY SECTOR

	Physical	Regulatory	Reputational & Consumer Behavior <sup>14</sup>
Consumer Discretionary	76%	76%	57%
Consumer Staples	87%	84%	74%
Energy	87%	92%	74%
Financials	87%	79%	68%
Healthcare	64%	70%	36%
Industrials	72%	78%	44%
Information Technology	73%	79%	48%
Materials	89%	97%	74%
Telecommunication Services	95%	95%	75%
Utilities	81%	100%	76%
All sectors	81%	83%	63%

## 25 OPPORTUNITIES IDENTIFIED BY SECTOR

	Physical	Regulatory	Reputational & Consumer Behavior <sup>15</sup>
Consumer Discretionary	50%	74%	59%
Consumer Staples	74%	76%	68%
Energy	56%	85%	67%
Financials	73%	83%	71%
Healthcare	39%	52%	48%
Industrials	59%	84%	68%
Information Technology	58%	79%	67%
Materials	71%	94%	69%
Telecommunication Services	95%	90%	90%
Utilities	67%	90%	86%
All sectors	64%	80%	68%

# Sector Snapshots

\*Please note that non-respondents does not include cases where a subsidiary company did not respond because it was covered by the parent company's response.

## CONSUMER DISCRETIONARY

### Global 500 response rate:

Consumer Discretionary overall: 77% (46 out of 60)

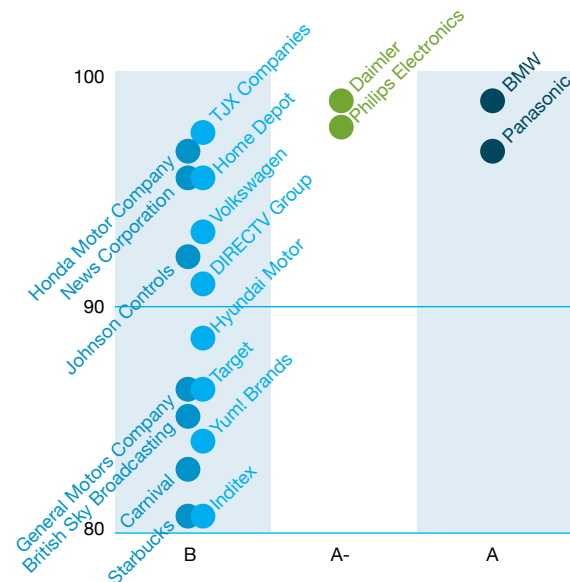
### Key industries within the sector:

Auto Components (4 of 5); Automobiles (10 of 11); Distributors (1 of 1); Hotels, Restaurants & Leisure (6 of 7); Household Durables (2 of 2); Internet & Catalogue Retail (1 of 3); Media (11 of 14); Multiline Retail (1 of 2); Specialty Retail (6 of 9); Textiles, Apparel & Luxury Goods (4 of 6)

### Non-respondents\*:

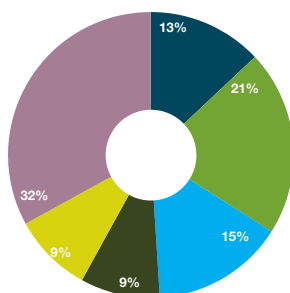
Amazon.com, Chow Tai Fook Jewellery Group, Coach, Comcast, Fast Retailing Co, Grupo Elektra, Hermes International, Kia Motors, Naspers, Priceline.com, S.A.C.I. Falabella, Sands China, Time Warner Cable

## TOP DISCLOSURE SCORES VS. TOP PERFORMANCE BANDS



## MOST COMMON METHODS TO DRIVE INVESTMENT IN EMISSIONS REDUCTION ACTIVITIES

- 16 Compliance with regulatory requirements/standards
- 26 Dedicated budget for energy efficiency
- 18 Employee engagement
- 11 Financial optimization calculations
- 11 Internal incentives/recognition programs
- 39 Other Methods



## CONSUMER STAPLES

### Global 500 response rate:

Consumer staples overall: 84% (38 out of 45)

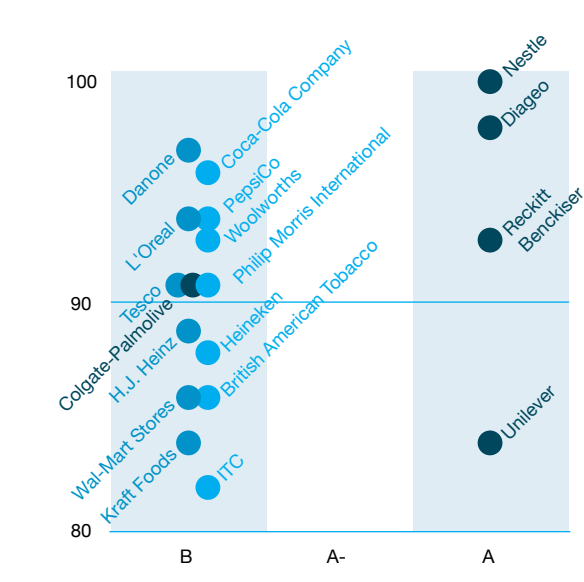
### Key industries within the sector:

Beverages (8 of 8); Food & Staples Retailing (10 of 11); Food Products (8 of 11); Household Products (1 of 2); Personal Products (4 of 5); Tobacco (7 of 8)

### Non-respondents\*:

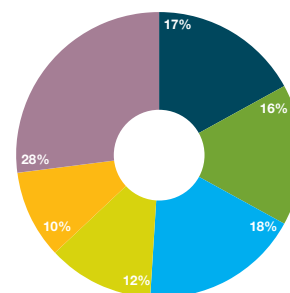
Sysco, Tingyi (Cayman Islands) Holdings, Wilmar International

## TOP DISCLOSURE SCORES VS. TOP PERFORMANCE BANDS



## MOST COMMON METHODS TO DRIVE INVESTMENT IN EMISSIONS REDUCTION ACTIVITIES

- 22 Compliance with regulatory requirements/standards
- 20 Dedicated budget for energy efficiency
- 23 Employee engagement
- 15 Internal incentives/recognition programs
- 13 Lower return on investment (ROI) specification
- 36 Other Methods





\*Please note that non-respondents does not include cases where a subsidiary company did not respond because it was covered by the parent company's response.

## ENERGY

### Global 500 response rate:

Energy overall: 68% (39 out of 57)

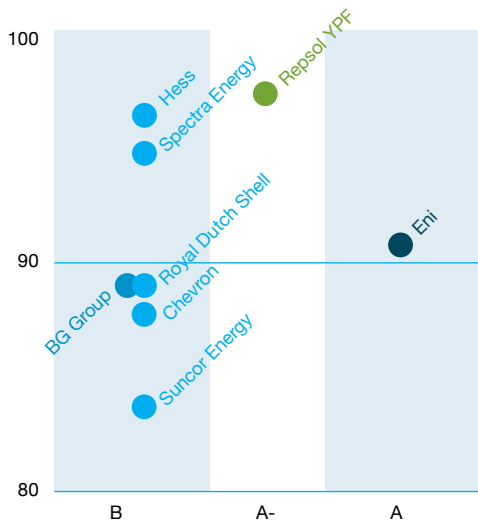
### Key industries within the sector:

Oil, Gas and Consumable Fuels (34 of 50); Energy Equipment and Services (5 of 7)

### Largest non-respondents (by market cap)\*:

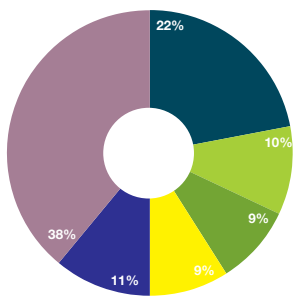
China Petroleum & Chemical, Coal India, Formosa Petrochemical, Lukoil, Oil & Natural Gas, Reliance Industries, Rosneft

## TOP DISCLOSURE SCORES VS. TOP PERFORMANCE BANDS



## MOST COMMON METHODS TO DRIVE INVESTMENT IN EMISSIONS REDUCTION ACTIVITIES

- 29 Compliance with regulatory requirements/standards
- 13 Dedicated budget for low carbon product R&D
- 12 Dedicated budget for energy efficiency
- 12 Internal price of carbon
- 14 Partnering with governments on technology development
- 50 Other Methods



## FINANCIALS

### Global 500 response rate:

Financials overall: 70% (78 out of 111)

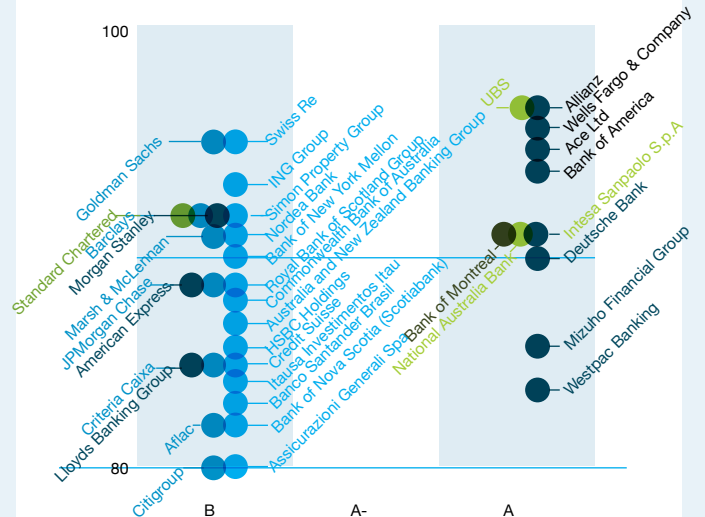
### Key industries within the sector:

Capital Markets (8 of 8); Commercial Banks (39 of 57); Consumer Finance (3 of 3); Diversified Financial Services (6 of 8); Insurance (17 of 23); Real Estate Investment Trusts (REITs) (4 of 8); Real Estate Management & Development (1 of 3); Thrifts & Mortgage Finance (0 of 1).

### Non-respondents\*:

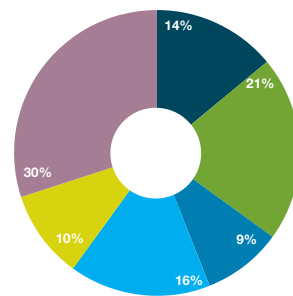
Bank Central Asia, Bank Mandiri, Bank Rakyat Indonesia, Sberbank Rossii, Otsuka Holdings, Bank of China

## TOP DISCLOSURE SCORES VS. TOP PERFORMANCE BANDS



## MOST COMMON METHODS TO DRIVE INVESTMENT IN EMISSIONS REDUCTION ACTIVITIES

- 31 Compliance with regulatory requirements/standards
- 48 Dedicated budget for energy efficiency
- 20 Dedicated budget for other emissions reduction activities
- 37 Employee engagement
- 22 Internal incentives/recognition programs
- 69 Other Methods



\*Please note that non-respondents does not include cases where a subsidiary company did not respond because it was covered by the parent company's response.

## HEALTHCARE

### Global 500 response rate:

Healthcare overall: 87% (33 out of 38)

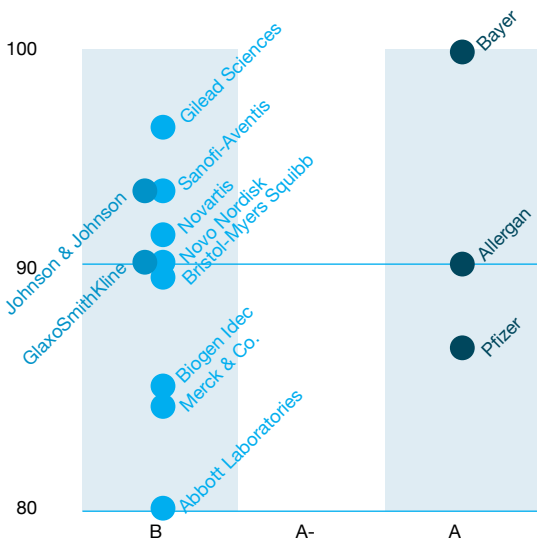
### Key industries within the sector:

Biotechnology (5 of 5); Healthcare Equipment & Supplies (4 of 7); Healthcare Providers & Services (5 of 7); Life Sciences Tools & Services (1 of 1); Pharmaceuticals (18 of 18)

### Non-respondents\*:

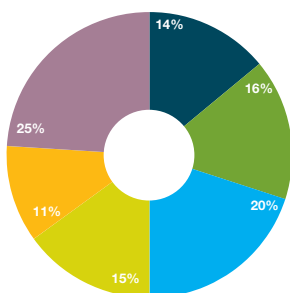
Intuitive Surgical, McKesson, Stryker, Synthes

## TOP DISCLOSURE SCORES VS. TOP PERFORMANCE BANDS



## MOST COMMON METHODS TO DRIVE INVESTMENT IN EMISSIONS REDUCTION ACTIVITIES

- 14 Compliance with regulatory requirements/standards
- 16 Dedicated budget for energy efficiency
- 20 Employee engagement
- 15 Internal incentives/recognition programs
- 11 Lower return on investment (ROI) specification
- 25 Other Methods



## INDUSTRIALS

### Global 500 response rate:

Industrials overall: 75% (36 out of 49)

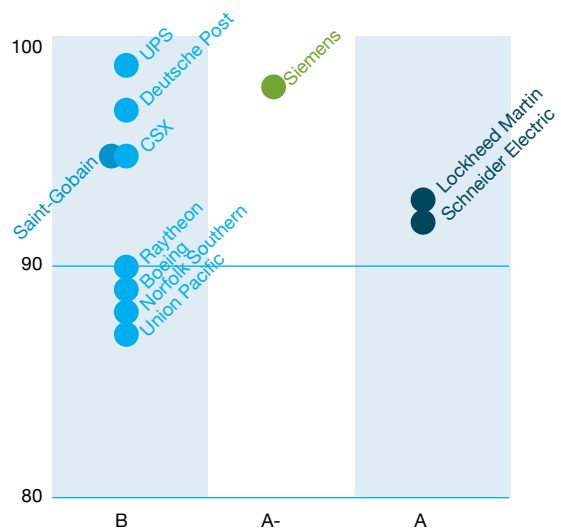
### Key industries within the sector:

Aerospace & Defense (7 of 10); Air Freight & Logistics (3 of 3); Building Products (1 of 1); Construction & Engineering (1 of 1); Electrical Equipment (2 of 2); Industrial Conglomerates (5 of 10); Machinery (7 of 10); Road & Rail (7 of 8); Trading Companies & Distributors (3 of 3)

### Non-respondents\*:

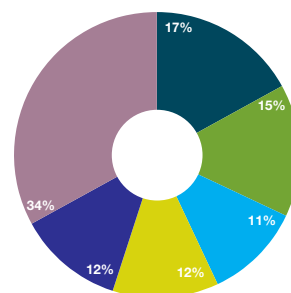
Caterpillar, FANUC, General Dynamics, Goodrich, Grupo Mexico, Hutchison Whampoa, Hyundai Heavy Industries, Jardine Matheson, Jardine Strategic, Precision Castparts

## TOP DISCLOSURE SCORES VS. TOP PERFORMANCE BANDS



## MOST COMMON METHODS TO DRIVE INVESTMENT IN EMISSIONS REDUCTION ACTIVITIES

- 18 Compliance with regulatory requirements/standards
- 16 Dedicated budget for energy efficiency
- 12 Employee engagement
- 13 Internal incentives/recognition programs
- 13 Partnering with governments on technology development
- 37 Other Methods



## INFORMATION TECHNOLOGY

### Global 500 response rate:

Information technology overall: 87% (33 out of 38)

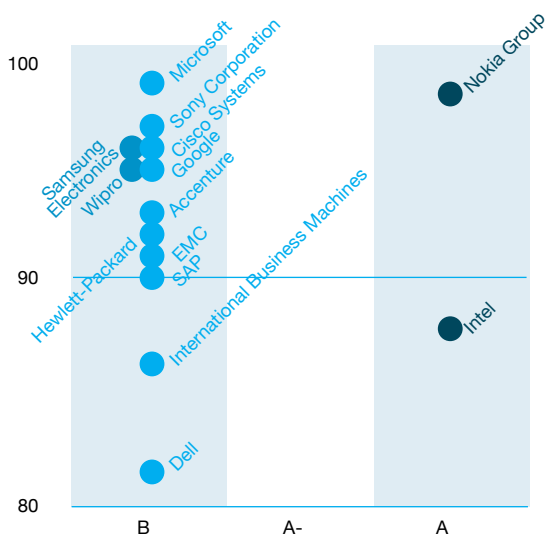
### Key industries within the sector:

Communications Equipment (4 of 4); Computers & Peripherals (6 of 7); Electronic Equipment, Instruments & Components (5 of 6); Internet Software & Services (3 of 4); IT Services (7 of 7); Semiconductors & Semiconductor Equipment (3 of 4); Software (5 of 6)

### Non-respondents\*:

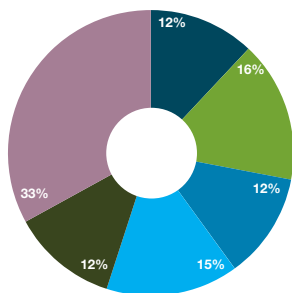
Apple, ASML Holding, Nintendo, Tencent Holdings

## TOP DISCLOSURE SCORES VS. TOP PERFORMANCE BANDS



## MOST COMMON METHODS TO DRIVE INVESTMENT IN EMISSIONS REDUCTION ACTIVITIES

- 14 Compliance with regulatory requirements/standards
- 19 Dedicated budget for energy efficiency
- 14 Dedicated budget for other emissions reduction activities
- 17 Employee engagement
- 14 Financial optimization calculations
- 38 Other Methods



## MATERIALS

### Global 500 response rate:

Materials overall: 83% (35 out of 42)

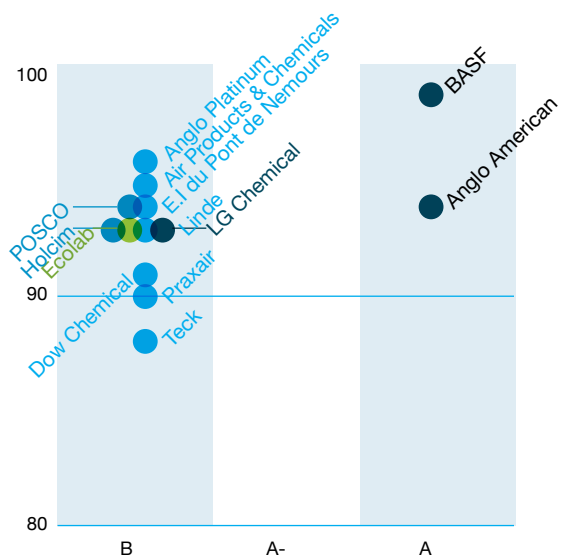
### Key industries within the sector:

Chemicals (13 of 18); Construction Materials (1 of 1); Metals & Mining (21 of 23)

### Non-respondents\*:

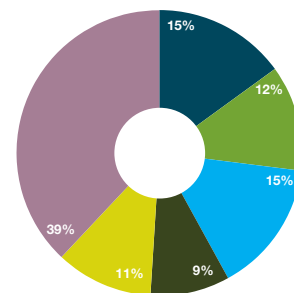
Formosa Plastics Corp, LyondellBasell Industries Cl A, MMC Norilsk Nickel, Nan Ya Plastics, Petronas Chemicals Group Berhad, Southern Copper Corporation, Uralkali

## TOP DISCLOSURE SCORES VS. TOP PERFORMANCE BANDS



## MOST COMMON METHODS TO DRIVE INVESTMENT IN EMISSIONS REDUCTION ACTIVITIES

- 21 Compliance with regulatory requirements/standards
- 17 Dedicated budget for energy efficiency
- 21 Employee engagement
- 12 Financial optimization calculations
- 15 Internal incentives/recognition programs
- 54 Other Methods



## TELECOMMUNICATION SERVICES

### Global 500 response rate:

Telecommunication Services overall: 69% (20 out of 30)

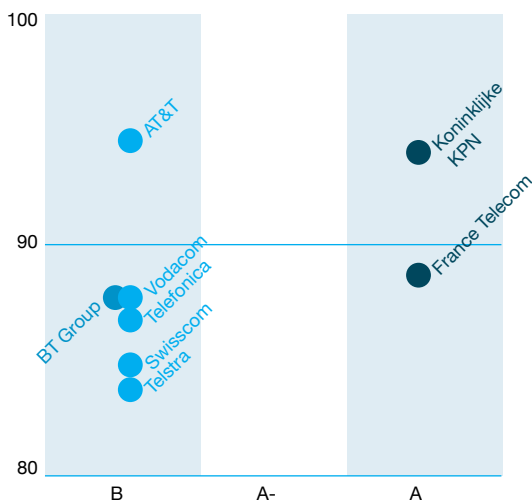
### Key industries within the sector:

Diversified Telecommunication Services (15 of 21);  
Wireless Telecommunication Services (5 of 8)

### Non-respondents\*:

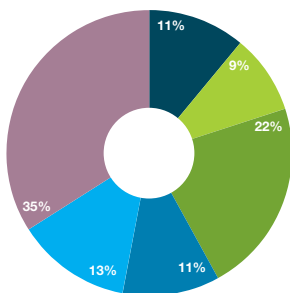
América Móvil, American Tower, Bharti Airtel, Singapore Telecom, SoftBank, Telekomunikasi Indonesia

## TOP DISCLOSURE SCORES VS. TOP PERFORMANCE BANDS



## MOST COMMON METHODS TO DRIVE INVESTMENT IN EMISSIONS REDUCTION ACTIVITIES

- 6 Compliance with regulatory requirements/standards
- 5 Dedicated budget for low carbon product R&D
- 12 Dedicated budget for energy efficiency
- 6 Dedicated budget for other emissions reduction activities
- 7 Employee engagement
- 19 Other Methods



## UTILITIES

### Global 500 response rate:

Utilities overall: 70% (21 out of 30)

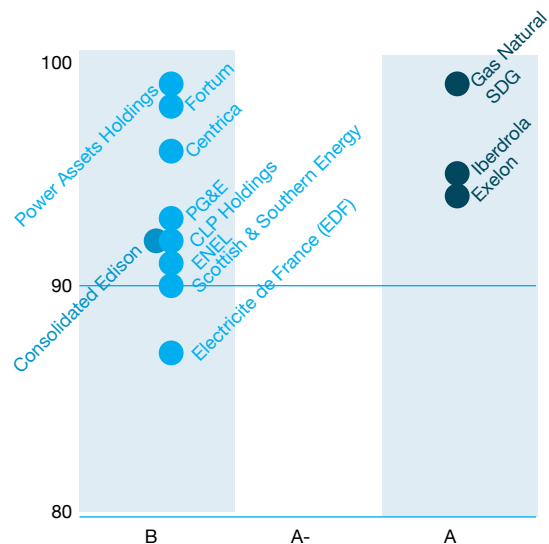
### Key industries within the sector:

Electric Utilities (14 of 20); Gas Utilities (1 of 2);  
Independent Power Producers & Energy Traders (0 of 1); Multi-Utilities (6 of 7)

### Non-respondents\*:

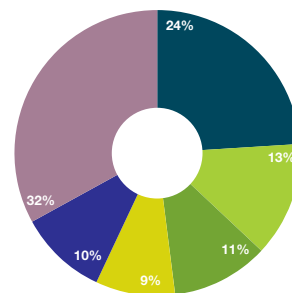
CEZ, FirstEnergy, Hong Kong and China Gas, National Thermal Power (NTPC), NextEra Energy, PPL, Progress Energy, Public Service Enterprise Group

## TOP DISCLOSURE SCORES VS. TOP PERFORMANCE BANDS



## MOST COMMON METHODS TO DRIVE INVESTMENT IN EMISSIONS REDUCTION ACTIVITIES

- 28 Compliance with regulatory requirements/standards
- 15 Dedicated budget for low carbon product R&D
- 13 Dedicated budget for energy efficiency
- 11 Internal incentives/recognition programs
- 12 Partnering with governments on technology development
- 38 Other Methods





# Key Statistics

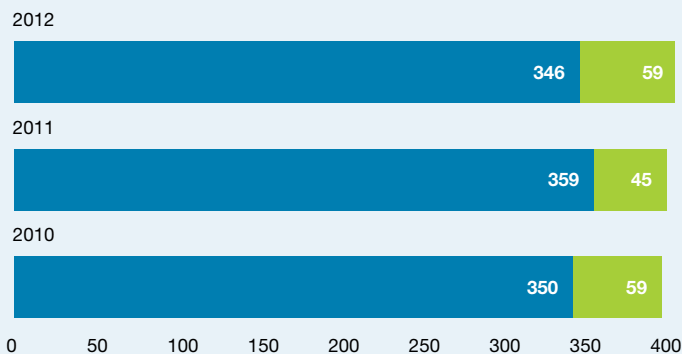
CD	Consumer Discretionary
CS	Consumer Staples
EGY	Energy
FIN	Financials
HC	Health Care
IT	Information Technology
IND	Industrials
MAT	Materials
TCOM	Telecommunications
UTIL	Utilities



# Key disclosure statistics

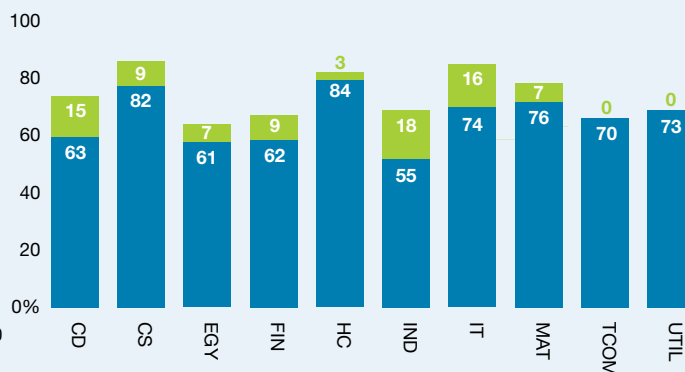
## KS1 YEAR ON YEAR NUMBER OF COMPANIES RESPONDING TO CDP PUBLICLY & PRIVATELY

- Responding publicly to CDP
- Responding privately to CDP



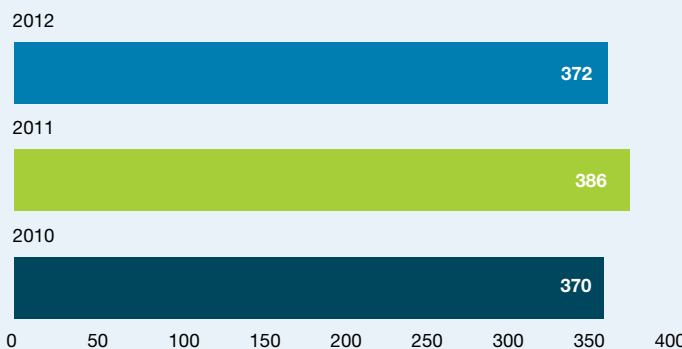
## KS2 PERCENTAGE RESPONSE RATE BY SECTOR FOR 2012

- Responding publicly to CDP
- Responding privately to CDP

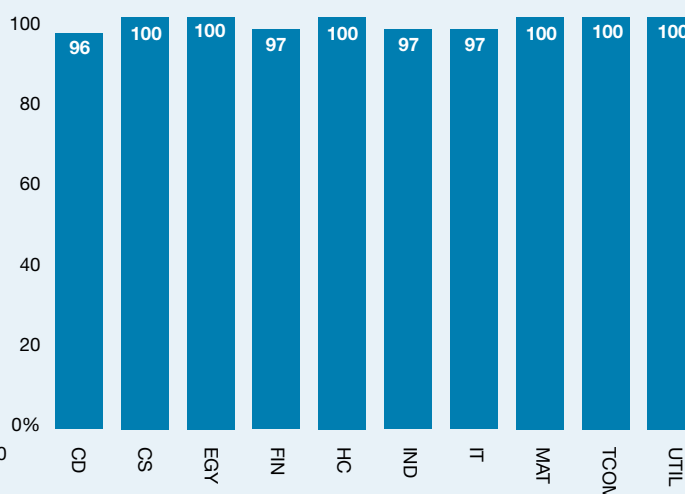


## KS3 YEAR ON YEAR NUMBER OF COMPANIES DISCLOSING SCOPE 1 OR SCOPE 2 GHG EMISSIONS

- 2012
- 2011
- 2010



## KS4 PERCENTAGE OF RESPONDING COMPANIES IN EACH SECTOR DISCLOSING SCOPE 1 OR SCOPE 2 GHG EMISSIONS (2012)



### Key disclosure statistics

405 companies have responded to CDP in 2012. Figure KS1 is based on the sample of 405 companies, this includes companies that reference a holding company's response. Analysis in the remainder of this report is based on 379 responses received by 1st July 2012 and does not include companies that reference a holding company's response.

The number of companies disclosing Scope 1 or 2 emissions includes those that have disclosed their emissions as zero. This is a change in approach from previous years.

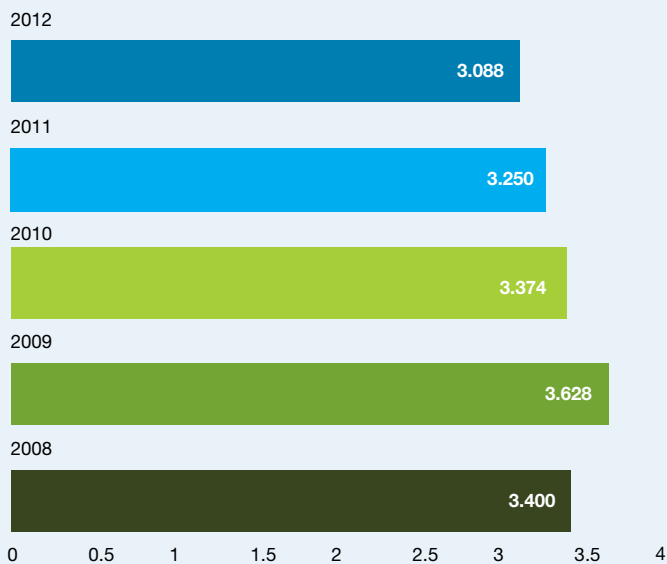
### Climate Change Reporting Framework

The Climate Disclosure Standards Board (CDSB), a special project of CDP, is an international organization committed to the integration of climate change-related information into mainstream corporate reporting. CDSB's internationally accepted Climate Change Reporting Framework is designed for use by companies in making disclosures in, or linked to, their mainstream financial reports about the risks and opportunities that climate change presents to their strategy, financial performance and condition. Designed in-line with the objectives of financial reporting and rules on non-financial reporting, the Climate Change Reporting Framework offers a leading example of how to apply the principles of integrated reporting with respect to reporting on climate change.

# Key emissions statistics

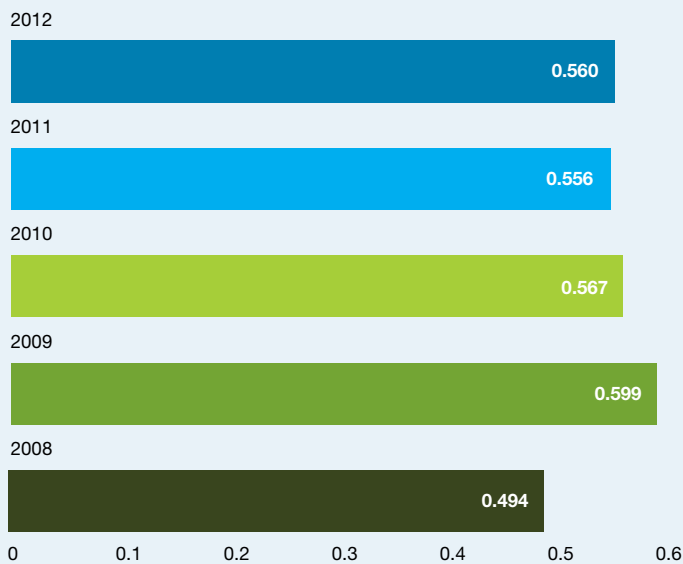
## KS5 TOTAL SCOPE 1 EMISSIONS REPORTED BY RESPONDING G500 COMPANIES (BILLION tCO<sub>2</sub>e)

- 2012
- 2011
- 2010
- 2009
- 2008



## KS6 TOTAL SCOPE 2 EMISSIONS REPORTED BY RESPONDING G500 COMPANIES (BILLION tCO<sub>2</sub>e)

- 2012
- 2011
- 2010
- 2009
- 2008



### Key emissions statistics

There has been a change in the way in which Scope 1 and 2 emissions reported under CCRF are calculated although this is not expected to cause a major change in reported emissions. In 2011 the Scope 1 and 2 figure was taken as Parent and subsidiaries under control of the parent whereas in 2012 joint ventures are also included.

Only companies reporting Scope 3 emissions using the Greenhouse Gas Protocol Scope 3 Standard named categories have been included below.

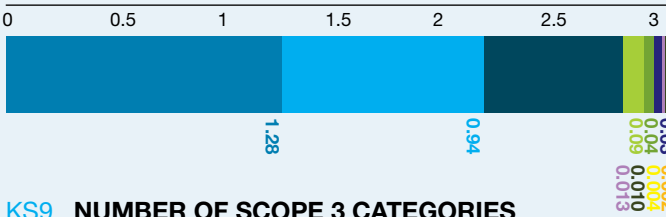
Whilst in some cases “Other upstream” or “Other downstream” are legitimate selections, in most circumstances the data contained in these categories should be allocated to one of the named categories. Reporting companies are encouraged to use these specific categories where appropriate as not doing so and using “Other” greatly affects data quality and therefore the utility of the data for investors. An attempt to subjectively attribute categories where companies have selected “Other” has not been undertaken. In addition, only those categories for which emissions figures have been provided have been included.

Scope 3 data has only been included for 2012 due to changes in Scope 3 categories occurring between the 2011 and 2012 reporting cycles as a result of the publication of the Greenhouse Gas Protocol Scope 3 Standard.

CDP has been working to encourage greater levels of third party verification/assurance of data in response to demands for higher levels of data quality. This led to a change in the way in which verification/assurance was reported and scored in 2011. Therefore only data for 2011 and 2012 for verification/assurance is included here. The term “reported and approved” refers to the fact that the number of companies with verification is based on the scoring of the verification statements attached to their response. Where companies report verification/assurance of more than one scope, they are only counted once in the statistic provided below.

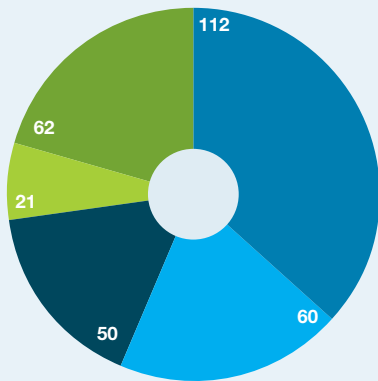
**KS7 TOTAL SCOPE 1 EMISSIONS REPORTED BY RESPONDING G500 COMPANIES (BILLION tCO<sub>2</sub>e)**

- Energy
- Utilities
- Materials
- Industrials
- Consumer Staples
- Consumer Discretionary
- Health Care
- Information Technology
- Telecommunications
- Financials



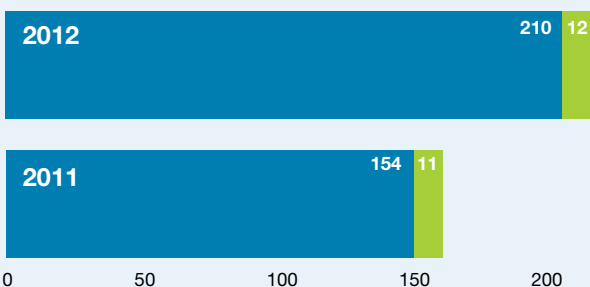
**KS9 NUMBER OF SCOPE 3 CATEGORIES REPORTED WITH EMISSIONS DATA**

- 1 category
- 2 categories
- 3 categories
- 4 categories
- 5+ categories



**KS11 VERIFICATION/ASSURANCE OF EMISSIONS COMPLETE OR UNDERWAY AND FULL POINTS AWARDED (ANY SCOPE - 2011-2012)**

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



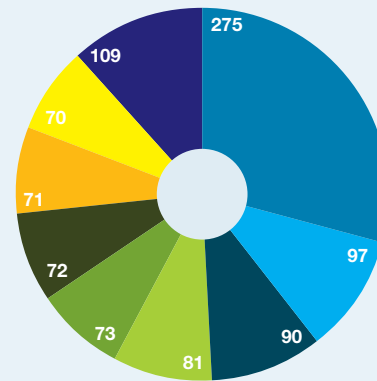
**KS8 TOTAL SCOPE 2 EMISSIONS REPORTED BY RESPONDING G500 COMPANIES (BILLION tCO<sub>2</sub>e)**

- Materials
- Energy
- Consumer Discretionary
- Consumer Staples
- Industrials
- Telecommunications
- Information Technology
- Utilities
- Financials
- Health Care



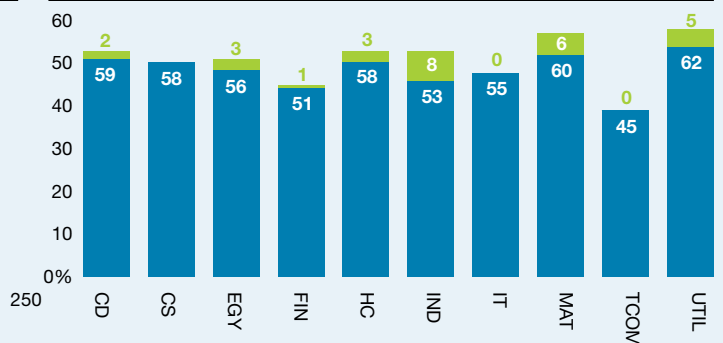
**KS10 COMMONLY REPORTED SCOPE 3 CATEGORIES (WITH EMISSIONS DATA PROVIDED)**

- Business travel
- Purchased goods & services
- Downstream transportation and distribution
- Fuel- and energy-related activities
- Upstream transportation & distribution
- Use of sold products
- Waste generated in operations
- Employee commuting
- Remaining scope 3 categories



**KS12 PERCENTAGE OF RESPONDING COMPANIES WITH VERIFICATION/ASSURANCE OF EMISSIONS (ANY SCOPE - BY SECTOR 2012)**

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

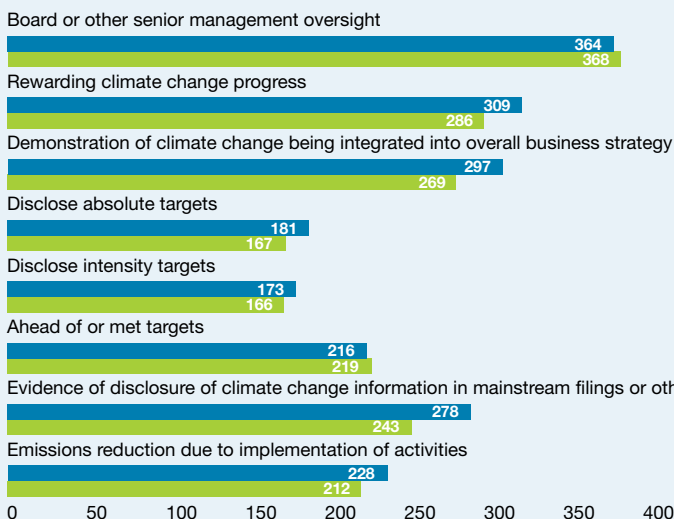




# Key performance statistics

## KS13 KEY PERFORMANCE STATISTICS 2011-2012

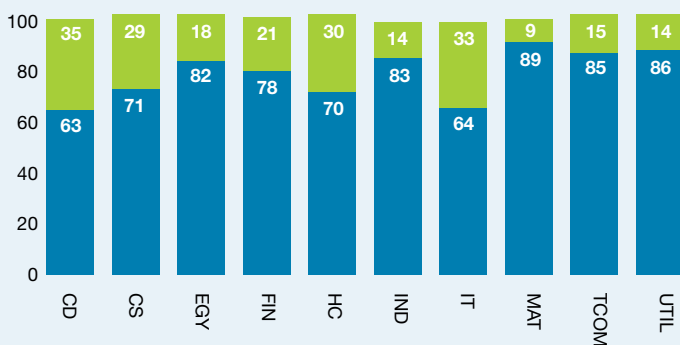
- 2012
- 2011



Companies disclosing absolute or intensity targets have only been included in this section where they have been fully described, providing base year, target year, percentage reduction and for intensity targets, target metric. Companies may report multiple emissions reductions due to implementation of activities, targets and reward incentives. In all of these cases, companies are only counted once in the statistics presented below, with the exception of the statistics on absolute and intensity targets where companies that have both types of target will be counted once in each type.

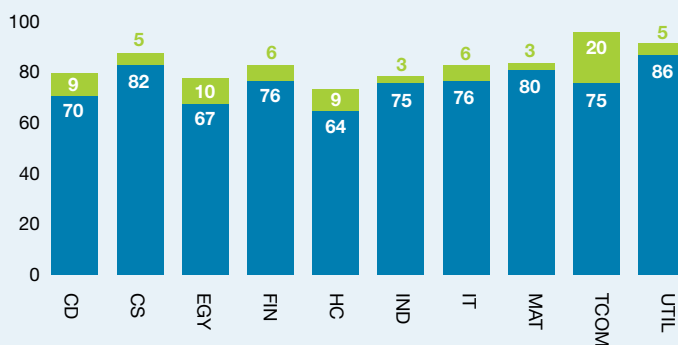
## KS14 PERCENTAGE OF RESPONDING COMPANIES WITH BOARD OR OTHER SENIOR MANAGEMENT OVERSIGHT BY SECTOR (2012)

- Individual/Sub-set of the Board or other committee appointed by the Board
- Other Manager/Officer

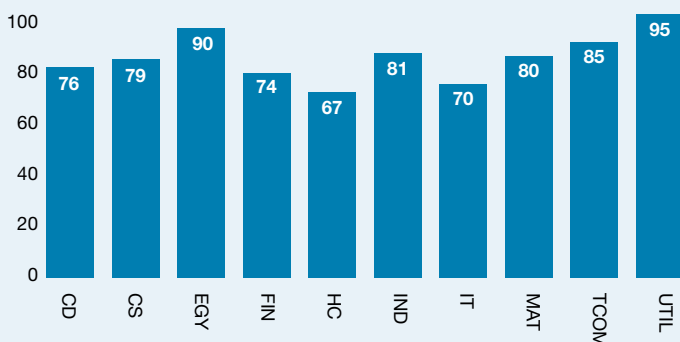


## KS15 PERCENTAGE OF RESPONDING COMPANIES REWARDING CLIMATE CHANGE PROGRESS BY SECTOR (2012)

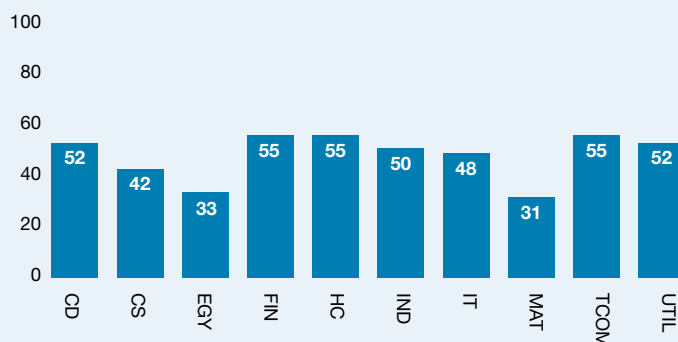
- Monetary
  - Non-Monetary
- Note: blue indicates companies with monetary incentives in place; green indicates companies with other incentives. This reflects companies selecting monetary incentives only.



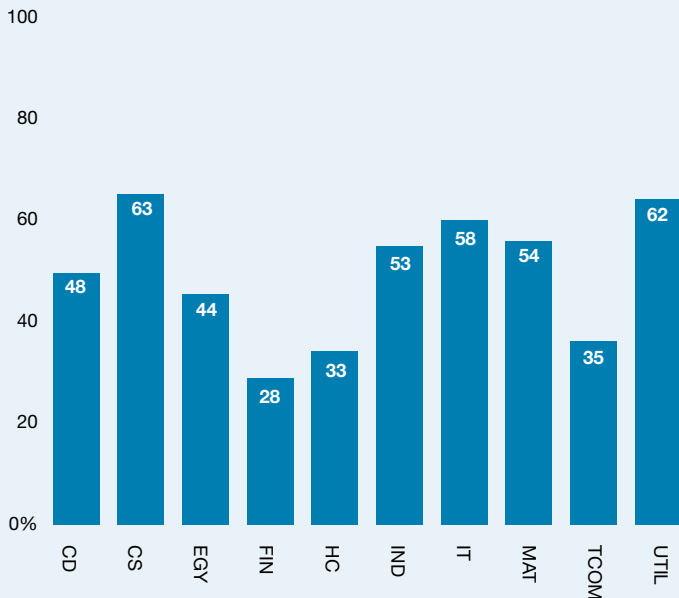
## KS16 PERCENTAGE OF RESPONDING COMPANIES DEMONSTRATING CLIMATE CHANGE BEING INTEGRATED INTO OVERALL BUSINESS STRATEGY



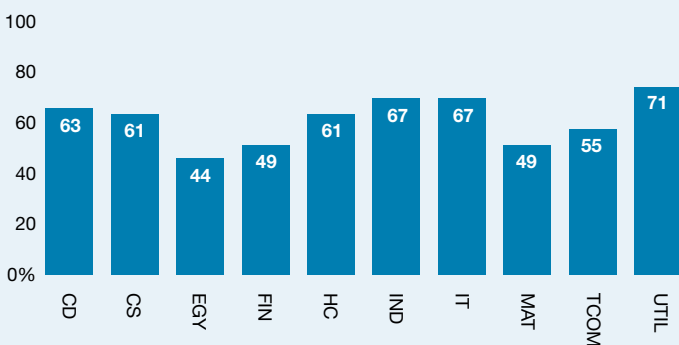
## KS17 PERCENTAGE OF RESPONDING COMPANIES DISCLOSING ABSOLUTE TARGETS BY SECTOR (2012)



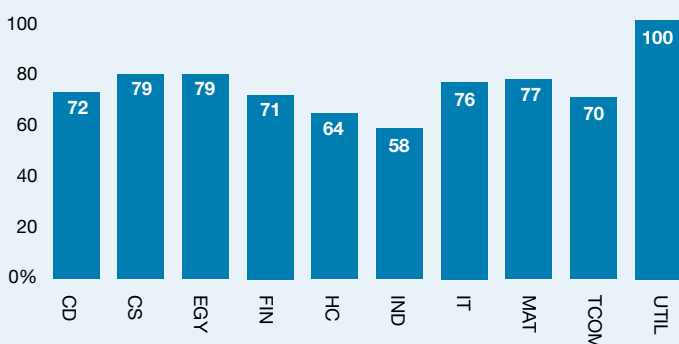
**KS18 PERCENTAGE OF RESPONDING COMPANIES DISCLOSING INTENSITY TARGETS BY SECTOR (2012)**



**KS19 PERCENTAGE OF RESPONDING COMPANIES AHEAD OF OR MET TARGETS BY SECTOR (2012)**



**KS20 PERCENTAGE OF RESPONDING COMPANIES WITH EVIDENCE OF DISCLOSURE OF CLIMATE CHANGE INFORMATION IN MAINSTREAM FILINGS OR OTHER EXTERNAL COMMUNICATIONS BY SECTOR (2012)**



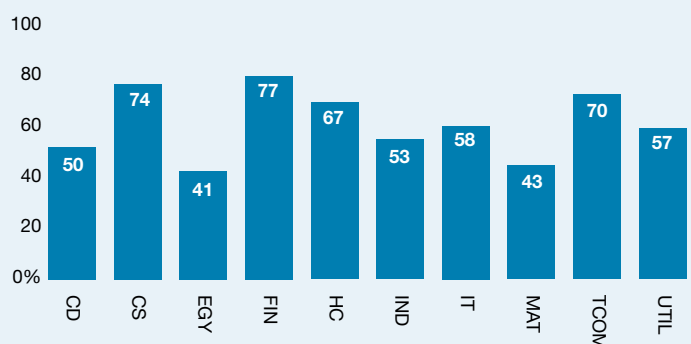
“progress in achieving our sustainability targets, including those related to climate change, are quarterly discussed by the Executive Committee (Board of Management)”

**Philips Electronics**

“Tools such as stress testing, scenario planning and economic modelling are used to help the Group, business lines and support functions to understand their resilience in the event of a significant event or shock and to help monitor and prepare for future opportunities and threats”

**National Australia Bank**

**KS21 PERCENTAGE OF RESPONDING COMPANIES WITH EMISSIONS REDUCTIONS DUE TO IMPLEMENTATION OF ACTIVITIES BY SECTOR (2012)**



# Appendix

Please refer to the Key on page 57 for further explanation of the abbreviations used

Company name	Country	Sector <sup>a</sup>	2012 Score <sup>b</sup>	2011 response status <sup>c</sup>	Total Scope 1 + Scope 2 Emissions	Scope 1	Scope 2	Number of Scope 3 categories reported <sup>d</sup>	Verification/Assurance status <sup>e</sup>	Target(s) reported <sup>f</sup>
3M	USA	IND	68 C	AQ	6,090,000	4,060,000	2,030,000		VAR S1, S2	Int
ABB	Switzerland	IND	76 D	AQ	1,508,000	722,000	786,000	1	VAR S1, S2, S3	Int
Abbott Laboratories	USA	HC	80 B	AQ	1,656,000	834,000	822,000	4	VAA S1, S2	Abs
Accenture	Ireland	IT	93 B	AQ	234,266	12,098	222,168	1	VAA S1, S2, S3	Int
Ace	Switzerland	FIN	94 A	AQ	52,475	12,866	39,609	1	VAA S1, S2, S3	Int
Aetna	USA	HC	38	AQ	61,553	7,178	54,375	1		
Aflac	USA	FIN	82 B	AQ	25,773	4,585	21,188	1	VAA S1, S2	Abs, Int
AIA Group	Greater China	FIN	DP	X	DP	DP	DP	DP	DP	DP
Air Liquide	France	MAT	82 C	AQ	20,543,000	10,549,000	9,994,000	*	VAR S1, S2	Abs
Air Products & Chemicals	USA	MAT	95 B	AQ	24,318,817	14,440,000	9,878,817	3	VAA S1, S2, S3	Int
Allergan	USA	HC	90 A	AQ	97,053	45,309	51,744	4	VAA S1, S2, VAR S3	Abs, Int
Allianz Group	Germany	FIN	97 A	AQ	328,883	70,150	258,733	3*	VAA S1, S2, S3	Int
Altria Group	USA	CS	71 C	AQ	547,203	279,395	267,808	1	VAR S1	Abs
Amazon.com	USA	CD	NR	NR	NR	NR	NR	NR	NR	NR
Ambev - Cia. Bebidas das Americas	Brazil	CS	69 D	AQ	961,332	775,768	185,564	*		Int
América Móvil	Mexico	TCOM	NR	NR	NR	NR	NR	NR	NR	NR
American Electric Power	USA	UTIL	76 C	AQ	135,671,200	135,671,200			VAR S1	Abs
American Express	USA	FIN	89 B	AQ	231,153	35,313	195,840	1	VAA S1, S2	Abs
American International Group	USA	FIN	14	AQ						
American Tower	USA	TCOM	DP	AQ	DP	DP	DP	DP	DP	DP
Amgen	USA	HC	75 B	AQ	400,951	126,233	274,718	1	VAA S1, S2	Abs
Anadarko Petroleum	USA	EGY	70 D	AQ	2,371,282	2,371,282		2	VAA S1, VAR S3	
Anglo American	United Kingdom	MAT	94 A	AQ	18,844,462	9,361,858	9,482,604	5	VAA S1, S2	Abs
Anglo American Platinum	South Africa	MAT	96 B	AQ	5,990,613	540,537	5,450,076	10	VAA S1, S2, VAF S3	Int
AngloGold Ashanti	South Africa	MAT	78 C	AQ	4,557,000	1,235,000	3,322,000	3	VAR S1, S2	Int
Anheuser Busch InBev	Belgium	CS	79 B	AQ	4,367,743	2,720,446	1,647,297	1	VAR S1, S2	Int
Annaly Capital Management	USA	FIN	NR	NR	NR	NR	NR	NR	NR	NR
Antofagasta	United Kingdom	MAT	64 E	AQ	1,883,876	565,718	1,318,158	6*		
Apache	USA	EGY	64 D	AQ	13,100,000	11,760,000	1,340,000	*	VAR S1	
Apple	USA	IT	DP	DP	DP	DP	DP	DP	DP	DP

Company name	Country	Sector <sup>a</sup>	2012 Score <sup>b</sup>	2011 response status <sup>c</sup>	Total Scope 1 + Scope 2 Emissions	Scope 1	Scope 2	Number of Scope 3 categories reported <sup>d</sup>	Verification/Assurance status <sup>e</sup>	Target(s) reported <sup>f</sup>
Arcelor Mittal	Luxembourg	MAT	85 C	AQ	179,930,000	162,028,000	17,902,000	1	VAA S1, S2, S3	Int
Archer Daniels Midland	USA	CS	AQ(L)	NR	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
ASML Holding	Netherlands	IT	DP	IN	DP	DP	DP	DP	DP	DP
Assicurazioni Generali	Italy	FIN	80 B	AQ	70,160	18,216	51,944	1	VAF S1, S2	Abs, Int
Astellas Pharma	Japan	HC	70 B	AQ	189,146	89,425	99,721	3*	VAA S1, S2, S3	Abs
Astra International	Indonesia	CD	11	AQ	NP	NP	NP	NP	NP	NP
AstraZeneca	United Kingdom	HC	73 B	AQ	637,555	375,002	262,553	5	VAA S1, S2, S3	Abs, Int
AT&T	USA	TCOM	95 B	AQ	9,078,271	1,007,201	8,071,070	1	VAA S1, S2, S3	Abs
Atlas Copco	Sweden	IND	76 D	AQ	126,001	28,179	97,822	1	VAR S1, S2, S3	Abs, Int
Australia and New Zealand Banking Group	Australia	FIN	87 B	AQ	224,422	18,202	206,220	4	VAA S1, S2, S3	Abs, Int
Automatic Data Processing	USA	IT	71 D	AQ	163,300	17,300	146,000	2		Abs
AXA Group	France	FIN	88 A	AQ	184,647	56,301	128,346	2	VAA S1, S2, S3	Int
Baker Hughes	USA	EGY	66 D	AQ	915,000	485,000	430,000	1	VAR S1, S2, S3	Int
Banco Bradesco	Brazil	FIN	63 E	AQ	15,621	3,478	12,143	1*	VAR S1, S2, S3	Int
Banco do Brasil	Brazil	FIN	57 E	AQ	25,998	5,822	20,176	3	VAR S1, S2, S3	
Banco Santander	Spain	FIN	79 C	AQ	414,846	30,272	384,574	2	VAR S1, S2, S3	Int
Banco Santander Brasil	Brazil	FIN	83 B	AQ	16,824	7,492	9,332	7	VAA S1, S2, S3	Abs
Bank Central Asia	Indonesia	FIN	NR	DP	NR	NR	NR	NR	NR	NR
Bank Mandiri	Indonesia	FIN	NR	NR	NR	NR	NR	NR	NR	NR
Bank of America	USA	FIN	93 A	AQ	1,709,890	110,005	1,599,885	4	VAA S1, S2, S3	Abs
Bank of China	Greater China	FIN	NR	NR	NR	NR	NR	NR	NR	NR
Bank of Communications	Greater China	FIN	AQ(L)	AQ	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
Bank of Montreal	Canada	FIN	91 A	AQ	86,753	21,151	65,603	3	VAA S1, S2, S3	Abs
Bank of Nova Scotia	Canada	FIN	82 B	AQ	112,348	15,027	97,321	1	VAA S1, S2, S3	
Bank Rakyat Indonesia	Indonesia	FIN	NR	DP	NR	NR	NR	NR	NR	NR
Barclays	United Kingdom	FIN	92 B	AQ	874,031	51,138	822,893	1	VAA S1, S2, VAR S3	Abs
Barrick Gold	Canada	MAT	84 B	AQ	5,030,690	3,004,464	2,026,226		VAA S1, S2	Abs



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BASF	Germany	MAT	99 A	AQ	25,799,000	20,920,000	4,879,000	14	VAA S1, S2, S3	Abs, Int
Baxter International	USA	HC	77 C	AQ	794,000	336,000	458,000	12	VAA S1, S2	Abs, Int
Bayer	Germany	HC	100 A	AQ	8,150,000	4,230,000	3,920,000	10	VAA S1, S2, S3	Abs, Int
BB&T	USA	FIN	DP	AQ	DP	DP	DP	DP	DP	DP
BBVA	Spain	FIN	80 C	AQ	345,523	9,964	335,559	1	VAR S1, S2, S3	Int
BCE	Canada	TCOM	74 C	AQ	215,029	85,598	129,431	1	VAA S1, S2, S3	Abs
Becton, Dickinson and Co.	USA	HC	59 D	AQ	526,880	79,454	447,426			Int
Berkshire Hathaway	USA	FIN	NR	NR	NR	NR	NR	NR	NR	NR
BG Group	United Kingdom	EGY	89 B	AQ	7,525,410	7,507,395	18,015	1	VAA S1, S2, S3	Abs
Bharti Airtel	India	TCOM	NR	NR	NR	NR	NR	NR	NR	NR
BHP Billiton	Australia	MAT	71 B	AQ	40,826,000	19,863,000	20,963,000	2	VAA S1, S2, S3	Int
Biogen Idec	USA	HC	84 B	AQ	101,146	46,557	54,589	1	VAA S1, S2, S3	Abs
BlackRock	USA	FIN	55 E	AQ	NP	NP	NP	NP	NP	NP
BMW	Germany	CD	99 A	AQ	1,406,855	450,829	956,026	5	VAA S1, S2, S3	Abs, Int
BNP Paribas	France	FIN	86 C	AQ	505,044	82,995	422,049	1	VAA S1, S2, S3	
BNY Mellon	USA	FIN	90 B	AQ	239,568	9,490	230,078	1	VAA S1, S2, S3	Abs
BOC Hong Kong	Greater China	FIN	NR	DP	NR	NR	NR	NR	NR	NR
Boeing	USA	IND	89 B	AQ	1,793,000	718,000	1,075,000	1	VAA S1, S2, S3	Abs, Int
BP	United Kingdom	EGY	75 C	AQ	70,790,000	61,820,000	8,970,000	1	VAA S1, S2, S3	
BRF Brasil Foods	Brazil	CS	62 D	AQ	NP	NP	NP	NP	NP	NP
Bridgestone	Japan	CD	88 C	AQ	NP	NP	NP	NP	NP	NP
Bristol-Myers Squibb	USA	HC	89 B	AQ	546,949	279,981	266,968	1	VAA S1, S2, S3	Abs
British American Tobacco	United Kingdom	CS	86 B	AQ	729,090	355,410	373,680	3*	VAA S1, S2, S3	Int
British Sky Broadcasting	United Kingdom	CD	86 B	AQ	113,089	22,744	90,345	1*	VAA S1, S2, S3	Abs, Int
Brookfield Asset Management	Canada	FIN	63 D	AQ	731,298	201,794	529,504		VAR S1, S2	
BT Group	United Kingdom	TCOM	88 B	AQ	1,498,024	196,290	1,301,734	3	VAA S1, S2, S3	Abs, Int

Company name	Country	Sector <sup>a</sup>	2012 Score <sup>b</sup>	2011 response status <sup>c</sup>	Total Scope 1 + Scope 2 Emissions	Scope 1	Scope 2	Number of Scope 3 categories reported <sup>d</sup>	Verification/Assurance status <sup>e</sup>	Target(s) reported <sup>f</sup>
CaixaBank	Spain	FIN	85 B	AQ	3,131	1,821	1,310	4*	VAA S1, S2, S3	Abs
Canadian Imperial Bank of Commerce	Canada	FIN	68 C	AQ	72,486	23,360	49,126	1*		
Canadian National Railway	Canada	IND	77 C	AQ	4,969,406	4,797,401	172,005	1	VAR S1	Abs, Int
Canadian Natural Resources	Canada	EGY	AQ(L)	AQ	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
Canon	Japan	IT	85 B	AQ	NP	NP	NP	NP	NP	NP
Capital One Financial	USA	FIN	67 D	AQ	216,207	15,166	201,041	1		Abs
Carnival	USA	CD	84 B	AQ	11,003,072	10,949,844	53,228	3	VAA S1, S2	Int
Carrefour	France	CS	68 D	AQ	3,849,000	1,978,000	1,871,000	1	VAR S1, S2, S3	Int
Caterpillar	USA	IND	DP	AQ	DP	DP	DP	DP	DP	DP
CBS	USA	CD	33	AQ					VAF S1, S2	
Celgene	USA	HC	54 C	AQ	25,993	7,232	18,761			
Genovus Energy	Canada	EGY	79 C	AQ	5,080,287	4,025,530	1,054,757	2	VAA S1	Int
Central Japan Railway Company <sup>16</sup>	Japan	IND	-	AQ	NP	NP	NP	NP	NP	NP
Centrica	United Kingdom	UTIL	96 B	AQ	7,696,573	7,564,949	131,624	2*	VAA S1, S2, S3	Abs, Int
CenturyLink	USA	TCOM	61 E	AQ	1,806,805	190,204	1,616,601	2		
CEZ	Czech Republic	UTIL	DP	AQ	DP	DP	DP	DP	DP	DP
Chesapeake Energy	USA	EGY	DP	NR	DP	DP	DP	DP	DP	DP
Cheung Kong	Greater China	FIN	NR	NR	NR	NR	NR	NR	NR	NR
Chevron	USA	EGY	88 B	AQ	65,908,005	61,346,995	4,561,010	1	VAA S1, S3	Abs
China Construction Bank	Greater China	FIN	AQ(L)	IN	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
China Life Insurance	Greater China	FIN	NR	IN	NR	NR	NR	NR	NR	NR
China Mobile	Greater China	TCOM	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
China Petroleum & Chemical	Greater China	EGY	NR	DP	NR	NR	NR	NR	NR	NR
China Telecom	Greater China	TCOM	AQ(L)	IN	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
China Unicom	Greater China	TCOM	AQ(L)	NR	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
Chow Tai Fook Jewellery Group	Greater China	CD	NR	X	NR	NR	NR	NR	NR	NR
Christian Dior	France	CD	58 E	AQ	316,811	41,274	275,537	6	VAR S1, S2, S3	Abs
Chubb	USA	FIN	58 D	AQ	15,267	1,767	13,500			

Company name	Country	Sector	2012 Score	2011 response status	Total Scope 1 + Scope 2 Emissions <sup>2</sup>	Scope 1	Scope 2	Number of Scope 3 categories reported	Verification/Assurance status	Target(s) reported
Chunghwa Telecom	Greater China	TCOM	70 E	AQ	910,879	25,322	885,556	1	VAR S1, S2	Abs
CIMB Group Holdings	Malaysia	FIN	NR	NR	NR	NR	NR	NR	NR	NR
Cisco Systems	USA	IT	96 B	AQ	671,214	60,382	610,832	9*	VAA S1, S2, S3	Abs
Citigroup	USA	FIN	80 B	AQ	1,075,929	36,751	1,039,178	3	VAR S1, S2	Abs
CLP Holdings	Greater China	UTIL	92 B	AQ	44,450,000	44,260,000	190,000	1	VAA S1, S2	Int
CME Group	USA	FIN	NR	AQ	NR	NR	NR	NR	NR	NR
CNOOC	Greater China	EGY	33	AQ	NP	NP	NP	NP	NP	NP
Coach	USA	CD	IN	NR	IN	IN	IN	IN	IN	IN
Coal India	India	EGY	NR	NR	NR	NR	NR	NR	NR	NR
Coca-Cola	USA	CS	96 B	AQ	3,729,323	2,420,996	1,308,327	4*	VAA S1, S2, S3	Abs
Cognizant Technology Solutions	USA	IT	68 D	AQ	172,458	27,829	144,629	1		Int
Colgate-Palmolive	USA	CS	91 B	AQ	666,581	239,524	427,057	5	VAA S1, S2	Int
Comcast	USA	CD	DP	DP	DP	DP	DP	DP	DP	DP
Commonwealth Bank of Australia	Australia	FIN	88 B	AQ	233,468	13,289	220,179	4	VAR S1, S2, S3	Abs
Compagnie Financière Richemont	Switzerland	CD	79 C	AQ	NP	NP	NP	NP	NP	NP
Compass	United Kingdom	CD	51 D	AQ	NP	NP	NP	NP	NP	NP
ConocoPhillips	USA	EGY	81 C	AQ	70,200,000	59,400,000	10,800,000	4	VAA S1, VAR S2	Abs, Int
Consolidated Edison	USA	UTIL	92 B	AQ	4,513,263	3,370,542	1,142,721	2	VAA S1, S2, VAR S3	Abs
Corning	USA	IT	42	AQ	1,425,706	371,844	1,053,862	*	VAR S1, S2	
Costco Wholesale	USA	CS	39	AQ	1,561,788	363,805	1,197,983			
Covidien	Ireland	HC	51 E	AQ	644,412	215,033	429,379			Int
Credit Suisse	Switzerland	FIN	85 B	AQ	242,239	17,812	224,427	4	VAR S1, S2, S3	Abs
CSL	Australia	HC	60 D	AQ	186,500	52,800	133,700	2	VAF S1, S2	
CSX	USA	IND	95 B	AQ	5,716,441	5,397,577	318,864	1	VAA S1, S2, VAF S3	Int
Cummins India (see Cummins)	India	CD	AQ(SA)	SA	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)
CVS Caremark	USA	CS	82 D	AQ	1,788,790	216,456	1,572,334	1		Int
Daimler	Germany	CD	99 A-	AQ	3,519,250	1,016,389	2,502,861	12	VAA S1, S2, S3	Abs, Int
Danaher	USA	IND	16	AQ	NP	NP	NP	NP	NP	NP
Danone	France	CS	97 B	AQ	1,307,257	495,998	811,259	4	VAA S1, S2, VAR S3	Int

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DBS Group Holdings	Singapore	FIN	NR	DP	NR	NR	NR	NR	NR	NR
Deere	USA	IND	76 C	AQ	1,461,086	420,019	1,041,067	2	VAA S1, S2	Int
Dell	USA	IT	81 B	AQ	436,230	38,672	397,558	1	VAA S1, S2, S3	Abs, Int
Denso	Japan	CD	61 D	AQ	1,558,000	585,000	973,000	4*	VAR S1, S2, S3	Abs
Deutsche Bank	Germany	FIN	90 A	AQ	330,016	25,073	304,943	1	VAA S1, S2, S3	Abs
Deutsche Post	Germany	IND	97 B	AQ	5,600,000	4,700,000	900,000	2	VAA S1, S2, S3	Int
Deutsche Telekom	Germany	TCOM	81 C	AQ	3,455,569	414,565	3,041,004	1	VAR S1, S2	Abs, Int
Devon Energy	USA	EGY	76 C	AQ	8,242,091	7,232,882	1,009,209	1*	VAA S1	Int
Diageo	United Kingdom	CS	98 A	AQ	690,263	596,506	93,757	5*	VAA S1, S2	Abs
DIRECTV	USA	CD	91 B	NR	202,665	120,873	81,792	3	VAA S1, S2, S3	Abs
DnB	Norway	FIN	68 E	AQ	11,593	1,292	10,300	2	VAR S1, S2, S3	Int
Dominion Resources	USA	UTIL	78 C	AQ	57,069,809	56,812,875	256,934	1*	VAA S1	
Dow Chemical	USA	MAT	91 B	AQ	37,151,000	28,130,000	9,021,000	3	VAA S1, S2, VAR S3	Abs, Int
Duke Energy	USA	UTIL	59 C	AQ	85,271,807	85,271,807				Abs, Int
E.I. du Pont de Nemours	USA	MAT	94 B	AQ	19,375,500	14,093,100	5,282,400	1	VAA S1, S2, S3	Abs
E.ON	Germany	UTIL	78 C	AQ	134,896,340	129,240,270	5,656,070	6	VAR S1, VAF S2, S3	Int
EADS	Netherlands	IND	70 C	AQ	1,048,900	593,530	455,371	1	VAA S1, S2	Int
East Japan Railway	Japan	IND	45	AQ	NP	NP	NP	NP	NP	NP
eBay	USA	CD	72 D	AQ	204,949	15,079	189,870	1		Abs
Ecolab	USA	MAT	93 B	AQ	277,727	189,202	88,525	1	VAA S1, S2, VAR S3	Int
Ecopetrol	Colombia	EGY	45	AQ	7,129,388	6,919,507	209,881			
El Paso <sup>17</sup>	USA	EGY	DP	NR	DP	DP	DP	DP	DP	DP
Electricite de France (EDF)	France	UTIL	87 B	AQ	71,016,962	70,935,790	81,172	9	VAA S1	Abs, Int
Eli Lilly	USA	HC	65 C	AQ	1,529,704	409,871	1,119,833	4*		Int
EMC	USA	IT	91 B	AQ	384,197	34,987	349,210	4	VAA S1, S2	Abs, Int
Emerson Electric	USA	IND	9	AQ	289,470	289,470				
Empresas COPEC	Chile	IND	AQ(L)	NR	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
Enbridge	Canada	EGY	84 C	AQ	4,646,349	1,641,028	3,005,321	3		Int
Endesa	Spain	UTIL	92 C	AQ	51,046,755	50,694,969	351,786	2*	VAA S1	Int
ENEL	Italy	UTIL	91 B	AQ	123,871,830	123,540,189	331,641	3*	VAA S1, S2, S3	Int
Eni	Italy	EGY	91 A	AQ	52,290,272	51,099,412	1,190,860	3	VAA S1, S2, S3	Abs, Int



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EOG Resources	USA	EGY	DP	DP	DP	DP	DP	DP	DP	DP
Equity Residential	USA	FIN	NR	NR	NR	NR	NR	NR	NR	NR
Ericsson	Sweden	IT	74 C	AQ	259,599	31,835	227,764	9*	VAA S1, S2, S3	Int
Exelon	USA	UTIL	94 A	AQ	12,142,218	6,600,286	5,541,932	3	VAA S1, S2, S3	Abs
Express Scripts Holding	USA	HC	48	NR	77,245	5,370	71,875			
Exxon Mobil	USA	EGY	75 C	AQ	150,000,000	136,000,000	14,000,000	1	VAA S1, VAR S2	Int
FANUC	Japan	IND	NR	NR	NR	NR	NR	NR	NR	NR
Fast Retailing	Japan	CD	NR	NR	NR	NR	NR	NR	NR	NR
FedEx	USA	IND	70 D	AQ	14,792,319	13,802,445	989,874	1	VAF S1	Int
FirstEnergy	USA	UTIL	DP	NR	DP	DP	DP	DP	DP	DP
Ford Motor	USA	CD	72 C	AQ	5,095,199	1,559,240	3,535,959		VAA S1, S2	Int
Formosa Petrochemical	Greater China	EGY	NR	NR	NR	NR	NR	NR	NR	NR
Formosa Plastics Corp	Greater China	MAT	NR	NR	NR	NR	NR	NR	NR	NR
Fortum	Finland	UTIL	98 B	AQ	23,906,000	23,700,000	206,000	3	VAA S1, S2, S3	Int
France Telecom	France	TCOM	89 A	AQ	1,362,643	392,552	970,091	1	VAA S1, S2, S3	Abs
Franklin Resources	USA	FIN	79 C	AQ	40,378	9,018	31,360	1		
Freeport-McMoRan Copper & Gold	USA	MAT	88 C	AQ	9,941,062	5,358,795	4,582,267	4	VAA S1, S2, S3	
Fresenius Medical Care	Germany	HC	55 E	AQ	NP	NP	NP	NP	NP	NP
Fresnillo	Mexico	MAT	61 E	AQ	700,340	285,788	414,552			
Gas Natural SDG	Spain	UTIL	99 A	AQ	24,131,361	23,177,862	953,498	8	VAA S1, S2, S3	Abs, Int
Gazprom	Russia	EGY	57 E	AQ	137,184,240	137,184,240	0		VAR S1	Abs
GDF Suez	France	UTIL	92 C	AQ	160,256,597	156,899,254	3,357,343	2	VAR S1	Abs
General Dynamics	USA	IND	IN	IN	IN	IN	IN	IN	IN	IN
General Electric	USA	IND	73 C	AQ	5,090,000	2,180,000	2,910,000			Abs
General Mills	USA	CS	68 C	AQ	994,000	271,000	723,000	2		Int
General Motors	USA	CD	87 B	AQ	7,639,914	2,310,819	5,329,095	6	VAA S1, S2, S3	Int
Gilead Sciences	USA	HC	96 B	AQ	65,486	30,472	35,014	2	VAA S1, S2, S3	Int
GlaxoSmithKline	United Kingdom	HC	90 B	AQ	1,874,230	1,016,974	857,256	3*	VAR S1, S2, S3	Abs
Glencore International	Switzerland	MAT	64 E	X	NP	NP	NP	NP	NP	NP
Goldcorp	Canada	MAT	71 C	AQ	1,411,700	667,800	743,900	2	VAA S1, S2	Abs
Goldman Sachs Group	USA	FIN	95 B	AQ	333,428	11,787	321,641	1	VAA S1, S2, VAR S3	Abs
Goodrich	USA	IND	NR	NR	NR	NR	NR	NR	NR	NR

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Google	USA	IT	95 B	AQ	1,469,266	29,563	1,439,703	*	VAA S1, S2, S3	Int
Great West Lifeco (see Power Financial Corporation)	Canada	FIN	AQ(SA)	DP	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)
Grupo Elektra	Mexico	CD	NR	NR	NR	NR	NR	NR	NR	NR
Grupo Mexico	Mexico	IND	NR	NR	NR	NR	NR	NR	NR	NR
H&M Hennes & Mauritz	Sweden	CD	61 D	AQ	342,501	17,543	324,958	2		Int
H.J. Heinz	USA	CS	89 B	AQ	863,930	507,796	356,134	3	VAA S1, S2	Int
Halliburton	USA	EGY	72 D	AQ	4,399,127	4,246,608	152,519	1		Int
Hang Seng Bank	Greater China	FIN	30	AQ	23,620		23,620		VAR S2	Abs
HCP	USA	FIN	77 D	NR	233,194	25,694	207,500	1		Abs
HDFC Bank	India	FIN	AQ(L)	AQ	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
Heineken	Netherlands	CS	88 B	AQ	1,938,545	1,172,887	765,658	7	VAA S1, S2	Abs, Int
Hermes International	France	CD	DP	NR	DP	DP	DP	DP	DP	DP
Hess	USA	EGY	97 B	AQ	9,056,906	8,509,069	547,837	3	VAA S1, S2, S3	Abs, Int
Hewlett-Packard	USA	IT	92 B	AQ	2,000,826	276,449	1,724,377	6	VAA S1, S2, VAR S3	Abs
Hindustan Unilever (see Unilever)	India	CS	AQ(SA)	SA	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)
Hitachi	Japan	IND	86 C	AQ	3,974,247	968,128	3,006,119	3	VAA S1, S2, VAF S3	Abs, Int
Holcim	Switzerland	MAT	93 B	AQ	113,055,295	106,567,444	6,487,851	6	VAA S1, S2	Int
Home Depot	USA	CD	95 B	AQ	3,020,010	281,083	2,738,927	1	VAA S1, S2, S3	Abs, Int
Hon Hai Precision Industry (see Foxconn Intl Hldg - Asia ex JCK)	Greater China	IT	AQ(SA)	SA	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)
Honda Motor Company	Japan	CD	96 B	AQ	4,200,000	1,240,000	2,960,000	15	VAA S1, S2, S3	Int
Honeywell International	USA	IND	22	IN	8,205,000	5,931,000	2,274,000			
Hong Kong and China Gas	Greater China	UTIL	NR	DP	NR	NR	NR	NR	NR	NR
Hong Kong Exchanges & Clearing	Greater China	FIN	79 D	AQ	NP	NP	NP	NP	NP	NP
Housing Development Finance	India	FIN	NR	NR	NR	NR	NR	NR	NR	NR
HSBC Holdings	United Kingdom	FIN	86 B	AQ	799,065	73,721	725,344	1	VAR S1, S2, S3	Int
Husky Energy	Canada	EGY	70 D	AQ	9,938,613	8,490,499	1,448,114		VAA S1	Int
Hutchison Whampoa	Greater China	IND	NR	NR	NR	NR	NR	NR	NR	NR

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Hyundai Motor	South Korea	CD	88 B	AQ	2,283,795	821,374	1,462,421	3	VAA S1, S2, S3	Abs
Hyundai Heavy Industries	South Korea	IND	NR	DP	NR	NR	NR	NR	NR	NR
Hyundai Mobis	South Korea	CD	77 C	AQ	357,127	65,255	291,872	1*	VAA S1, S2, S3	Int
Iberdrola	Spain	UTIL	95 A	AQ	41,381,862	36,193,156	5,188,706	4	VAA S1, S2, S3	Int
ICICI Bank	India	FIN	AQ(L)	AQ	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
Illinois Tool Works	USA	IND	76 E	AQ	NP	NP	NP	NP	NP	NP
Imperial Oil	Canada	EGY	61 D	AQ	11,663,200	10,285,400	1,377,800		VAA S1	Int
Imperial Tobacco Group	United Kingdom	CS	75 D	AQ	310,687	149,714	160,973	15	VAA S1, S2	Abs, Int
Inditex	Spain	CD	81 B	AQ	313,332	21,919	291,413	1	VAA S1, S2, S3	Int
Industrial and Commercial Bank of China	Greater China	FIN	AQ(L)	AQ	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
Industrias Peñoles	Mexico	MAT	37	AQ	1,610,963	674,544	936,419		VAR S1, S2	Abs
Infosys	India	IT	72 C	AQ	178,953	20,294	158,659	2	VAR S1, S2, S3	Int
ING Group	Netherlands	FIN	93 B	AQ	229,116	28,040	201,076	1	VAA S1, S2, S3	Abs
Inpex	Japan	EGY	69 D	AQ	488,808	466,568	22,240			Int
Intel	USA	IT	88 A	AQ	3,099,546	885,416	2,214,130	5	VAA S1, S2, S3	Abs
International Business Machines (IBM)	USA	IT	86 B	AQ	2,734,954	535,387	2,199,567	4	VAA S1, S2	Abs
International Power (see GDF Suez)	United Kingdom	UTIL	AQ(SA)	AQ	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)
Intesa Sanpaolo	Italy	FIN	91 A	AQ	297,758	55,058	242,700	1	VAA S1, S2, S3	Abs
Intuit	USA	IT	73 D	AQ	46,263	6,769	39,494	4*		Abs
Intuitive Surgical	USA	HC	NR	NR	NR	NR	NR	NR	NR	NR
Itaú Unibanco Holding	Brazil	FIN	76 C	AQ	30,645	5,916	24,730	6	VAA S1, S2, VAR S3	
Itausa Investimentos Itau	Brazil	FIN	84 B	AQ	478,242	353,567	124,674	6	VAA S1, S2, S3	Abs
ITC	India	CS	82 B	AQ	1,316,954	1,156,678	160,277	1	VAA S1, S2, S3	
Itochu	Japan	IND	61 D	AQ	NP	NP	NP	NP	NP	NP
Japan Tobacco	Japan	CS	83 B	AQ	NP	NP	NP	NP	NP	NP
Jardine Matheson	Greater China	IND	NR	DP	NR	NR	NR	NR	NR	NR
Jardine Strategic	Greater China	IND	NR	DP	NR	NR	NR	NR	NR	NR
Johnson & Johnson	USA	HC	93 B	AQ	1,221,231	329,669	891,562	1	VAA S1, S2	Abs

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Johnson Controls	USA	CD	92 B	AQ	2,374,236	831,783	1,542,453	3	VAA S1, S2, S3	Abs, Int
JPMorgan Chase	USA	FIN	89 B	AQ	1,323,591	92,413	1,231,178	1	VAA S1, S2	Abs
KDDI	Japan	TCOM	75 D	AQ	971,201	0	971,201	2	VAA S1, S2, S3	Abs
Kellogg Company	USA	CS	81 C	AQ	1,289,399	566,988	722,411	1	VAA S1, VAR S2	Int
Kia Motors	South Korea	CD	NR	DP	NR	NR	NR	NR	NR	NR
Kimberly-Clark	USA	CS	74 D	AQ	5,557,781	2,530,334	3,027,447	1	VAA S1, S2, S3	Abs
Komatsu	Japan	IND	83 D	AQ	571,882	147,696	424,186	2*	VAA S1, S2, S3	Abs, Int
Koninklijke KPN	Netherlands	TCOM	94 A	AQ	549,605	68,654	480,951	3	VAA S1, S2, S3	Abs, Int
Kraft Foods	USA	CS	84 B	AQ	3,340,091	1,634,473	1,705,618	9*	VAA S1, S2, S3	Int
Kumba Iron Ore	South Africa	MAT	88 C	AQ	907,142	387,813	519,329	6	VAR S1, S2	Abs
Kyocera	Japan	IT	56 E	AQ	NP	NP	NP	NP	NP	NP
Las Vegas Sands	USA	CD	83 C	NR	NP	NP	NP	NP	NP	NP
LG Chem	South Korea	MAT	93 B	AQ	5,887,625	4,207,796	1,679,829	1	VAA S1, S2, VAR S3	Int
Li & Fung	Greater China	CD	74 B	AQ	NP	NP	NP	NP	NP	NP
Linde	Germany	MAT	93 B	AQ	16,900,000	6,700,000	10,200,000	15	VAA S1, S2, S3	Int
Lloyds Banking Group	United Kingdom	FIN	85 B	AQ	378,877	57,179	321,698	1	VAA S1, S2, S3	Abs
Lockheed Martin	USA	IND	93 A	AQ	1,320,633	309,529	1,011,104	1	VAA S1, S2, S3	Abs
L'Oreal	France	CS	94 B	AQ	192,639	71,012	121,627	1	VAA S1, S2, S3	Abs
Lowe's Companies	USA	CD	83 C	AQ	2,898,416	292,747	2,605,669	1		
Lukoil	Russia	EGY	NR	NR	NR	NR	NR	NR	NR	NR
LVMH	France	CD	65 D	AQ	313,436	40,890	272,546	6	VAA S1, S2, VAR S3	Abs
LyondellBasell Industries	Netherlands	MAT	NR	X	NR	NR	NR	NR	NR	NR
Malayan Banking	Malaysia	FIN	58 D	AQ	NP	NP	NP	NP	NP	NP
Manulife Financial	Canada	FIN	57 C	AQ	NP	NP	NP	NP	NP	NP
Marathon Oil	USA	EGY	55 D	AQ	3,759,000	2,856,000	903,000		VAA S1	Int
Marsh & McLennan	USA	FIN	91 B	AQ	99,969	127	99,842	1	VAA S1, S2	
MasterCard	USA	IT	39	AQ	NP	NP	NP	NP	NP	NP
McDonald's	USA	CD	63 D	AQ	NP	NP	NP	NP	NP	NP
McKesson	USA	HC	NR	DP	NR	NR	NR	NR	NR	NR



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Medco Health Solutions (see Express Scripts Holding)	USA	HC	AQ(SA)	AQ	AQ(SA)	AQ(SA)	AQ(SA)	AQ (SA)	AQ(SA)	AQ(SA)
Medtronic	USA	HC	49	AQ	240,744	23,596	217,148			Int
Merck & Co.	USA	HC	83 B	AQ	2,087,047	1,135,597	951,450	3	VAA S1, S2	Abs
MetLife	USA	FIN	84 C	AQ	26,084	10,598	15,486	2		
Microsoft	USA	IT	99 B	AQ	1,227,340	40,848	1,186,492	3	VAA S1, S2, S3	Int
Mitsubishi	Japan	IND	65 D	AQ	5,116,416	3,205,957	1,910,459	1	VAA S2, VAR S3	
Mitsubishi Electric	Japan	IT	60 D	AQ	1,176,000	362,000	814,000	1		Abs
Mitsubishi Estate	Japan	FIN	21	AQ	NP	NP	NP	NP	NP	NP
Mitsubishi UFJ Financial Group	Japan	FIN	78 B	AQ	225,593	19,832	205,761	1	VAA S1, S2	Abs
Mitsui & Co	Japan	IND	69 C	AQ	NP	NP	NP	NP	NP	NP
Mizuho Financial Group	Japan	FIN	85 A	AQ	186,888	17,630	169,259	2	VAA S1, S2	Abs
MMC Norilsk Nickel	Russia	MAT	NR	DP	NR	NR	NR	NR	NR	NR
Monsanto	USA	MAT	40	AQ	2,533,848	1,389,817	1,144,031			
Morgan Stanley	USA	FIN	92 B	AQ	381,733	14,903	366,830	2	VAA S1, S2, VAR S3	Int
MTN Group	South Africa	TCOM	69 C	AQ	944,033	536,541	407,492	1		
MTR	Greater China	IND	91 C	AQ	1,196,173	39,543	1,156,630	2*	VAA S1, S2, S3	
Munich Re	Germany	FIN	82 C	AQ	191,580	90,199	101,381	2*	VAR S1, S2, S3	Abs, Int
Nan Ya Plastics	Greater China	MAT	NR	NR	NR	NR	NR	NR	NR	NR
Naspers	South Africa	CD	DP	AQ	DP	DP	DP	DP	DP	DP
National Australia Bank	Australia	FIN	91 A	AQ	200,125	25,688	174,437	4	VAA S1, S2, S3	Abs, Int
National Grid	United Kingdom	UTIL	78 C	AQ	8,647,525	8,328,345	319,180	3	VAR S1, S2	Abs, Int
National Oilwell Varco	USA	EGY	NR	NR	NR	NR	NR	NR	NR	NR
National Thermal Power (NTPC)	India	UTIL	DP	NR	DP	DP	DP	DP	DP	DP
Nestle	Switzerland	CS	100 A	AQ	7,040,014	3,806,467	3,233,547	3	VAA S1, S2, S3	Abs, Int
Newcrest Mining	Australia	MAT	58 E	AQ	2,241,783	1,483,302	758,481	1	VAR S1, S2	
Newmont Mining	USA	MAT	92 C	AQ	5,559,759	4,414,206	1,145,553	1	VAA S1, S2, S3	
News Corporation	USA	CD	95 B	AQ	477,553	76,548	401,005	1	VAA S1, S2, S3	Abs, Int
NextEra Energy	USA	UTIL	DP	DP	DP	DP	DP	DP	DP	DP
NIKE	USA	CD	69 D	AQ	84,700	8,000	76,700	2*		Abs, Int
Nintendo	Japan	IT	IN	DP	IN	IN	IN	IN	IN	IN

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Nippon Steel	Japan	MAT	86 C	AQ	NP	NP	NP	NP	NP	NP
Nippon Telegraph & Telephone (NTT)	Japan	TCOM	61 E	AQ	3,825,000	267,000	3,558,000			Int
Nissan Motor	Japan	CD	92 C	AQ	3,059,164	1,017,943	2,041,221	1	VAA S1, S2, S3	Int
Noble Energy	USA	EGY	75 C	AQ	2,121,100	2,045,300	75,800			Int
Nokia Group	Finland	IT	98 A	AQ	270,400	18,600	251,800	5	VAA S1, S2, S3	Abs, Int
Nordea Bank	Sweden	FIN	91 B	AQ	50,233	34	50,199	1	VAA S1, S2, S3	Int
Norfolk Southern	USA	IND	88 B	AQ	5,405,052	5,127,985	277,067	1	VAA S1, S2	Int
Novartis	Switzerland	HC	91 B	AQ	1,707,121	657,416	1,049,705	3	VAR S1, S2	Abs
Novatek	Russia	EGY	AQ(L)	AQ	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
Novo Nordisk	Denmark	HC	90 B	AQ	96,726	41,354	55,372	3	VAR S1, S2, S3	Abs
NTT DOCOMO	Japan	TCOM	58 D	AQ	1,266,591	92,277	1,174,314		VAR S1, S2	Abs
Occidental Petroleum	USA	EGY	60 D	AQ	19,100,000	12,200,000	6,900,000		VAA S1	
OGX Petróleo e Gás Participações	Brazil	EGY	DP	DP	DP	DP	DP	DP	DP	DP
Oil & Natural Gas	India	EGY	NR	AQ	NR	NR	NR	NR	NR	NR
Oracle	USA	IT	61 D	AQ	NP	NP	NP	NP	NP	NP
Otsuka Holdings	Japan	FIN	NR	NR	NR	NR	NR	NR	NR	NR
Oversea-Chinese Banking	Singapore	FIN	5	NR						
Panasonic	Japan	CD	96 A	AQ	3,674,090	743,722	2,930,368	1	VAA S1, S2, S3	Abs
Pearson	United Kingdom	CD	65 D	AQ	150,536	35,806	114,730	2	VAR S1, S2, S3	Abs
PepsiCo	USA	CS	94 B	AQ	5,996,781	3,980,007	2,016,774	1*	VAA S1, S2, VAR S3	Abs
Pernod-Ricard	France	CS	61 E	AQ	NP	NP	NP	NP	NP	NP
Petróleo Brasileira (Petrobras)	Brazil	EGY	83 C	AQ	56,200,187	54,931,167	1,269,019	1	VAR S1, S2	
PETROCHINA	Greater China	EGY	AQ(L)	IN	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
Petronas Chemicals Group	Malaysia	MAT	NR	X	NR	NR	NR	NR	NR	NR
Pfizer	USA	HC	87 A	AQ	2,659,192	1,402,528	1,256,664	3	VAA S1, S2	Abs
PG&E	USA	UTIL	93 B	AQ	4,756,449	3,618,015	1,138,434	3	VAA S1, S2, VAR S3	Abs
Philip Morris International	USA	CS	91 B	AQ	774,524	373,641	400,883	6	VAA S1, S2	Int
Philips Electronics	Netherlands	CD	98 A-	AQ	857,925	430,603	427,322	3	VAA S1, S2, S3	Abs, Int
Picc Property & Casualty	Greater China	FIN	NR	DP	NR	NR	NR	NR	NR	NR

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Ping An Insurance Company of China	Greater China	FIN	AQ(L)	IN	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
PNC Financial Services Group	USA	FIN	84 C	AQ	429,381	49,257	380,124	4*	VAA S1, S2	Abs
POSCO	South Korea	MAT	94 B	AQ	78,227,000	74,602,000	3,625,000	3	VAA S1, S2, VAR S3	Int
Potash Corporation of Saskatchewan	Canada	MAT	68 D	AQ	10,212,800	8,512,800	1,700,000			Int
Power Assets Holdings	Greater China	UTIL	99 B	AQ	8,631,000	8,631,000	0	*	VAA S1, S2, S3	Abs, Int
Power Financial Corporation	Canada	FIN	69 E	DP	NP	NP	NP	NP	NP	NP
PPL	USA	UTIL	DP	NR	DP	DP	DP	DP	DP	DP
PPR	France	CD	58 D	AQ	118,010	13,273	104,737	3	VAA S1, S2, S3	Int
Praxair	USA	MAT	90 B	AQ	16,006,000	5,073,000	10,933,000	5	VAR S1, S2, S3	Abs, Int
Precision Castparts	USA	IND	NR	NR	NR	NR	NR	NR	NR	NR
Priceline.com	USA	CD	NR	AQ	NR	NR	NR	NR	NR	NR
Procter & Gamble	USA	CS	51 D	AQ	5,829,299	2,906,000	2,923,299		VAR S1, S2	Int
Progress Energy	USA	UTIL	DP	DP	DP	DP	DP	DP	DP	DP
Prudential	United Kingdom	FIN	64 D	AQ	137,581	13,725	123,856	1	VAR S1, S2	Abs
Prudential Financial	USA	FIN	47	AQ	78,375	6,052	72,323	1		Abs
PTT	Thailand	EGY	63 D	NR	NP	NP	NP	NP	NP	NP
PTT Exploration & Production	Thailand	EGY	62 D	AQ	2,752,725	2,751,322	1,403	2		
Public Service Enterprise Group	USA	UTIL	DP	AQ	DP	DP	DP	DP	DP	DP
Public Storage	USA	FIN	NR	NR	NR	NR	NR	NR	NR	NR
Qualcomm	USA	IT	59 D	AQ	113,915	63,300	50,615			
Raytheon	USA	IND	90 B	AQ	566,205	95,700	470,505	1	VAA S1, S2	Abs
Reckitt Benckiser	United Kingdom	CS	93 A	AQ	289,677	94,406	195,271	9*	VAA S1, S2, S3	Int
Reliance Industries	India	EGY	DP	NR	DP	DP	DP	DP	DP	DP
Repsol	Spain	EGY	98 A-	AQ	24,696,516	23,138,229	1,558,287	5	VAA S1, S2, S3	Abs
Reynolds American	USA	CS	63 D	AQ	294,252	113,517	180,735		VAR S1, S2	Abs
Rio Tinto	United Kingdom	MAT	82 C	AQ	44,700,000	27,500,000	17,200,000	6	VAR S1, S2	Int
Roche Holding	Switzerland	HC	75 B	AQ	863,000	444,823	418,177	1	VAA S1, S2, S3	Int
Rogers Communications	Canada	CD	66 D	AQ	151,644	36,443	115,201	4		
Rolls-Royce	United Kingdom	IND	72 B	AQ	568,883	224,500	344,383	3	VAR S1, S2	Abs, Int

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Rosneft	Russia	EGY	NR	NR	NR	NR	NR	NR	NR	NR
Royal Bank of Canada	Canada	FIN	IN	AQ	IN	IN	IN	IN	IN	IN
Royal Bank of Scotland Group	United Kingdom	FIN	89 B	AQ	655,437	71,065	584,372	1	VAA S1, S2, VAR S3	Abs
Royal Dutch Shell	Netherlands	EGY	89 B	AQ	84,000,000	74,000,000	10,000,000	6	VAA S1, S2, S3	
RWE	Germany	UTIL	78 B	AQ	166,220,000	163,800,000	2,420,000	4	VAA S1, S2, S3	Int
S.A.C.I. Falabella	Chile	CD	NR	NR	NR	NR	NR	NR	NR	NR
SABMiller	United Kingdom	CS	68 C	AQ	2,193,208	1,410,135	783,073	1	VAR S1, S2	Int
Saint-Gobain	France	IND	95 B	AQ	19,089,000	14,126,000	4,963,000	3	VAA S1, S2	Int
Saipem	Italy	EGY	57 E	AQ	NP	NP	NP	NP	NP	NP
Samsung Electronics	South Korea	IT	96 B	AQ	11,303,978	4,045,113	7,258,865	3*	VAA S1, S2	Int
Sands China	Greater China	CD	NR	NR	NR	NR	NR	NR	NR	NR
Sanofi	France	HC	93 B	AQ	1,556,470	756,642	799,828	2	VAA S1, S2	Int
SAP	Germany	IT	90 B	AQ	285,847	145,236	140,611	8	VAA S1, S2, VAR S3	Abs
Sasol	South Africa	EGY	81 C	AQ	74,777,000	65,469,000	9,308,000	3	VAA S1, S2	Abs, Int
Sberbank Rossii	Russia	FIN	NR	NR	NR	NR	NR	NR	NR	NR
Schlumberger	USA	EGY	92 C	AQ	2,103,157	1,761,333	341,824	5	VAA S1, S2, S3	
Schneider Electric	France	IND	92 A	AQ	482,732	122,688	360,044	3	VAA S1, S2	Abs
Seadrill Management	Norway	EGY	55 E	AQ	NP	NP	NP	NP	NP	NP
Seven & I Holdings	Japan	CS	74 C	AQ	2,642,042	137,972	2,504,070	2		Int
Shin Etsu Chemical	Japan	MAT	44	AQ	4,263,639	1,528,537	2,735,102		VAR S1, S2	Int
Shinhan Financial Group	South Korea	FIN	78 C	AQ	36,765	3,868	32,897	*	VAR S1, S2	Abs, Int
Shire	Ireland	HC	77 D	AQ	64,554	28,115	36,439	2		
Siemens	Germany	IND	98 A-	AQ	3,104,000	1,263,000	1,841,000	3	VAA S1, S2, S3	Abs, Int
Sime Darby	Malaysia	IND	51 D	DP	NP	NP	NP	NP	NP	NP
Simon Property Group	USA	FIN	92 B	AQ	584,008	22,605	561,403	2	VAA S1, S2, VAR S3	Abs
Singapore Telecom	Singapore	TCOM	IN	AQ	IN	IN	IN	IN	IN	IN
Societe Generale	France	FIN	70 C	AQ	191,690	31,630	160,060	2	VAR S1, S2, S3	Int
SoftBank	Japan	TCOM	NR	DP	NR	NR	NR	NR	NR	NR
Sony Corporation	Japan	IT	97 B	AQ	1,625,350	353,977	1,271,373	4	VAA S1, S2, S3	Abs
Southern Copper Corporation	USA	MAT	DP	NR	DP	DP	DP	DP	DP	DP
Souza Cruz (see British American Tobacco)	Brazil	CS	AQ(SA)	SA	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)



Company name	Country	Sector <sup>a</sup>	2012 Score <sup>b</sup>	2011 response status <sup>c</sup>	Total Scope 1 + Scope 2 Emissions	Scope 1	Scope 2	Number of Scope 3 categories reported <sup>d</sup>	Verification/Assurance status <sup>e</sup>	Target(s) reported <sup>f</sup>
Spectra Energy	USA	EGY	95 B	AQ	10,200,310	9,244,770	955,540	3	VAA S1, VAR S3	Abs, Int
SSE	United Kingdom	UTIL	90 B	AQ	26,194,904	24,791,474	1,403,430	1	VAA S1, S2, S3	Int
Standard Bank Group	South Africa	FIN	74 D	AQ	NP	NP	NP	NP	NP	NP
Standard Chartered	United Kingdom	FIN	92 B	AQ	250,456	10,643	239,813	1	VAA S1, S2	Int
Starbucks	USA	CD	81 B	AQ	979,962	228,505	751,457	12	VAA S1, S2	Int
State Bank of India	India	FIN	AQ(L)	AQ	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
State Street	USA	FIN	71 C	AQ	143,897	4,890	139,007	1	VAR S1, S2, S3	Int
Statoil	Norway	EGY	75 C	AQ	14,810,189	14,347,351	462,838	1	VAA S1	
Stryker	USA	HC	DP	DP	DP	DP	DP	DP	DP	DP
Sumitomo	Japan	IND	69 C	AQ	NP	NP	NP	NP	NP	NP
Sumitomo Mitsui Financial Group	Japan	FIN	78 C	AQ	NP	NP	NP	NP	NP	NP
Sun Hung Kai Properties	Greater China	FIN	NR	NR	NR	NR	NR	NR	NR	NR
Suncor Energy	Canada	EGY	84 B	AQ	18,739,477	16,600,796	2,138,681	3*	VAA S1, S2	Int
Surgutneftegas	Russia	EGY	AQ(L)	NR	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
Svenska Handelsbanken	Sweden	FIN	71 C	AQ	NP	NP	NP	NP	NP	NP
Swiss Re	Switzerland	FIN	95 B	AQ	17,100	5,100	12,000	1	VAA S1, S2, S3	Int
Swisscom	Switzerland	TCOM	85 B	AQ	56,919	23,242	33,677	4	VAR S1, S2	Abs, Int
Syngenta International	Switzerland	MAT	84 B	AQ	952,000	578,000	374,000	2	VAA S1, S2, S3	Int
Synthes	Switzerland	HC	NR	NR	NR	NR	NR	NR	NR	NR
Sysco	USA	CS	NR	NR	NR	NR	NR	NR	NR	NR
Taiwan Semiconductor Manufacturing	Greater China	IT	76 B	AQ	4,286,217	1,375,110	2,911,107	5	VAR S1, S2, S3	Abs, Int
Takeda Pharmaceutical	Japan	HC	70 C	AQ	339,642	171,978	167,664	1	VAA S1, S2	Abs
Target	USA	CD	87 B	AQ	3,075,444	476,783	2,598,661	1	VAA S1, S2	Int
Tata Consultancy Services	India	IT	78 C	AQ	335,022	34,219	300,803	2	VAR S1, S2, S3	Int
Teck Resources	Canada	MAT	88 B	AQ	2,954,695	2,655,347	299,348	1	VAA S1, S2	Int
Telefonica	Spain	TCOM	87 B	AQ	1,727,044	111,516	1,615,528	3	VAR S1, S2, S3	Int
Telefonica Brasil (see Telefonica)	Brazil	TCOM	AQ(SA)	X	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)
Telekomunikasi Indonesia	Indonesia	TCOM	NR	NR	NR	NR	NR	NR	NR	NR
Telenor Group	Norway	TCOM	76 C	AQ	1,099,685	283,480	816,205	2	VAR S1, S2, S3	Int
TeliaSonera	Sweden	TCOM	69 D	AQ	267,725	39,370	228,355	3		Int

Company name	Country	Sector <sup>a</sup>	2012 Score <sup>b</sup>	2011 response status <sup>c</sup>	Total Scope 1 + Scope 2 Emissions	Scope 1	Scope 2	Number of Scope 3 categories reported <sup>d</sup>	Verification/Assurance status <sup>e</sup>	Target(s) reported <sup>f</sup>
Telstra	Australia	TCOM	84 B	AQ	1,414,262	55,137	1,359,125	3	VAA S1, S2, S3	Int
Tenaris	Luxembourg	EGY	NR	NR	NR	NR	NR	NR	NR	NR
Tencent Holdings	Greater China	IT	NR	NR	NR	NR	NR	NR	NR	NR
Tesco	United Kingdom	CS	91 B	AQ	5,540,789	1,944,344	3,596,445	1	VAA S1, VAR S2, S3	Abs, Int
Teva Pharmaceutical Industries	Israel	HC	69 D	AQ	700,429	210,684	489,745		VAA S1, S2	Abs
Texas Instruments	USA	IT	61 D	AQ	2,319,361	837,626	1,481,735			Int
The Southern Company	USA	UTIL	48	AQ	121,000,000	121,000,000				
Thermo Fisher Scientific	USA	HC	69 D	AQ	377,540	68,804	308,736		VAR S1, S2	
Thomson Reuters	USA	CD	61 D	AQ	NP	NP	NP	NP	NP	NP
Time Warner	USA	CD	48	AQ	233,789	24,635	209,154	1		
Time Warner Cable	USA	CD	DP	NR	DP	DP	DP	DP	DP	DP
Tingyi (Cayman Islands) Holdings	Greater China	CS	NR	NR	NR	NR	NR	NR	NR	NR
TJX Companies	USA	CD	97 B	AQ	755,759	58,479	697,280	1	VAA S1, S2, S3	Int
Tokio Marine Holdings	Japan	FIN	75 D	AQ	70,678	18,013	52,665	1	VAA S1, S2, S3	Abs
Toronto-Dominion Bank	Canada	FIN	78 B	AQ	222,019	47,265	174,754	2	VAA S1, S2, S3	Abs
Toshiba	Japan	IT	88 C	AQ	2,542,000	822,000	1,720,000	8	VAA S1, S2, S3	Abs, Int
Total	France	EGY	76 B	AQ	51,800,000	46,300,000	5,500,000	2	VAR S1, S2	Abs
Toyota Motor	Japan	CD	81 C	AQ	7,224,000	2,809,000	4,415,000	2	VAA S1, S2, S3	Abs, Int
TransCanada	Canada	EGY	83 C	AQ	12,241,946	12,064,325	177,621	3	VAA S1, S2	Abs, Int
Travelers Companies	USA	FIN	68 C	AQ	78,476	36,254	42,222			Abs
Tullow Oil	United Kingdom	EGY	44	AQ	1,376,741	1,376,588	153		VAR S1	
Tyco International	Switzerland	IND	AQ(L)	AQ	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
U.S. Bancorp	USA	FIN	77 C	AQ	431,386	45,725	385,661	1		
UBS	Switzerland	FIN	97 A	AQ	253,213	25,235	227,978	3	VAA S1, S2, S3	Abs
Unibail-Rodamco	France	FIN	79 B	AQ	88,922	18,429	70,493	1	VAA S1, S2	Int
Unilever	United Kingdom	CS	84 A	X	2,491,971	1,048,797	1,443,174		VAA S1, S2, VAF S3	Abs, Int
Unilever Indonesia (see Unilever)	Indonesia	CS	AQ(SA)	SA	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)	AQ(SA)
Union Pacific	USA	IND	87 B	AQ	12,265,017	11,854,279	410,738	1	VAA S1, S2	Int
United Overseas Bank	Singapore	FIN	DP	NR	DP	DP	DP	DP	DP	DP
United Technologies	USA	IND	70 C	AQ	1,772,220	856,354	915,866	1		Abs
UnitedHealth Group	USA	HC	66 D	AQ	122,311	10,155	112,156	2		Int

Company name	Country	Sector <sup>a</sup>	2012 Score <sup>b</sup>	2011 response status <sup>c</sup>	Total Scope 1 + Scope 2 Emissions	Scope 1	Scope 2	Number of Scope 3 categories reported <sup>d</sup>	Verification/Assurance status <sup>e</sup>	Target(s) reported <sup>f</sup>
UPS	USA	IND	99 B	AQ	12,872,322	11,980,892	891,430	6	VAA S1, S2, S3	Int
Uralkali	Russia	MAT	DP	DP	DP	DP	DP	DP	DP	DP
VALE	Brazil	MAT	88 C	AQ	16,903,468	16,026,693	876,774	8	VAR S1, S2, S3	Abs
Ventas	USA	FIN	AQ(L)	DP	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)	AQ(L)
Verizon Communications	USA	TCOM	66 B	AQ	5,750,014	533,460	5,216,555			Int
Viacom	USA	CD	21	AQ	NP	NP	NP	NP	NP	NP
Vinci	France	IND	80 C	AQ	2,302,459	2,068,019	234,440	1	VAA S1, S2	Abs, Int
Visa	USA	IT	51 E	AQ	NP	NP	NP	NP	NP	NP
Vivendi	France	CD	57 E	AQ	361,093	48,073	313,020	2	VAR S1, S2	
Vodacom Group	South Africa	TCOM	88 B	AQ	430,972	46,680	384,292	4*	VAA S1, S2, S3	Int
Vodafone Group	United Kingdom	TCOM	73 C	AQ	2,469,985	358,691	2,111,294	2	VAR S1, S2	Abs
Volkswagen	Germany	CD	93 B	AQ	NP	NP	NP	NP	NP	NP
Volvo	Sweden	IND	56 D	AQ	NP	NP	NP	NP	NP	NP
VTB Bank	Russia	FIN	NR	NR	NR	NR	NR	NR	NR	NR
Walgreen Company	USA	CS	79 C	AQ	NP	NP	NP	NP	NP	NP
Wal-Mart de Mexico	Mexico	CS	69 C	AQ	1,628,404	741,226	887,178	2		Abs, Int
Wal-Mart Stores	USA	CS	86 B	AQ	21,465,430	5,804,559	15,660,871	2	VAA S1, S2, VAR S3	Abs, Int
Walt Disney Company	USA	CD	53 D	AQ	1,524,837	661,493	863,344			Abs
WellPoint	USA	HC	69 C	AQ	141,370	7,712	133,658	2		Abs
Wells Fargo	USA	FIN	95 A	AQ	1,601,048	105,454	1,495,594	1	VAA S1, S2, S3	Abs
Wesfarmers	Australia	CS	77 B	AQ	6,160,300	3,069,669	3,090,631	3	VAA S1, S2, S3	Int
Westfield Group	Australia	FIN	78 D	AQ	510,911	31,126	479,785	4	VAR S1, S2	
Westpac Banking	Australia	FIN	83 A	AQ	201,125	21,463	179,662	3	VAA S1, S2, S3	Abs
Williams Companies	USA	EGY	DP	AQ	DP	DP	DP	DP	DP	DP
Wilmar International	Singapore	CS	NR	IN	NR	NR	NR	NR	NR	NR
Wipro	India	IT	95 B	AQ	307,095	65,129	241,966	7	VAA S1, S2, S3	Abs, Int
Woodside Petroleum	Australia	EGY	79 B	AQ	7,898,603	7,890,419	8,184	1	VAA S1, S2	Abs, Int
Woolworths	Australia	CS	93 B	AQ	2,929,680	398,653	2,531,027	2	VAA S1, S2, VAR S3	Abs, Int
Xstrata	Switzerland	MAT	85 C	AQ	NP	NP	NP	NP	NP	NP
Yahoo Japan	Japan	IT	17	AQ	NP	NP	NP	NP	NP	NP
Yahoo!	USA	IT	59 D	AQ	401,397	4,000	397,397	2	VAA S2	Int
Yum! Brands	USA	CD	85 B	AQ	2,433,497	83,397	2,350,100		VAA S1, S2	Abs
Zurich Insurance Group	Switzerland	FIN	63 D	AQ	NP	NP	NP	NP	NP	NP

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## KEY TO APPENDIX

- a **CD** Consumer Discretionary,  
**CS** Consumer Staples,  
**EGY** Energy,  
**FIN** Financials,  
**HC** Health Care,  
**IND** Industrials,  
**IT** Information Technology,  
**MAT** Materials,  
**TCOM** Telecommunications,  
**UTIL** Utilities
- b The 2012 score is comprised of the disclosure score number and performance score letter. Only companies that have scored more than 50 for their disclosure score are given a performance score. Companies that are in the CDLI or CPLI have the relevant part of the score (disclosure or performance) in bold text. Companies that have not responded have the relevant response status code in this column. See the key for c below.
- c **AQ** Answered Questionnaire,  
**AQ(L)** Answered Questionnaire Late (after analysis cut off date of July 1, 2012),  
**DP** Declined to Participate,  
**IN** Provided Information,  
**NR** Not Responded,  
**NP** Non Public,  
**SA** See Another
- d Only Scope 3 categories reported using the Greenhouse Gas Protocol Scope 3 named categories (as provided in the Online Response System) are included when determining the number of categories reported. Companies that have reported one or more additional categories of “Other upstream” and/or “Other downstream” are indicated with an asterisk (\*). Where companies have not provided emissions data or where they have not reported a named Scope 3 category according to the GHG Protocol Scope 3 standard, this column is blank.
- e **VAR:** Verification/Assurance reported; companies have reported that they have verification complete or underway with last year’s statement available but the verification statement provided has not been awarded the full points available, or they have not been scored and therefore their verification statement has not been assessed.  
**VAF:** Verification/Assurance reported as underway, first year; companies have reported that they have verification underway but that it is the first year they have undertaken verification. In this case there is no verification statement available for assessment.  
**VAA:** Verification/Assurance approved; companies have reported that they have verification complete or underway with last year’s certificate available and they have been awarded the full points available for their statement.  
**S1:** Scope 1; verification/assurance applies to Scope 1 emissions.  
**S2:** Scope 2; verification/assurance applies to Scope 2 emissions.  
**S3:** Scope 3; verification/assurance applies to Scope 3 emissions.
- f **Abs** Absolute target,  
**Int** Intensity target, based on entering a value for “% reduction from base year”

16: Central Japan Railway Company submitted a response in Japanese so was not scored, see Japan 500 report for their score

17: During the reporting period, El Paso was acquired by Kinder Morgan.





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In recognition of its work to catalyze the transition to a profitable low carbon economy, drive greenhouse gas emissions reduction and sustainable water use by business and cities, the Carbon Disclosure Project (CDP) has been awarded the top accolade in the SME & NGO category of the Zayed Future Energy Prize.



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